

# Catalogue of existing successful organizational and financial models for providing green care

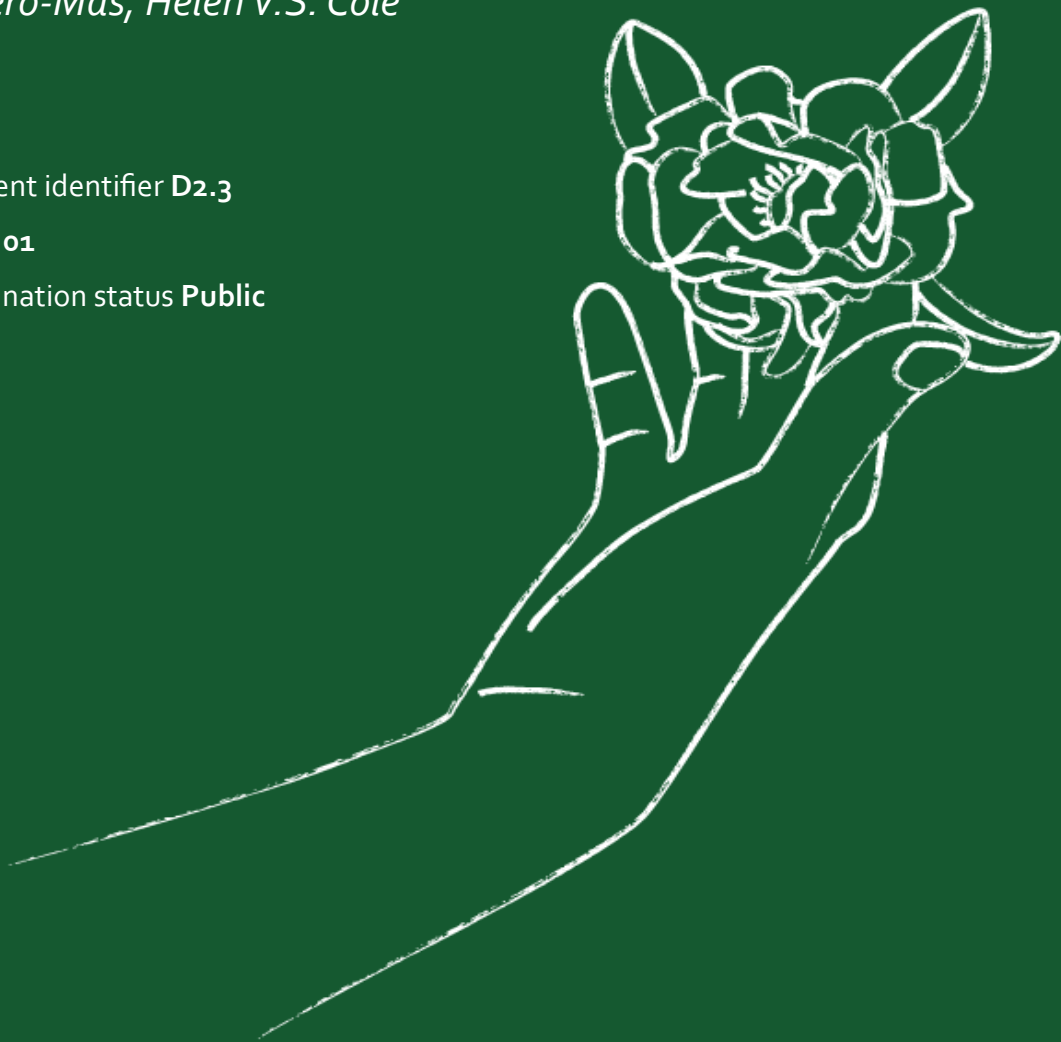
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Document identifier **D2.3**

Version **01**

Dissemination status **Public**



**Deliverable 2.3**
**Catalogue of existing successful organizational and financial models for providing green care**

Grant Agreement nº	101084198
Project acronym	GreenME
Project title	Advancing Greencare in Europe: an integrated multi-scalar approach for the expansion of nature-based therapies to improve mental health equity
Call	Resilient, inclusive, healthy and green rural, coastal and urban communities (HORIZON-CL6-2022-COMMUNITIES-02-twostage)
Topic	HORIZON-CL6-2022-COMMUNITIES-02-02-two-stage - Developing nature-based therapy for health and well-being
Project Duration	01/09/2023 – 31/08/2027
Coordinator:	Universitat Autònoma de Barcelona (UAB)
Associated Beneficiaries	<ul style="list-style-type: none"> <li>• Alma Mater Studiorum – Universita Di Bologna (UNIBO)</li> <li>• Sveriges Lantbruksuniversite (SLU)</li> <li>• ILS Research GGMBH (ILSR)</li> <li>• ILS gGmbH (ILS)</li> <li>• Szkola Glowna Gospodarstwa Wiejskiego (SGGW)</li> <li>• Old-Continent (OC)</li> <li>• Fundacja Neurolandscape (NL)</li> <li>• Gesellschaft Für Gartenbau und Therapie (GGUT)</li> <li>• Instytut Psychiatrii I Neurologii (IPIN)</li> <li>• Wetterholm Petra (SHINRIN-YOKU SWEDEN)</li> <li>• ETA BETA Cooperativa Social (ETA BETA)</li> <li>• Stadt HERNE (HERNE)</li> <li>• Asociación Española de Horticultura y Jardinería Social y Terapéutica (AEHJST)</li> <li>• Universitat Oberta de Catalunya (UOC)</li> </ul>
	<ul style="list-style-type: none"> <li>• University of Kent (UNIKENT)</li> <li>• The University of Salford (USAL)</li> <li>• Social Farms and Gardens (SF&amp;G)</li> <li>• Mind in Bexley and East Kent LTD (MBEK)</li> </ul>

## Project n. 101084198

*Advancing Greencare in Europe: an integrated multi-scalar approach for the expansion of nature-based therapies to improve mental health equity*

### HISTORY CHART

Issue	Date	Changed page(s)	Cause of change	Implemented by
0.1		-	Draft	SGGW
1.0	05/08/2024	ALL	Version 1.0	SGGW
1.1	28/08/2024	ALL	Version 1.1	SGGW

### VALIDATION CHART

No.	Action	Beneficiary	Date
1.	Prepared	SGGW	05/08/2024
2.	Revised	UOC, UAB	18/08/2024
3.	Approved	UAB, UOC	30/08/2024
4.	Released	UAB	30/08/2024

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## Executive summary

The present document represents Deliverable 2.3. – Catalogue of existing successful organizational and financial models for providing green care. It has been developed as a part of Work Package 2 – Assessment of the current status of green care and is related to Task 2.2. Identify the status of green care implementation.

A successful model for providing green care is understood as a way to effectively provide one of the three levels of green care (or the integration of the three levels) with a focus on health equity (i.e. benefitting the health of those with more need) and that can be used as a benchmark or can be applied to similar conditions elsewhere, and thus can be referred to as good practice. The term covers all activities related to providing nature based-therapies and nature-based health promotion, as well as assuring nature in everyday life. Accordingly, the term good practice is an umbrella term covering various projects, solutions, initiatives, approaches, programmes, etc.

This deliverable is a stand-alone report documenting existing successful organizational and financial models for providing green care by public and private institutions in the GreenME megastudy areas. It also forms the basis for further activities under WP5 related to the co-development of national schemes for green care.

The catalogue features a total of 13 charts, encompassing case studies from Spain, Italy, Sweden, UK, Germany, Poland and US. The successful models included in this catalogue comprise all three levels of green care: nature in everyday life (NEL), nature-based health promotion (NBP), and nature-based therapies (NBP). However, it is important to highlight that most of these examples integrate multiple levels simultaneously. Typically, initiatives that focus on incorporating nature into daily life also incorporate elements of nature-based health promotion, while nature-based therapies are often combined with broader health promotion efforts.

For many of the case studies featured in this catalogue, their field of activity extends beyond health or social care. Most commonly, these initiatives intersect with nature conservation, environmental protection as well as spatial planning, and in some cases, agriculture and consultancy. This interdisciplinary approach reflects the holistic nature of green care, which seeks to harness the benefits of nature for mental-health and wellbeing in multiple dimensions.

The results presented in this report may not provide a comprehensive view of the successful green care models within the GreenME megastudy areas. As highlighted in Deliverable 2.1, some green care actors focus primarily on physical health, while others target children as their primary demographic, a group not included in the GreenMe project. Rather, this report aims to present a selection of cases to show the existing variety of successful green care interventions focusing on improving mental health and wellbeing equity among adults.

## Introduction

### *Project information*

**GreenME aims to** identify ways in which effective nature-based therapy and a broader green care framework can be scaled-up to improve adult mental health and wellbeing equity while contributing to multiple socio-ecological co-benefits. To that end, GreenME's approach is to diagnose, to **increase scientific evidence on the mental health and wellbeing benefits of green care** and to empower green care actors to, finally, **increase the use of nature-based therapy and its integration within a multi-scalar green care framework** to ultimately promote just climate resilient and sustainable healthy communities.

**GreenME understands green care as** a three-scale continuum from **nature-in-everyday-life** (e.g. the existence of green and blue infrastructure for viewing and walks) to **nature-based health promotion** (the promotion of active interaction with nature such as gardening and conservation) to **nature-based therapy** (the provision of treatment for individual patients). GreenME will use a transdisciplinary and mixed-methods approach to identify opportunities, barriers, causal pathways and patterns of (in)equitable distribution of mental health and wellbeing benefits from green care in study countries.

**GreenME focuses on seven study countries** (Germany, Italy, Poland, Spain, Sweden, the UK, and the USA). Four of these countries are **frontrunners** in nature-based therapy (**Italy, Spain, Sweden, the UK**; where nature-based therapy is at least partially integrated in the health care system meaning that patients can be referred to some type of green care by their health care provider) and three are **followers** (**Germany, Poland, the USA**; which have yet to implement robust nature-based therapy programs that are connected with the health care systems, but which could learn from other frontrunners).

**GreenME will co-create solutions and guidelines** including an EU framework and country-specific schemes **for bolstering green care** along with an identified community of green care actors, and **design a training program** for nature-based therapy providers informed by empirical evidence. The evidence generated will **offer replicable partnership models** and guidelines to **design impactful cross-sectorial green care systems**, with national health care systems and local governments amongst the beneficiaries, **leading to a higher uptake of nature-based therapy** and a general **reframing of the green infrastructure functionality**.

## *Objectives and scope of the report*

The report is elaborated under WP2 *Assessment of the current status of green care*, Task 2.2. *Identify the status of green care implementation*. The **main objective** of this report is to **document** existing **successful organizational and financial models for providing green care** by public and private institutions in each study area.

The GreenME project understands a **successful model** for providing green care as an intervention that effectively provide one of the three levels of green care for mental health equity (i.e. focusing on benefiting the mental health of marginalized populations) or as an intervention that integrates two/three of the green care levels. Moreover, this identified intervention must have potential to be **used as a benchmark** or have potential to **be applied to similar conditions elsewhere**, and thus can be referred to as good practice. The term “successful model” covers all activities related to providing nature based-therapies and nature-based health promotion, as well as assuring nature in everyday life. Accordingly, the term **good practice is an umbrella term** covering various projects, solutions, initiatives, approaches, programs, etc.

The **Catalogue of existing successful organizational and financial models for providing green care** is presented in the form of **data sheet** (catalogue charts) **for each case study**, including following data:

- name of case study
- country
- area of application
- implementer
- sector
- field(s) of activity
- green care level
- key words
- core objectives
- organizational and financial structure
- success factors
- key messages
- main efforts
- scale
- link to further information

**Identification of successful organizational and financial models for providing green care** was carried out in **eight study areas** (Fig.1.), which represent regions with diverse natural characteristics including **urban, peri-urban, rural, semi-rural** and **coastal areas**: Province of **Barcelona** (Spain), **Bologna** Metropolitan Area (Italy), **Stockholm** Metropolitan Area (Sweden), Greater **Manchester**, England (UK), **Pembrokeshire**, Wales (UK), Ruhr Area focus area **Herne** (Germany), **Warsaw** Functional Area (Poland), **Multnomah County**, Oregon (US).

The catalogue features a total of **13** charts, encompassing the following **case studies**:

- Forest Bathing prescription in Castellar del Vallès, Spain
- Mans al verd (Hands to Green) program Spain

- Agriverde Società Cooperativa Sociale S.R.L. San Lazzaro di Savena, Italy
- Health care center, primary health care, Region Skåne, Sweden
- ShirinYoku, Greater Stockholm, Sweden
- Come out with us (Swe: Häng med oss ut) – Outdoor life for mental health, Greater Stockholm, Sweden
- Greater Manchester Green Spaces Fund, UK
- Pembrokeshire Outdoor Health Project, Wales, UK
- Preventing and Tackling Mental Ill Health through Green Social Prescribing, England, UK
- Future and Home: Revierparks 2020, Ruhr Area, Germany
- Hortitherapy as a standard social care intervention in Warsaw, Poland
- Sensory garden in the Masovian Provincial Hospital Dębnica in Ząbki, Poland
- Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS), Multnomah County, Oregon.

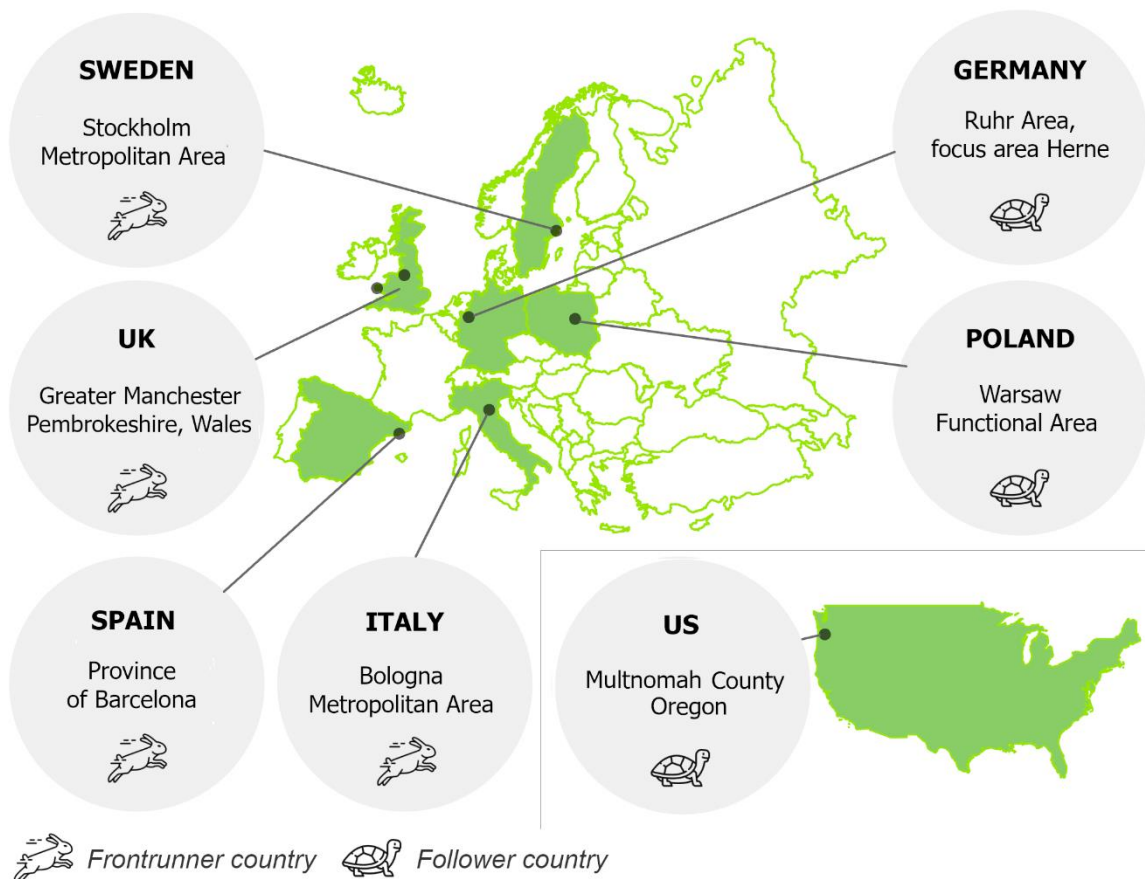


Figure 1 GreenME megastudy areas

## *Relation to other deliverables and tasks*

This deliverable is a stand-alone report documenting existing successful organizational and financial models for providing green care by public and private institutions. It also forms the basis for further activities under WP5 **Task 5.2** aiming at co-development of national schemes for green care. The result of this task also lays the groundwork for the report on suggested national organizational and financial models for providing green care which will be presented in **D.5.1**. Furthermore, based on lessons learned in WP2 (including those from the Catalogue), **Task 5.3** will develop the content of a pilot course to train nature-based therapy providers.

The Catalogue is developed on the basis of data collected as part of **Task 2.2**, i.e. semi structured interviews and in-depth review of grey literature, and is therefore closely linked to **D.2.2**. Green care baseline reports for each study country and **D.2.4**. Database with collected data (interviews to green care actors). The study covered the areas defined in **Task 2.1**, which are the same areas as those that will be included in the rest of the GreenME work (WP3-WP6; with exceptionally some areas in WP2 being more expansive than the study areas of WP3-WP4 for practical reasons).

## *Methodological framework*

**Identification of successful financial and organizational models** for providing green care **was based on the results of semi-structure interviews and in-depth analysis of grey literature**.

The creation of the catalogue began with developing **criteria for selecting case studies**. Research conducted in task T2.1 revealed that green care stakeholders in various countries are highly diverse in terms of their sectors, fields of activity, roles, and areas of focus. Additionally, many stakeholders engage in multiple levels of green care and assume various roles within them. Consequently, identifying successful models of green care presents a significant challenge. The literature indicates **that there is no one-size-fits-all set of measures to assess the success** of organization or a project (Kotas 2015<sup>1</sup>; Ika & Pinto 2022<sup>2</sup>; Volden & Welde 2022<sup>3</sup>).

The dimensions of **success may be defined and classified in different ways**, depending on the project concerned (Maltz et al. 2003<sup>4</sup>; Ika & Pinto 2022<sup>5</sup>). Furthermore, **different success dimensions are relevant to different types of initiatives**, and in different

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<sup>1</sup> Kotas M. 2015. Pomiar sukcesu organizacji publicznych na przykładzie ośrodków pomocy społecznej (Measuring the success of public organizations on the example of social welfare centers). Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie 86: 39-49.

<sup>2</sup> Ika L.A., Pinto J. 2022. The "re-meaning" of project success: Updating and recalibrating for a modern project management. International Journal of Project Management 40(7): 835-848.

<sup>3</sup> Volden G.H., Welde M. 2022. Public project success? Measuring the nuances of success through ex post evaluation. international journal of Project Management 40: 703-714.

<sup>4</sup> Maltz A.C., Shenhar A.J. Reilly R.R. 2003. Beyond the Balanced Scorecard: Referring the Search for Organizational Success Measures. Long Range Planning 36: 187-204.

<sup>5</sup> op.cit.

degrees of importance (Shenhar et al. 2001<sup>6</sup>; Shenhar & Dvir 2007<sup>7</sup>, Maltz et al. 2012<sup>8</sup>). Green care activities require context-specific success measurements, due to their multifaceted nature, as both the actors involved and the scope of their activities differ. Thus, for example, the **durability** (Kabish et al. 2016<sup>9</sup>) and extent of **scalability** (Sekulova & Anguelovski 2017<sup>10</sup>) of greening projects **are considered as management success**. Most organizations have traditionally used financial performance to assess and measure their success (Bauer 2018<sup>11</sup>). However, many researchers point out, that in addition to benefits to the performing organization, other criteria should be taken into account e.g. customers perspective, process perspective (Maltz et al. 2012<sup>12</sup>), relevance of the project, (Volden & Velde 2022<sup>13</sup>), and project sustainability (Ika & Pinto 2022<sup>14</sup>).

Given the above, and the extent of information obtained from the grey literature review and semi-structured interviews, it was decided to adopt **two guiding criteria for selection case studies for the catalogue**:

- **sustainability** - project, solution, initiative, approach, program, etc., has the **financial, material, personal or other resources to support its operation**
- **reference to mental health equity** – the project should refer to fair and just opportunities for all to achieve mental health.

**In addition**, it was also possible to **take into account** projects, solutions, initiatives, approaches, programmes, etc. that did not meet the above criteria, but involved the **integration of the three levels of green care**.

The content of the catalogue chart was prepared in two stages. Initially, a draft version was created. This was followed by a pilot study, which involved completing sheets for three case studies in the UK, Spain and Poland (one in each country). These case studies covered various types of green care initiatives, allowing the catalogue chart to be refined and made better suited for the different contexts and realities included in the GreenME project.

The final version of the **Catalogue chart** consists of three parts:

- profile – containing basic information about the case study such as: name of case study, country, area of application, implementer, sector, field(s) of activity, green care level, key words
- framework – describing core objectives of the case study, organizational and financial structure as well as success factors

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<sup>6</sup> Shenhar A.J., Dvir D, Levy O., Maltz A.C. 2001. Project Success: A Multidimensional strategic Concept. Long Range Planning 34 (2001) 699-725.

<sup>7</sup> Shenhar A.J., Dvir, D. 2007. Reinventing project management. The diamond approach to successful growth and innovations. Boston, MA: Harvard Business School Press

<sup>8</sup> Maltz A.C., Shenhar A.J., Dvir D., Poli M. 2012. Integrating Success Scorecards Across Corporate Organizational Levels. The Open Business Journal 5: 8-19.

<sup>9</sup> Kabisch, N., Frantzeskaki, N., Pauleit, S., Naumann, S., Davis, M., Artmann, M., Haase, D., Knapp, S., Korn, H., Stadler, J., Zaunberger, K., Bonn, A. 2016. Nature-based solutions to climate change mitigation and adaptation in urban areas: Perspectives on indicators, knowledge gaps, barriers, and opportunities for action Ecology and Society, Vol. 21(2):39.

<sup>10</sup> Sekulova F., Anguelovski I. 2017. The Governance and Politics of Nature-Based Solutions. <https://doi.org/10.13140/RG.2.2.23172.35201>

<sup>11</sup> Bauer D. 2018. Quantification of Project Success. An Explorative Analysis. Social Science Series. AkademikerVerlag

<sup>12</sup> op.cit.

<sup>13</sup> op.cit.

<sup>14</sup> op.cit.

- evidence of success – including key messages, main efforts, scale of the project, solution, initiative, approach, programme, etc., and link to further information

As mentioned above **catalogue charts contain several data describing the case studies**. In order to **standardise the presentation** of results, a **template was developed**. Interpretation of the categories adopted is presented in table 1.

*Table 1 Characteristics of the features adopted to describe the case studies*

Feature	Description
Name of case study	Name of project, solution, initiative, approach, programme, etc.
Country	Specify
Area of application	Name of geographical area /name of administrative unit as identified in T2.1
Implementer	Name of the stakeholder implementing project, solution, initiative, approach, programme, etc.
Sector	Public sector; for-profit sector, non-profit sector (select)
Field(s) of activity	Health, social care, environmental protection, nature conservation, spatial planning, research, education and training, insurance, finance, media, consulting, tourism (select all that apply), other (specify)
Green care level	Nature-based therapies, Nature-based health promotion, Nature in everyday life (select all that apply), justify the selection by identifying the activities carried out in the chosen levels(s)
Key words	3-5
Core objectives	Brief description of main objectives of project, solution, initiative, approach, programme, etc.
Organizational and financial structure	Description of the model/structure of the organization and description of the connections with institutions that are enabling their activity: e.g. connections with the national/regional health service, other therapy providers, or philanthropic donations plus a brief description of the financing model/scheme
Success factors	Brief description of circumstances, facts, elements, influences that affect success
Key messages	Concise, clear, and compelling statements that convey the most important information or main points about a project, solution, initiative, approach, programme, etc.
Main efforts	Brief description of the primary activities that focus on achieving the objectives of project, solution, initiative, approach, programme, etc.
Scale	Describe success in numbers - depending on the case study this may refer to the expenses incurred, the number of parks completed, the number of people participating in the therapies, number of groups/individuals used the service, area of impact, etc.
Further information	Link to www, Fb, etc.

# Catalogue of successful models for providing green care

## *Forest Bathing prescription in Castellar del Vallès, Spain*

<b>PROFILE</b>	
Name of case study	Forest Bathing Prescription program in Castellar del Vallès
Country	Spain
Area of application	Basic health area <sup>15</sup> of Castellar del Vallès which also includes the town of Sant Llorenç Savall. This basic health area is part of the Province of Barcelona
Implementer	The staff involved are the staff of the CAP (primary healthcare centre), EAP <sup>16</sup> (psychopedagogical counselling and guidance teams) entities
Sector	Public sector
Field(s) of activity	Health, social care
Green care level	Nature-based therapies: the primary healthcare centre of Castellar del Vallès provides forest bathing for adults with moderate and severe mental health conditions
Key words	Forest bathing, integrated model, nature-based therapy, mental health equity
<b>FRAMEWORK</b>	
Core objectives	<p>The general objective of the Social Prescription program, of which the Forest Bathing Prescription program is part, is to improve the comprehensive health of people in the municipality of Castellar del Vallès by promoting healthy habits and improving the living conditions of the community through a network of multidisciplinary-designed interventions.</p> <p>The specific objectives of the Social Prescription project are:</p> <ul style="list-style-type: none"> <li>• Promote healthy relationships with oneself, with others, and with the environment.</li> <li>• Decrease aggression and hostility, as well as anxiety and sadness.</li> <li>• Improve cardiovascular and metabolic health.</li> <li>• Help rest and sleep.</li> <li>• Promote the creation of new health assets<sup>17</sup> through participatory processes.</li> <li>• Tailor the provided health activities to the community by addressing the comprehensive needs of those people treated in the Primary</li> </ul>

<sup>15</sup>The basic health area (ABS) is the elementary territorial unit through which primary health care services are organized. They are territorial units formed by neighborhoods or districts in urban areas, or by one or more municipalities in rural areas.

<sup>16</sup>The EAPs are psycho-pedagogical counseling and guidance teams that support teachers and educational centers in responding to the diversity of students and in relation to students with special educational needs, as well as their families.

<sup>17</sup>*Actius en salut*, these are broadly defined as resources which can be beneficial to ones health, including people, environments, facilities, activities, etc.

	<p>Healthcare Centre and in the Social and Health Services of the municipality.</p> <ul style="list-style-type: none"> <li>• Empower patients to identify health assets and their benefits.</li> <li>• Avoid medicalizing life's problems that cause distress and reduce the inappropriate prescription of psychotropic drugs.</li> <li>• Reduce the excessive use of consultations at the Primary Healthcare Center and at municipal Social Services.</li> </ul>
<b>Organizational and financial structure</b>	<p>The Local Municipal Health Plan of Castellar del Vallès includes a Community Health program, which involves the local administration, the EAP Castellar del Vallès (psychopedagogical counselling and guidance teams), several entities and associations, and the Department of Public and Community Health of Castellar del Vallès. The Community Health program is updated annually and includes a health diagnosis to identify the primary needs and prioritize interventions for the population of Castellar del Vallès. The Social Prescription project emerged from the Castellar del Vallès annual health diagnosis conducted in 2016.</p> <p>The Social Prescription program is broadly implemented across several primary healthcare centres in Catalonia. This project in Castellar del Vallès incorporates the recommendation of community activities by the healthcare and social workers from the city council and the EAP, such as physical exercise, volunteering, art workshops, and support groups, to improve population health and well-being. Within these activities, the Social Prescription program includes outdoor activities like healthy walks, forest bathing (the focus of this case), and Nordic walking. These activities aim to address issues like loneliness and stress, acknowledging that health is influenced by one's social circumstances.</p> <p>The Forest Bathing Prescription program has been ongoing since 2019. The organization of the Forest Bathing Prescription program is distributed in three working groups: 1) the leading group: health and environmental units of the local administration, together with the basic health area; 2) the steering team: other staff from the local administration, the natural spaces unit from Barcelona Provincial Council (<i>Diputació de Barcelona</i>)<sup>18</sup>, agents from the natural parks where the activities are conducted, and Castellar del Vallès main hiking group; 3) others: specialized advisors. The activity is provided by a trained psychologist from the public healthcare centre of this municipality.</p> <p>The entire project was funded with budget from Castellar del Vallès local administration and the Catalan Health Institute (<i>Institut Català de la Salut</i>)<sup>19</sup>, and other unnamed associations from the city.</p>
<b>Success factors</b>	<p>The fact that it is promoted and provided by public authorities and integrated into the healthcare system of a municipality makes it potentially</p>

<sup>18</sup> The *Diputació de Barcelona* is a public institution of Catalonia that provides direct services to citizens and provides technical, economic and technological support to the city councils of the 311 municipalities of the province of Barcelona.

<sup>19</sup> The *Institut Català de la Salut* (ICS) is the largest public health company in Catalonia, with more than 55,000 professionals working in 332 primary care teams, 3 large high-tech tertiary hospitals (Vall d'Hebron, Bellvitge and Germans Trias i Pujol), 4 regional reference hospitals (Arnau de Vilanova de Lleida, Joan XXIII de Tarragona, Dr. Josep Trueta de Girona and Verge de la Cinta de Tortosa) and one regional hospital (Viladecans).

	<p>reachable by groups with fewer means. Moreover, it's provided by a trained psychologist, giving reliability to this nature-based therapy. Furthermore, the Forest Bathing program is designed to include different sessions, which allows for ongoing therapy rather than just a single treatment. In addition, data is constantly being collected to evaluate and improve the program and the project has been ongoing for years, implying that it's financially viable and sustainable.</p> <p>The general criteria of the itineraries ensure they are accessible to everyone living in the city who has access to the healthcare system, which is universal in Spain.<sup>20</sup></p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>The Forest Bathing Prescription program is an ongoing locally integrated project where a nature-based therapy – forest bathing – is provided and promoted by public authorities and the local healthcare system. It takes place within a broadly implemented – at the regional/Catalan level – social prescription program, and several entities take part in this project, increasing the social capital of the village. Successful especially for its integration in the local public healthcare system, its existence since 2019, and because data is constantly being collected to evaluate and improve it.</p>
<p>Main efforts</p>	<p>In Castellar del Vallès, forest bathing prescriptions for mental health and wellbeing are offered by healthcare providers at the primary healthcare centre. This prescription is carried out within a broader social prescription program, which is integrated within the healthcare system across all of Catalonia. The prescription of forest bathing is done quarterly for 9-10 sessions to benefit mental health and wellbeing. It is coordinated by a psychologist from the healthcare centre who has received training in forest bathing. The sessions consist of forest bathing in itineraries that are between 60 and 120 minutes. After the sessions, the benefits of the activity are evaluated. The primary healthcare centre of Castellar del Vallès are considered a pioneering centre for implementing these activities.</p> <p>The project follows a structured methodology divided into five phases. In the Initial Phase (Phase 0), the technical team collects relevant information and existing itineraries. In Phase 1, the general criteria for creating an itinerary are established, and a map of actors is created that includes the relevant municipal collectives. During Phase 2, the selected actors determine the physical characteristics of the itinerary. The actors involved in the project also assess route infrastructure, including fences, bridges, and accessibility. Phase 3 involves selecting users through a social prescription program, with activities conducted by specialized guides and the prescriptions are monitored. Finally, in Phase 4, the technical team analyses the collected data, cross-referencing it with the criteria established in Phases 1 and 2, and incorporates suggestions from Phase 3. An evaluation is then conducted,</p>

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<sup>20</sup> The Spanish healthcare system is officially “universal”. This means that all citizens and those migrant residents paying in to the social security system (i.e., who are employed or pay self-employment taxes) have direct access to the system. Migrants without documentation officially have been granted access since 2018 but this may be less straight forward than access for citizens. Relatively wealthy migrants such as foreign residents with non-lucrative or digital nomad visas by law must purchase private insurance and cannot use the public system unless in case of emergencies.

	<p>and improvement proposals are developed to enhance the project's outcomes.</p> <p>The main characteristics of the itineraries are 1) inclusive itineraries for any type of user; 2) working with pre-existing conditions, thus using existing itineraries; 3) point of origin in the urban core and 4) circular itineraries, among other characteristics.</p>
Scale	<p>According to an evaluation conducted in 2021, the total expenses on forest bathing amounted to 20.700€ for that year. The area encompasses a population of approximately 23,000 adults.</p>
Further information	<p>Forest bathing of Castellar del Vallès evaluation 2019:  <a href="https://www.bbp.cat/info_producida/2282informa.pdf">https://www.bbp.cat/info_producida/2282informa.pdf</a></p> <p>Forest bathing of Castellar del Vallès as a good practice model:  <a href="https://www.bbp.cat/practicas_detalle.php?id_ficha=1740">https://www.bbp.cat/practicas_detalle.php?id_ficha=1740</a></p> <p>News article about social prescription and forest bathing of Castellar del Vallès:  <a href="https://www.lactual.cat/actualitat/exit-prescripcio-social-donostia_49710_102.html">https://www.lactual.cat/actualitat/exit-prescripcio-social-donostia_49710_102.html</a></p>

## *Mans al verd (Hands to Green) program, Spain*

<b>PROFILE</b>	
Name of case study	<i>Mans al verd</i> (Hands to Green) program
Country	Spain
Area of application	Barcelona (city) in Province of Barcelona
Implementer	Barcelona's Local Administration ( <i>Ajuntament de Barcelona</i> )
Sector	Public sector
Field(s) of activity	Health, social care, spatial planning, environmental protection, agriculture
Green care level	Nature-in-everyday life because an inherent aim is to increase green spaces within the cities, as well as the social participation in these spaces,  Nature-based health promotion as part of the project is to involve people older than 65 years old in community gardens, as well as an organized journey to raise awareness of the benefits that nature entail for health, among others.
Key words	Urban gardens, agriculture, community empowerment, nature conservation, biodiversity, participatory democracy
<b>FRAMEWORK</b>	
Core objectives	<p>The <i>Mans al verd</i> (Hands to Green) program's goal is to empower citizens to actively cultivate public and private spaces. It also aims to increase green spaces, promote the health and well-being of people and promote biodiversity within a collaborative public space management framework.</p> <p>The specific objectives of the program are:</p> <ul style="list-style-type: none"> <li>• Promote the participation of citizens in the care of green spaces located in public or private spaces.</li> <li>• Facilitate, manage and regulate the various green involvement initiatives that already exist.</li> <li>• Offer flexible responses to the opportunities and needs of the territory.</li> <li>• Promote a more efficient use of natural resources.</li> <li>• Promote participation and social transformation.</li> <li>• Strengthen social cohesion and community projects on nature-health.</li> <li>• Promote agroecological practices and encourage the biodiversity of flora and fauna.</li> </ul>
Organizational and financial structure	The <i>Mans al verd</i> ("Hands to Green") belongs to the Urban Agriculture Strategy (EAU) 2030, which, in turn, belongs to the Nature Plan 2021 – 2030 of Barcelona. The Nature Plan is the roadmap that should guide green policies in the city over the next decade. It is divided into three strategic axes: 1) become greener and more biodiverse, 2) conservation and improvement of greenery and biodiversity and, 3) improve the city's greenery with and for citizens. The EAU 2030 is an instrument that plans

	<p>the actions necessary to promote agroecology and food sovereignty, its strategic axes are: 1) improve and increase the city's agricultural land with an agroecological model, 2) maximize the environmental, social, therapeutic, emotional and community benefits of gardens and, 3) move towards co-governance based on participatory democracy and the empowerment of the community. As a result of these plans and strategies, Barcelona commits to supporting citizen initiatives, offering proposals for residents, organizations, and companies to actively promote agroecology and urban biodiversity conservation.</p> <p><i>Mans al verd</i> (Hands to Green) collects, organizes and promotes citizen initiatives in the care of greenery and biodiversity, and offers concrete proposals so that all city agents can play an active role, through different actions: transfer of municipal spaces to entities and citizens, co-management of public spaces, participation in activities and projects to care for the greenery and biodiversity of the city, and resources, studies and dissemination on agriculture, gardening and biodiversity.</p> <p>Projects underway and resources available in Mans al Verd are a network of urban gardens aimed at people over 65-years old; the transfer of unused municipal plots of land in the city of Barcelona to non-profit entities, associations and foundations to manage them; the Spring Festival, an event offering workshops and activities highlighting the importance of green spaces for health, well-being, and climate change mitigation; a program that accompanies residents in the fundamental steps to plant in tree pits in the public right of way and carry out maintenance; the co-management of public spaces; the collection of bitter oranges and making jam from them; an Urban Agriculture Observatory, an integrated information, study, research and monitoring system of urban agriculture in the city; and the Laberint d'Horta training centre in gardening, agriculture and biodiversity.</p> <p>The EAU's leadership currently lies in the Urban Ecology Department, and therefore it is this area that should take the lead in finding financial resources for the deployment of the strategy. <i>Mans al verd</i> ("Hands to Green") is managed by the Urban Ecology, Communication and Participation Directorate of Barcelona's local administration. The vegetable gardens included in this program have agreements or authorizations from the local administration for the use of the spaces. The entities are responsible for managing the gardens and their surroundings in compliance with the agreement with the local administration and with the aim of recovering certain urban spaces or using them in some way.</p>
<p>Success factors</p>	<p>Factors contributing to this program's success include the fact that it works on multiple levels of promotion, both with citizens, small initiatives, and with the city government. This way of working creates connections between these various levels and allows for greater communication and collaboration. Moreover, the program is included in multiple planning initiatives, including The Natura Plan (2021-2030) and The EAU (2030), thus integrated within a broader strategy. One of the guiding principles of the EAU is inclusion and social justice: "In the current context of eco-social crisis, urban agriculture must promote inclusion and social cohesion</p>

	<p>through community revitalization, ensuring that urban gardens are egalitarian, plural and democratic spaces, and guaranteeing equitable access to resources.". Furthermore, it aims at strengthening the community network, social relationships, participation and social transformation, important factors for promoting the wellbeing of communities. Another success factor is the active involvement of local communities, and the multiple ongoing projects actively working to increase green space in the city.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>The <i>Mans al verd</i> (Hands to Green) program, part of Barcelona's Urban Agriculture Strategy (EAU) 2030 under the Nature Plan 2021-2030, aims to empower citizens to cultivate public and private spaces, fostering green initiatives that enhance health, well-being, and biodiversity through collaborative management. Managed by the Urban Ecology Department, the program supports diverse projects like urban gardens for seniors and tree planting, engaging local communities in green space development. It emphasizes, at least as a goal, inclusion and social justice, ensuring equitable access to resources and transforming urban gardens into egalitarian and democratic spaces. Through strategic actions and citizen involvement, <i>Mans al verd</i> ("Hands to Green") strengthens community networks and promotes social transformation, aligning with Barcelona's broader green policies.</p>
<p>Main efforts</p>	<p><i>Mans al verd</i> (Hands to Green) works to collect, organize, and promote citizens' initiatives in the care of green space and biodiversity, and offers concrete proposals so that all the agents of the city can play an active role in this promotion, through different actions. This not only helps promote the growth and management of green spaces in Barcelona through research, co-management and the distribution of resources, but also helps small initiatives get the backing, funding and attention they need.</p>
<p>Scale</p>	<p>According to the EAU, there are 189 urban gardens, with 900 users of the urban gardens of the municipal network, and 66 entities (with 650 members) linked to urban gardens of the municipal networks. The Mans al Verd program is dependent on the city budget with additional efforts (according to the EAU) placed on finding grants for developing and maintaining gardens.</p>
<p>Further information</p>	<ul style="list-style-type: none"> <li>• Mans al verd: <a href="https://ajuntament.barcelona.cat/ecologiaurbana/es/mans-al-verd">https://ajuntament.barcelona.cat/ecologiaurbana/es/mans-al-verd</a></li> <li>• Urban Agriculture Strategy (EAU): <a href="https://ajuntament.barcelona.cat/ecologiaurbana/es/que-hacemos-y-porque/ciudad-verde-y-biodiversidad/estrategia-agricultura-urbana">https://ajuntament.barcelona.cat/ecologiaurbana/es/que-hacemos-y-porque/ciudad-verde-y-biodiversidad/estrategia-agricultura-urbana</a></li> <li>• Nature Plan: <a href="https://ajuntament.barcelona.cat/ecologiaurbana/es/que-hacemos-y-porque/ciudad-verde-y-biodiversidad/plan-natura">https://ajuntament.barcelona.cat/ecologiaurbana/es/que-hacemos-y-porque/ciudad-verde-y-biodiversidad/plan-natura</a></li> </ul>



*Agriverde Società Cooperativa Sociale S.R.L. San Lazzaro di Savena, Italy*

<b>PROFILE</b>	
Name of case study	<i>Agriverde Società Cooperativa Sociale S.R.L</i> "Agrigreen Social Cooperative Ltd."
Country	Italy
Area of application	San Lazzaro di Savena in Bologna Metropolitan Area
Implementer	Agriverde Soc. Coop. Soc. srl
Sector	Non-profit sector
Field(s) of activity	Health, social care, environmental protection, nature conservation
Green care level	<p>Nature-based therapies:</p> <ul style="list-style-type: none"> <li>• Therapeutic environments: the intervention includes collaborating with experts to design therapeutic gardens for individuals with mental health issues.</li> <li>• Sensory gardens: the intervention develops sensory gardens with medicinal and ornamental plants.</li> <li>• All users are always accompanied by specialized operators and educators.</li> </ul> <p>Nature-based health promotion:</p> <ul style="list-style-type: none"> <li>• Community education: the intervention includes organizing educational programs and events to promote biodiversity and sustainability.</li> <li>• Sustainable practices: the intervention integrates nature to improve air quality and support healthy eating.</li> <li>• Impact monitoring: the intervention tracks and shares environmental and social benefits.</li> <li>• Inclusivity: the intervention incorporates cultural and artistic elements to reflect community diversity.</li> </ul>
Key words	Environmental sustainability, Human well-being, Community Engagement, Inclusivity, Healthy eating
<b>FRAMEWORK</b>	
Core objectives	<p>Promote biodiversity and self-production of plants in the nursery that integrates Nature-Based Solutions (NBS) and the principles of the New European Bauhaus (NEB) to promote environmental sustainability, and human well-being.</p> <p>As a Type B Social Cooperative, Agriverde's objectives included creating job opportunities for people marginalized in the labor market, particularly those with disabilities or social disadvantages.</p>
Organizational and financial structure	Agriverde was established as an "agricultural cooperative" in June 1986, on the initiative of the Social and Psychiatric Services of the former <i>USL 22</i> of San Lazzaro di Saven. Its aim was to integrate productive and social activities for people with different types of disadvantages, offering them

	<p>training, rehabilitation, and job placement courses inside and outside the cooperative.</p> <p>On the 28<sup>th</sup> of January 1994, Agriverde became a Type B Social Cooperative, implementing the directives of Law No. 381 of 1991. This transition meant that Agriverde formally recognized its dual mission of combining productive agricultural activities with social inclusion and support for disadvantaged individuals. The cooperative also engaged in activities aimed at their social and professional integration.</p> <p>On the 25<sup>th</sup> of June 1998 the cooperative was registered in the Regional Register of Social Cooperatives as type B + A. This registration allowed Agriverde to expand its activities to include both the employment of disadvantaged people (Type B) and the provision of social, health, and educational services (Type A). This dual classification enabled Agriverde to broaden its impact by offering a wider range of services, including therapeutic and rehabilitation programs, while continuing its commitment to environmental sustainability and community engagement.</p> <p>Agriverde is organized according to two distinct sectors: one dedicated to agricultural production and the other to rehabilitative purposes. In terms of agricultural production, Agriverde focuses on ornamental greenery and operates with the same organizational and financial structure as a peri-urban farm. For its rehabilitative and social-welfare purposes, Agriverde offers services aimed at psychiatric care and support for adults facing social disadvantages.</p> <p>Financially, the cooperative turns over around 2 million euro per year. Three-quarters of the income (1,500,000 EUR) comes from gardening activities, mostly connected to maintenance and design of public parks, public green spaces, and private gardening. One-quarter (500,000 EUR) is received by Agriverde for their green care/rehabilitative activities. Breaking down the costs, about 60,000 EUR comes from agricultural activities done with people with disabilities (i.e. selling the organic-certified produce to the market and to private consumers), while the biggest income is received by rehabilitation contracts signed with the local healthcare authorities. Accordingly, Agriverde works closely with local public services, including Municipalities in the Bologna Metropolitan Area, Department of Mental Health and Drug Addiction, Adult Disabled Services, social services.</p>
<p>Success factors</p>	<p>Clustering with other local entities is probably the greater success factor of the coop. Agriverde that has been in the rehabilitation sector for almost 40 years: activities are promoted and provided within a local consortium of other NGOs, social cooperatives, and entities working in the field of sustainable agriculture and care provider, in collaboration with public authorities. Specifically, since 2016, Agriverde participate to regional tenders for financed by the Local Health Authority (AUSL Emilia Romagna) for the rehabilitation of people affected by mental issues. To receive this funding, Agriverde works in collaboration with other cooperative that works in the field of mental health (but not necessary connected to green care). Once the tender is won, Agriverde signs a 2+2-year contract for developing the rehabilitation and re-education activities with the patients sent by the AUSL. This has allowed the consortium and Coop. Agriverde to be integrated into the healthcare system, which makes the proposed</p>

	<p>horticultural therapies reachable by different social groups with different means, thus potentially fostering mental health equity over the territory. Furthermore, so far, the proposed therapies have proved reliable and financially viable, which is a success that can be replicated as a model.</p>
<b>EVIDENCE OF SUCCESS</b>	
<b>Key messages</b>	<p>Promotion of personalized therapeutic rehabilitation pathways through organic farming, nursery and landscape design, care and maintenance activities.</p> <p>Promotion of services dealing with social support and mental health, based on the concept of community, which could be achieved through the collaboration of the health sector and other cooperatives to foster educational, social care, employment, social inclusion and mental health.</p> <p>Promote environmental sustainability and biodiversity.</p> <p>Cope with and adapt to the current climate emergency.</p>
<b>Main efforts</b>	<p>Agriverde primarily focuses on the following activities and therapies:</p> <ul style="list-style-type: none"> <li>● Collaborative Nursery Design (Site Analysis and Integrated Design): <ul style="list-style-type: none"> <li>- Conduct a detailed study of the nursery site, considering local climate, existing biodiversity, and soil characteristics.</li> <li>- Actively involves the community, artists, designers, architects, landscapers, as well as NBS and environmental experts in nursery design.</li> <li>- Integrate NEB and NBS principles into architectural and landscape design.</li> <li>- Hires consultants for architectural solutions linked to individuals with mental health issues, psychological and cognitive discomfort, and sensory disabilities.</li> </ul> </li> <li>● Implementation of NBS Solutions: <ul style="list-style-type: none"> <li>- Integrates NBS to increase biodiversity, improve air quality, and promote sustainable agriculture in their gardens.</li> <li>- Incorporates companion planting and typical foods from other countries within the cultivated garden.</li> <li>- Creates beds of medicinal and ornamental plants to develop sensory skills.</li> <li>- Establishes beds for growing flowers to enhance awareness of local productions and the slow flower philosophy.</li> <li>- Develops an educational garden cultivated with synergistic agriculture.</li> <li>- Collects seeds from forest and shrub plants to create eco-friendly areas.</li> </ul> </li> <li>● Environmental Education and Community Engagement: <ul style="list-style-type: none"> <li>- Develops educational programs to raise awareness in the local community about the importance of biodiversity, sustainability, and inclusivity.</li> <li>- Organizes interactive events, workshops, and guided tours to engage the community and encourage participation.</li> </ul> </li> <li>● Environmental and Social Impact Monitoring and Sustainability:</li> </ul>

	<ul style="list-style-type: none"> <li>- Implements environmental and social monitoring systems to collect data on biodiversity, air and soil quality in the nursery, data on community benefits, and highlighting the positive impacts both environmentally and socially of NBS and NEB solutions.</li> <li>- Collaborates with research institutes, universities, and environmental organizations to conduct biodiversity studies, environmental impact assessments, and long-term monitoring.</li> <li>- Shares acquired knowledge with the scientific community and the public.</li> <li>• Inclusivity and Cultural Diversity:             <ul style="list-style-type: none"> <li>- Incorporates cultural and artistic elements in various nursery spaces to reflect the diversity of the community.</li> <li>- Organizes events that celebrate the plurality of values, inclusivity, and involvement of vulnerable individuals and communities with a migration background.</li> <li>- Creates pathways for migrants based on interaction with those arriving from migration routes, adapting to their dietary habits and producing crops that align with their preferences.</li> <li>- Showcases how Italy works on inclusion through social agriculture through a defined model that can be exported and replicated in other contexts. The consolidated model can also be used and adapted to accommodate people with different needs and adapt to the evolving social distress. Promotes new practices for working with people that have disability and mental health issues.</li> </ul> </li> <li>• Ongoing Evaluation and Adaptation:             <ul style="list-style-type: none"> <li>- Collects feedback from the community and adapts the project based on evolving local needs and dynamics.</li> </ul> </li> <li>• Additional activities:             <ul style="list-style-type: none"> <li>- Cultural Integration and Employment Guidance for Migrants: the structure created can help teach migrants about the culture of the host country and provide them with a guidance path for employment. This objective aims to facilitate their integration and offer them the necessary tools to become self-sufficient.</li> </ul> </li> <li>• Compliance with Employment Regulations:             <ul style="list-style-type: none"> <li>- Agriverde exceeds the required percentage of disadvantaged employees with a disadvantage. According to I.N.P.S. Circular 188/94, at least 30% of the cooperative's workers must be people with a disadvantage. Agriverde's percentage is higher than this minimum requirement (around 40%).</li> </ul> </li> </ul>
Scale	<p>Agriverde benefits from a contract for the occupation of various premises, including the first floor of the former Dialysis building, a 6-hectare park, an office in Via Salarolo, a warehouse of about 1,200 m<sup>2</sup>, and a building of about 400m<sup>2</sup>.</p> <p>The above-mentioned spaces are described below:</p> <ul style="list-style-type: none"> <li>- The first floor of the former Dialysis building, which includes male and female changing rooms, four bathrooms on the first floor, one bathroom on the ground floor, and a large room for meetings and</li> </ul>

breaks. Note: The first floor is not connected by an elevator or cargo lift.

All activities take place in an outdoor environment in a 6-hectare park, comprising:

- An agricultural field of 2 hectares.
- A nursery of about 800 m<sup>2</sup> with a heated greenhouse of about 160 m<sup>2</sup>.
- A workshop (wooden house of 16 m<sup>2</sup>) and another unheated greenhouse of about 80 m<sup>2</sup>.
- A cold room.
- Two chemical toilets near the workplace.
- A 2.5 hectares park open to the public.

At the registered office in Via Salarolo, the cooperative has:

- A warehouse of about 1,200 m<sup>2</sup>.
- A building of about 400 m<sup>2</sup>, consisting of:
  - A canteen at the ground floor equipped for meals.
  - An infirmary.
  - Two large changing rooms (male and female) with showers and toilets.
  - A laundry area.
  - The first floor, accessible by people in wheelchair through a stairwell and cargo lift, includes: three offices, a large meeting room, and male and female bathrooms.

Employees and Organizational Structure:

At the beginning of 2024, Agriverde is structured with 53 employees:

- 19 employees with permanent contracts.
- 14 workers belong to sector A (one of whom is a person with a disadvantage), which focuses on personalized rehabilitation therapeutic pathways. There are about 50 active rehabilitation pathways
- 35 workers in sector B, (14 of whom are people with a disadvantage, and one is a person with disability hired under an agreement with Art. 22 LR 17/2005 Lg 68/99). Sector B concentrates on job placement and social inclusion for disadvantaged people
- 4 gardeners were recruited following a training period according to the Law 14/2015 "fragility and vulnerability."

Further information

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

## *Humlamaden Green Rehab, Region Skåne, Sweden*

<b>PROFILE</b>	
Name of case study	Humlamaden Green Rehab
Country	Sweden
Area of application	Region Skåne (County level). Note that this county does not include Stockholm Metropolitan area
Implementer	Humlamaden Green Rehab foundation
Sector	Non-profit sector
Field(s) of activity	Health, social care
Green care level	Nature-based therapy and promotion; Equine-assisted therapy.
Keywords	Equine-assisted therapy, animal-assisted therapy, public health, mental health equity
<b>FRAMEWORK</b>	
Core objectives	The objectives are to support and improve clients' health and well-being through clinical interventions and prevention.
Organizational and financial structure	Humlamaden Green Rehab is a non-profit foundation run by a committee: one chairperson and three commissioners. Treatment staff: six employed, of whom three are clinical professionals: nurse, physiotherapist, and psychologist. Also, one staff member is an expert in equine-assisted therapy and activities, as well as horsemanship. There are three working dogs, one trained as a therapy dog and two assistant dogs. Humlamaden Green Rehab works closely with schools and health care units, such as psychiatric units, as well as private clients.
Success factors	This case study is evidence-based and grounded in ethnology, health care, and occupational science. All treatments are performed outdoors and combine health care with nature and animals. All activities are performed by licensed healthcare personnel. Humlamaden works closely with researchers in occupational science, health care, and environmental psychology. A recent study conducted in collaboration with Lund University and the Swedish University of Agriculture shows significant improvements in their clients' mental health and well-being.
<b>EVIDENCE OF SUCCESS</b>	
Key messages	<p>Pioneer in animal-assisted interventions for psychiatric patients, in particular, the very difficult-to-treat individuals such as adolescents with severe anorexia.</p> <p>Animal-assisted interventions are effective in lowering mental health problems and inducing recovery and well-being.</p>
Main efforts	Long-term collaboration in primary health care, psychiatry, primary schools, and specialized schools. Research-based practice in partnership with several universities.

	Offer training for NBP/NBT providers and health care professionals on the Humlamaden rehab model.
Scale	<p>On-going evaluation of a two-year prospective study of clients from the psychiatric ward (n=48) results expected later in 2024.</p> <p>Part of a scientific evaluation of nature-based rehabilitation in Skåne (n=48). The results of the study showed significantly improvement on perceived health and well-being (manuscript under review).</p> <p>Over the years, several hundred clients have benefited from prevention and clinical interventions. Exact number is not available.</p>
Further information	<a href="https://www.humlamaden.com/?locale=en">https://www.humlamaden.com/?locale=en</a>



## *Shinrin Yoku Sweden, Sweden*

<b>PROFILE</b>	
Name of case study	Shinrin-Yoku Sweden
Country	Sweden
Area of application	Stockholm Metropolitan area
Implementer	Shinrin Yoku Sweden
Sector	Private organization that sometimes is funded by the public sector.
Field(s) of activity	Public and clinical healthcare, education, research
Green care level	Nature-based therapy and promotion
Key words	Public Health Care, Forest Therapy, Nature based intervention, Stress related disorders, Method development, Mental health
<b>FRAMEWORK</b>	
Core objectives	<ul style="list-style-type: none"> <li>• Provide forest baths. Primarily working with group intervention and with adults diagnosed with exhaustion disorder (burnout), anxiety and depression, but also providing forest baths for the general population.</li> <li>• Provide forest bathing and forest therapy trainings on a professional and certified level for NBI providers.</li> <li>• To work in close collaboration with the scientific community to provide evidence-based methods and NBP/NBT programs.</li> </ul>
Organizational and financial structure	<p>Shinrin-Yoku Sweden (SYS) is an organisation founded by private means in 2016 and the first company to offer certified forest baths and forest therapy in Scandinavia. Shinrin-Yoku Sweden created the Scandinavian Nature and Forest Therapy Institute (SNFTI) to further provide services, education and certifications and to train professional forest bathing and forest therapy guides.</p> <p>A certified forest bathing and forest therapy guide, has a comprehensive training, based on evidence-based theory, methodology and practice, "Eco Forest Therapy". The guides trained on EcoForest Therapy offer well-prepared, safe and immersive Forest Bathing experiences. The SNFTI Certified Forest Therapy Guides have an additional methodology, training and expanded skills to prepare and guide those with special needs to adapt contact with nature to the needs/abilities of each group. The SNFTI and its founder has formed a team of leaders, working on a consultation bases, and a nationwide network of certified guides with approximately 100 certified guides, working privately and free of obligations to the SNFTI .They guide people in need of destressing and recuperation, in accessible nature areas; urban parks, semi-urban nature areas and forests, as well as by waterfronts and in mountainous areas. As the founder of SYS and a number of trained guides hold licenced positions in health Care, there is also a collaboration with the Swedish health care system, primarily aimed at those with stress related disorders,</p>

	exhaustion disorders and comorbid symptoms such as anxiety and depression.
Success factors	<p>There are several success factors with Shinrin-Yoku Sweden.</p> <ul style="list-style-type: none"> <li>• Primarily working with group intervention and with adults diagnosed with exhaustion disorder (burnout), anxiety and depression</li> <li>• Activities and services provided by SYS are founded on extensive training in both eastern and western forest bathing therapy traditions, applied in a Scandinavian context.</li> <li>• The methodology and program within SYS are evidence based and continuously evaluated in collaboration with the scientific community, for the public as well as in health care.</li> <li>• SYS and its training platform, Scandinavian nature and forest therapy institute, has an extensive national and international network of certified forest bathing and forest therapy guides.</li> <li>• The founder and certified guides being health care professionals operate and collaborate within the health care system.</li> <li>• The forest therapy training program implies a flexibility in treating variety of target groups with specific needs.</li> <li>• Increasing number of studies and results of studies linked to forest therapy. E.g. in 2022, a prospective mixed-method study was conducted on the SNFTI, "Eco Forest Therapy", engaging 21 trained forest therapy guides from 21 different geographical green spaces across Sweden and 75 participants. The results show significant positive benefits from the EcoForestTherapy over time on perceived well-being, fatigue, restoration, and nature connection and feelings of well-being.</li> </ul>
<b>EVIDENCE OF SUCCESS</b>	
Key messages	Professionally guided Forest Bathing and Forest Therapy walks offered in different parts of Sweden. This initiatives wisely combines implementation, education and research to scale-up forest bathing across Sweden.
Main efforts	<p>Shinrin-Yoku Sweden primarily focuses on the following activities and therapies:</p> <ul style="list-style-type: none"> <li>• Guided Forest Bathing and Forest Therapy walks in a variety of accessible nature areas; forested areas, urban parks, lakesides.</li> <li>• A collaboration with public health care.</li> <li>• Method development</li> <li>• Providing an several-week, guided forest therapy intervention for public mental health professionals, targeting adults diagnosed with exhaustion disorder, anxiety and depression</li> </ul>
Scale	The Shirin Yoku has its base in Stockholm metropolitan area, but the guides are working from south to north in Sweden. It has become a vast network of guides, and more than 70 guides have gone through the certification. The founder of the organization is the main contact and there are regular online meetings and yearly meetings to keep the

	<p>organization network intact. Most of the guides in different places of Sweden start their own businesses and private companies.</p>
Further information	<ul style="list-style-type: none"><li>• More information and contact can be found on this page: <a href="https://www.scandinaviannatureandforesttherapyinstitute.com/om-oss/">https://www.scandinaviannatureandforesttherapyinstitute.com/om-oss/</a></li><li>• Link to Shirin-Yoku on Facebook: <a href="https://www.facebook.com/shinrinyokusweden/?locale=sv_SE">https://www.facebook.com/shinrinyokusweden/?locale=sv_SE</a></li><li>• Links to Guides in Stockholm who had their certificates' by Shirin yoku: <a href="https://www.skogsbadistockholm.se/">https://www.skogsbadistockholm.se/</a></li><li>• In a book chapter by the CEO for Shirin Yoku Sweden Cau-Wetterholm the experiences and methodologies of Forest bath is further explained, "From forest bathing as a preventive wellness practice to a forest therapy treatment intervention in public mental health care. A forest therapy group intervention for exhaustion disorder, anxiety and depression", in Forest for public health, Cambridge Scholar publishing, 2020.</li></ul>

*Come out with us (Häng med oss ut) – Outdoor life for mental health, Greater Stockholm, Sweden*

<b>PROFILE</b>	
Name of case study	Come out with us – Outdoor life for mental health
Country	Sweden
Area of application	<p>The area of application includes Stockholm Metropolitan area.</p> <p>Come out with us expands through 30 different health-related interventions across Sweden: social psychiatric centres, centres specialized in people with specific physical or mental health needs (LSS), adult psychiatric centres, substance abuse treatment centres, churches, labour market improvement activities, forensic psychiatric interventions, and primary care.</p>
Implementer	Initiated by Therese Rosenkvist, occupational therapist in social psychiatry in collaboration with the non-profit outdoor organization "Swedish Outdoor Association" ( <i>ref. Friluftsförbundet</i> ).
Sector	Public and Social Care sector
Field(s) of activity	Social care, health
Green care level	Nature-based health promotion and Nature in everyday life (Swedish Outdoor Association) with Nature based therapy (trained health care workers as outdoor activity leaders)
Key words	Outdoor activities, Health Promotion, Mental Health, Companionship, Peer support
<b>FRAMEWORK</b>	
Core objectives	<p>The program is not primarily a clinical therapy initiative but aims to promote recovery through non-profit outdoor activities (<i>ref. "Friluftsliv"</i>) with social exposure and contact with nature.</p> <p>The program mainly offers accessible outdoor activities and provide basic knowledge about outdoor life (such as making a fire and socializing, canoeing, hiking, biking, climbing etc) in order to break isolation, improve mental health and to promote active lifestyle and peer support. The method is based on a) The importance of an active lifestyle for health b) Recovery theories c) Nature's health-promoting effects d) Peer support.</p>
Organizational and financial structure	The "Come out with us" initiative is based on a collaboration between state, municipality, private activities and the "Swedish Outdoor Association". The "Swedish Outdoor Association" oversees the outdoor training for the mental health staff working at treatment units. Thereafter, the outdoor activities are carried out by the treatment units' staff, preferably in collaboration with a non-profit outdoor organization in the immediate area.
Success factors	The program "Come out with us" is run, spread and promoted in active cooperation with the "Swedish Outdoor Association", a long standing,

	<p>nationwide, traditional public promotor and organiser of outdoor life and activities. The promotion of the project, "Come out with us" is, for the most part, directed towards the social services. The program with outdoor activities are guided by trained staff; a mix of health care workers, already familiar with the target groups, and previous partakers in the program (peer support). The professional leaders have an additional training in the "Come out with us" method. Another great enabler for participants is the paid for, subsidized travels, paid meals and coffee, as many participants cannot otherwise afford participating.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>An innovative approach in nature-based promotion and prevention, with open and free access for the public.</p>
<p>Main efforts</p>	<p>Come out with us (<i>Häng med oss ut</i>) – Outdoor life and Friluftsliv for mental health began as a project, in collaboration between social psychiatric services and the Swedish Outdoor Association (<i>Friluftslivsfrämjandet</i>).</p> <p>Today, the method of introducing participants to outdoor life and activities is used in about 30 different operations, spread across the country. It has spread to more than the initial social psychiatric operations; Swedish Act concerning Support and Service for Persons with Certain Functional Impairments, adult psychiatry, substance abuse treatment, the church, labour market efforts, forensic psychiatry and primary care.</p> <p>In the spring of 2024, a research project started at Uppsala University to evaluate the effects of the method.</p>
<p>Scale</p>	<p>Initially a 3-year trial project during the year 2016-2017, with participants in 5 locations across the county of Skåne; Sjöbo n=17, Tomelilla n= 10, Ystad n=14, Simrishamn n=4 and Skurup n=7. In total n=52 and 25 leaders. Clients from the psychiatric sector were offered recovery-oriented outdoor activities, once/week for 2,5 hours. After the first year the participants were interviewed and assessed for depression, anxiety and self-injury. Results indicated that participants had experienced improvements in all areas. Several expressed it has been the salvation of their lives. That they have stopped drinking alcohol and taking drugs. They have found a social context where they can be comfortable.</p>
<p>Further information</p>	<p><a href="https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/utvardering-hang-med-oss-ut-2018.pdf">https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/utvardering-hang-med-oss-ut-2018.pdf</a></p> <p><a href="https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/2021-12-slutrapport-hmou.pdf">https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/2021-12-slutrapport-hmou.pdf</a></p> <p><a href="https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/rapport-jonkoping-2021-2022.pdf">https://www.friluftslivsframjandet.se/globalassets/om-oss/friluftsliv-enligt-oss/friluftsliv-for-alla/hang-med-oss-ut/rapport-jonkoping-2021-2022.pdf</a></p>

## Greater Manchester Green Spaces Fund, UK

<b>PROFILE</b>	
Name of case study	Greater Manchester Green Spaces Fund
Country	United Kingdom
Area of application	Greater Manchester
Implementer	Greater Manchester Environment Fund
Sector	Non-profit sector
Field(s) of activity	Environmental protection, nature conservation, spatial planning, consulting
Green care level	<p>Nature-based health therapy, nature-based health promotion and nature in everyday life.</p> <ul style="list-style-type: none"> <li>• Nature-based Health Promotion: spaces have been created only for activities classified as nature-based health promotion e.g. gardening at Wardour Street Community Allotments, which is facilitated by the allotment management.</li> <li>• Nature in Everyday Life: The fund supports the creation and improvement in green spaces which are available to people in everyday life. For example, the Redbank Partnership which is rejuvenating 6 ha of publicly accessible green space in a deprived area.</li> </ul>
Key words	Outdoor activities; park upgrading grants; park planning
<b>FRAMEWORK</b>	
Core objectives	To support community-led projects that increase the amount and quality of accessible, nature-rich green space in Greater Manchester, particularly in the areas where people need it most.
Organizational and financial structure	<p>The “Greater Manchester Environment Fund” is a nature focused extension of a previous grant which gives implementing partners funds to implement environmental projects in the Greater Manchester Area. They are managed by the Lancashire Wildlife Trust (regional environmental charity) and are sponsored by the Greater Manchester Combined Authority (the local authority of Manchester). They receive other public-sector, philanthropic and private donations. They also receive additional funding through enforcement undertakings and consultation fees for some programmes they operate.</p> <p>The Greater Manchester Environment Fund manage the “Greater Manchester Green Spaces Fund”. The fund was created by the Greater Manchester Combined Authority, but other private enterprises and donors contribute funds on a project-by-project basis, this “matched funding” has been pledged at close to £800,000.</p> <p>Aside from connections with the Greater Manchester Combined Authority, the fund is advised from experts in green social prescribing, social outreach, green space management, and green infrastructure planning,</p>

	<p>who are also delivery partners to the smaller organizations it funds. They are from City of Trees, Groundwork, Sow the City and the Royal Horticultural Society. It also has a project assessment panel including representatives from Natural England and the Greater Manchester Integrated Care Partnership alongside other private, public and charitable sector organisations.</p>
<p>Success factors</p>	<p>The fund arose amongst other similar initiatives across the UK, as it is designed to address the lower access to high quality nature in deprived areas. This is due to the existence of some public recognition at the national level of the mental health and wellbeing benefits of nature in everyday life in particular, and also some recognition on the lack of good quality nature in more deprived areas. This fund is linked to a historical cultural link to “parks for health” that go back to the original justification for creating parks in the UK for health during the Victorian Era (e.g. London Inns Fields).</p> <p>The success of this initiative is predicated on a large amount of money (2.6 m) being donated by the Greater Manchester Combined Authority, with additional smaller amounts of funding coming from private enterprises and philanthropy.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>The majority of the projects funded cite the impact they will have on the mental health and wellbeing of disadvantaged people who live locally by improving the quality of nature experiences in everyday life, and also through guided therapies and health promoting activities. The fund provided performance indicators that demonstrate their implementation in areas with the most need (49% of projects being in the top 10% most deprived areas of the UK).</p> <p>The fund has found that local community groups in the target areas with the most need show a high level of interest for this type of funding, with strong engagement across the calls for applications. The fund is also aware through engagement of the local community groups of the need for long-term project sustainability and ongoing support from funders.</p> <p>The fund success relies on political pressure to provide these projects, rather than it needing to be a profit-making venture. As projects receive one-off payments, this limits the potential future sustainability of them. However, projects are required to demonstrate a plan to continue their work after receiving funding, and the scale of the initiative gives it potentially long-lasting impact.</p>
<p>Main efforts</p>	<p>The Greater Manchester Green Spaces Fund provides local community groups, with money to improve and create green spaces in areas in Greater Manchester that have the greatest need. It is in its fourth funding round, and has financed 86 projects so far. While it provides one-off payments, it is a requirement for organisations to provide a continuation plan, and it funds larger capital costs (such as relandscaping, installing facilities etc.) so its impact is potentially long-lasting. Community groups applying for funding enter a competitive application process, which is reviewed by a panel comprising stakeholders from the government (e.g. Natural</p>

	<p>England). The initiative commenced in 2022 and has four funding rounds. Its first phase will finish in 2024 (later phases are unconfirmed).</p> <p>The fund targets green space improvement/creation projects in areas that have low accessibility to good quality green spaces and are the most “deprived”. In addition to a case-by-case assessment the fund defines deprivation by a composite multiple deprivation index constructed on each local areas mental and physical health, unemployment and low income rates, crime, educational attainment, barriers to housing and living environment. It explicitly focuses on funding community-led projects where likely participators decide on how the projects are designed.</p> <p>Projects that support experiences of nature in everyday life, and/or support nature-based health promotion and nature-based therapy for communities in deprived areas and those that are more vulnerable and have disabilities are funded. For example, the “Rewilding Fairfield Hospital for Everyone” aims to rewild the hospital grounds to enhance the wellbeing of patients and staff in everyday life as well we provide a hub for green social prescribing. The “Heathlands Village Green (Space) Project” aims to improve access to nature for vulnerable people and people living with disabilities, particularly people living with dementia. This is by providing facilities, enclosed and secure green spaces and more biodiverse areas. Another project the “Forest School Laudato Si Centre” aims to support mental health and mindfulness sessions with children.</p> <p>The initiative has been publicized in the Greater Manchester in different news and reports, but has not received as much attention at a national level. This may be due to similar initiatives taking part across other areas of the UK.</p> <p>The final beneficiaries (e.g. those in areas close to park development/improvement) mostly hear about the projects due to local awareness after they are created. In addition, there is public awareness from its coverage in local media.</p>
<p>Scale</p>	<ul style="list-style-type: none"> <li>• 86 green space creation/improvement projects have been funded.</li> <li>• In Phase 1 - 3,237m<sup>2</sup> of green space created, 238,774m<sup>2</sup> of green space improved. 2,218 trees planted. 4,755 people trained.</li> <li>• 49% of projects have been in areas in the highest decile (10%) of deprivation in England.</li> <li>• 91,048 people have engaged in the created projects in formal sessions (with many more expected to use them in everyday-life).</li> <li>• Mental health benefits have been highlighted as a wider benefit, but not quantified due to this being difficult.</li> <li>• As a regranting programme the Green Space Fund held 12 meet the funder sessions, engaged 285 local groups and supported 31 potential project implementers with their applications for funding.</li> </ul>
<p>Further information</p>	<p><a href="https://gmenvfund.org/green-spaces-fund">https://gmenvfund.org/green-spaces-fund</a></p> <p><a href="https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/greater-manchester-green-spaces-fund/">https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/greater-manchester-green-spaces-fund/</a></p>

<https://sowthecity.org/green%2ospaces%2ofund.htm>

<https://www.groundwork.org.uk/greatermanchester/gm-about/gm-our-programmes/greater-manchester-green-spaces-fund/>

<https://www.cityoftrees.org.uk/green-spaces-fund/>

<https://democracy.greatermanchester-ca.gov.uk/documents/s22900/07%20Green%20Spaces%20Fund.pdf>

<https://democracy.greatermanchester-ca.gov.uk/mgConvert2PDF.aspx?ID=31630>

## *Pembrokeshire Outdoor Health Project, Wales, UK*

<b>PROFILE</b>	
Name of case study	Pembrokeshire Outdoor Health Project
Country	Wales
Area of application	Pembrokeshire
Implementer	Pembrokeshire Coastal Forum with Coed Lleol (Small Woods)
Sector	Non-profit sector
Field(s) of activity	Health, social care, Environmental protection, Nature conservation
Green care level	<p>Nature-based Health Promotion; Nature-based therapies.</p> <p>This project targets both referred and self-referred service users. Depending on the association delivering the activity and the condition of the service user (specific or more general), the activity can be classified as promotion or therapy, although it mainly falls under nature-based health promotion.</p>
Key words	Outdoor activities, Marine and woodland conservation, 5 ways of wellbeing.
<b>FRAMEWORK</b>	
Core objectives	The aim of the Pembrokeshire Outdoor Health Project is to support the health and wellbeing needs of the population of Pembrokeshire by increasing opportunities for social prescribing to the outdoors ("green/blue social prescribing") by health and social care professionals, support organisations, as well as being accessible by anyone independently seeking support (i.e, self-referral).
Organizational and financial structure	<p>The Pembrokeshire Outdoor Health Project was initially organised by the Pembrokeshire Coastal Forum with money coming from the Welsh Government's fund ENRaW (Enabling Natural Resources and Wellbeing), which was calling for projects focused on blue-space wellbeing activities. The Pembrokeshire Coastal Forum - a partnership working with statutory bodies, industry and communities to identify sustainable solutions for this county's marine and coastal environment – had previously established links with the outdoor activity sector through the Pembrokeshire Outdoor Charter Group, an initiative aimed to ensure that adventurous activities do not negatively impact on Pembrokeshire's coastline, local communities and the local wildlife.</p> <p>While the ENRaW fund enabled to set the organisation of the project, another fund – Natural Resources Wales Resilient Communities Grant – paid for the delivery of the sessions in 2023. A third fund – UK Shared Prosperity Fund - is paying for the 2024 sessions. This latest phase of the project is run in partnership with Coed Lleol (Small Woods) a UK-wide charity for small woodlands with a strong track record of delivering projects for the sustainable management of small woodlands for social, environmental and economic benefit.</p>

	<p>This is an independently managed initiative, in that although the funding comes from the Welsh government, it is organised and provided by the network of independent associations and health practitioners that form a partnership. Moreover, the website of the Pembrokeshire Outdoor Health Project is used as a recruitment tool for referred and self-referred participants to each activity offered. It explicitly links the project to social prescribing and invites health and social care providers such as general practitioners (GP) clinics and health support charities to prescribing their activities free of charge.</p>
<p>Success factors</p>	<p>The Pembrokeshire Outdoor Health Project is developed with a multi-actor approach. It is based on the partnership with activity providers, wellbeing experts and nature organisations with the aim to support the health and wellbeing of the people in Pembrokeshire through nature-based outdoor wellbeing activities. At the start of 2024, in a dedicated event, local providers came together to exchange experiences and best practice on delivering social prescribing activities in the outdoors and to improve the planning and running of future outdoor sessions.</p> <p>The project successfully links health and conservation activities therefore generating impact at several levels. It works with activity providers, local clubs and community groups, experts and organisations with different competences. A case in point is their Advisory Board which includes county Health Boards, Public Health bodies and natural resources organisations such as the Welsh Wildlife Trust. This results in a wide range of diversified activities that cater for many interests and ways to connect with nature. Ultimately, the project combines nature-based health promotion and therapeutical programmes with the management of the green and blue areas both through the organisation of such activities and the co-creation of this innovative model.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>The stated aims of the project include 'to connect people with coastal, woodland and other outdoor spaces within their local communities, and benefit from the connection with nature', 'to develop best practice' and 'to form strong connections and partnerships with organisations across Pembrokeshire working within the Outdoor Health &amp; Wellbeing Sector.'</p> <p>The aim has been attained by using the 5 Ways to Wellbeing. This is a framework developed by the New Economic Foundation, a charity carrying out research for an '<i>economy that works for people and within environmental limits</i>'. Their report on the 5 ways of wellbeing reviews evidence to ultimately identify behavioural attitude that can improve people's mental and physical wellbeing. These are: connect, take notice, learn, give, and be active. The framework promotes enhanced active engagement and interaction with people and the environment to increase self-esteem balance. 5 ways of wellbeing is supported by the National Health Service as an approach to improve mental health. It is a requirement that the initiatives proposed within the Pembrokeshire Outdoor Health Project must be designed using the 5 Ways of Wellbeing framework, hence</p>

	<p>emphasising connection and engagement with nature, learning activities, and socialisation.</p>
<p>Main efforts</p>	<p>5 initiatives/activities were planned for 2024. These are listed below:</p> <p><b>Paddle and Connect</b> (organised by Windswept Watersports) – paddleboarding to connect with other participants and learn about seagrass restoration.</p> <p><b>Blue Spaces</b> (organised by Blue Horizons) – surf sessions to build self-confidence and connection with nature.</p> <p><b>Wildlife on One Breath</b> (organised by Celtic Deep) – therapeutic and educational sessions delivered by biologists and freedivers, progressing the interaction with water from the pool to the ocean.</p> <p><b>Nature Connection</b> – a 6-week journey in woodlands and water environments for enhanced physical and mental health and contribution to the preservation of nature.</p> <p><b>Cold water immersion &amp; beach-based wellbeing</b> (organised by Wildswim Wales) – a 6 week program to enjoy cold water immersion and boost mood and wellbeing.</p> <p>Some of the teams operating the initiatives are clearly interdisciplinary, with experts ranging from life sciences to public health to conservation. Activities include collaborations to scientific projects with citizen science approaches to collect data on marine life and ecosystems. This is an attempt to engage with nature at several levels, with a diversified approach and a strong emphasis on environmental education and awareness as a therapeutic driver.</p>
<p>Scale</p>	<p>The scale of outreach of the project is limited to the administrative boundaries of the county, a sparsely populated area including coastal and forest areas of great ecological value, inhabited by about 123,000 people only (3.97% of Welsh total population). Due to the usual restrictions on group sizes that come with many outdoor activities the providers usually organise groups of 10 or 12 people. All the activity providers have designed their sessions with 6-week programmes (usually 6 half-day sessions delivered over 6 consecutive weeks).</p> <p>The project is complex but still at a 'pilot' phase because it has no long-term funding. However, it has established a successful model of partnership and organisation, and is currently collecting data on the improvements that participants experience, which will be used to promote the project to potential future funding streams.</p>
<p>Further information</p>	<p><a href="https://www.pembrokeshirecoastalforum.org.uk/projects/pembrokeshire-outdoor-health-project/">https://www.pembrokeshirecoastalforum.org.uk/projects/pembrokeshire-outdoor-health-project/</a></p> <p><a href="https://www.pembrokeshirecoastalforum.org.uk/">https://www.pembrokeshirecoastalforum.org.uk/</a></p> <p><a href="https://www.smallwoods.org.uk/en/coedlleol/about/">https://www.smallwoods.org.uk/en/coedlleol/about/</a></p> <p><a href="https://neweconomics.org/2008/10/five-ways-to-wellbeing">https://neweconomics.org/2008/10/five-ways-to-wellbeing</a></p>

<https://www.pembrokeshireoutdoors.org.uk/>

<https://www.pembrokeshireoutdoors.org.uk/wp-content/uploads/2023/04/Background-Aims-Objectives-Pembrokeshire-Outdoor-Health-Project.pdf>

## *Preventing and Tackling Mental Ill Health through Green Social Prescribing, UK*

<b>PROFILE</b>	
Name of case study	Preventing and Tackling Mental Ill Health through Green Social Prescribing
Country	United Kingdom
Area of application	England (including Greater Manchester)
Implementer	Cross-Department partnership led by UK Department for the Environment, Food, and Rural Affairs (Defra) / National Health Service (NHS)
Sector	Public sector, Non-profit sector
Field(s) of activity	Health, social care, environmental protection
Green care level	Nature-based Therapies; Nature-based health Promotion.  The project was designed to reach service users with specific needs, hence needing therapy, as well as those with more general needs, requiring a nature-based health promotion approach.
Key words	Green Social Prescribing, Multi-Actor Partnership, Test sites
<b>FRAMEWORK</b>	
Core objectives	The core objective focuses on how systems can be developed to enable the use of nature-based settings and activities to promote wellbeing and improve mental health. This is attained by testing how to embed green social prescribing into communities in seven test and learn sites in England.
Organizational and financial structure	<p>A two-year Green Social Prescribing Programme was funded by the UK Government, building on the National Health Service commitment to increase social prescribing and to encourage people to spend more time in nature as part of their everyday lives. The latter is a national objective stated in 'A Green Future: Our 25 Year Plan to Improve the Environment', the programme for the protection of the natural environment drafted by the UK Department of Environment, Food and Rural Affairs (Defra). Another shared stated objective in this programme is the reduction of health inequalities which is shared with the England Department of Levelling Up, Housing and Communities. This is an implicit, political recognition that Health, Public Health and Environment policies must be coordinated because they share some key societal objectives.</p> <p>The UK Government allocated £5.77 million to this project. The fund was managed by a cross-governmental department partnership that includes government supported organisations (Department for Environment, Food and Rural Affairs (Defra), Department of Health and Social Care, Natural England, NHS England, Public Health England, and Ministry of Housing, Communities and Local Government, and Sport England together with the National Academy for Social Prescribing, a non-governmental association). The fund paid for the implementation of 7 test sites in which pathways to green social prescribing were designed, mapped and assessed. An interim evaluation was published in a report led by Sheffield Hallam University in 2022. A final report is not yet available, although the</p>

	<p>programme funded an assessment of the spread and scale green social prescribing in England led directly by Defra and published in 2023, in which some findings align with the interim evaluation of the 7 sites.</p>
<p>Success factors</p>	<p>This was a UK Government funded initiative which suggests national commitment to green social prescribing and recognition of its therapeutical impact and potential. The multiple actors composing the partnership suggest a commitment in developing cross-sectoral solutions and the awareness of co-benefits associated with green prescribing that are of mutual interest.</p> <p>Another important factor is that the programme was designed while looking at green prescribing as a complex system in which all concurring elements had to be identified, mapped and implemented in order to understand existing capacity, bottlenecks and opportunities. The 7 test sites across England allowed an understanding of how contextual factors require diverse organisational systems to deliver green prescribing locally.</p> <p>To this end, 7 sites were identified and the steps necessary to embed the delivery of a green prescribing service within the organisational units of the NHS England carried out. Such organisational units - called Integrated Care Systems (ICSs) - are local partnerships formed by health and care organisations, local councils and third and voluntary sectors, which organise, monitor and deliver health and social care services within their administrative area. There are 42 ICSs in England.</p> <p>Finally, a key success factor is represented by the co-creation process that informed each test site. Relevant stakeholders, including service users, were involved in Theory of Change workshops to agree a shared vision, status and needed changes, resources, activities, and aims regarding medium- and longer-term changes.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p>Key messages</p>	<p>The 2022 Interim report on the 7 sites highlights the following messages:</p> <ul style="list-style-type: none"> <li>• The importance of involving communities and service users in building the local network and systems of green prescribing.</li> <li>• Link workers (i.e. those that refer individuals to the appropriate community resources, services and activities) and people working in the voluntary sector do not always have the necessary skills and knowledge,</li> <li>• Many sites addressed health inequalities. But barriers remain, including poverty, digital and physical access, and cultural differences.</li> <li>• Some stakeholders (including some clinicians) remain unaware or sceptical of green social prescribing benefits.</li> </ul> <p>The Defra report at a national scale highlights the following key messages:</p> <ul style="list-style-type: none"> <li>• There is capacity to support more service users but this is hindered by the current short-term funding model.</li> <li>• Link workers and providers are not equipped for patients with complex mental health conditions and lack specialist support.</li> </ul>

	<ul style="list-style-type: none"> <li>• Affordability and availability of transport substantially limits service user engagement with green and nature-based activities.</li> <li>• The need for a shared terminology and increased knowledge among general practitioners, link workers and service users</li> </ul> <p>In addition to the official assessment of the project, each ‘test and learn’ site produced short films that are available on the project’s website and that summarise site-specific findings, possibly reflecting perceptions from those who were more directly involved in the making of the project. These include:</p> <ul style="list-style-type: none"> <li>• An understanding of the structural micro and macro barriers possibly preventing service users to embrace green social prescribing; from detailed information to be provided to potential service users about the format and context of the session to an accurate mapping of the local associations that are willing to become providers.</li> <li>• The importance of the social component in the green prescribing sessions, which needs to be carefully embedded in the nature-based activities.</li> </ul>
Main efforts	<p>The main efforts were:</p> <ul style="list-style-type: none"> <li>• Organisational: To identify pathways to integrate green social prescribing within the typical routes to referral for mental health related condition</li> <li>• User-centred: To gather through workshops and interviews views of service users and co-design with them the journey from referral to green activities</li> <li>• Scientific: To develop further evidence on the benefits of green prescribing</li> </ul> <p>In parallel to the implementation of the 7 test and learn sites, the 2 reports mentioned above were developed through surveys, interviews and literature review on the capacity of the green prescribing sector at a national level (England) and on the perception of green prescribing amongst clinicians and the public. Moreover, a Green Social Prescribing Toolkit ‘to help communities, organisations and health professionals who are looking to set up green social prescribing programmes that connect with local health systems’ was also developed. The 2 reports constitute a valuable resource for stakeholders in the health, public health and social care sectors as they help understand the potential for scalability of this particular service and the current level of acceptance of this particular nature-based service.</p>
Scale	<p>Quoting the website of the programme, the focus and achievements of these test and learn sites include:</p> <ul style="list-style-type: none"> <li>• Over 8,500 people have been referred to a green social prescribing activity during the programme from April 2021 to March 2023.</li> <li>• Interim evaluation findings showed positive improvements in mental health and wellbeing and strong engagement in communities experiencing high levels of social inequalities that affect health and wellbeing.</li> <li>• 85% of those offered green social prescriptions accepted it.</li> </ul>

	<ul style="list-style-type: none"><li>• Green networks have been established in all 7 test and learn sites.</li><li>• Integrated workforce development has increased trust and understanding between delivery partners and healthcare providers, leading to more referrals to suitable green activities.</li><li>• Green social prescribing continues to be delivered in all 7 test and learn sites, demonstrating a lasting impact of the programme.</li></ul>
Further information	<p><a href="https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/">https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/</a></p> <p><a href="https://www.gov.uk/government/publications/national-green-social-prescribing-delivery-capacity-assessment/national-green-social-prescribing-delivery-capacity-assessment-final-report">https://www.gov.uk/government/publications/national-green-social-prescribing-delivery-capacity-assessment/national-green-social-prescribing-delivery-capacity-assessment-final-report</a></p> <p><a href="https://beyondgreenspace.net/wp-content/uploads/2023/06/15783_gsp_evaluation_interim_report_-_main_report_jan_2023.pdf">https://beyondgreenspace.net/wp-content/uploads/2023/06/15783_gsp_evaluation_interim_report_-_main_report_jan_2023.pdf</a></p> <p><a href="https://www.gov.uk/government/publications/green-social-prescribing-perceptions-among-clinicians-and-the-public/exploring-perceptions-of-green-social-prescribing-among-clinicians-and-the-public">https://www.gov.uk/government/publications/green-social-prescribing-perceptions-among-clinicians-and-the-public/exploring-perceptions-of-green-social-prescribing-among-clinicians-and-the-public</a></p> <p><a href="https://www.gov.uk/government/publications/25-year-environment-plan">https://www.gov.uk/government/publications/25-year-environment-plan</a></p>



## *Future and Home: Revierparks 2020, Ruhr Area, Germany*

<b>PROFILE</b>	
Name of case study	Future and Home: Revierparks 2020 (district parks)
Country	Germany
Area of application	Ruhr area; participating cities: Duisburg, Oberhausen and Bottrop (sharing one park across the two cities), Essen and Gelsenkirchen (sharing one park across the two cities), Herne and, last, Dortmund (note that most of the municipalities of the Ruhr area participate in this program)
Implementer	Regionalverband Ruhr (Regional Association Ruhr)
Sector	Public sector
Field(s) of activity	Health, social care, environmental protection, nature conservation, spatial planning, education and training
Green care level	Primarily Nature in everyday life, with some elements of Nature-based health promotion – Five freely accessible parks for experiencing nature, physical activity and increasing well-being for everyone
Key words	sustainable urban development, nature conservation, accessibility, well-being
<b>FRAMEWORK</b>	
Core objectives	To counteract the industrial landscape of the Ruhr region, one park masterplan concept was applied to five different parks (some of them implemented in one city, some of them implemented in spaces across two cities). Each of the five park had its individual design, but all of them allowed a wide range of activities in nature for people to participate in, with the overarching goal to make it accessible to as many people as possible. Although each park pursues its own theme, they all have the same ecological and social priorities in common: offering nature experiences, promoting biodiversity, providing an extensive repertoire of environmental education opportunities and improving the well-being in physical, mental and social terms for everyone.
Organizational and financial structure	<p>In order to provide a natural counterbalance against the industrial conurbations of the Ruhr region, the five Revierparks were created in the 1970s. The initial aim was to improve quality of life, to attract workers to the municipalities and to create extensive green spaces with high recreational value as a contrast to the advancing industrialization. The project promotes the integration of disadvantaged social groups into education and the community, but also focusses on the ecological revitalization of urban areas by reclaiming unused areas and creating diverse habitats</p> <p>For the last 50 years people's interests and needs changed, which had to be taken into account while developing the new design of the parks. First, the variety and number of leisure opportunities increased due to improved mobility and technical progress. Second, awareness of the value of nature to fight the upcoming climatic and ecological challenges increased. And third, there have been the increasing and changing needs of addressing the</p>

	<p>needs of all different social groups regardless of age, culture, social status or impairments, which led the Revierparks 2020 project to revise the outdated park concepts.</p> <p>In cooperation with the partner cities, the Ruhr Regional Association (RVR) followed an integrated action plan to revitalize and transform the Revierparks between 2019 to 2023 with an environmental sustainability focus. A big part of the process was the active exchange with different interest neighbourhood groups to integrate everyone’s requirements and create green spaces for and with the people of the region.</p> <p>Since then, each park is jointly governed by the neighbouring municipalities and the RVR, as the central authority for governing the green space in the Ruhr region. The reasons for the shared responsibilities are to ensure well operated and maintained places for the communities within the municipalities and to meet their individual needs.</p> <p>The total cost of the project is 28 million euros – around 5.5 million euros for the transformation of each park. 20% of those was RVR’s own contribution. For the remaining 80% (22 million euros) the RVR used the European Regional Development Fund (ERDF) as part of the Green Infrastructure Northrhine-Westphalia (NRW) funding program of the the federal state government's Ministry of Agriculture, Nature Conservation and Transport NRW. .</p>
<b>Success factors</b>	<p>The main attributes of the project are to improve the centralization and accessibility to the parks by creating a network of green spaces, and to provide a wider range of activities in these spaces. On the regional level, the Revierparks work as a network of the five parks. As they are 10 to 15km apart, they create a green line through and between the cities that offers multiple functions for the people. The Revierparks 2020 project followed its vision to adapt the park masterplan concepts to address the diverse needs of the users by creating a network of the five parks. The focus is placed on the inclusion of marginalised groups and considering their needs during the development process and construction phase.</p> <p>The keys to the success are to ensure the timely funding approval of ERDF and the long-standing cooperations between the RVR and the relevant municipalities.</p>
<b>EVIDENCE OF SUCCESS</b>	
<b>Key messages</b>	<p>The overall concept of the Revierparks and individual focuses for each park in the region makes it a Europe-wide showcase project. The fact that exchange with different interest groups was desired from the beginning and the cooperation with the municipalities makes it a model for similar measures at the planning level. Revierparks combine nature, leisure, education and health with and for the people of the Ruhr area and beyond.</p>
<b>Main efforts</b>	<p>The Revierparks 2020 project focussed on three main elements in each park design. These elements differentiate in their function to meet the individual needs of the users.</p> <p>The first design element includes sports grounds, social interactive spaces and playgrounds for the children. The target group is people who are</p>

	<p>looking for some physical activity, social connections and being in the outdoors. These activities are always free of charge.</p> <p>The second element include the creation and design of natural green spaces which connect the neighbourhood with the social activities inside the parks. These are for the people looking for a link to nature, long distance walks, natural outings and quiet relaxation in a nearby destination. The enhanced connection to the activities may tempt people to go out more often.</p> <p>The third element includes all newly introduced activities. These involve for example swimming pools, Mini-Golf, ice-skating or courses and events with a changing programme from health centres, nature conservation associations or sports clubs. The key aim is to engage all social groups into the parks and encourage them to see the potential of using the free green spaces while visiting some areas within the parks which require an admission fee.</p> <p>By combining the three elements, spaces were created where everyone can find at least one advantage for themselves and lead to further benefits for improving their health, well-being or nature understanding.</p>
Scale	<p>5 parks, within or adjacent to 7 cities with a total area of 172 hectares were revitalized. The parks are 10 to 15 km apart and build a green axis through the Ruhr region.</p> <p>Due to the dense population in the western part of Germany, especially in the Ruhr region, an expected impact on the area is very high. 5 million people live in the Ruhr region – around 50% (2.4 million) of them live in the participating cities and therefore have direct access to the Revierparks. Even more people can benefit from the parks by coming from neighbouring cities. 25.000 people attended the opening events of the parks alone on one day.</p>
Further information	<p><a href="http://www.revierparks.rvr.ruhr">www.revierparks.rvr.ruhr</a>  <a href="https://www.ruhrgebiet-industriekultur.de/revierparks-im-ruhrgebiet/">https://www.ruhrgebiet-industriekultur.de/revierparks-im-ruhrgebiet/</a></p>



*Hortitherapy as a standard social care intervention in Warsaw, Poland*

<b>PROFILE</b>	
Name of case study	Hortitherapy as a standard social care intervention in Warsaw under AGE project (Action for active and dignified ageing in Warsaw)
Country	Poland
Area of application	City of Warsaw, which is part of the Warsaw Functional Area
Implementer	Municipal Authority of Warsaw, Bureau for Assistance and Social Projects in cooperation with the Bureau for European Funds and Development Policy
Sector	Public sector
Field(s) of activity	Social care, health
Green care level	Nature in everyday life, nature-based health promotion - sensory gardens allow passive or active contact with nature depending on the health status of social care home residents
Key words	Hortitherapy, sensory gardens, standards for providing hortitherapy
<b>FRAMEWORK</b>	
Core objectives	<ul style="list-style-type: none"> <li>Improving population health by developing and adapting medical care in line with the current health status and demographic factors of the population.</li> <li>Development of systemic solutions for the elderly and dependent persons.</li> <li>Improving the quality of services provided by Warsaw social care homes (Dom Pomocy Społecznej - DPS).</li> </ul>
Organizational and financial structure	<p>DPSs are places that act as a substitute family for people who, for various reasons, cannot function independently. This may be due to ageing, chronic illnesses or various disabilities. A DPS not only provides the basic necessities of life, but also offers medical and psychological support to help with daily functioning.</p> <p>DPSs operate on the basis of the Act on Social Assistance and the Regulation of the Minister of Labour and Social Policy on social care homes.</p> <p>The organizational structure and the detailed scope of tasks of each type of home is determined by the organizational regulations developed by the director of the home, adopted by the entity supervising the home.</p> <p>There are currently 19 DPSs operated by or on behalf of the City of Warsaw, including: 7 homes for the elderly, 7 homes for the chronically somatically ill, 4 homes for people with intellectual disabilities (for adults and for children), 1 home for the chronically mentally ill. Direct supervision of the homes is provided by the Warsaw Centre for Family Assistance.</p>

	<p>The AGE project was implemented in 14 social care homes managed and administrated by City of Warsaw, between 07.08.2015 and 30.04.2017.</p> <p>The project was co-financed by the European Economic Area Financial Mechanism 2009-2014 and the Norwegian Financial Mechanism under the Programme for Improving and Better Adapting Health Care to Demographic and Epidemiological Trends.</p> <p>Total project value: 3,999,000.00 PLN (934,891.88 EUR), of which contribution of the City of Warsaw: 839,790.00 PLN (196,327.29 EUR)</p>
<b>Success factors</b>	<p>Involvement of the Warsaw Municipality in raising funds to improve the quality of the services provided by DPS which resulted in obtaining a grant to develop the AGE project.</p> <p>Development and implementation of standards of care and standards for the work of staff in 14 social care homes (DPSs) run by the City of Warsaw. Introducing, as part of the standard, the mandatory practice of hortitherapy as one of the types of occupational therapy.</p>
<b>EVIDENCE OF SUCCESS</b>	
<b>Key messages</b>	<p>Under the AGE project, hortitherapy was successfully implemented as a standard social care intervention in Warsaw DPSs.</p> <p>Implementation of the project was possible thanks to obtaining a grant to improve the infrastructure of the DPSs and to improve the quality of services in the DPSs. As a result, more than 70 percent of DPSs in Warsaw are equipped with facilities enabling residents to have active or passive contact with nature.</p>
<b>Main efforts</b>	<p>The AGE project encompassed a comprehensive upgrade of infrastructure at DPSs facilities, extensive staff training, the introduction of hortitherapy, educational and integration events, as well as the establishment of care and caregiver work standards within DPSs.</p> <p>The AGE project created the conditions for the introduction of hortitherapy as a standard social care intervention in Warsaw DPSs. Sensory gardens have been established in all DPSs included in the project. Moreover, personnel at each DPS have enhanced their qualifications to effectively conduct hortitherapy activities. As part of DPS's caregiving standards, guidelines for conducting hortitherapy were meticulously developed and put into practice.</p> <p>According to this experience, hortitherapy serves to:</p> <ul style="list-style-type: none"> <li>• encourage residents to be socially active, foster a sense of community and build positive relationships with others through collective work in the garden</li> <li>• develop passions and interests in ecology and the natural environment</li> <li>• enhance the resident's positive self-esteem by pointing out the visible effects of the work in the garden</li> <li>• create a sense of respect for work-related values</li> <li>• expand knowledge and skills, vocabulary and the range of stimuli perceived from the environment</li> </ul>

	<ul style="list-style-type: none"> <li>• calm the emotions, improve the mood, well-being and general psychological condition of the residents</li> <li>• increase physical condition and resilience through physical work in the garden, walks and physical activities in the garden, walking and being outdoors</li> <li>• improve the visual, auditory, taste and olfactory organs through sensory experiences (colours, tastes, smells, textures, consistency, sounds)</li> <li>• develop creativity by jointly planning the planting of new plants and using plant elements for creating artwork</li> <li>• develop an aesthetic sense and the ability to create a welcoming space with a friendly character.</li> </ul> <p>Depending on the state of health and the physical and intellectual abilities of the residents, hortitherapy include either active or passive hortitherapy. The active forms of hortitherapy include, among others: physical work in the garden (growing and caring of plants), doing workshop activities connected with gardening work and artwork using natural materials. Passive forms of hortitherapy include, among others: relaxation and recreation in contact with nature, taking walks, listening to the sounds of nature, exploring tastes or smells of fruit and vegetables and activities using learning materials (multimedia, books, press).</p> <p>The DPS is obliged to provide horticulture therapy in above-mentioned forms, taking into account the individual needs of the residents.</p> <p>As far as possible, the implementation of horticulture therapy in the DPS should include the active participation of family members or carers of residents as well as representatives of the local community.</p>
Scale	<p>14 sensory gardens were developed, 30 DPS staff members have been trained to conduct hortitherapy.</p> <p>A total of 1512 residents from 14 DPS benefit from hortitherapeutic activities, including 612 residents from six homes for the elderly, 520 from five homes for the chronically somatically ill (of which one for women), 180 from two homes for people with intellectual disabilities and 200 from one home for the chronically mentally ill.</p>
Further information	<p><a href="http://um.warszawa.pl">AGE – Działania na rzecz aktywnego i godnego starzenia się w Warszawie - Wsparcie (um.warszawa.pl)</a></p>

## *Sensory garden in the Masovian Provincial Hospital Drewnica in Ząbki, Poland*

<b>PROFILE</b>	
Name of case study	Sensory garden in the Masovian Provincial Hospital Drewnica Ltd. located in Ząbki
Country	Poland
Area of application	Ząbki town in Warsaw Functional Area
Implementer	<p>The project is implemented by the "Zdrowie w Głowie" (Health in the Head) foundation operating at the Masovian Provincial Hospital Drewnica Ltd. in cooperation with Masovian Provincial Hospital Drewnica Ltd. and Masovian Voivodeship (i.e. Masovian regional government).</p> <p>The garden has been created in two stages with different implementers at each stage:</p> <ol style="list-style-type: none"> <li>1. The sensory garden was developed as part of the project entitled: "With Alzheimer's every day", contract no. 42/MCPS/07/2020/B/PSP of July 22, 2020 (Public task: Activities for the professional and social integration and reintegration of people at risk of social exclusion). The project was co-financed by the budget of the Masovian Voivodeship. The sensory garden was designed and developed by Garden &amp; Pleasure Garden Art Studio.</li> <li>2. Expansion of the activities of the sensory garden occurred in 2023 as part of the implementation by the "Zdrowie w Głowie" foundation of the project entitled: "With Alzheimer's every day - Drewnicki Azył", contract no. 8/MCPS/04/2023/B/PSP of April 2023 as part of a public task - Activities for professional and social integration and reintegration of people at risk of social exclusion, title of the task - "Providing assistance and social support for elderly people with mental illness – creation of a Day Home /Care for elderly people with dementia, including Alzheimer's disease</li> </ol>
Sector	Public sector
Field(s) of activity	Health care (mental health)
Green care level	Nature-based therapy through a sensory garden, nature-based health promotion for mental health issues, especially for Alzheimer's disease.
Key words	sensory garden, mental health, Alzheimer's disease, psychiatric hospital
<b>FRAMEWORK</b>	
Core objectives	<ul style="list-style-type: none"> <li>• Enhancing mental health by administering medical care that aligns with the health status and health recommendations that each individual has received, while also incorporating nature-based therapeutic techniques as an adjunctive approach.</li> <li>• Development of complementary and synergistically acting therapeutic solutions for patients with mental health problems, with a particular focus on those with dementia, who are treated in inpatient and daily care units at the Masovian Provincial Hospital Drewnica Ltd. in Ząbki.</li> </ul>

<p><b>Organizational and financial structure</b></p>	<p>Masovian Provincial Hospital Drewnica Ltd. is involved in public network of mental health care hospitals, and centers of mental health.</p> <p>The hospital operates on the basis of Act of 15 April 2011 on medical activities.</p> <p>The National Health Fund is responsible for the financing of treatment for patients with psychiatric disorders. The hospital has 280 beds, which represents one of the largest capacities among psychiatric facilities in Poland. The facility has 5 general psychiatric wards (including clinical ward), a psychogeriatric ward, a psychiatric rehabilitation ward, a psychiatric day ward and an alcohol detoxication ward. Patients can also get help from the Mental Health Center (outpatient) and the mobile Community Treatment Services.</p> <p>It provides psychiatric care, primarily for approximately 700,000 inhabitants of the following Warsaw districts: Praga-Północ, Rembertów, Białołęka, Praga-Południe, and counties: Legionowo, Wołomin, Wyszaków, Węgrów (Łochów, Sadowne, Stoczek municipalities).</p> <p>The funds were obtained between 2020 and 2023 and it is expected that further funding will be granted in 2025. The stages of financing the project and activity of sensory garden were: 1. The "Zdrowie w Głowie" foundation received funding from the Masovian Voivodeship (creation and operation of a sensory garden) – Contract No 42/MCPS/07/2020/B/PSP 2020 – PLN 41,730.00 2021 – PLN 53,440.00 2022 – PLN 25,440.00</p> <p>2. The project was co-financed by the Masovian Voivodeship for expansion of the area of the garden: Contract No 7/MCPS/04/2023/B/PSP 2023 – 2025 – PLN 91,545.00, Contract No 8/MCPS/04/2023/B/PSP 2023 - 2025 - PLN 198,500.00</p> <p>Total cost of creating the sensory garden was PLN 410 655</p> <p>Currently, the garden is managed by a volunteer of the "Zdrowie w Głowie" Foundation and employees of the Masovian Provincial Hospital Drewnica Ltd.</p>
<p><b>Success factors</b></p>	<p>Involvement of the Masovian Voivodship in raising funds to improve the quality of the services provided by the hospital.</p> <p>Cooperation between Masovian Voivodship, Hospital Managers and Foundation - enthusiastic and involved network of partners.</p> <p>Good infrastructure and area conditions for creating a garden.</p> <p>Positive attitude of hospital employees to use the garden as a part of therapy.</p>
<p><b>EVIDENCE OF SUCCESS</b></p>	
<p><b>Key messages</b></p>	<p>The effective collaboration between the Masovian Voivodship, hospital administrators, and the Foundation "Zdrowie w Głowie" created the necessary conditions for the establishment of a garden and its integration into the hospital's standard of care.</p> <p>As a result, about 400 patients of the Masovian Provincial Hospital Drewnica Ltd. and people under care of "Zdrowie w Głowie" foundation</p>

	<p>can use the facilities enabling them to have active or passive contact with nature.</p>
<p>Main efforts</p>	<p>The activities carried out in sensory garden are an excellent form of rehabilitation and prevention for people of all ages. Through contact with nature (both passive and active), participants can calm down, rest and rediscover all their senses. It can be argued that this is of particular importance for those in the later stages of life, given that the ageing process may lead to an increased impact of the senses on both behaviour and mental state. Participants often evoke memories, situations or feelings, which is particularly important in the case of older people, especially those experiencing dementia symptoms. However, it is also evident that contact with nature can have positive effects for those with other mental health conditions, with studies demonstrating a reduction in stress, anxiety, and an overall relaxing effect on the mind and body.</p> <p>The garden mainly focuses on the needs of the beneficiaries of the psychogeriatric ward, but also patients under care of the Foundation and other patients and employees of the hospital.</p>
<p>Scale</p>	<p>Patients: About 330 patients of the Masovian Provincial Hospital Drewnica Ltd. use the sensory garden (monthly) and about 50 participants of Day Homes coordinated by the "Zdrowie w Głowie" Foundation.</p> <p>Area: The sensory garden with an area of 500 m2 (lending agreement of July 24, 2020) was incorporated into the existing garden surrounding the hospital building.</p> <p>Expansion of the activities of the sensory garden in 2023, as part of the implementation by the Zdrowie w Głowie foundation of the project entitled: "With Alzheimer's every day - Drewnicki Azyl", contract no. 8/MCPS/04/2023/B/PSP of April 2023 as part of a public task - Activities for professional and social integration and reintegration of people at risk of social exclusion, title of the task - "Providing assistance and social support for elderly people with mental illness – creation of a Day Home for elderly people with dementia, including Alzheimer's disease, co-financed by the budget of the Masovian Voivodeship. Expansion of the garden's activities by another 500 m2 (lease agreement of April 11, 2023).</p>
<p>Further information</p>	<p><a href="https://www.facebook.com/szpitaldrewnica/videos/msw-drewnica-nowoczesny-szpital-psychiatryczny/1902675343154772/?locale=pl_PL">https://www.facebook.com/szpitaldrewnica/videos/msw-drewnica-nowoczesny-szpital-psychiatryczny/1902675343154772/?locale=pl_PL</a></p>



## Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS), US

PROFILE	
Name of case study	Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS), Portland, Oregon
Country	United States
Area of application	Multnomah County in the state of Oregon (and also Clark County in the neighbouring state of Washington). Note that the city of Vancouver is part of Clark County in the state of Washington.
Implementer	United States Department of Veterans Affairs (VA) via the Veterans Health Administration (VHA)
Sector	Public sector
Field(s) of activity	Healthcare
Green care level	Nature-based therapies, nature-based health promotion
Key words	Horticultural therapy; PTSD; Addiction; Veteran community reintegration; Whole Health
FRAMEWORK	
Core objectives	Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS) is a pilot program that is being implemented across 10 VHA sites <sup>21</sup> . All sites provide mental health services and resources for veterans with Post Traumatic Stress Disorder (PTSD) while simultaneously providing vocational training in gardening or agriculture, and access to leisure garden activities. <sup>2</sup> Objectives of the VA FARMS program include providing nature-based therapy and nature-based health promotion for veterans living with PTSD, as well as offering technical education in horticulture and leisure gardening opportunities to build skills, community bonds, and enhance self-worth.
Organizational and financial structure	<p>The United States Department of Veterans Affairs (VA) is an agency of the United States (U.S.) federal government that provides military veterans with services, including healthcare via the Veterans Health Administration (VHA). The VHA serves over 9 million veterans with diverse needs across 1,321 healthcare facilities, and is the largest U.S. integrated healthcare system. The VHA is committed to the delivery of Whole Health,<sup>3</sup> defined as “an approach to care that empowers and equips a person to take charge of their health and well-being and live their life to the fullest”. Implementation of the VA’s Whole Health System relies on empowering, equipping, and medically-treating veterans through a personalized, proactive approach to health and wellbeing, which is contextualized by their community, relationships, and environment</p> <p>In 2018, U.S. Congress mandated the VHA Office of Rural Health to create a program that delivers agricultural vocation training to veterans while providing</p>

<sup>21</sup> VHA ORH. VA FARMS Fact Sheet, 2023 (accessed 2024-07-11). [https://www.ruralhealth.va.gov/docs/ORH1458-001\\_VAFARMS\\_508.pdf](https://www.ruralhealth.va.gov/docs/ORH1458-001_VAFARMS_508.pdf)

	<p>behavioral health care services and treatments from licensed providers<sup>22,23</sup> The VHA's Office of Rural Health collaborated with VA's Nutrition and Food Services and the Offices of Care Management and Social Work, Mental Health and Suicide Prevention's Therapeutic and Supported Employment Service section, and Community Engagement to develop a pilot program—VA FARMS. The Office of Rural Health then opened a targeted request for applications to VHA facilities across the U.S. and encouraged each VHA facility to partner with an existing community organization engaged in agricultural training. Applications were reviewed for feasibility, probability of success, and compliance with the Congressional mandate. In July 2018 VA awarded nine VHA sites of care, including the VA Portland Health Care System, with funding to implement their proposed VA FARMS pilot program.</p>
<b>Success factors</b>	<p>Formal evaluation of the VA FARMS pilots (across and within the 9 funded sites) has been designed to assess both site-specific and cross-site processes and outcomes; systematic evaluation is underway.</p> <p>According to a recreation therapist at the Portland VA Medical Centre, gardening and horticultural therapy reduces stress and anxiety in the veteran population and can result in reduced medication use.<sup>24</sup></p> <p>Veteran and regular visitor to the VA site, Glen DeWille, has been quoted in the The Columbian newspaper saying that those implementing VA FARMS are doing a great job "to connect with veterans and take them away for a moment, at least, and just kind of calm the noise".<sup>25</sup></p>
<b>EVIDENCE OF SUCCESS</b>	
<b>Key messages</b>	<p>VA FARMS is a complimentary therapeutic program that incorporates nature and care as a key element of the therapeutic process (nature-based therapy). VA FARMS is a horticultural therapy program for US veterans living with PTSD and includes vocational training (i.e., building agricultural workforce skills relevant to the region) that is funded by the largest integrative healthcare provider in the United States (the VHA).<sup>26</sup></p> <p>The program is being formally evaluated by VA staff across all VA FARMS pilot sites, including the VA Portland Health Care System (Multnomah County, Oregon) site, which includes a plot of land in Vancouver, Washington, as well as program activities at the VA hospital in Portland, Oregon.</p>
<b>Main efforts</b>	<p>Each VA FARMS site provides access to behavioural healthcare services by licensed providers and vocational agricultural training; however, each site</p>

<sup>22</sup> VHA ORH. VA FARMS Fact Sheet, 2023 (accessed 2024-07-11).

[https://www.ruralhealth.va.gov/docs/ORH1458-001\\_VAFARMS\\_508.pdf](https://www.ruralhealth.va.gov/docs/ORH1458-001_VAFARMS_508.pdf)

<sup>23</sup> Besterman-Dahan, K.; Hathaway, W. A.; Chavez, M.; Bradley, S.; Orozco, T.; Panaite, V.; Lind, J.; Berumen, J. Multisite Agricultural Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS) Pilot Program: Protocol for a Responsive Mixed Methods Evaluation Study. JMIR Res Protoc 2023, 12, e40496

<sup>24</sup> Fuentes, C. Gardens of Healing: Caring for Plants Part of Veterans' Therapy, Training at Vancouver VA Campus. The Columbian. Vancouver, WA 2023 (accessed 2024-07-11). <https://www.columbian.com/news/2023/aug/04/gardens-of-healing-caring-for-plants-part-of-veterans-therapy-training-at-vancouver-va-campus/>

<sup>25</sup> Ibidem

<sup>26</sup> VA FARMS Fact Sheet, Op. cit.

	<p>initially tailored their VA FARMS pilot project to meet the specific needs of their local environment and veteran population.<sup>2</sup> In the VA Portland Health Care System, VA FARMS is offered in-person and virtually. In-person therapeutic gardening activities and horticulture education sessions are located at the Vancouver or Portland VA campus locations, where daily gardening sessions for various groups, including weekly classes for veterans recovering from substance abuse are available. The VA Vancouver campus site is managed by a former botanist of the U.S. Forest Service, Sierra Sampson, and a horticulture therapist, Mandi Atkinson, who serves as the Coordinator for Therapeutic Horticulture.</p> <p>Note, the VA FARMS program is offered to veterans alongside traditional healthcare and other Whole Health programs at the VA Portland Health Care System, which include Veteran Art, Mindfulness Classes, Whole Health coaching, Well-Being Classes, and Taking Charge of One’s Life.</p>
<p>Scale</p>	<p>VA FARMS at the Portland/Vancouver site treat approximately 20 veterans a week. The 1-acre site provides a safe place for veterans to talk and recover while engaging with nature and learning agricultural skills. This site (VA Portland Health Care System) is one of nine VHA sites of care with funding awarded to implement a regionally-tailored VA FARMS pilot program (see <i>Organizational and Financial Structure</i> above).</p>
<p>Further information</p>	<p>VHA ORH. VA FARMS Fact Sheet, 2023 (accessed 2024-07-11).  <a href="https://www.ruralhealth.va.gov/docs/ORH1458-001_VAFARMS_508.pdf">https://www.ruralhealth.va.gov/docs/ORH1458-001_VAFARMS_508.pdf</a>            Besterman-Dahan, K.; Hathaway, W. A.; Chavez, M.; Bradley, S.; Orozco, T.; Panaite, V.; Lind, J.; Berumen, J. Multisite Agricultural Veterans Affairs Farming and Recovery Mental Health Services (VA FARMS) Pilot Program: Protocol for a Responsive Mixed Methods Evaluation Study. JMIR Res Protoc 2023, 12, e40496.  <a href="https://doi.org/10.2196/40496">https://doi.org/10.2196/40496</a>            Kligler, B. Whole Health in the Veterans Health Administration. Glob. Adv. Health Med. 2022, 11, 2164957X221077214.  <a href="https://doi.org/10.1177/2164957X221077214">https://doi.org/10.1177/2164957X221077214</a>            Fuentes, C. Gardens of Healing: Caring for Plants Part of Veterans’ Therapy, Training at Vancouver VA Campus. The Columbian. Vancouver, WA 2023 (accessed 2024-07-11).  <a href="https://www.columbian.com/news/2023/aug/04/gardens-of-healing-caring-for-plants-part-of-veterans-therapy-training-at-vancouver-va-campus/">https://www.columbian.com/news/2023/aug/04/gardens-of-healing-caring-for-plants-part-of-veterans-therapy-training-at-vancouver-va-campus/</a></p>





This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No. 101084198

