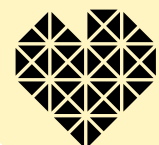




Review of Nordic Nature-based Service Models

Study on the opportunities and challenges of
the nature-based services in Finland, Sweden
and Norway

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Review of Nordic Nature-based Service Models – Study on the opportunities and challenges of the nature-based services in Finland, Sweden and Norway

Abstract

This report is part of a joint Nordic project, the New Nordic Nature Based Service Models (Nordic NaBS 2019-2021), with the primary objective of developing business activities and service models based on the effects of Nordic nature on health and well-being. This study was conducted to produce analysed information about characteristics and preconditions, including challenges and opportunities, for the nature-based services in the project area in Finland (Central Ostrobothnia, Northern Ostrobothnia, and Lapland) and in Sweden (Norra Västerbotten and Norrbotten) and as an external order, outside the project area for benchmarking, three regions in Norway (Nordland, Tromsø, and Finnmark). The focus in this review is on entrepreneurs and companies offering nature-based services, as well as on the relevant social, health care, and pedagogical sectors.

The methods used for collecting material were document analysis, theme interviews, and electronic surveys. Based on a diverse set of data and SWOT (strengths, weaknesses, opportunities, threats) analysis, in addition to the PACO (problems, advantages, challenges, opportunities) analysis framework, the study aimed to provide an overview of the current state of nature-based services. This included demand and supply, as well as institutional structures for the services in the project area, and also uncovered future perspectives for the services.

Finding the biggest challenges and barriers for implementing and buying nature-based services allowed for the formulation of recommendations and guidelines for other actions in this project. The weaknesses and strengths related to preconditions and circumstances of implementing nature-based services, as well as recommendations concerning these factors were classified into three, partly overlapping main categories, as follows: 1) knowledge, professional skills, and qualities; 2) operational environment, and institutional

structures; and 3) actors, networks, and activities. Under these three categories, specific measures for creating better preconditions and circumstances for enhancing nature-based services are presented.

Keywords

Nature-based services, Green Care, Grön omsorg, Naturunderstödd rehabilitering, Grön arena, Care farming, Inn på Tunet, animal assisted activities, well-being, health promotion

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PREFACE

Support for many of society's welfare challenges can be found in nature-based forms of activities and services that have positive impacts for wellbeing. There is a lot of untapped potential and resources in nature and in rural nature-based businesses that can be combined with social, health care, and pedagogical services. The main goal of the New Nordic Nature Based Service Models project (Nordic NaBS 2019-2021) is to develop nature-based business and service models based on the health promoting effects of our Northern nature.

With this review, we aim to clarify the current situation, regarding the needs and supply of nature-based services in the project area, as well as bring out the strengths and opportunities as well as challenges and barriers concerning the theme, both in general and in practice. As a part of this review, we also studied to what extent different concepts like Green Care, Grön arena, NUR, and Inn på TUNET are recognised, and how well research knowledge and results are available and applicable for a variety of professionals and their clients. Our main task was to produce guidelines for the project work, but also analyse and describe potential future opportunities for nature-based services in Nordic societies. Hopefully this report will serve as a useful overview of the Nordic nature-based services and could also encourage experts and professionals from different sectors to apply the recommendations and ideas to their current services and develop them further with an open mind.

I would like to give my warmest thanks to co-authors Olli Voutilainen, Päivi Juuso, Rhys Evans and Anja Yli-Viikari for conducting this report with a positive joint Nordic spirit. Special thanks to Merja Kangasjärvi for her contribution and expertise on conducting the survey as well as to Åsa Engström and Gunilla Johansson for conducting interviews in Sweden and to Jeaneth Johansson for also contributing to the collection of data in Sweden. I would also like to thank project colleagues Leena Välimaa, Arja Jääskeläinen, Sanna Vinblad, Elisa Maljamäki and Satu Välijärvi for their contribution and valuable comments to this study. I also thank Merja Kallio for the assistance in finishing the publication. Finally, particular thank you to all who participated in the interviews and responded to the questionnaires, as your contribution to the content of the study was crucial.

In Vaasa the 25th of March 2021

Martta Ylilauri

1 INTRODUCTION

The report is a part of a joint Nordic project, the New Nordic Nature Based Service Models (Nordic NaBS 2019-2021) with the primary objective of developing business activities and service models based on the effects of Nordic nature on health and well-being and suited to the natural and cultural environment of Nordic areas. The theme of this review, development of nature-based services, is included in many regional and rural development priorities in different regions concerning welfare services, rural entrepreneurship, female entrepreneurship, local services, and business development. Nature-based services also links to the objectives of bioeconomy, ecologically sustainable growth, responsible business models, and social innovations.

International cooperation offers a great opportunity to select the best features of the Nordic nature-based service concepts and to apply these features to the concepts of the actors in the project area. This project supports enterprises and social, health care, and pedagogical organisations to utilise this possibility.

The coordinator and main executor of the project is Lapland University of Applied Sciences. The partner organisations are University of Vaasa, Oulu University of Applied Sciences and the Department of Health Sciences of Luleå University of Technology. University of Vaasa has been responsible for and has coordinated the implementation of this study and, as part of the review, has conducted the country report of Finland. Luleå University of Technology has conducted the country report of Sweden. The project has cooperated with University College of Green Development (Høgskulen for grøen utvikling) in Bryne to include Norway and its country report to this study. Additionally, Natural Resources Institute Finland (Luke) has been involved in commenting on the study from a national perspective and conducting Chapter 1.2 about the effects of nature-based services.

This study was conducted to produce analysed information about characteristics and preconditions including challenges and opportunities for the nature-based services in the project area. The study concentrated on three regions in Finland (Central Ostrobothnia, Northern Ostrobothnia, and Lapland), two regions in Sweden (Norra Västerbotten and Norrbotten) and as an external order, outside the project area for benchmarking, three regions in Norway (Nordland, Tromsø, and Finnmark). One key objective of the study was to produce guidelines and substantiated recommendations for other actions in this project.

The structure of the report is as follows: In Chapter 1, the subject to be studied, objectives, case regions, key definitions, and materials and methods are introduced. Chapter 2 contains the country analyses from Finland, Sweden, and Norway, as well as case descriptions related to the chosen examples of customer groups in the case regions. In Chapter 3, conclusions and recommendations based on the national analyses are

presented. The presentations and webinars concerning the study are available on the project's website (nordicnabs.com).

1.1 Effects of nature-based activities

Anja Yli-Viikari and Martta Ylilauri

The implementation of nature-based activities for promoting health and well-being have experienced a clear growth over the past few years and decades. One of the essential issues raised is the need for more accurate identification and description of the impact processes of nature-based activities and methods. Substantial international research has already been carried out, resulting in an overview of the main mechanisms of influence of nature-based activities. (Sempik, Hine & Wilcox 2010; Gallis 2013.) However, further verification of these effective displays is still needed through randomised and experimental research, which provides the most scientifically accurate evidence and also enable giving general-level treatment recommendations (in Finland, e.g., *Käypä hoito -suositus* recommendations for health care).

In the survey of this project, professionals in social, health care, and pedagogical sectors (*in figures, abbr. S*) were asked to assess the importance of the objectives related to nature-based activities for their own respective client groups. In Finland, the result was significant, as the numerous aims from decreased stress levels to positive effects on appetite/nutrition presented in the bar chart in Figure 1 were found to be broadly important to various client groups. The result can be seen to indicate the remarkable need and potential for the development and implementation of nature-based activities.

In Sweden, the corresponding result was also positive. However, compared to Finland, there was a relatively and substantially wider lack of knowledge or experiences related to the aims of nature-based activities for the respondents' own client groups. In Figure 2 the bar chart shows the importance of aims of nature-based services in percentages from Sweden.

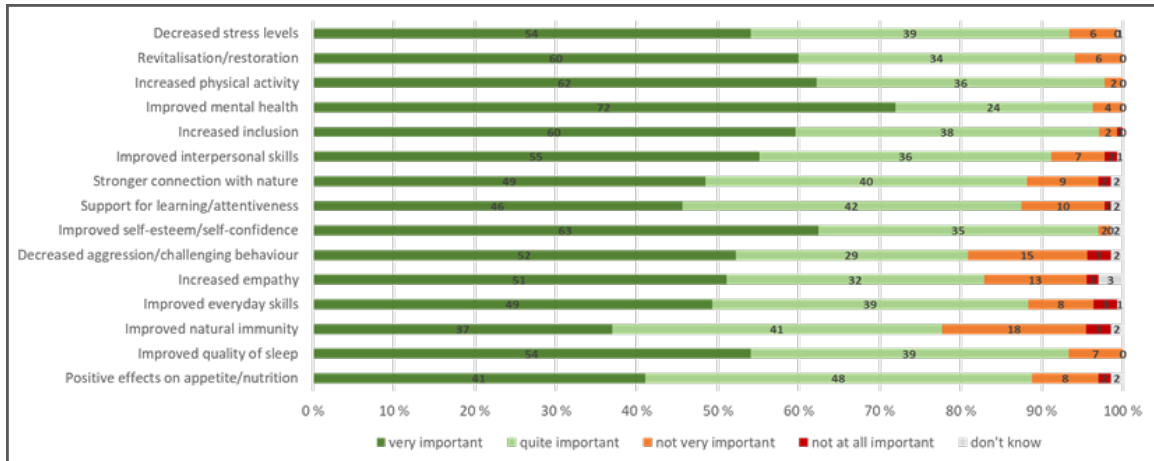


Figure 1. Aims of nature-based services: How important do you find the following aims of nature-based services to be for your client groups? (Finland, *S*, *n*=134–136)

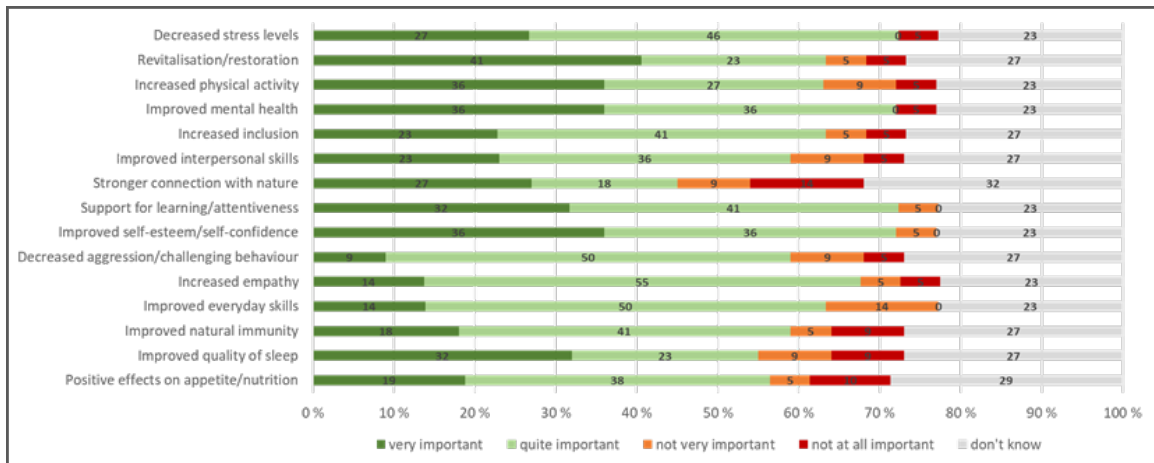


Figure 2. Aims of nature-based services: How important do you find the following aims of nature-based services to be for your client groups? (Sweden, *S*, *n*=21–22)

1.1.1 The role of evidence-based information and knowledge

The demand of evidence-based information is highlighted in several contexts, but may need further discussion. The perspective of experimental research setup is most justified in medical studies. As, for example, it is necessary to clarify, systematically, the effects of new drugs assessed in different quantities and concentrations before adopting them into medical treatments. Experimental research setup is well suited to elucidating such cause-and-effect relationships (Yli-Viikari & Lipponen 2020).

Regarding nature-based activities and interventions promoting health and well-being, the focus is often on the individual situation and needs of each client. For example, when a client has a need to support physical activity, it is considered what possible means of support are available locally for this objective. Usually, social and health care professionals are able to observe and assess new forms of support and determine whether the selected means are useful for their client. In addition, the client, his or her family, as well as other professionals involved in the treatment or rehabilitation processes are able to assess this issue. In light of the current research, the main impact mechanisms in nature-based activities and interventions would be related to lowering the stress levels and recovering, but also to activation of attentiveness and experiences of personal learning.

1.1.2 Lowering stress levels and improving recovery

The calming effects of natural views and elements in nature, as well as with the presence of animals, are indicated in a number of studies (Beetz 2012; Lee 2012; Tsunetsugu et al. 2013). For people with vulnerable situation and increased stress, these are especially important. As stress reactions settle down and one's calm presence is strengthened, the client has a significantly better chance to deal with challenging issues, and also find new ways to solve them (Porges 2009; Leikola, Mäkelä & Punkanen 2016). Experiences in practical work have shown how the free space associated with nature and animals enables the clients to take space for themselves. They are also able to seek their own peace when the mind is overloaded. This helped avoid unnecessary escalation of challenging situations (Hambidge 2017).

1.1.3 Activation and personal learning experiences

Using examples from outdoor preschools, it is indicated that the same natural settings can produce effects that are both calming to an overactive child, and encouraging and activating to a timid child. It seems that people are themselves able to seek elements to support their individual well-being. Nature-based activities further support in the increase of physical movement (Sallis et al. 2016). It is easy to find a wide range of activities in nature, which at its best can give sparks of interest to physical exercise all year round. The increase in physical activity is reflected in physical fitness, muscle strength, nimbleness and balance, but also in regular nutrition and quality of sleep. All these factors are supporting elements for human health and can support resilience and abilities to cope with different kinds of challenges in life. These aspects of a healthy life are especially important for children to support normal development and growth.

Nature-based activities can also promote the interaction between the client and the professional. For example, the presence of a horse changes the atmosphere of therapy

session (Beetz 2017; Scopa, Contalbrigo, Greco, Lanatà, Scilingo & Baragli 2019). Approaches become naturally solution- and resource-based, making it easy to encourage and give attention to the client's own personal strengths. Thereafter, power relationships between the professional and client are levelled off, and trust can be built via everyday routines made together. Getting new clients involved with the activities on farms and horse stables is mostly easy. Also, communication with other family members takes place naturally within the framework of horse stable activities (Kiskola 2019).

For many clients, the experiences of real inclusion and participating are the most meaningful factors. Nature-based activities provide one cost-effective way to introduce such low-threshold environments, where clients can experience being accepted as themselves (Lovell et al. 2014). Operational, nature-based environments also have the advantage of their multidisciplinary character. Rehabilitation processes can start with certain health-related goal and continues to other goals concerning different functions and abilities. In total, they result improved self-confidence, self-esteem, and mental health. These were also highlighted by the respondents in this project survey (Figure 1 and Figure 2).

One strength of nature-based activities remains on their potential transition to the level of the client's own everyday life. For example, activities with horses as a part of a rehabilitation process, can continue as a life-long supportive asset to the client.



1.2 Objectives of the study

The object of the study was to produce analysed information about characteristics and preconditions including strengths and opportunities but also threats, weaknesses, and barriers for the nature-based services in the project area. Focus in this review is on social, health care, and pedagogical sectors, as well as entrepreneurs and companies offering nature-based services.

The study was conducted to describe demand and supply for the nature-based services as well as to provide information of the current national and regional role and emphasis of nature-based services. One key objective of the study was to produce guidelines and substantiated recommendations for other actions in this project.

Main review questions

- What is the current state of the resources for and supply of nature-based services?
- What kind of needs or demands are there for nature-based services?
- What kinds of service structures and cooperation models are there between various sectors regarding to the use of nature-based services?
- What kind of strengths or opportunities are there relating to the nature-based services?
- What kinds of weaknesses, threats, and barriers are there relating to the nature-based services?
- What means could be used to remove existing barriers and support the implementation of nature-based services?

The main task of the review was to produce a topical summary of nature-based social, health care, and pedagogical services in Finland, Sweden, and Norway based on a SWOT (strengths, weaknesses, opportunities, threats) analysis in Finland and Sweden and PACO (problems, advantages, challenges, opportunities) analysis in Norway. The analysis consists of structures and cooperation models, supply and demand, strengths, and opportunities, as well as weaknesses and threats including crucial barriers of nature-based services. Knowledge, professional skills and qualities, operational environment, and institutional structures, as well as actors, networks, and activities are considered separately in the analysis.

1.3 Case regions

The review concentrates on the Interreg North program area, including three regions in Finland, two regions in Sweden, and as an external order, outside the project area, three regions in Norway (shown on the map in Figure 3):

- Finland: Central Ostrobothnia, Northern Ostrobothnia, Lapland
- Sweden: Västerbotten, Norrbotten
- Norway: Nordland, Tromsø, and Finnmark.

Table 1 presents population and number of municipalities in each case region during the study.



Figure 3. Area covered by the study (Interreg North 2014-2020).

Table 1. Population and municipalities in the review.

Case regions	Inhabitants	Municipalities
Lapland	177 373*	21
Northern Ostrobothnia	411 856*	30
Central Ostrobothnia	68 361*	8
Norrbotten	250 093**	14
Västerbotten	271 736**,***	15
Nordland	241 235****	41
Tromsö and Finnmark	243 311*****	39

*2019-10-31
 **2019-12-31
 ***All municipalities are not included in the project area based on Interreg Nord regulations.
 ****2020-10-20
 *****Tromsö and Finnmark were united on 2020-1-1



1.4 Main concepts and actors in the study

1.4.1 Nature-based services

Nature-based service activities (e.g., *Green Care*, *Grön Arena*, *Grön omsorg*, *Naturunderstödd rehabilitering NUR*, *Inn på Tunet*) aim to improve human wellbeing and quality of life. These activities make use of nature (e.g., natural environments, gardens, farm environments, and animals) in connection with various social, health care,

pedagogical, and recreational services. The services are based on the restorative and rehabilitative effects of nature, arising from participation and experiences. The services are provided professionally, reliably, and purposefully, according to clients' needs. (Hushållningssällskapet; IPT 2016; Luke & THL 2017; Region Halland; Region Skåne.)

1.4.2 Actors

In this study, the actors representing client organisations were professionals in social and health care organisations and units in the pedagogical sector (e.g., schools, day care units). Most of the respondents represented the public sector (municipalities and other regional organisations), while associations, covenants, and private service providers were also represented. In this study, this group of actors represents demand of nature-based services (*in figures, abbr. S*):

- Social, health care, and pedagogical sector professionals, service purchasers of nature-based services
- Can, in some cases, produce nature-based services by their own staff.

The respondents of the group entrepreneurs or companies were mostly entrepreneurs but also other actors in companies producing nature-based services. In this study, this group of actors represents supply of nature-based services (*in figures, abbr. C*):

- Companies and entrepreneurs (C), nature-based service providers for different client groups.

1.5 Materials and methods in Finland and Sweden

The methods used for collecting material were document analysis, theme interviews and electronic surveys. Based on a diverse set of data, the study aimed to provide the overview of the current state of nature-based services, including demand and supply, as well as institutional structures for the services in the project area, and also discover the future perspectives for the services. Uncovering the biggest challenges and barriers for implementing and buying the nature-based services enabled formulating justified recommendations and guidelines for other actions in this project.

1.5.1 Document analysis

The material of document analysis consisted of studies, reports, and other documents concerning nature-based activities and services, including previous experiences and documentation of regional and local service experiments and service models. Research

relating to the subject, as well as strategies and suitable statistics, legislation, and also the contents of government and regional programs were utilised in the review. Essential references and literature utilised in the study are presented in the end of the corresponding chapter.

1.5.2 Theme interviews

Main themes of the interviews were:

- Knowledge and experiences in nature-based services
- Strengths and opportunities regarding nature-based services
- Challenges related to the purchase of nature-based services
- Challenges related to the business of nature-based services; need for support
- Extent and quality of cooperation network regarding nature-based services
- Prediction of the growth of nature-based services in the near future

Participants of interviews were professionals in the social and health care sector and entrepreneurs, including a few potential entrepreneurs who use nature-based methods in their service activities and plan to start their business in the future. In Finland, the total number of participants of interviews was 13, of which 3 were from Lapland, 5 from Northern Ostrobothnia, and 5 from Central Ostrobothnia. From 13 interviews in Finland, 5 were entrepreneurs and 8 were from the social and health care sector. In Sweden, the total number of participants in the interviews was 17, of which 4 were from Västerbotten, and 13 from Norrbotten. From 17 interviews in Sweden, 12 were entrepreneurs, and 5 were from the social and health care sector. The data was analysed by themes using content analysis.

1.5.3 Survey

The main idea of the survey was to specify the current situation and future expectations for supply and demand of the nature-based services in case regions.

The main themes of the survey were:

- Background data (organisation, role of the respondent, location, customer groups, etc.)
- Production and purchase of nature-based services
- Challenges related to the purchase of nature-based services from social, health care and pedagogic professionals' point of view
- Strengths and opportunities regarding nature-based services in the respondents' units and companies

- Challenges related to the nature-based services business; need for support from entrepreneurs' and companies' point of view
- Prediction of the growth of nature-based services in the near future
- Need for more information

The two main target groups of the survey were:

1. *Companies and entrepreneurs (C)*, which in this study represented service providers and the supply of nature-based services
2. *Social, health care, and pedagogical sector professionals (S)*, representing service purchasers and the demand of nature-based services (in some cases also as service providers).

The entrepreneurs and companies in nature-based services were mapped according to if they were already connected to client groups. They were, to some extent, known actors in the field or were, at least potentially, nature-based service providers. Social, health care, and pedagogical sector professionals were mapped on the basis of available information, mostly via public webpages. Both target groups were approached with direct emails and via the project's Facebook site. The survey was conducted via electronic questionnaires (Webropol). The quantitative data from Finland and Sweden were analysed by using SPSS statistical software. The data gathered in the survey was processed in such a way that respondents could not be identified. (Kangasjärvi, Ylilauri & Voutilainen 2020.) Selected results and figures of the survey are presented in this review and the survey results in full are available as slide presentations on the project's website (nordicnabs.com/material).

Survey in Finland

In Finland, the survey was published on 1.11.2019 and closed on 27.11.2019. In total, 136 professionals from the social, health care, and pedagogical sectors responded to the questionnaire, of which 99 responses (share of total answers: 73%) were from Northern Ostrobothnia, 23 (17%) were from Lapland, and 14 (10%) were from Central Ostrobothnia, i.e., the respondent's unit or workplace was located in the region in question, or within the area in which a respondent mainly operated when the respondent did not have a fixed place of work. The sample of responses was over-represented in Northern Ostrobothnia (share of population as of 31.10.2019: 63%) and under-represented in Lapland (share of population as of 31.10.2019: 27%). The contact information of the respondents from Central Ostrobothnia was collected according to the same criteria as in Northern Ostrobothnia and Lapland, but because of the significant difference in the number of municipalities and service providers with only one regional organisation of health care and social services (Soite), the number of contact persons is smaller. In addition, the tasks of school head teachers and curators are often shared among smaller schools in rural areas,

which also explains the differences in regional sample sizes. Nearly 18% of the respondents worked in associations, foundations, or other organisations in the third sector, including social, health care, and pedagogical services (as presented in the pie chart and data table in Figure 4).

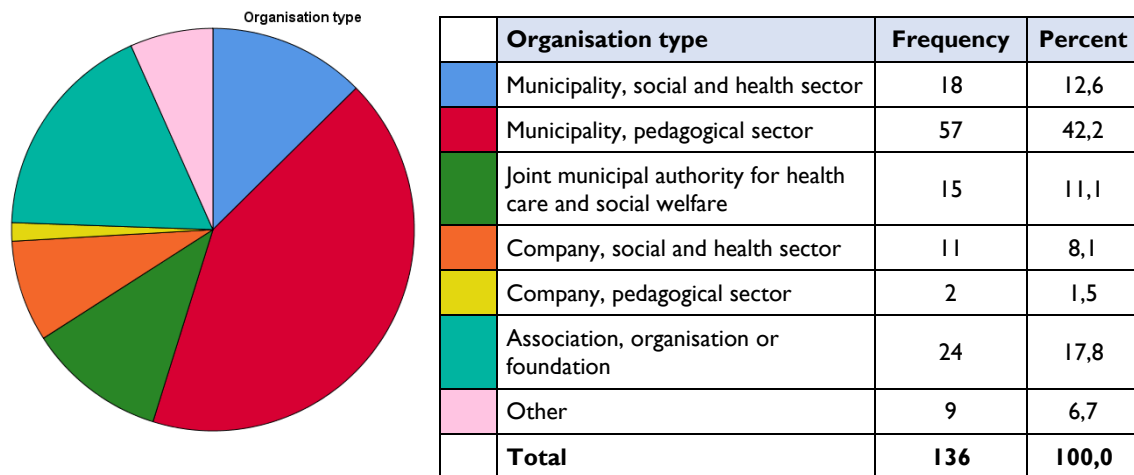


Figure 4. Respondents' organisation type: What kind of organisation do you work in? (Finland, S)

In the social, health care, and pedagogical sectors, approximately two-thirds of the respondents acted as a manager or supervisor (as presented in the pie chart and data table in Figure 5). More than half of the respondents had the possibility of influencing others, very much or quite a lot, in the purchase of services, while more than one-third of the respondents did not have very much, or did not have at all, the possibility to influence the purchase of services (as presented in the pie chart and data table in Figure 6).

Based on the survey, approximately three-out-of-four respondents, purchasing or ordering welfare services (social, health care, pedagogical, and recreational services) for clients was included in his or her duties as a key task or to some extent. Meanwhile, for around one-fourth of the respondents, purchasing or ordering these services for clients was not included in his or her duties. Most often, i.e., in around two-thirds of the responses, these tasks were included in the duties to some extent.

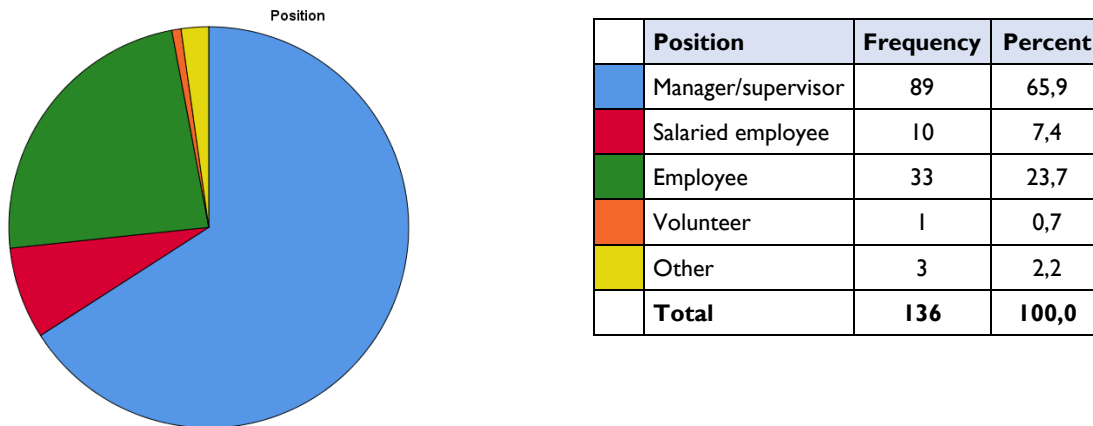


Figure 5. Respondent’s position: Which of the following describes best your position in your unit? (*Finland, S*)

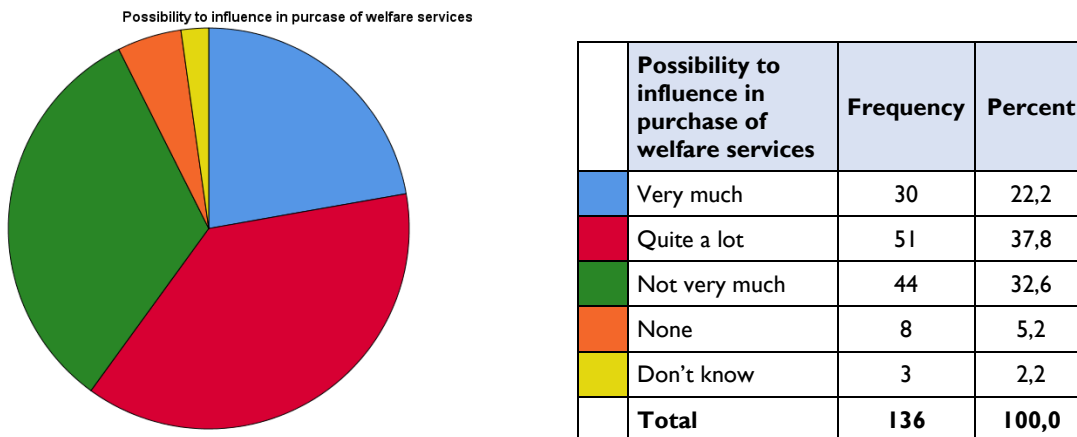


Figure 6. Possibility to influence purchases: How much influence do you have on the type of welfare services acquired for clients in your unit? (*Finland, S*)

In Finland, 39 entrepreneurs or actors in these companies responded to the questionnaire. Four of them were from outside the project area, so these responses were removed and 35 responses were analysed. Of the total of 35 qualified responses, 19 (share of total answers: 54%) were from Northern Ostrobothnia, 11 (31%) from Lapland; and 5 (14%) from Central

Ostrobothnia, i.e., the respondent's company or workplace was located in the region in question or the area in which a respondent mainly operates in the case of a respondent not having a fixed place of work. The number of responses corresponds fairly well to the ratio of the regional population of the project area with some amount of over-represented samples from Central Ostrobothnia (share of population 31.10.2019: 10%), and Lapland (share of population 31.10.2019: 27%), and to some extent, an under-represented sample from Northern Ostrobothnia (share of population 31.10.2019: 63%).

More than 70% of the respondents were entrepreneurs and the rest of the respondents were supervisors or managers, employees, or volunteers of the companies (as presented in the pie chart and data table in Figure 7).

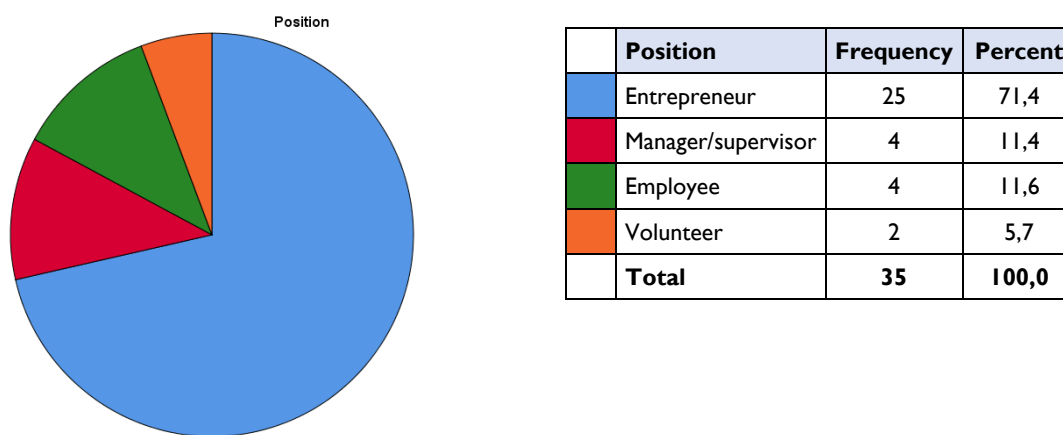


Figure 7. Respondent's position: Which of the following describes best your position in your company? (*Finland, C*)

Survey in Sweden

In Sweden, the survey was published on 21.11.2019 and closed on 6.12.2019. In total, 22 social, health care, and pedagogical sector professionals responded to the questionnaire. Of these 22 responses, there were 18 responses from Norrbotten, and four responses from Västerbotten, i.e., the respondent's unit or place of work was located in the region in question, or within the area a respondent mainly operated, in the case of respondents who did not have a fixed place of work. In general, the number of responses was small, as the response rate was low in Sweden. Therefore, these results are not representative of the number of inhabitants in the two regions of Norrbotten and Västerbotten. The small number of responses can be explained with interconnected reasons, such as lack of knowledge about nature-based services, unwillingness and/or lack of time to answer the

survey, methods used to approach respondents with the survey, or perhaps that the survey had not reached the “right” person in the organisation.

Among the participants who answered the survey, 50% worked in the pedagogical sector. Looking at the response rate for respondents from the social and health care sector, 27.3% worked in municipalities. Notable, however, is that responses coming in from the option of “Other” are respondents from the health care sector, but who work in county councils and not municipalities, leading to a total response rate of approximately 41% from the social and health care sectors (as presented in the pie chart and data table in Figure 8). Regarding the difference in response rate between Norrbotten and Västerbotten, this can be attributed the project group having reached out with less information about the project or having less contact with target groups in Västerbotten compared to Norrbotten. (Kangasjärvi, Ylilauri, Voutilainen & Juuso 2020.) Compared to Finland, the Swedish analysis is more based on interviews and document analysis due to weaker representativeness of the sample in the survey.

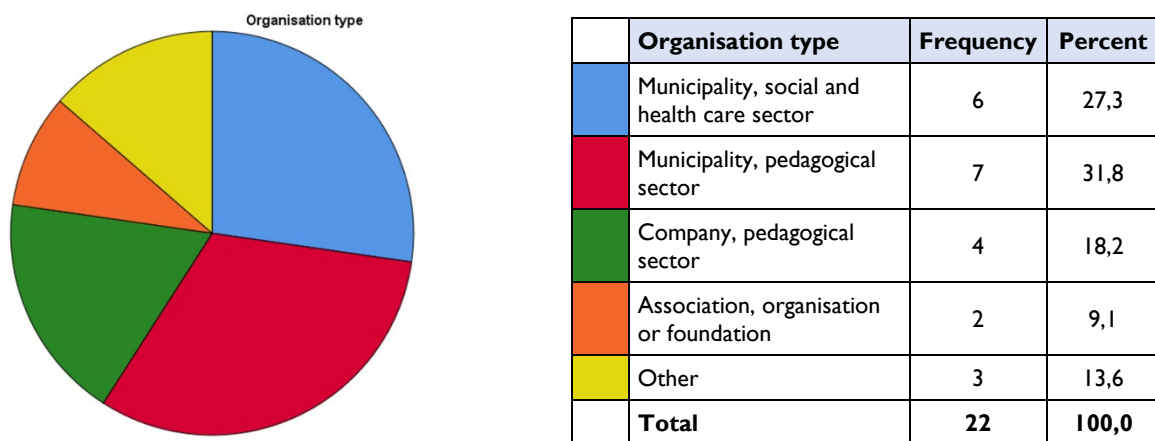


Figure 8. Respondent’s organisation type: What kind of organisation do you work in? (Sweden, S)

The majority (63.6%) of the respondents from social, health care, and pedagogical sectors were managers or supervisors for their organisation (as presented in the pie chart and data table in Figure 9) of which, based on the survey, about half were not responsible for the purchasing of welfare services. As presented in the pie chart and data table in Figure 10, the majority of the respondents, however, had the possibility of influencing the purchasing of the services.

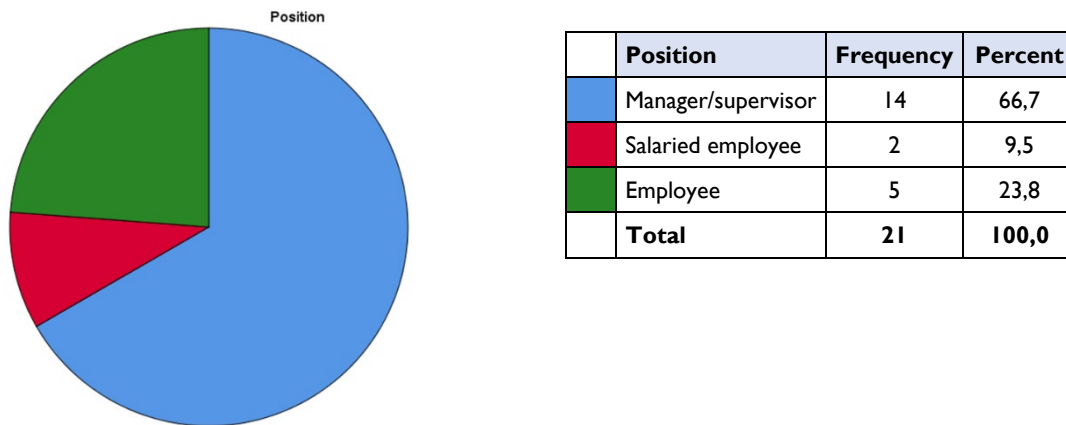


Figure 9. Respondent's position: Which of the following describes best your position in your unit? (Sweden, S)

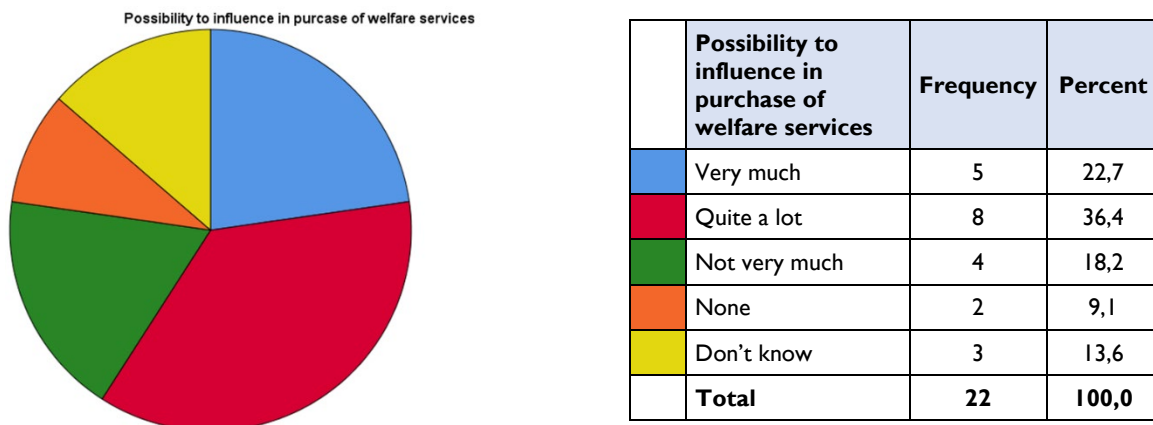


Figure 10. Possibility to influence purchases: How much influence do you have on the type of welfare services acquired for clients in your unit? (Sweden, S)

In Sweden, 12 entrepreneurs or actors in these companies responded to the questionnaire. Of the total 12 responses, there were 10 responses from Norrbotten and two responses from Västerbotten, i.e., the respondent's company or place of work was located in the region in question, or the area in which a respondent mainly operates, in the event a respondent did not have a fixed place of work. The number of responses is not representative for the population in the two areas. Several reasons can explain the small number of answers and low response rate, such as lack of time to answer the survey, changes in the business organisation, or lack of knowledge about the aim of the survey. Higher response rate in Norrbotten compared to Västerbotten can to some extent be explained by the fact that the project group reached out to more entrepreneurs in

Norrbottnen. The majority of the respondents answered to be entrepreneurs and one respondent had chosen to respond with “other” (as presented in the pie chart and data table in Figure 11). The analysis, however, showed that the “other” answer stands for entrepreneur, manager, and owner of the company, which correlates with the option “entrepreneur”, meaning that all respondents from the case region in Sweden were entrepreneurs.

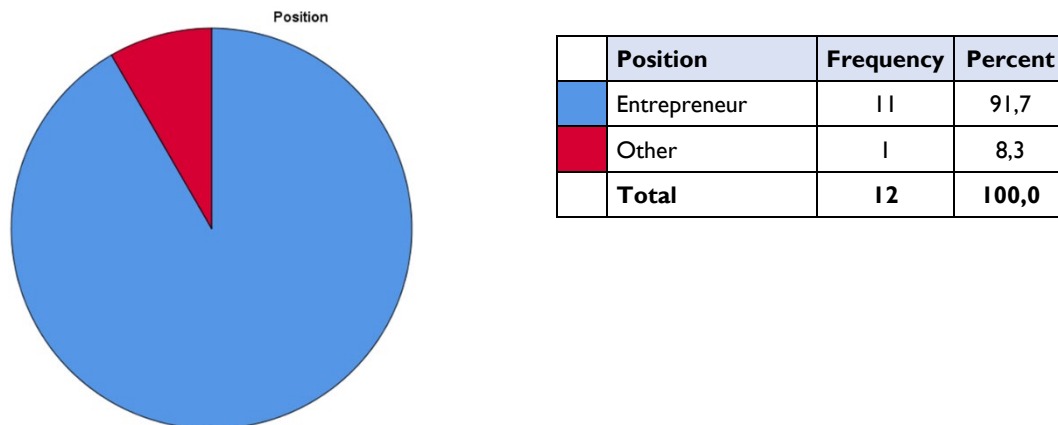


Figure 11. Respondent’s position: Which of the following describes best your position in your company? (Sweden, C)

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2 COUNTRY ANALYSES: FINLAND, SWEDEN AND NORWAY

2.1 Finland

Martta Ylilauri and Olli Voutilainen

2.1.1 Structures, concepts, and cooperation models of nature-based services

Finnish Green care

In Finland, the broadest possible selection of nature-based activity forms including different kind of methods has been gathered together under the umbrella of the Green Care concept, including farms and other agricultural environments, animals, forests, water environments, parks, gardens, and even nature-based activities indoors in urban areas (as presented in Figure 12).

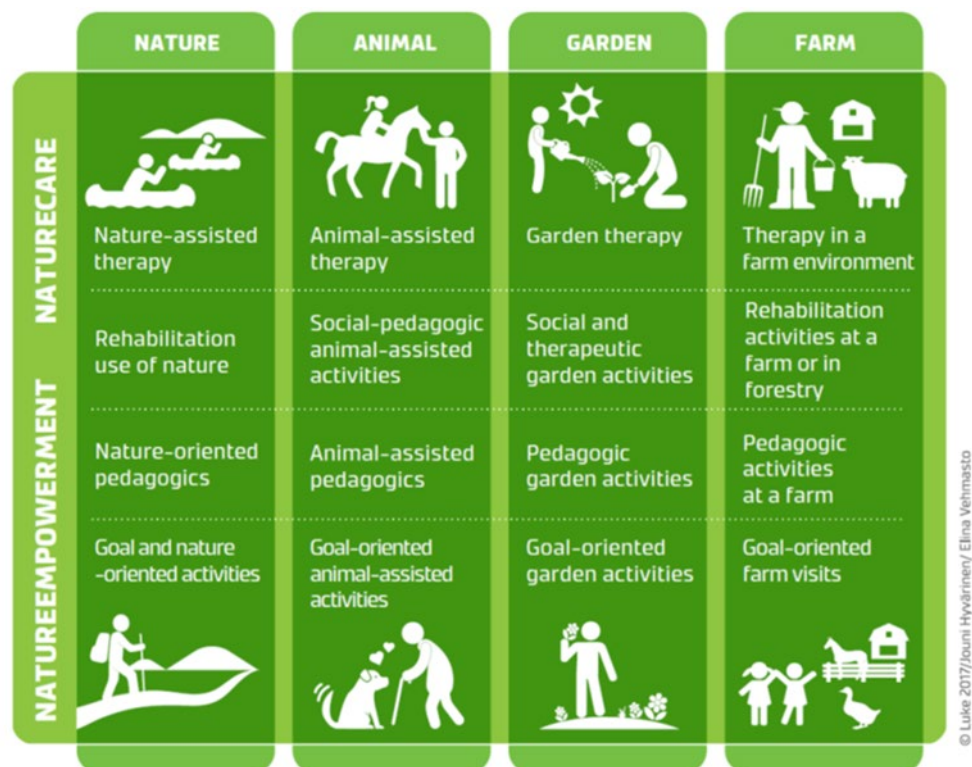


Figure 12. Finnish Green Care concept (Luke & THL 2017: Green Care Quality Manual).

Green Care organisation in Finland

The association, Green Care Finland, was established in 2010 for coordination and development of overall professions using nature in the field of social, health care, pedagogical, and recreational services. The national association contributes to the interdisciplinary network of professionals, spreads information, and leads the Green Care quality management work. Currently, the association has a diverse network of actors, both nationally and professionally, with more than 600 members (e.g., entrepreneurs and other service producers, developers, researchers, and educators), and is growing steadily as the interest for nature-based activities increases.

Green Care Finland contributes to arranging the annual, national Green Care conference and upholds the national websites (Green Care Finland). These both have significant roles in networking and distribution of information. Green Care Finland has also a crucial role in contributing to the definitions of the Green Care sector and its development. The development of Finnish Green Care concept and activities is also promoted via national and regional projects. There were 62 Green Care projects, forming as early as 2013, which have been registered on the website of Green Care Finland (situation 28.9.2020). The majority of these projects have been implemented at the regional level. Additionally, there are projects that have been implemented in the international and national levels, as well as between regions (Green Care Finland ry). The National Coordination Project for Rural Welfare Services (2018–2020) has contributed to the cooperation between different regions and projects at the national level by sharing information, publications, arranging networking, theme events, and courses. The national coordination project have also contributed to evaluation of nature-based services.

Creating a multidisciplinary and multi-professional concept of Finnish Green Care has contributed to the creation of an innovation-oriented discussion forum, which is likely to provide inspiring and empowering viewpoints for many professionals. However, this kind of broad scope can also be seen as confusing and frustrating. Therefore, it has been essential to develop specific methodologies as well as quality models, which can guide the practical actions of professionals.

Finnish Green Care Quality management work

Finnish Green Care quality management work was launched in 2012 when the Green Care Code of Ethics was established. Quality management work continued with designing the quality models in cooperation with Green Care Finland, National Institute for Health and Welfare (THL), and Natural Resources Institute Finland (Luke). The Finnish Green Care concept has been divided into two sections: *Nature Care services (Luontohoiva, Grön*

omsorg), and *Nature Empowerment services (Luontovoima, Grön kraft)*, which differs by criteria, directional legislation, and clients' position.

Nature Care resides within the social and health care services in which the public sector has the responsibility of providing services. Nature Care services are primarily intended for people in a vulnerable position, who need care or external support with physical or mental health issues, long-term unemployment, substance abuse, or similar challenges. A Nature Care service provider must have an educational background in social services or health care or cooperate with social or health care professionals. The activities must comply with any relevant social service and health care legislation and regulations. A safety plan as well as a self-monitoring plan is required for all Nature Care services. (Green Care Finland ry.)

Nature Empowerment services include goal-oriented services in nature-assisted well-being, education, and recreation services. These services are available to the public and aim to promote the overall well-being and health of the participants. The service provider does not need qualifications in social services or health care, but the operations must comply with any valid recommendations and regulations in the field of the service provider. The expertise is required by the services and the Green Care operating method and each service must be provided in a professional, goal-oriented, and responsible manner. A safety plan that covers all safety issues pertaining to the service is always required. (Green Care Finland ry.)

The Green Care Quality Certificate was published in January 2017 and 27 applications have already been processed and accepted by August 2020, including 13 Nature Care certificates and 14 Nature Empowerment certificates. The Green Care Quality Manual serves as one of the main documents when applying for the Green Care quality label, but it can also be used as a quality management tool even without applying for a certificate. (Green Care Finland ry.) In Finland, the most important means for increasing the professional and financial significance of the Green Care quality labels are to increase the visibility of the current label owners as well as increase the critical mass by getting more applicants and labels in the field (Aho 2019).

Green Care education and research

As the nature-based methodologies and approaches have mostly been missing in different degrees of social and health care, Finnish universities of applied sciences and other educational units have developed multidisciplinary Green Care education modules in a joint project from 2015–2018 (Vinblad, Sipola & Iijolainen 2018). There are also corresponding educational modules that have been developed in Swedish Ostrobothnia (Enlund 2018). Basic knowledge in Green Care is also required when applying the quality

label. There are national criteria for assessing whether the planned training or course meets the theoretical knowledge required for the Green Care quality label in Finland. The criteria were created in collaboration with the Green Care Finland foundation, the Green Care Quality label board, and the national Green Care coordination project (Green Care Finland ry).

Green Care Finland collects and transmits information about courses and education, training organisers and different specialists in the field. Currently, there are a number of training organisers in Finland that fulfill the theoretical competence requirement for both Green Care Quality labels. In addition, there are a number of other basic and complementary courses and education programs related to different nature-based activities and methods.

The national Green Care research network for researchers, developers, and professionals with a shared interest in Green Care was gathered in autumn 2016 by the University of Vaasa. Since the kick-off meeting, the network has organised several research events in cooperation with regional development projects and Green Care Finland. Furthermore, a Facebook group has been established to spread information about research and conferences. One outcome from the network is a joint publication (Ylilauri & Yli-Viikari 2019) with 35 articles, contributing to recent research and concepts, as well as the needs and possibilities for nature-based services in Finnish society.

Overview of operational environment in a Finnish national level

Megatrends, such as urbanisation, demographic and technological development, environmental issues, and climate change, as well as unequal and polarised development of wealth affect the demand of welfare services in many ways. To solve challenges regarding accessibility, effectivity, and cost-effectiveness, new social innovations and new forms of cooperation are needed (Rehunen, Reissell, Honkatukia, Tiitu & Pekurinen 2016). Additionally, nature and health issues in the public and on social media have encouraged general acceptance for the aforementioned themes. Green Care and its many forms of activities are increasingly and widely known, both as a term and at the level of activity. The effects and effectiveness of different activity forms and methods of Green Care have been addressed in many studies and throughout the media. The recognition of potential and positive prospects for developing and extending nature-based activities and services has increased significantly within the last 10 years in Finland. Thus, it can be said that the time for developing nature-based services in Finland is now ripe. However, much work and cooperation is still needed to realise the fruits of promising prospects. (Airaksinen 2019.)

There are challenges concerning the development of services for clients and entrepreneurs. Public procurement processes can give competitive advantage to bigger service providers,

which also have often had better possibilities to manage the regulatory procedures and licenses required. However, lack of knowledge concerning nature-based methods, activity forms and the quality of services can cause prejudices. (Airaksinen 2019.) Education and professionalism together with high ethical standards enable assurances of higher quality of the services. Developing new cooperation models often requires external support.

In Finland, the wide-ranging interpretation of the Green Care concept, together with the national association, Green Care Finland, along with various groups of professionals and interdisciplinary networks enables wide-spanning cooperation to tackle challenges. In the joint Nordic cooperation perspective, this can be seen as a strength that can be benchmarked to contribute to the national coordination of development, education, and quality management work, but also when lobbying the theme to decision-making processes at the national level.

National and regional development often involves the most active group of professionals interested in the subject. Parallel to the national and regional level, it is also important to notice smaller, local units with their specific characteristics, as well as operational and decision-making mechanisms, which can have a significant role in the introduction and implementation of new services. (Ylilauri 2018.)

2.1.2 Supply of nature-based services

Green Care and other nature-based service providers

In Finland, Green Care and other nature-based service providers include Green Care entrepreneurs or companies and other actors, e.g. horse-assisted social pedagogic service providers, outdoor guides, and actors within ecotourism. The nature-based activities have been gathered together under the umbrella of the Green Care concept, including different kinds of natural and rural environments, animals, and natural elements.

There were totally 610 registered members in the Green Care Finland association as of 21.9.2020, in which 285 were entrepreneurs in different parts of Finland (source: unpublished information of Green Care Finland ry). On the association's website, there were a total of 262 registered service providers in Finland, as of 21.9.2020. According to Green Care Finland, these registered service providers in Finland offered the following services: 159 activities making use of natural environments and materials; 157 animal-assisted activities; 89 activities on farms; and 78 gardening activities (Green Care Finland ry). However, all private or public actors as well as associations with nature-based care or welfare services in Finland have not all registered as a member to Green Care Finland.

According to service providers published on Green Care Finland's website, many Green Care service providers work professionally with trained horses. There were also nearly 200 registered professionals providing horse-assisted social pedagogic services in Finland in 2020 (Sosiaalipedagoginen hevostoimintayhdistys ry). Furthermore, in Finland, there is growing interest of Green Care service models, among nature tourism or ecotourism and rural tourism entrepreneurs. This also means that the actual number of service providers has been difficult to estimate.

Supply in Finland - Case regions: Green Care and other nature-based service providers

In Green Care Finland's website, as of 21.9.2020, there was a total of 38 registered service providers in Central Ostrobothnia (14), Northern Ostrobothnia (14), and Lapland (10), including all sectors. According to Green Care Finland, the registered service providers in the case regions together offered 29 animal assisted activities, 13 gardening activities, 20 activities on farms, and 24 activities making use of natural environments and materials (Green Care Finland ry). Among the 35 survey responses, the activities in nature areas and animal-assisted activities were the most common forms of (as presented in the bar chart in Figure 13). The six interviews for entrepreneurs followed the same division of activity forms.

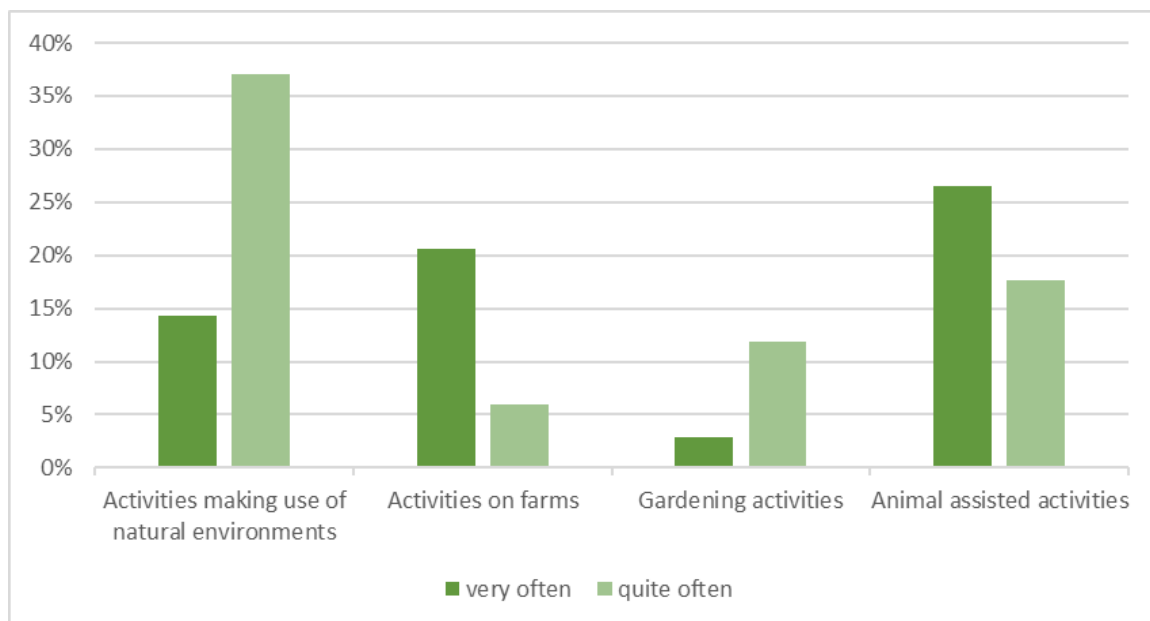


Figure 13. Offering of nature-based services: Does your company offer clients services which include the following types of activities? (Finland, C, n=34–35)

In Central Ostrobothnia, nature-based activities are often produced on care farms or horse stables, but there is growing interest of Green Care services amongst actors in rural and

nature tourism. In Northern Ostrobothnia, the entrepreneurs work mostly with horses or use nature areas, or nature elements in their services. There are many excellent nature areas (for example Kuusamo, Rokua, Liminganlahti, and Hailuoto), which are suitable and actively used in Green Care services. In Lapland, several Green Care cooperation models have recently been developed, mostly in cooperation between the voluntary and public sector. With its unique northern nature, including seasons with a real winter, long distances, and strong human-nature relationship can be seen as characteristic features for nature-based services. International tourism has expanded remarkably (before COVID-19 pandemic in 2020), which can offer new possibilities to include Green Care to recreation and wellness services.

Approximately two-thirds of the respondents on the survey worked in a company with 1-2 employees, while a majority of the rest of the respondents worked in a company with 3-9 employees (as presented in the pie chart and data table in Figure 14).

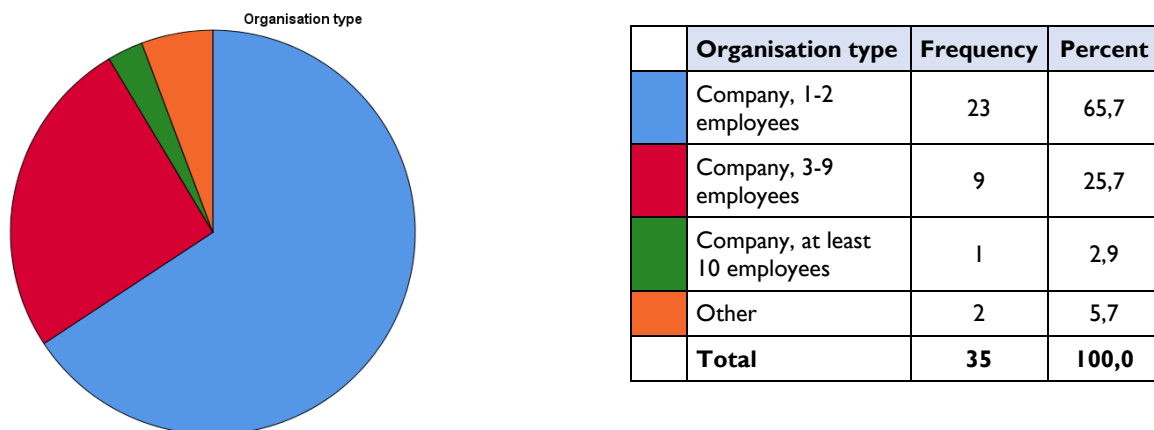


Figure 14. Respondent's organisation type: What kind of organisation do you work in? (Finland, C)

The organisation types of nature-based companies interviewed and examined from the document analysis follow the results of the survey. Concerning Care farming and horse-assisted activities, the farms and stables are usually small and there is often the willingness to keep the business small-scaled in the future, as well. The same mindset can be seen as characteristic to companies and entrepreneurs with other nature-based activity forms.

Main client groups

Based on the survey (Kangasjärvi, Ylilauri & Voutilainen 2020), for entrepreneurs offering nature-based services in Finland, the most crucial client groups with special needs were persons with disabilities or those using mental health services. Children and adolescents, as well as families with special needs, were also named as central client groups. In spite of

the increasing need for senior services in Finland, there were only few entrepreneurs providing services to senior citizens with special needs (as presented in the bar chart in Figure 15).

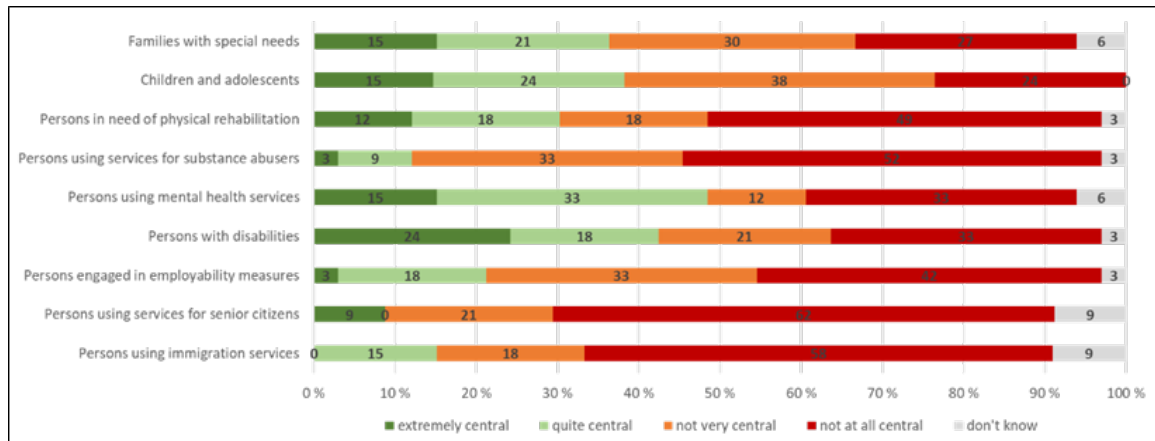


Figure 15. Client groups with special needs: Which health care and social welfare client groups with special needs do you work with most often (either directly or, for example, by acquiring services for them)? Please indicate for each client group how central it is from the viewpoint of your job description. (Finland, $n=33-34$)

Based on the survey, for entrepreneurs in Finland, the most crucial client groups *with no special needs* were children and adolescents, as well as adults. In spite of the increasing need for senior services in Finland, there were not so many entrepreneurs providing services to senior citizens with no special needs (as presented in the bar chart in Figure 16).

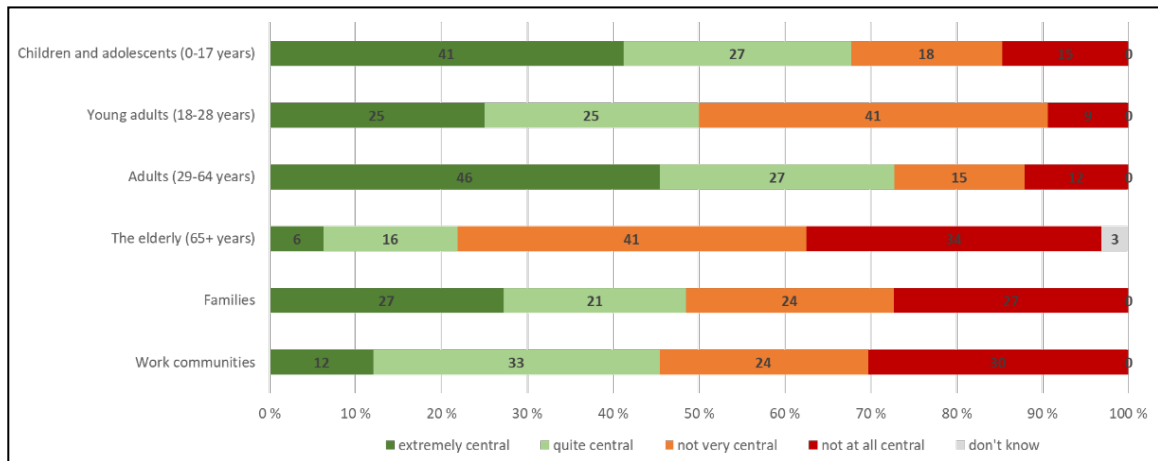


Figure 16. Client groups with no special needs: Which other client groups (with no special needs) do you work with most often (either directly or, for example, by acquiring services for them)? Please indicate for each client group how central it is from the viewpoint of your job description. (Finland, C, n=32–34)

2.1.3 Demand of nature-based services

Nature and rural environments offer many new opportunities for services and businesses. Green Care activities can be seen as a part of the future and a sustainable bioeconomy and green economy, based on trends and research. Identified benefits for health and wellness can support growth for nature-based services, which can, in the best cases, improve the quality and effectiveness of welfare services and create cost savings. Preventive, nature-based methods can be used to reduce the costs of remedial services, but can also serve to complement or substitute institutional or medical care. (Airaksinen 2019.)

Demand in Case regions in Finland: Purchase and use of nature-based services

In Finnish case regions, there is a growing interest in nature-based services, and the attitudes towards nature-based services were widely positive among the social, health care and pedagogical sectors. Some public organisations and associations utilise nature-based methods regularly in their services and some of them are also members in the Green Care Finland association. However, according to the interviews and the survey conducted in the study, purchasing of the services was still very marginal in case regions.

For social, health care, and pedagogical sectors that participated on the survey in Finland, the most crucial client groups *with special needs* were children and adolescents, as well as families with special needs. Persons using mental health services or with disabilities were

also named as central client groups. The most crucial client groups *with no special needs* were children and adolescents, as well as families. Young adults and adults were the next crucial client groups. Strong representativeness of these client groups may also be based on the comprehensive and non-selective distribution of the questionnaire in the pedagogical sector in Finland.

There are several social, health care, and pedagogical service providers in the project area, which apply nature-based methods and activities in their services by their own professionals and staff. Based on the survey, in Finland, the most popular activity form produced by the social, health care, and pedagogical sectors in their own services, was activities making use of natural environments. All of the other nature-based activities could be seen quite marginal among the respondents (as presented in the bar chart in Figure 17).

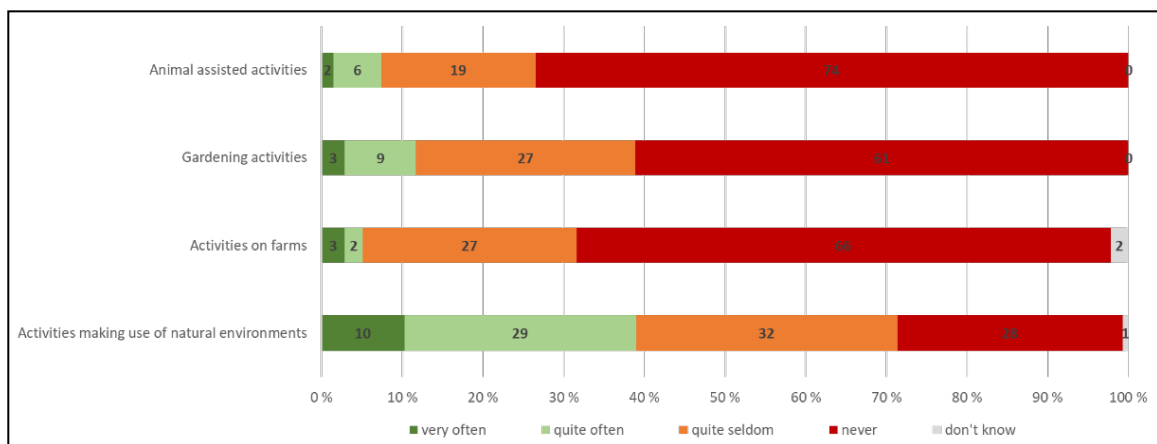


Figure 17. Offering of nature-based activities in their own services: Does your unit itself provide clients services, which include the following types of activities? (Finland, $S, n=136$)

The results of the survey indicated that, in general, nature-based services seemed not to be a probable choice when purchasing services. Approximately one-fifth of respondents bought or ordered clients' services or referred clients either very often, or quite often, to services, which included these types of activities. Based on the survey, the most usual purchased activity form were activities making use of natural environments, while activities on the farms and with animals were purchased more often than gardening activities (as presented in the bar chart in Figure 18), which may indicate that gardening is easier to combine with other services among the social, health care, and pedagogical sectors produced by their own staff. There might be a stronger demand for purchased service models that require special equipment and premises like farms and stables, as well

as specialised professionals and trained animals. The same emphasis also came up in the interviews with social and health care professionals.

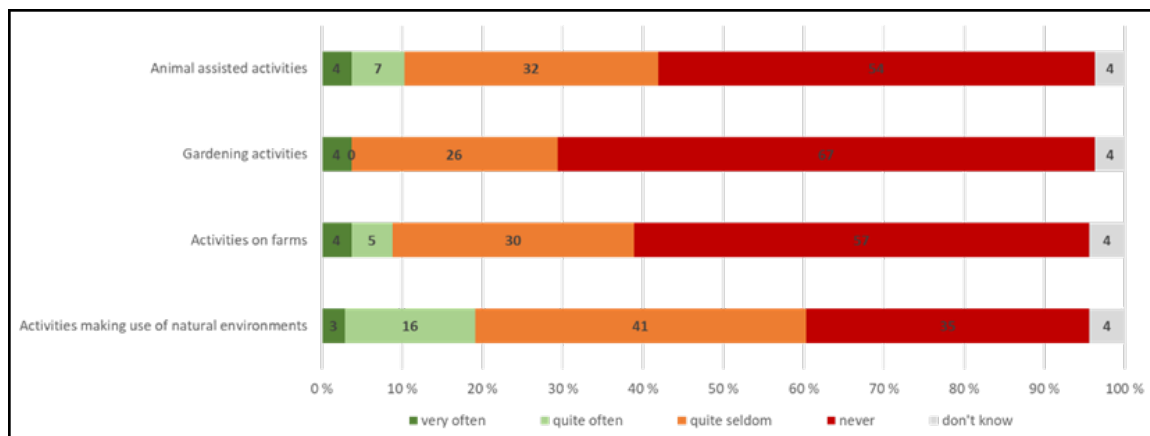


Figure 18. Purchase of nature-based services: Does your unit buy/order clients services or refer clients to services which include the following types of activities? (Finland, S, n=136)

2.1.4 Strengths and opportunities in Finnish case regions

Knowledge, professional skills, and qualities

The recognition is good of nature-based methods and their positive effects for health, wellbeing, functionality, and participation among entrepreneurs offering nature-based services, but recognition varies greatly among social and health care professionals. However, among social, health care, and pedagogical sectors, positive impacts of the nature-based services is increasingly recognised.

Innovativeness, creativeness in service design, and courage to make new implementations describe the entrepreneurs or companies offering nature-based services but also the pioneers in social, health care, and pedagogical sectors. Many entrepreneurs have versatile competence and also have participated in Green Care projects and complementary education. The companies offering nature-based services are often small scale. The flexibility of small-scale enterprises to react and adapt to current demand and the changes in the service market is also the strength and opportunity of nature-based service sector in Finland.

Operational environment and institutional structures

Nature-based activities diversify and complete the service structure, which simultaneously brings effectiveness as a part of multi-professional and holistic service. Genuine customer orientation is an asset of nature-based services when comparing and choosing different services. Furthermore, among social, health care, and pedagogical sectors, the general attitude toward nature-based methods is positive.

Actors, networks and activities

The specific nature of the Green Care theme has encouraged the actors to network between sectors and also nationally and internationally. In the case regions, there are a few Green Care/nature-based entrepreneurs which are commonly known in their own region and have already had cooperation with social, health care, and pedagogical sectors. The variation of current and potential client groups offers the nature-based service providers opportunities to specialise in certain client groups. Furthermore, many social and health care actors aim to more preventive services, which also can open new possibilities to the companies offering nature-based services.

Among social, health care, and pedagogical sectors, there are often suitable settings, especially suitable natural environments, for nature-based activities in the vicinity of their unit. There are already great examples of cooperation between the public sector and entrepreneurs, where social care clients have managed to stop juggling with different authorities and service units by committing to a regular Green Care service, which in turn, has both personal level and wider economic impacts.

Strengths of the companies

Figure 19 shows the results of the survey of companies and entrepreneurs related to the strengths and potential of nature-based activities describing their companies at present. The most common and notable strengths and potential were the existence and availability of suitable natural environments and settings, positive attitude of their companies toward the utilisation of nature-based methods and the fact that nature-based activities diversify the services of their companies. On the other hand, compared to the results in general, effects of nature-based activities in increasing the cooperation with other actors and the existing special knowledge of these activities in the cooperation networks of their companies were not of notable strength, even though the results were not considered modest either. Descriptions of the strengths and potential of the companies are presented in the bar chart in Figure 19.

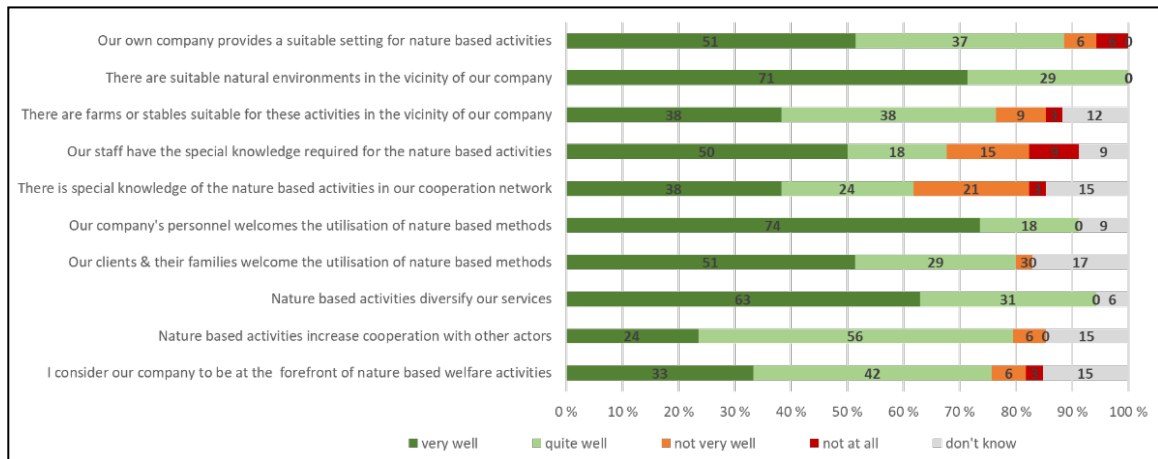


Figure 19. Strengths and potential of the companies: How well do the following statements concerning the strengths and potential of nature-based activities describe your company at present? (*Finland, C, n=33–35*)

2.1.5 Weaknesses and threats, challenges for companies, and barriers for services in Finnish case regions

Knowledge, professional skills, and qualities

Despite the nationwide and regional development activities and courses, there is still a lack of information, competence, and special knowledge among social, health care, and pedagogic organisations and clients concerning nature-based methods and effects, services, and service providers in the project area, as presented in the pie chart and data table in Figure 20. The terminology and different service types are often unknown or can be mixed amongst the social, health care, and pedagogical actors, which can lead to misunderstanding. The transformation of media has made it much easier to publish vague information via social media and other digital channels, and false interpretations can also cause negative attitudes and groundless prejudice against nature-based services.

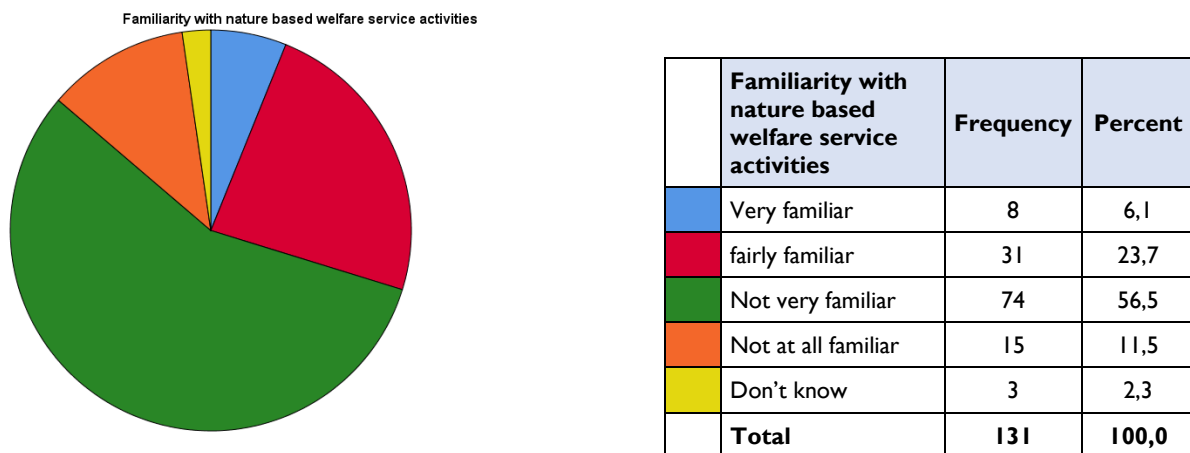


Figure 20. Familiarity with nature-based services among social, health care and pedagogical sectors: In your opinion, how familiar are you with nature-based welfare service activities? (Finland, S)

There are difficulties with marketing including pricing among entrepreneurs. Challenges also concern profitability, which arose in both the survey and other data. Small, part-time entrepreneurs have challenges regarding use of time. This is often combined with problems of coping with workload when there are economical obstacles to hiring an employee. The entrepreneurs also had challenges with finding time for marketing, complementary education, and other activities required for developing the services.

Operational environment and institutional structures

Many actors found difficulties incorporating into the current service structure. The “culture of trying and testing” is often missing. There is a lack of regional examples of cooperation between entrepreneurs and social, health care, and pedagogical sectors. However, while there are isolated examples of good cooperation models, the services do not reach larger numbers of clients, and customer use is still very marginal. Shortage of financial resources or difficulties reallocating them among the social, health care, and pedagogical sectors often prevent potential customers from buying the services. Based on the survey, legislation is seen as more restrictive among entrepreneurs than among social, health care, and pedagogical sectors. Variation between and tightening of interpretations among regional and national authorities weakens predictability for both clients and service providers.

Actors, networks, and activities

In Finland, the companies have great difficulties reaching clients and the threshold to make contacts with the social, health care, and pedagogical sectors is high. Finding partners and crossing the sector boundaries is found to be difficult. There is a lack of courage among the social, health care, and pedagogical actors, and potential buyers of new kinds of experimental services, such as Green Care. Key persons in social, health care, and pedagogical sectors are important, but too big of an adherence to merely a few key people can make the cooperation more vulnerable and unpredictable. Lack of commitment in the whole organisation can prevent the implementation and development of new service models.

Challenges for the companies

In Finland, the biggest challenges for companies pertain to reaching clients and other difficulties with marketing, including pricing. Profitability is also seen as a big challenge (as presented in the bar chart in Figure 21).

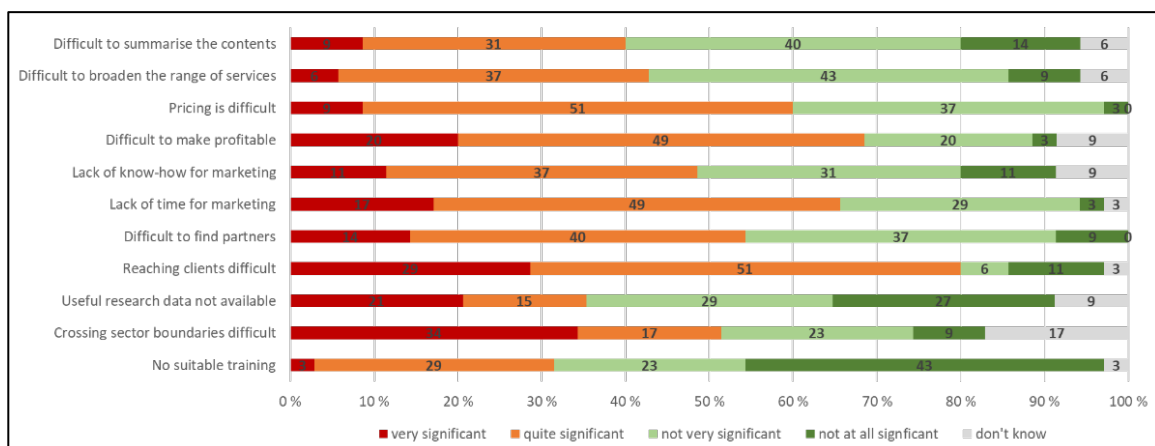


Figure 21. Challenges for the companies: As a service provider, what do you find particularly challenging in providing nature-based welfare services? Please indicate for each point how significant you find the challenge to be. (Finland, C, n=34–35)

Barriers for buying the services

Based on the survey, the biggest barriers for buying the services, according to social, health care, and pedagogical sectors were mainly shared with the entrepreneurs and companies. Firstly, the financial resources of social, health care, and pedagogical sectors do not allow for using purchased services. Secondly, there is not enough information about the types of

services available in the area among the social, health care, and pedagogical sectors or their clients. However, generally, based on the survey, entrepreneurs and companies see more, and often different, barriers that prevent or hinder actors in the social, health care, and pedagogical sectors from buying or ordering nature-based welfare services from external service providers, than the mentioned sectors themselves. Barriers for buying the services are presented in the bar chart in Figure 22.

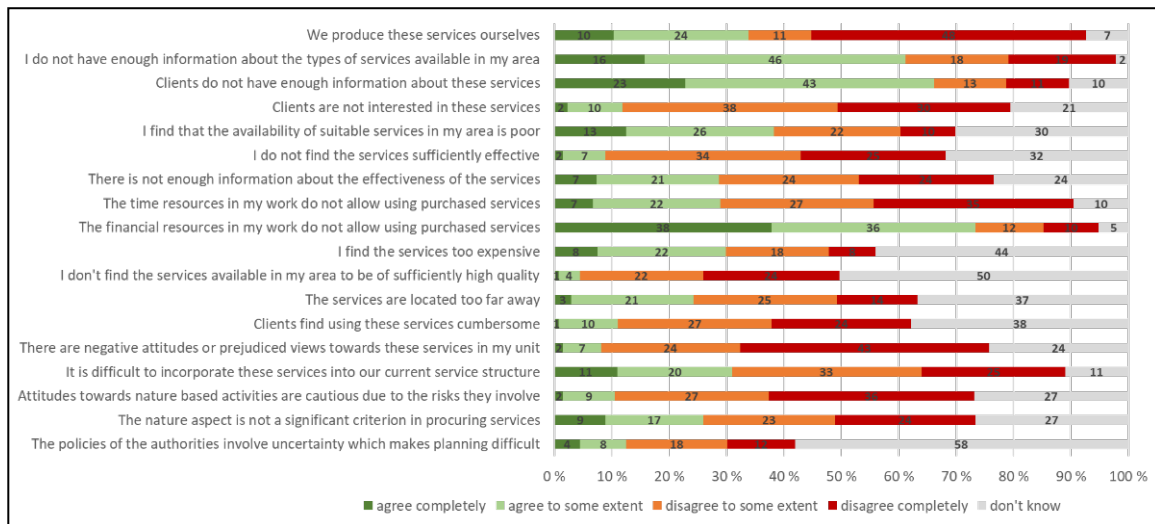
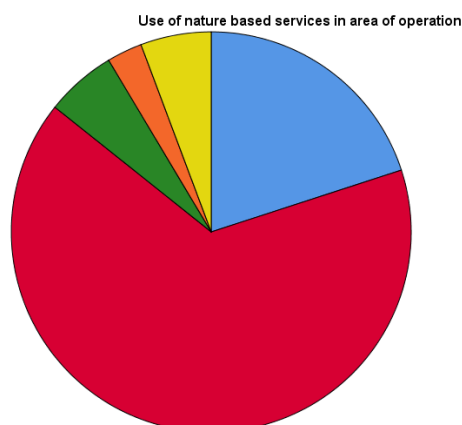


Figure 22. Barriers; social, health care, and pedagogical sectors’ point of view: What factors may prevent or hinder your unit from buying/ordering nature-based welfare services from external service providers? Please indicate for each of the following statements to what extent you agree or disagree (Finland, S, n=134–136).

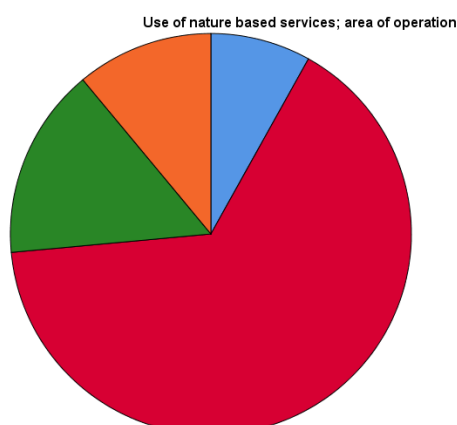
2.1.6 Developing aspects of nature-based services

Based on the survey conducted in the study, the future of the nature-based services was seen as positive. A clear majority of entrepreneurs and employees in companies (as presented in the pie chart and data table in Figure 23) as well as actors in social, health care, and pedagogical sectors (as presented in the pie chart and data table in Figure 24) believed that nature-based services will increase in their area of operation within five years and that the provision of nature-based services will also increase in their own companies or units.



	Use of nature based services in area of operation	Frequency	Percent
	Will increase considerably	7	20
	Will increase somewhat	23	65,7
	Will remain the same	2	5,7
	Will decrease somewhat	1	2,9
	Don't know	2	5,7
	Total	35	100,0

Figure 23. Use of nature-based services in area of operation: Do you believe that the use of nature-based services in your area of operation will increase or decrease within the next five years? (*Finland, C*)



	Use of nature based services in area of operation	Frequency	Percent
	Will increase considerably	11	8,1
	Will increase somewhat	89	65,4
	Will remain the same	21	15,4
	Don't know	15	11,0
	Total	136	100,0

Figure 24. Use of nature-based services in area of operation: Do you believe that the use of nature-based services in your area of operation will increase or decrease within the next five years? (*Finland, S*)

According to the survey, among *social, health care, and pedagogical sectors*, the following issues seem to be the most important to influence positively in the use of nature-based services *in their area of operation*:

- Nature as such is being valued more overall and nature-related services are therefore trendy.
- People are increasingly interested in nature-based services and value them more.

- Awareness of these services and the benefits they offer increases all the time.
- Increased awareness leads to increased demand and supply.

Some obstructive issues, i.e., the factors that hinder the introduction or increased use of nature-based services in their area of operation, were also brought out among social, health care, and pedagogical sectors, such as lack of availability of the services, lack of marketing, and lack of awareness related to nature-based services as well as financial preconditions.

The respondents in social, health care, and pedagogical sectors mentioned, especially the following issues for the reasons of increasing the use of nature-based services *in their own unit*: increasing awareness and interest, positive experiences and attitudes as well as development of the current activities toward a more. Those who believed that the use of nature-based services will remain on the same level than before in their own unit, or those who could not tell, mentioned lack of financial resources and/or lack of information as having a crucial role in the hindrance of development. In addition, there might be some restrictions coming from the unit's own objectives or working methods.

The entrepreneurs and employees of the companies mentioned several issues involved with increasing the use of nature-based services *in their area of operation*, such as increased awareness among the customers and the buyers of the services, increased number of service providers, and growing interest for nature and using nature-based activities for health promotion. On the other hand, according to entrepreneurs and companies, issues such as bureaucracy involved or lack of financial resources might slow down progress. Additionally, more service providers and pioneer work is needed.

The entrepreneurs and companies aiming to increase *their provision* of nature-based services have mentioned wanting to share their positive experiences. Hence, they are starting or developing their services toward the nature-based direction and hope their customers will adopt them. These entrepreneurs and companies invest in increasing their capacity (premises, staff) and believed that growing interest towards nature-based services will increase the demand. On the other hand, the entrepreneurs and companies that did not believe in growth thought mainly attributed slow or no progress to lack of personnel resources in their own companies, and/or mostly concerned time constraints.

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2.2 Sweden

Päivi Juuso

2.2.1 Structures, concepts, and cooperation models of nature-based services

In Sweden, there is no common structure or cooperation model for different nature-based services. There are, however, organisations who in different ways work to support entrepreneurs, such as Hushållningssällskapet, with their concept Grön Arena and Hälsans Natur, a non-profit association with the aim of spreading information and knowledge about nature-based services. Further, there are models, such as Alnarpsmodellen, which in some occasions is used as foundations for the environment in which nature-based services are implemented (for further description see below).

Nature-based services has nevertheless increased in recent years in Sweden. In addition, the research base has increased and there is therefore evidence of its positive effect on human health. Different regions have, however, different structures and cooperation models, which seems to depend on the buyer's demands on nature-based services and the competence of the company. Legislations and legitimacy of the business are other reasons for how well and in what amount the entrepreneurs can offer services and/or receive their services purchased by the public actors.

Lundqvist, Persson and Holmqvist (2019) raise the question regarding what criteria nature-based service providers should have the right to call their business Green Care or rehabilitation. Another issue regarding the inconsistency around services is the use of several concepts for the same kind of services. Concepts used, for example, are: nature-based rehabilitation (Naturunderstödd rehabilitering NUR); nature-assisted rehabilitation; nature-based activities; nature-assisted therapy; and nature-based interventions, among others. According to Dahlin, Abel & Hallström (2018) the distinction between the concepts used is based on the content of the service, but also in conventions. Gröna Rehab, Grön omsorg (Green Care), animal assisted therapy/rehabilitation, and Grön Arena are other commonly used concepts by different service providers.

Hushållningssällskapet, with the concept Grön Arena aim to gather and give support, education, etc., to entrepreneurs and service providers within the area of nature-based services, farming, and gardening. Grön Arena works all over Sweden (in eight regional areas with eight local project leaders, using place-based knowledge). Through Hushållningssällskapet the entrepreneurs can earn the Grön Arena certification. After six day-long education sessions during six months, the entrepreneur attends lecturers about legislation, activities, marketing, economy, risk analysis, and develops the companies'

business model. Before being able to use the label of the Grön Arena garden, the entrepreneur has to fulfil criteria based on a holistic evaluation by Hushållningssällskapet's decision committee. The criteria for approval are: Completed education and business plan in accordance with Grön Arena; profiling the concept in a positive way and being aware of the brands regulations; prioritising invitations to Grön Arena activities; have permits for their own business and a F-tax certificate; have no tax debt and have conducted a risk analysis for the business; work with written agreements, as well as evaluate the business. Further, the entrepreneur shall work in accordance with environmental respects and value-based work, empathy, morality, offer personalised activities, and activities with animals, nature and garden, where the animals consists of two different types of agricultural animals.

There are 80 certified Gröna Arena farms in Sweden but just a handful of them are in the northern region. Several more have taken the education but have not completed their certification process. The public sector (usually municipalities) would be the main buyer of the services; Grön Arena is often a complement to other service programs. Different service models are used depending on the buyer's needs. The municipality can, for example, buy a complete package, "all inclusive" from the farmer or rent the farm with the farmer as a tutor and bring their own specific educated staff. Services are tailored for each client for their personal development and increased quality of life. Activities are based on daily work in a farm with animals, gardening, and nature. (Hushållningssällskapet.)

Hälsans Natur is a non-profit association with the aim of spreading information and knowledge about the health benefits from having interactions with nature and animals. It is open for everyone and those interested in or who work with health promotion with support from nature and/or animals. The association was formed during 2006 and has among other things established standards for care dog education. (Hälsans Natur.)

2.2.2 Supply of nature-based services

In Sweden, the supply of nature-based services has increased during recent years. Public actors in different regions are now buying services or producing them on their own. In some regions, there is a demand for registered health care personnel at the farm/garden level, while for others there are no such demands. Below are some good examples of nature-based service providers presented. It is important to note that this is just a brief description of these services, and is therefore not a complete presentation nor to be considered a deep analysis.

Naturunderstödd Rehabilitering på landsbygd (NUR) is a complement to medical care for people with mild mental illness, passivity, isolation problems, and people on sick leave. Participants are in groups of a maximum of seven people who take part in rehabilitation

on farms during eight weeks, broken down into four hours/three times a week. People encounter NUR through a prescription from their physician or other health care personnel. Farms offering NUR work in accordance with legislation related to the health care system. Joint assessments are done after half time, together with a contact person from the health care, the service provider, and the client. Region Skåne has implemented NUR during 2014 and have agreements with eight different entrepreneurs with and without animals who provide the services. (Region Skåne; Whitelock 2009.)

Gröna Rehab is the concept used by Västra Götalandregionen, the county council, who offers nature-based services for their employees on sick leave related to, for example, exhaustion disorder. The business was initially a project that started during 2006. After research, it was implemented at the Botanic Garden in Gothenburg during 2006. The results from the implementation show socioeconomic advantages of the rehabilitation as the majority (90%) of participants return to work or/and experience a decrease in symptoms. The business is also sustainable as it is a year-round activity. (Larsson & Pauli 2019; Sahlin & Ahlberg 2010; Sahlin, Ahlberg, Tenenbaum & Grahn 2015; Västra Götalandsregionen.)

Greve Garden is a company with a contract with Västra Götalandregionen. They have offered nature-based services since 2000, mainly for people with exhaustion disorders. Elisabeth Wahlgren, the head of the company is a registered nurse and gardener, who works in a multidisciplinary team with other health care personnel. The clients are offered rehabilitation during 14 weeks. Lundqvist Persson and Holmqvist (2019) evaluated the project period for Greve Garden and found that all participants experienced the rehabilitation as meaningful and as a start of something new in their lives. The results did not, however, show increase in work capacity or return to work in the same way as other projects (see, for example, Gröna Rehab above). According to the researchers, this could be related to the complexity in the clients' illness and associated related problems, the short period of rehabilitation, and weakness of the self-assessment tools in capturing personal changes such as self-esteem, etc. The conclusion of the evaluation is that rehabilitation with a multidisciplinary team, such as at Greve Garden is suitable for people with exhaustion disorders, provided that the patient is well examined and that he or she, as well as the team, are given the right circumstances with realistic goals to positively increase their health.

Grön Rehab is provided by Region Halland, as a complement to traditional treatment for people with exhaustion disorders. The aim is to support them to increase their health so they would be able to return to work. The service provider has an agreement/contract with the region and the client is prescribed Grön Rehab by a medical doctor at the health care centre. The duration of the activity is 8-12 weeks, 2-3 times/week, with a minimum of 4 h/occasion. The activities are planned according to the clients' needs and completed

individually. The Salutogenic Health Indicator Scale (SHIS) evaluation tool is used. (Region Halland.)

Supply in Sweden - Case regions: Nature-based service providers and actors in public sector

The majority of the participating entrepreneurs in this project offer services in a natural environment (i.e., nature-based therapy, forest bathing, adventure tourism). Gardening and animal-assisted services on farms are also common, as presented in the bar chart in Figure 25.

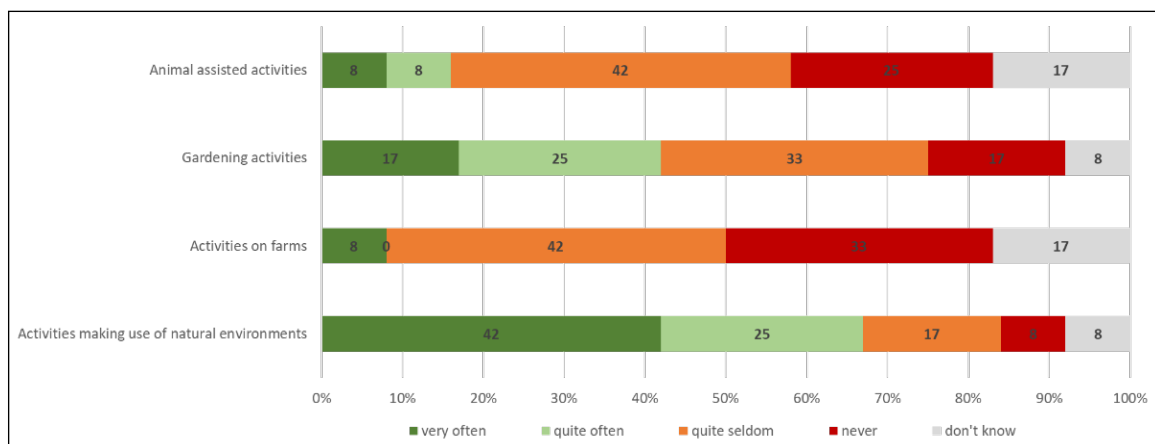


Figure 25. Offering of nature-based services: Does your company offer clients services which include the following types of activities? (Sweden, C, n=12)

Based on the survey (Kangasjärvi, Ylilauri, Voutilainen & Juuso 2020), the most crucial *client groups with special needs*, for entrepreneurs in Sweden, are persons on work rehabilitation, persons with disabilities, persons in need of physical rehabilitation, and persons suffering from exhaustion disorders. People with mental illness problems and immigrants are also named as central client groups, as presented in the bar chart in Figure 26.

Based on the survey, for entrepreneurs in Sweden, the most crucial client groups *with no special needs* differ according to the results and some of them are adults, families, children, and working teams. The variation in the answers to this question can be attributed to the fact that some participants found it difficult to answer the question, as they have not yet begun to offer nature-based services. Their answers are based on plans to offer nature-based services and therefore also include the client groups they aim to offer future services, as presented in the bar chart in Figure 27.

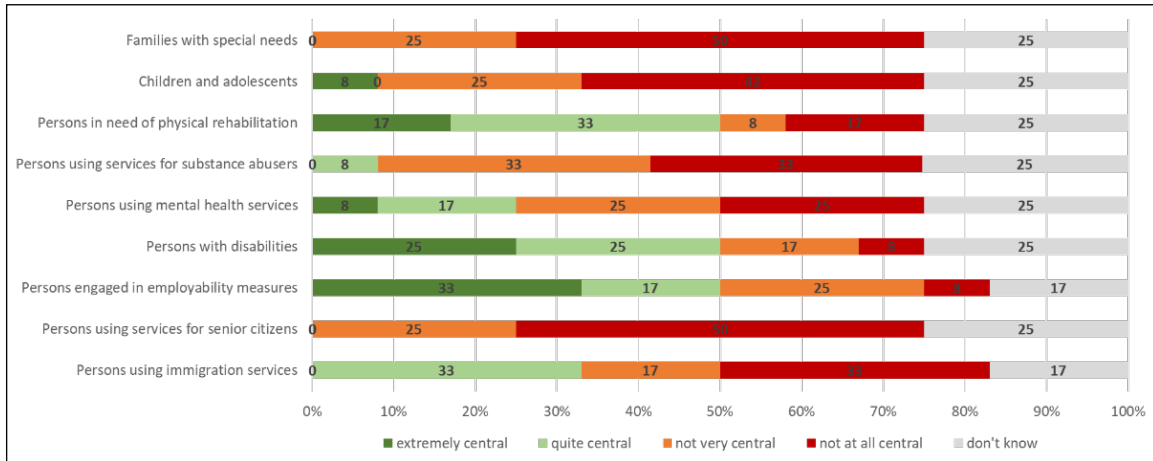


Figure 26. Client groups with special needs: Which health care and social welfare client groups with special needs do you work with most often (either directly or, for example, by acquiring services for them)? Please indicate for each client group how central it is from the viewpoint of your job description. (Sweden, C, n=12)

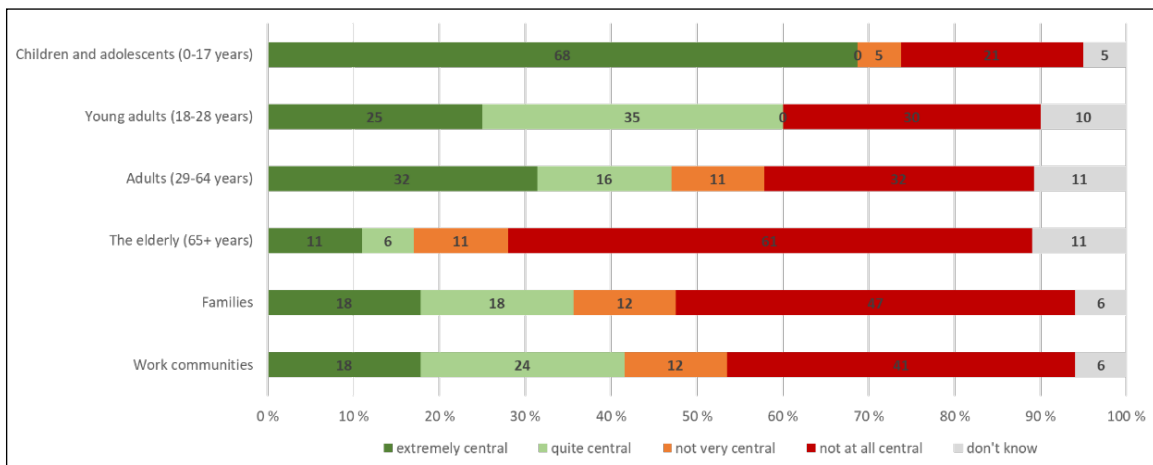


Figure 27. Client groups with no special needs: Which other client groups (with no special needs) do you work with most often (either directly or, for example, by acquiring services for them)? Please indicate for each client group how central it is from the viewpoint of your job description. (Sweden, C, n=11–12)

For social public actors that participated in the survey in Sweden, the most crucial client groups *with special needs* were mentioned to be people with disabilities, people outside the labour market, children and adolescents, immigrant adolescents and adults, and people with a history of abuse. The most crucial client groups *with no special needs* were

children, adolescents and adults. Except for restoration and improved mental health, increased physical activity, self-esteem, and sleep were the most important reasons for their client groups using nature-based services.

Based on the survey, it was shown that public actors, in a smaller amount offered nature-based services within their own organisation. For those who did so, it was mainly activities using natural environments (as presented in the bar chart in Figure 28). The results, however, also show that actors in the public sector purchase nature-based services within the area of activities using natural environments (as presented in the bar chart in Figure 29). What these activities are and within which areas cannot, though, be read from the results. In summary, the results from the survey and the interviews showed that the supply of nature-based services for the client groups the public actors were responsible for was not at all a part of their repertoire of treatments. The lack of available services, lack of knowledge about presumptive possibilities within the area, and lack of knowledge about how to and whom will decide upon such offers to their clients were all marked reasons for a low supply of nature-based services.

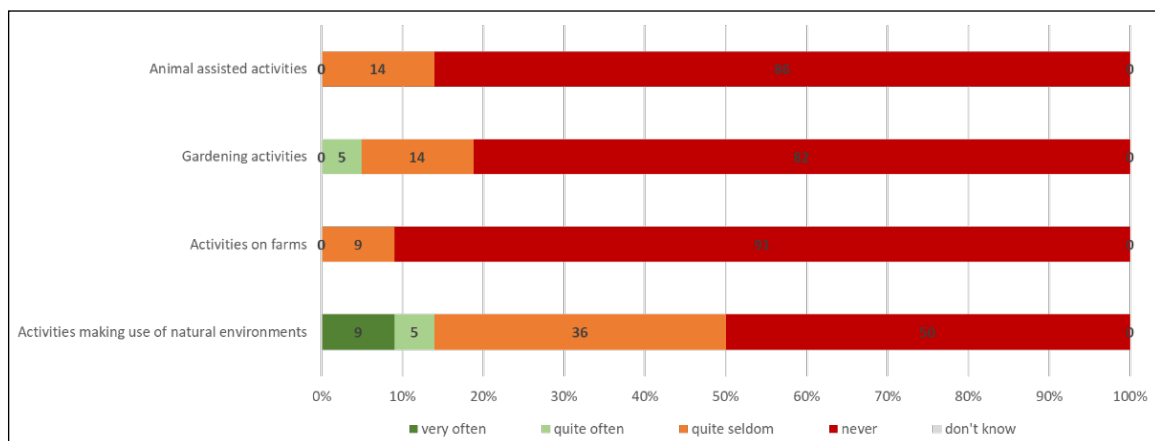


Figure 28. Offering of nature-based services: Does your unit itself provide clients services that include the following types of activities? (Sweden, S, n=22)

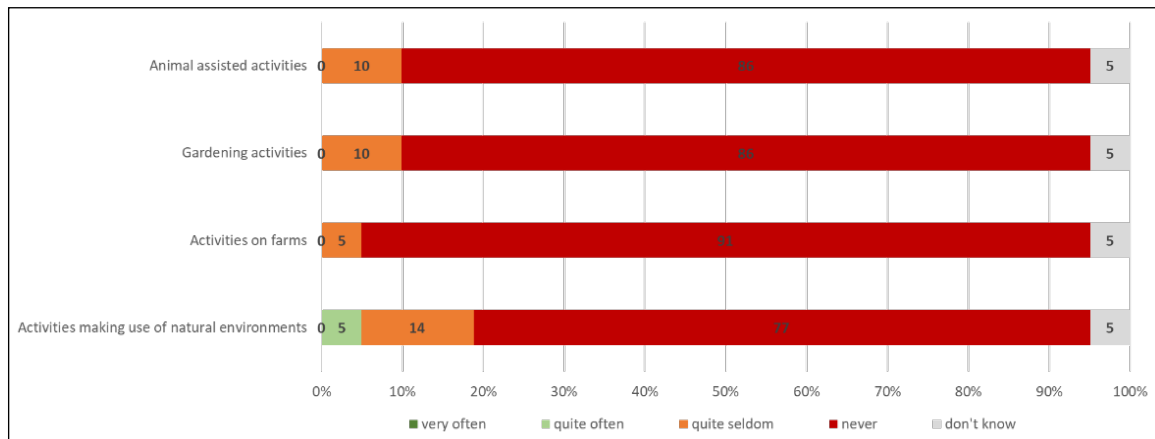


Figure 29. Purchase of nature-based services: Does your unit buy/order clients services or refer clients to services that include the following types of activities? (Sweden, S, n=21–22)

2.2.3 Demand of nature-based services

An increased interest in nature and its effect on health and wellbeing for the population, has led to increased demand on outdoor life and activities. For example, The Swedish Agency for Economic and Regional Growth shows that the demand for nature tourism, especially among international visitors, has increased. Often, these kinds of nature-based services are provided by entrepreneurs in rural areas, leading to increased growth for the company but also the county. Fredriksson, Andersson Pripp & Siljhammar (2018) found that a more elaborate approach and increased knowledge about public support for nature tourism can strengthen the companies' capacity and increase public health, through outdoor life, instead of the other way around. This could lead to sustainable solutions for nature, the people in the regions, and also for the entrepreneurs. The demand on other nature-based services, is likewise slowly increasing and the entrepreneurs have purchased agreements with the public sector, for example, to support people with exhaustion disorder.

Demand in Sweden - Case regions: Purchase and use of nature-based services

The interest of nature-based services in the case regions is also slowly increasing. However, even so, purchased agreements of the services are not common. From the results, it is clear that among social, health care, and pedagogic sector actors, there is a general lack of knowledge about the services, leading to a direct lack of demand for them. As presented in the pie chart and data table in Figure 30, the majority of the 22 respondents were not at all familiar or not very familiar with nature-based services. Most of the respondents are

however, the head of their organisation, with the possibility of affecting the purchase of services for their clients, but without responsibility for the purchasing process.

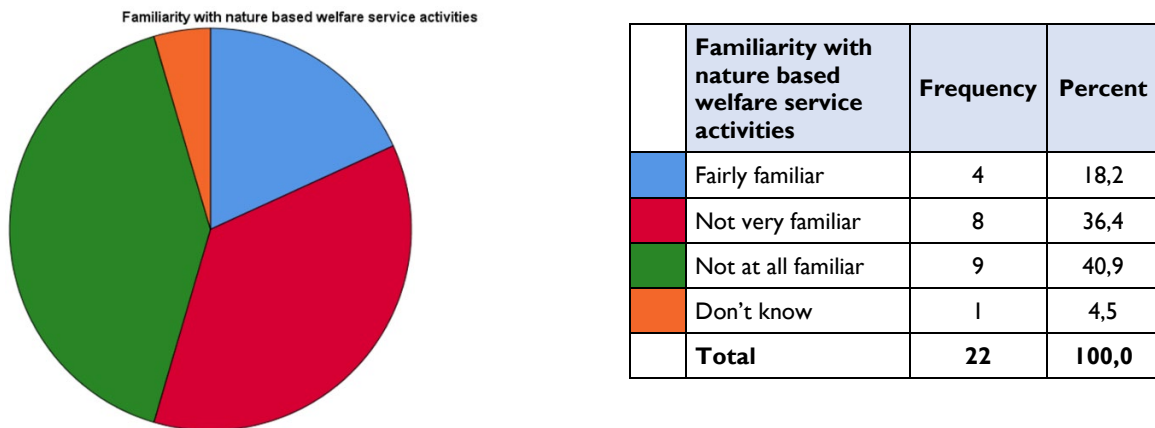


Figure 30. Familiarity with nature-based services among social, health care, and pedagogical sectors: In your opinion, how familiar are you with nature-based welfare service activities? (Sweden, S)

Even with the relatively low levels of familiarity, from the social, health care, and pedagogical sectors’ perspectives, the survey and the interviews, however, show that there is an interest and a hope for increased use of nature-based services for their clients. The service is, by some, seen as an active way to reach recovery for their clients while serving as a possibility for them, as actors in different public sectors, to provide varying degrees of services. As one of the respondents from the interviews said:

It would be great to be possible to offer Green Care as a complement to traditional treatment and by that be able to offer active sick leave instead of as today a passive one.

Nature-based services were not, however, seen a probable choice when purchasing services for their clients. Financing, accessibility, and no experience of cooperation with nature-based service providers were mentioned to be some of the reasons for this.

2.2.4 Strengths and opportunities in Swedish case regions

The results regarding strengths and opportunities in the case regions are presented in three themes: Knowledge, professional skills, and qualities; operational environment and institutional structures; and actors, networks, and activities.

Knowledge, professional skills and qualities

The results show that there is high competence among nature-based service providers about their business. Often, they have double competence, i.e., they have education in farming or gardening, and in a health care profession. They have also experience-based knowledge about the effect of the services on peoples' health, and the existing evidence base within the field. The high competence increases their possibilities to be flexible and adjust the service to the clients' and/or buyers' needs, but also to what kind of service they provide, which has to correspond with their own values and the animals' needs, if these are part of the service, and the seasonal changes. All together, these factors facilitate development of the business and services. The actors from social, health care, and pedagogical sectors had trust in the entrepreneurs' knowledge and competence regarding how to activate and adapt the services in accordance with their clients' individual needs. Flexibility among nature-based service providers was shown to increase the possibility of offering services suitable for different groups of clients. The knowledge that nature-based services decrease the use of health care services increases the possibilities for legitimacy within the business.

Operational environment and institutional structures

The unique environment of regions, the availability and closeness to nature and a service "right in time" related to the quest of sustainable health solutions and protection of nature in societies increase the possibility to develop nature-based services in the region. From the social, health care, and pedagogical sectors' perspectives, the environment around some of their organisations have natural settings that could be suited for nature-based services with physical closeness to their own infrastructure.

Nature-based services are seen as a complement to existing treatments of various illness states, such as anxiety and stress-related disorders. From the public actors' perspective, those who work close to the clients also see the services as an early intervention for people with risk of exclusion/isolation and loneliness. A structured way to work with these states is, for example, animal-assisted therapy, which is seen as a possible health-promoting activity, as communication with animals is easier when people suffer from different mental illness states. The home-like environment further facilitates the clients' possibilities to interact with animals and people alike.

The services should be possible to prescribe, but also as a part of the welfare society's offer for health-promoting activities.

Actors, networks, and activities

The results from the survey and the interviews showed that the entrepreneurs observed good cooperation with the public sector as an opportunity to enhance dialogue and increase their knowledge about nature-based services and to also market their services. Good cooperation and support between entrepreneurs within nature-based services was also seen as a way to increase the possibility to gain sustainable solutions for the business and to decrease costs for marketing.

One entrepreneur described this by saying, *“Good cooperation between us who offer the services is important for our own possibilities to talk about activities, ideas, hindrances, and solutions, to support each other”*.

Further, cooperation with Hushållningssällskapet and Grön Arena was, by entrepreneurs, seen as a strength, as it further increases their possibility of being part of a larger community.

From the results, it became clear that the entrepreneurs' subjective experiences of health-increasing effect from nature-based services was seen as a strength, increasing the possibility of cost-effective results. There was a common belief that the services will increase in the near future and be a complement to traditional treatment while increasing health-promoting activities.

Strengths of the companies

The analysis of the data from the interviews and the survey showed that the entrepreneurs experienced their companies' strengths to be the availability of natural environments suitable for nature-based services. Further, they lifted their own and the employees' positive approach for utilisation of methods related to nature-based services as a strength as well the activities diversifying their services, as presented in the bar chart in Figure 31.

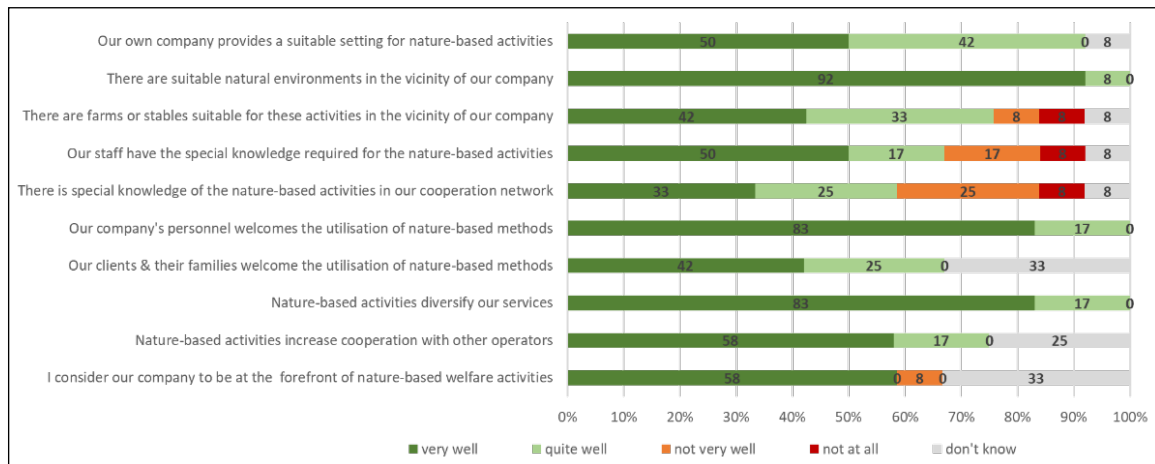


Figure 31. Strengths and potential of the companies: How well do the following statements concerning the strengths and potential of nature-based activities describe your company at present? (Sweden, C, n=12)

2.2.5 Weaknesses and threats, challenges for companies, and barriers for services in Swedish case regions

Knowledge, professional skills, and qualities

The results showed that lack of knowledge and understanding about the value of the nature-based services among the actors in social, health care, and pedagogical sectors, as well as disbelief about the effect of nature-based services as a form of health-promoting intervention was a threat against the development of the services. Respondents also expected a lack of companies with enough knowledge about their clients' needs, or that the companies do not have the right presumptions to offer the right kind of support for the client. All respondents meant that the services lacked credibility and legitimacy, which was a major weakness for development and common dialogue.

The fact that different concepts are used for the same kind of services, as mentioned earlier, leads to lack of understanding and coherence. Lacking or unclear descriptions of the content of the service was described to further increase the confusion for the clients, as their contact person could not give clear descriptions of what the client will meet at the farm or garden, nor what expectations they would have on the entrepreneurs' educational qualifications. On the contrary, coherence about concepts and clarifications regarding the content of the service was seen as a way to increase knowledge about nature-based services. The results also revealed uncertainty among entrepreneurs, as well as among actors in social, health care, and pedagogical sectors about what they can, or might have the right to do, or not do, as it related to laws, legislations, and purchasing processes.

Operational environment and institutional structures

Based on the results, both entrepreneurs and actors from social, health care, and pedagogical sectors found the dependence on political decisions led to uncertainty and decreased possibilities of planning ahead regarding development of nature-based services and common cooperation. Also noted were that there are differences in possibilities to offer and develop the services nationally. To offer sustainability in their services, survey participants noted that there should be national guidelines for the services. A threat to the development of nature-based services was the lack of certification of the services, which according to the respondents could increase the credibility and status of the services offered.

From the social, health care, and pedagogical sector perspectives, the results showed that the availability and accessibility to the business was seen as a major weakness if it was located remotely. Most of the remote clients did not have resources to travel on their own to the businesses, and it could therefore be difficult to motivate them to try nature-based services for health promotion.

Financing of the services was—by both the entrepreneurs and actors from social, health care, and pedagogical sectors—described to be a major threat for development and sustainable solutions in nature-based services. The entrepreneurs found it hard to set the price on the service due to a lack of consensus and guidelines. Meanwhile, actors from the social, health care, and pedagogical sectors questioned who should pay for the services. Entrepreneurs also described challenges stemming from the lack of possibility to be paid for services offered, and the need to increase prices related to higher costs in the business. This meant that they needed to double their work to be able to provide the services, as they are not profitable themselves. They further meant that social, health care, and pedagogical sectors are interested in the services but do not have the opportunity or ability to pay for them. These results showed that respondents from the social, health care, and pedagogical sectors meant that norms and old habits, as well as the lack of knowledge, and experience regarding purchasing processes of nature-based services, were threats to seeing these kinds of services as a complement to traditional treatment.

Actors, networks, and activities

The results further show that the lack of courage to try innovative solutions for clients' health promotion was, by both actors in social, health care, and pedagogical sectors, as well as the entrepreneurs, seen as a weakness, related to high levels of uncertainty. Lack of flexibility in the public sector was described as another reason that hindered collaboration. From the entrepreneurs' perspective, it sometimes was helpful to meet a "right person" to spread information and market the services; such a person may be an

enthusiast who is willing to try to convince decisionmakers of the value of nature-based services for their clients. To rely on just one enthusiast was, however, also seen as a weakness, as it leads to uncertainty and vulnerability in the end. When the entrepreneurs developed contracts with actors from the public sector to offer nature-based services for their clients, the contracts were short-term, which further increased their uncertainty regarding financing and sustainability.

Challenges for the companies

The greatest challenge among the companies in Sweden was to reach out to the clients, as well as to cross sector boundaries and find partners for cooperation. Marketing, pricing, and making the business economically profitable were all also mentioned as notable challenges among the entrepreneurs, as presented in the bar chart in Figure 32. Profitability was closely related to pricing and the uncertainty about who will be the responsible payer of the service offered to the client, as the clients might not be able or willing to pay for the services on their own or by themselves.

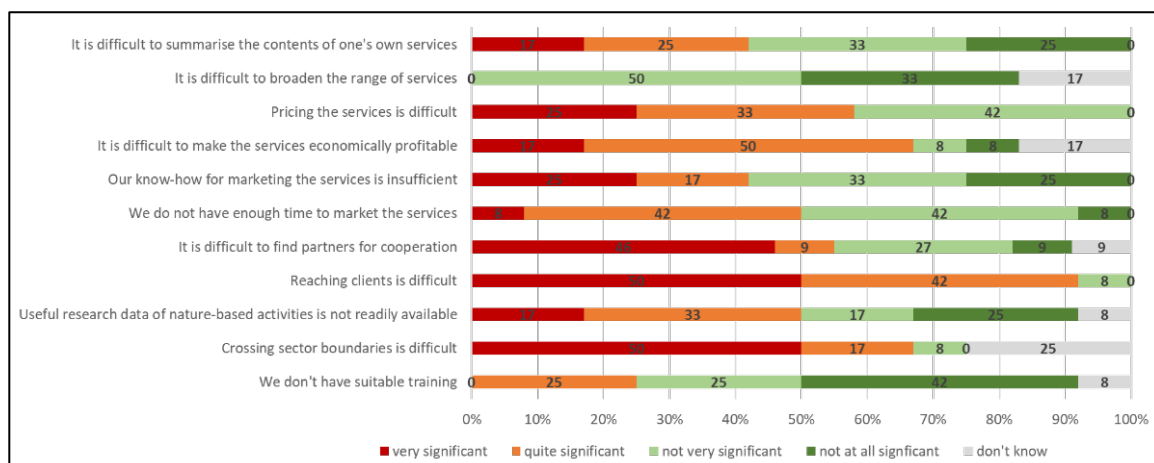


Figure 32. Challenges for the companies: As a service provider, what do you find particularly challenging in providing nature-based welfare services? Please indicate for each point how significant you find the challenge to be. (Sweden, C, n=11–12)

Barriers for buying the services

Based on the data, the biggest barrier for buying the services, according to social, health care, and pedagogical sectors was that financial resources did not allow for using purchased services in his or her work. Secondly, there was a lack of information about the types of services available in the area and that the information about the effectiveness of the services was also lacking. Further, the survey results show that some of the actors

produce the services themselves, which is in line with the interview data that showed lack of tradition of cross-border cooperation between public actors and entrepreneurs. The results also show that some respondents from the social, health care, and pedagogical sectors were hesitant to citing nature as a significant criterion for producing services, and therefore for buying them, as presented in the bar chart in Figure 33. In addition, the entrepreneurs meant that the lack of demands or clear criteria on the services developed and offered is a barrier for them to be purchased by public actors.

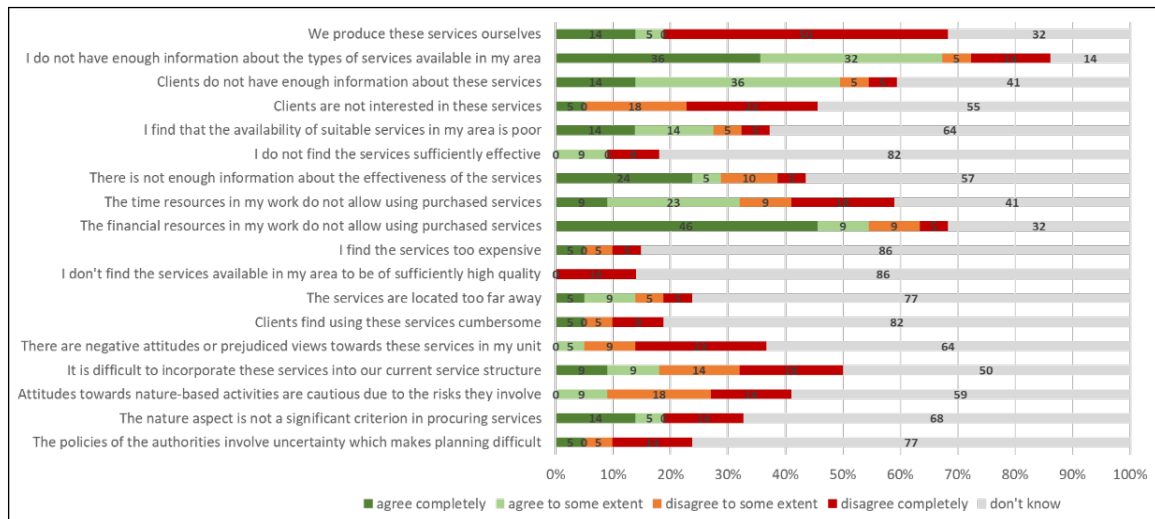


Figure 33. Barriers; social, health care and pedagogical sectors' point of view: What factors may prevent or hinder your unit from buying/ordering nature-based welfare services from external service providers? Please indicate for each of the following statements to what extent you agree or disagree with it. (Sweden, S, n=21–22)

2.2.6 Developing aspects of nature-based services

Regarding the future and development of nature-based services, the results showed that even though the majority of the actors from the social, health care, and pedagogical sectors answered that they do not know if the services will increase in the project area, a third of them thought there would be a considerable or slight increase. Looking at the answers regarding their own unit, the majority believed that the use of nature-based services would remain the same in the future. They meant that those who use the services today continue in the same regard, whilst those who do not use the services will not do so in the future, either. Factors affecting the development and increase of the services was described for reasons such as:

- The services can serve as a complement to health care and attract visitors from abroad.

- Nature as such has recovering effects and can decrease isolation and passivity among clients, when supported by adequate professionals.
- Increased knowledge can increase the demand of the services.

Simultaneously, these factors also were weaknesses for the development and increase of nature-based services. The results showed that to be a true complement to existing social, health care, and pedagogical services, the evidence base needs to increase, in addition to the knowledge about what kind of nature-based services exist in the project area, and what services they offer and to whom. Other factors mentioned to affect an increase were financing, purchasing processes, and cooperation models.

On the contrary, the entrepreneurs had a more positive view of the future development of nature-based services in the project area and the majority believed that there would be considerable or somewhat of an increase of future nature-based services. They were motivated to offer answers surrounding this outlook with reasons such as:

- Knowledge and research show that time in natural environments increases health and well-being;
- Sustainability and interconnection with the nature increases our will to take care of the planet – a circular process;
- We are growing older and more people suffer from stress-related illness, which is why we need to work more in health promoting;
- Nature can serve as a place for recovery and activity for children and adolescents with neuropsychiatric diagnoses; &
- Nature can also break isolation among people with special needs, illness, and/or disabilities.

The entrepreneurs also believed that there will be a considerable increase in provision of nature-based services in their own company and all of them had a goal to increase the provision of the business and invested money and time to achieve this. They, however, meant that this would require a lot from them, in terms of time and financing, even though it also is rewarding. To manage the workload and resources, they kept the company size small. Their answers also revealed that an important motivating factor was their belief in the need for nature-based services to promote health among the population.



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2.3 Client case descriptions in Finland and Sweden

Martta Ylilauri, Olli Voutilainen and Päivi Juuso

In client case descriptions from Finland and Sweden, the aim was to examine examples of the service provision in different countries and regions through selected client cases. Data collection was carried out through interviews and documentary analysis, supported by the results of electronic survey. The service supply and the needs for supportive services are described in the following cases:

- Mentally-disabled, middle-aged adult (Central Ostrobothnia, Finland)
- A primary-school age child with mental and physical disability (Lapland, Finland)
- Adult clients in mental health rehabilitation (Northern Ostrobothnia, Finland)
- Young adults with disability (Norrbotten and Västerbotten, Sweden)
- Adult women on sick leave related to exhaustion disorder (Norrbotten/Västerbotten, Sweden)

Each client case was examined through the following themes:

- Services purchasers and customer's opportunities to influence the choice of forms of service
- Experiences of success and challenges to solve
- Needs or opportunities for nature-based services for these client groups



2.3.1 Case I: Mentally-disabled middle-aged adult (Central Ostrobothnia, Finland)

Services purchasers and customer's opportunities to influence the choice of forms of service

In Central Ostrobothnia Social and Health Services Consortium Soite (former Jyväskylä region), work activities and daily activities are needed in the care of mentally or physically disabled adults. The first care farming services for disabled clients was launched in 2014 and the positive effects of the care farming services have been clearly visible from the beginning. In spring 2018, the *Green Care service voucher* was introduced in Soite, which allowed adult clients with disabilities to choose Green Care farming work activities. Freedom of choice and self-determination are important to disabled clients and there is a need for alternatives to operating centers (Witick 2019).

Soite has applied a widely used Effector's service voucher solution. The rulebook forms an agreement between the subscriber and the service producer (Palse 2020). Service providers and stakeholders were consulted in the drafting of the rulebook, which is a collection of common rules of the cooperation. The rulebook is updated annually and is continuously developing to meet the different needs and changes in the operating environment.

Experiences of success and challenges to solve

Nature-based work on care farms for people with intellectual disabilities has proven to be very meaningful and effective for clients, including a rehabilitation perspective. Nature-based activities have decreased, e.g., behavioural disorders and sleeping problems, and has increased both physical and psychological abilities to function. Although increasing the freedom of choice has sometimes proved to be a challenge for clients, increasing the range has reduced the number of "service jumpers" in the system, by committing to one service at a time instead of drifting from one service to another. (Witick 2019.)

However, nature-based work also faces challenges. The number of clients opting for Green Care services has increased since launching the Green Care service voucher, but there are still only a few service providers with regular clients and commitments for participation in nature-based services. There is a clear need for more service providers to meet the growing demand. Soite is seeking for more Green Care service providers in its area concerning care farming but also gardening and forest-related activities. From an economic point of view, some of the Green Care services are, in the cost comparison with Soite's own units, on the same level, and some of them can be more expensive. On a larger scale, diminishing the

amount of service jumpers, who have faced challenges with committing to the services, can cause significant financial savings for the service provider. (Witick 2019; Ylilauri 2019.)

- Numbers in September 2020: Clients, 40; Days of activities, 344; Care farms and other Green Care service providers, 5 (Witick 2020).

New service providers need support, especially in the beginning and with the authorisation procedures. There have been uncertainties regarding licensing procedures for new enterprises, which has partially slowed down the development of nature-based service production in the area and within this client group. Service production often requires complementary investments and additional education or co-operation with social or health care professionals. According to Soite it is good to have projects that allow different experiments to be organised and this will allow both clients and service providers to lower the threshold to test the nature-based service models in practice. (Witick 2019; Ylilauri 2019.)

Needs and opportunities for nature-based services

Rehabilitative benefits of the nature-based activities and the effectiveness of the services are perceived as very significant. From Soite's point of view, it is important that people with disabilities have the opportunity to use freedom of choice and decide upon the content of their work. From the management and governance perspective, compared to providing services in operating centers, using care farms somewhat increases administrative work like decision making and controlling, and the price level for a day varies from the same level to more expensive. However, encouraged by good experiences, Soite has increased Green Care service activities and have expanded Green Care services also for other client groups, such as clients in adult social work, mental health, and substance abuse services, as well as in child protection services. (Witick 2020.)

2.3.2 Case II: A primary-school aged child with mental and physical disability (Lapland, Finland)

The case client group is within the severely disabled people service category and is also a severely disabled primary-school aged child from the province of Lapland. The client attends a special school of local government, whose pupils have a special support decision and for which a personal plan for the organisation of teaching is drawn up. The case description is based on the interview with the parent of the case client.

Services purchasers and customer's opportunities to influence the choice of forms of service

The paying entities for the child's services include Kela (The Social Insurance Institution of Finland), the municipality and the client/client's parents themselves. Kela pays for therapies, rehabilitation coaching, and adjustment coaching. Regarding nature-assisted services, therapy has included Equine assisted therapy as part of physical therapy. In Equine assisted therapy in the region, there is only one stable suitable for the child's special needs. Mainly, regarding the services Kela pays to the child, Kela buys the services directly from the companies producing the service and from the therapists acting as single entrepreneurs.

Another purchaser/buyer of the services is the municipal social services and disability services. Services paid by the municipality include children's assistants, for instance. The municipality pays the salaries of the assistants or to the company where the assistants work. The case client has positive experiences regarding the company providing an assistant service: assistants engage with their clients in many activities and, if possible, also take customers to free, nature-based services, e.g., forests and lean-to/campfire tent. The service provider is not an affordable service to the municipality, but the service production is of high quality.

The third purchaser/paying entity for the case client's services is the client itself. For example, a child's horse-riding is paid either by the client itself or by Kela.

Scarcity of the provision of services to the child has a significant impact on how the child's parents can influence the choice of service forms and service provider. With regard to Green Care services used by the child, the situation is the same: there is only one entity that provides a suitable Equine-assisted service in the municipality. The size of the locality is one of the key factors determining the provision of the service.

No service voucher is available in the region. If the child's parents themselves do not pay, they have an extremely small leeway in terms of choosing who carries out the service. Through a competitive process, the municipality strictly limits the choice of the service provider. However, the child's parents considered that families would be quite positive about the service voucher, as it would bring opportunities to try new things for the child and flexibility in the choice of service.

Needs and opportunities for nature-based services

Apart from a riding hobby, there is certainly not a single "ready" hobby that the child could engage in. At the Equine-assisted stable, which has also provided the riding therapy to the child, the child can go in for a ride. The stable therefore offers the child a hobby as a paid

or self-purchased service, but this is perhaps the only activity where the child's parent could take the child, leave them there for half an hour, and then pick them up.

People with severe developmental disabilities as a customer group requires substantial help from the service provider. There are few such service providers, since it requires skills that very few sources provide. One regional challenge in enabling the riding hobby is arranging transport to the stable. During winter times, i.e., during the tourist season in Lapland, it is not necessarily easy to arrange taxi transport to the stables. In Lapland, transport challenges are highlighted, as distances are long.

In nature-assisted services, there are many elements suitable for the group of clients represented by the case child. Nature has much to give to people with severe developmental disabilities, not only as an environment to develop motor skills but also through the calming effects of nature. Among people with developmental disabilities, there are highly sensory sensitive, deaf, and blind people, among others. In nature, sensory stimulus like smells and sounds are present for service users. Nature can act as a calming as well as a sense-stimulating environment. Animals, on the other hand, can be involved as the third party of therapy. For example, for deeply autistic people, animals—whether trained or not—can aid in doing awesome things.

Green Care types of hobbies also allow for meaningful activities for severely-disabled people to partake in. Finding hobbies that are suitable for them is not necessarily easy. Hobbies must often be quite individualistic, and not involve team games, for example. Regarding a nature-assisted hobby, no sports hall, game equipment, rules, nor team are required. Instead, it is an immense event for severely-disabled people to go to the campfire tent and make a fire, or simply spend time with a horse, even without riding. There are many things that can be practiced, and yet we are in an environment outside the home, which can be motivating for a child, too. The social network can also be built through hobbies. In addition, a nature-assisted hobby may be a very affordable hobby.



Experiences of success and challenges to solve

Success is produced when more than one service works well together. For example, regarding the riding hobby of the case client, success is achieved when the transport service, which enables the hobby, and the hobby itself have “bonded well together”. In this case, there is no need for the presence of the child's parent to enable a hobby. The challenges of getting transport services during peak seasons were described above.

The crucial challenge to be solved concerns guiding to the services, i.e., directing the client to the right service entity. It is left to the client’s responsibility to find out which services exist, what their own child could benefit from, and by which arguments support could be applied for. Problems with the information exchange between sectors leaves the customer with the responsibility of coordinating the whole. Overall, providing helpful information in many ways is critical to successfully rendering the service. The parent of the child thinks that many parents in families with special needs would be happy to allow their child, for example, to have a hobby, but it is challenging to come up with everything, and find out how to access the services all by themselves. Support by informing clients and their families about different services and possibilities could make living at home possible for disabled people, but also savings could be achieved. This could support coping and the everyday life of disabled people and their families.

The lack of a service voucher can lead to a particular service having to be purchased, whether it is suitable for the client or not. The situation is also challenging for the service providers, if they have no access to the competition procedures and therefore lose the possibility to be selected as an alternative service provider. This does not encourage motivation to try to apply for services. A service voucher could allow for perseverance in the provision of the service. Perseverance and stability, e.g., that the people providing the service do not constantly change, are really important issues for people with intellectual disabilities. In many cases, the resistance to change is many times at a lower level among the people with mental disabilities and autism compared to average level. Even if the client sometimes needs to pay some extra costs for the services, a service voucher could allow the same human relationships to remain within the services.

2.3.3 Case III: Adult clients in mental health rehabilitation (Northern Ostrobothnia, Finland)

Services purchasers and customer's opportunities to influence the choice of forms of service

The City of Oulu has produced and ordered services including horse-assisted and nature-based activities for clients in residential mental health services. Several initiatives have been made to utilise nature as part of the group activities for clients in mental health rehabilitation. Group activities include trips to nature areas, and in the summer the units aim to acquire flowers as well as activate and assist clients in gardening. Accordingly, there are rented gardening columns and tenement gardens in the city where clients can participate in gardening activities. Even if the environments are institutional, the aim is to bring nature elements into the interiors or add visual nature effects by technical means in the buildings.

There is always a rehabilitative element involved in the services. This is especially true for clients with long-term mental health problems, in which their cognition may suffer and illness makes mental health rehabilitation challenging. It can be challenging to find points of interest and rehabilitation that can proceed with small steps and meaningful actions, all the while finding an empowering environment, which nature and animals can offer.

In the services for mental rehabilitation, the aim is to create content and interests in ordinary, everyday life, to help the client find and notice what kind of activities will increase positive feelings and empowerment. Nature-based activities are perceived as very meaningful and clients usually find connection to nature or animals. In the beginning, the activities are supported by the professionals, but the goal for the client is to seek out to

nature independently and make use of the positive elements and effects that it brings into their lives.

Needs and opportunities for nature-based services

In this case client group, the vast majority of clients live independently in normal rental apartments and one strongly perceived challenge is loneliness. Nature-based services attempt to create forums where clients can meet, act together, and gain peer support through natural activities. While illness makes constraints and fear of social situations, doing something common makes the situation somehow more natural. It becomes easier to interact with others. It is important to find inclusive places where clients can also visit on a bad day with minimal resources, which can increase opportunities through working together and being supported by the group.

The City of Oulu cooperates with the third-sector service providers, which produce a number of rehabilitative services in the area, also including nature-based group activities. The common initiative is to introduce new action models for the clients and get them acquainted with different activities available in the region. The TOLPPA-project conducted by the Mielenvireys (*Mind vitality*) association has gained remarkable results by introducing different kind of nature-based activities for their adult clients in mental rehabilitation (Eskola, 2019). The activities have provided great variation, including care farming and horse activities, gardening, forest walks, forest yoga, mental exercises, using swamp areas for sense exercises, activities in water environments, bird watching, renovating Natura-areas and using nature elements in handicraft. A part of nature-based services produced by the associations in the third sector are purchased from private entrepreneurs, e.g., horse-assisted activities. Horse-assisted activities have been popular and groups have been fully booked so that the demand often exceeds the possibilities to participate.

Experiences of success and challenges to solve

On the basis of the feedback collected in TOLPPA-project, experience, peer support, inclusion, appreciation, new opportunities, and wider social relationships have been gained by the people involved in nature-based activities. People have experienced the calming effect of nature and nature-based activities have improved clients' abilities. Nature-based activities can be applied to different life situations and stages of the rehabilitation process, for example, after a hospital period. Building a rehabilitation path with nature-based services often needs close cooperation with the client, social and health care services, third sector, and the entrepreneurs. (Eskola 2019.)

Concerning the City of Oulu, there were nearly 350 customers in the residential rehabilitation period in autumn 2019 and more than 500 clients each year in total. Rehabilitative benefits of the nature-based activities are perceived as significant and they could be more widely used in mental rehabilitation. Nature-based activities can also have a preventive effect when introduced in childhood within early pedagogics or education. Connection with nature could create a driving force or resilience through life, whether it comes to a mental health diagnosis or challenges otherwise.



2.3.4 Case IV: Young adult with disability (Norrbotten/Västerbotten, Sweden)

Young adults with disabilities caused by physical, cognitive, psychological, and/or impaired learning ability are to a higher extent outside the labor market compared to young adults without disabilities. The vulnerability increases if the young adults with disabilities also have low level of education. To support integration to work or study, they are a prioritised group (Swedish Public Employment Service, 2020).

Needs and opportunities for nature-based services

Nature-based services have been shown to have health promoting and empowering effects on people with, for example, mental and exhaustion disorders. Further, these services have been shown to increase the persons' possibilities to manage work (Sahlin et al., 2015). In the case region of this project, young adults with disabilities have in some municipalities had the possibility to take part in nature-based services.

The total number of clients is, however, not countable, as there are no general official documents describing these cases. Based on the findings from this project's data collection, this kind of co-operation in the case region is not common. The entrepreneurs witness a lack of sustainable solutions, whilst the actors from the public sector describe lack of knowledge about the services. Nevertheless, findings also show that there is a common interest of cooperation, which can be interpreted as positive for future development. Municipalities, social insurance agencies and/or employment agencies can be purchasers of the services. However, it is more common that the client gets an internship at the company, meaning that the entrepreneur does not receive compensation. This can still be a starting point for cooperation between entrepreneurs and actors from the public sector whilst the client receives rehabilitation or practical training. From the entrepreneurs' point of view, the findings show that they experience ambivalence, as there is no provision for the company.

Experiences of success and challenges to solve

In general, the young adult/client is assigned to the activity by the responsible public actor. The clients have a freedom of choice to participate or not, or suggest other services if they find the ones at the company too hard to fulfil, as related to the disability. This can be seen as a weakness in terms of waning continuity and perseverance for the client. It also increases the uncertainty for the entrepreneurs who also relate to sudden changes in their business as the lack the possibility in long-term planning. Based on our findings, the entrepreneurs, however, described that they found positive results in personal growth, self-esteem, and security when the client found the nature-based activity meaningful.



2.3.5 Case V: Adult women on sick leave related to exhaustion disorder (Norrbotten/Västerbotten, Sweden)

Exhaustion disorder (ED) is a condition characterised by fatigue, sleep problems, and palpitations. Long-term stress causes an imbalance between activity and recovery leading to the disorder (The National Board of Health and Welfare, 2017). It is one of the mental disorders associated with increase in time on sick leave, and the majority are women aged 30-39 years. Time on sick leave can be long and beyond individual suffering, loss of social networks and isolation for persons with ED can lead to having a hard time going back to work (The Swedish Social Insurance Agency 2020). It is therefore important to support the person and start early interventions to decrease the negative consequences for the individual.

Needs, opportunities, and challenges for nature-based services

Palsdottir (2014) has shown that nature-based rehabilitation can foster good results for people with ED. Despite the fact that results would lead to implementation of nature-based rehabilitation as a complement to treatment at health care centres (Region Skåne), there are no or few possibilities for clients with ED to actually choose nature-based services as treatment/rehabilitation in the case region. Today, The Swedish Social Insurance Agency acts as a purchaser to a limited amount in the case region, but purchasers could also be, as in the south of Sweden, county councils, regions, and municipalities, as well as major employers.

Our results show that there in the case region, already exists entrepreneurs with competence, knowledge, and experience of work with, and for people, with mental illness. Many of them also describe experiences of good results for the person with ED, as they, with support of nature-based services, receive tools to manage daily life, and increase self-esteem, as well as strength, and recovery. In addition, our results show that actors from the public sector are positive to test the services for their clients and one from the county council said; *“Nature-based services can be seen as an offer of psychological activity on prescription in a similar way as we already offer physical activity on prescription, when people have physical impairments”*.

Activities could be, for example, forest bathing and activities related to animals, and gardening. Up until today, there are few possibilities for the person with ED to choose such activities as complements to other treatments. Employed people can, however, use their wellness allowance (*friskvårdsbidrag*), to take part in outdoor activities and nature experiences, if the activities contain elements of exercise, stress management through meditation, or mental training and mindfulness, etc. (The Swedish Tax Agency 2020). It is, however, not clear how common this is and according to our results, none of the

participants mentioned this as a way to support clients and increase one's own business or cooperation with each other. Related to the economic values for each, there are no numbers from the case region. Sahlin et al. (2015), though, showed that time on sick leave decreased and a successful rehabilitation back to work increased for people with ED taking part in nature-based services (gardening). This should be a motivator for public actors with responsibility for clients, but also their employees to consider nature-based service as an alternative to offer their clients.



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2.4 Norway

Rhys Evans

2.4.1 Introduction of Green Care in Norway

This chapter is a short report on the state of Green Care in Norway as of the year 2020, which matches similar reports prepared by the project on Sweden and Finland as a summary of nature- and farm-assisted social, health care, and educational services in Norway. This especially relates to Inn på tunet, and includes a description of the resources, supply, and demand for the previously mentioned services, based on a PACO analysis. Although there are many other services that are nature-based, Norway's experience with Green Care is both the primary example of nature-based services and the other two Nordic nations could benefit from Norway's longer experience with the sector. Thus, this is the focus of this short report.

The new term, ‘Nature-based service models,’ is used in this project and should not to be confused with ‘nature-based solutions,’ which is used to specifically describe the use of natural features to mitigate flooding and other impacts of climate change. According to the project’s own definition:

“Nature-based service activities (e.g., Green Care, Grön Arena, Grön omsorg, Naturunderstödd rehabilitering NUR, Inn på Tunet) aim to improve human wellbeing and quality of life. These activities make use of nature (e.g., natural environments, gardens, farm environments and animals) in connection with various social, health care, pedagogical, and recreational services. The services are based on the restorative and rehabilitative effects of nature, which arise from participation and experiences. The services are provided professionally, reliably, and purposefully according to clients’ needs.”

In the case of this report, the focus is primarily upon the use of farm-based environments, delivered to produce important positive effects for clients who face physical, mental, and/or emotional challenges, through their integration with activities on the farms. It must be remembered, also, that in the delivery of nature-based services, the ‘nature’ serves as the ‘platform’ or ‘stage’ upon, or within, which the service provision happens. Clearly, it is not enough to simply set clients down within a ‘natural environment’ for them to experience the benefits that can be available. Rather, we might see the provision of nature-based services as a collaboration between the natural environment (and those who own and maintain them) and, most often, professional teachers, therapists, and care workers who use those environments to deliver their professional services. So, in the Norwegian case, Inn på tunet represents the coming together of small-scale farmers and care professionals in a structured way, which delivers individual benefits to their clients. In this sense, this is a ‘hybrid’ model, where the well-established benefits of experiencing natural environments are engaged synergistically along with the professional skills and practices of trained and certified practitioners.

Given that the Nordic NaBS -project is a multinational project, with a key priority on supporting new opportunities for rural businesses to employ nature-based assets for innovation and development, this report has investigated the Norwegian experience from that prevailing perspective. It is expected that this report could become a resource for those who do not have such a well-developed Green Care services sector, offering both a picture of how it is done in Norway, and a more detailed assessment of the complex details of Green Care’s opportunities and challenges, so that the prospective development of a new national Green Care system can profit from the Norwegian experience.

The situation with Green Care in Norway is somewhat complex institutionally; while there are systems for commissioning, delivery, and quality control of such services, many of these systems rest in the hands of different parts of government, from national, to very

local. The systems assure the delivery of high-quality services at the cost of a certain level of complexity, which will be discussed later. This complexity, however, means that given the limited time and budget available for the work, this report is subsequently a brief overview of the systems currently in use. The complexity also means that any statistical evaluation of the sector is somewhat compromised, as aforementioned that various agencies hold different responsibilities and data. This will be explored further below.

This report aims to provide a snapshot of the sector in Norway from 2019-2020. It contains a number of sections to carry out this aim. These begin with definitions of the terms used within the field. Within those definitions are concrete examples of how the system works in Norway, as well as its history, present state, and potential for growth. This is followed by a PACO (problems, advantages, challenges, and opportunities) analysis of the Green Care services sector in Norway, offering insights into both its strengths and challenges.

2.4.2 Materials and methods in Norway

The Norwegian study was undertaken using the case study methodology, as per Robert K. Yin (2009). Yin asserts that the rigorous application of a Case Study Method (CSM) allows investigation into "a contemporary phenomenon within its real-life context" (Yin 2009: 13), which is certainly the case with this study. One important feature of the CSM is the ability to cope with data from different levels, sources, and registers through the employment of triangulation and analysis for internal and external coherence. This empirical work, thus, has attempted an "analytic generalisation in which a previously developed theory is used as a template with which to compare the empirical results of the case studies" (Yin 1994: 31).

The data was generated from a wide variety of sources including in-depth interviews with practitioners, service buyers, and general experts; previous studies and reports; academic literature on Care farming; formal policy publications; and online materials. A Case Study Protocol was set up and adhered to throughout the entire process, including during analysis, which allowed the researcher to improve their hypothesis over several iterations, increasing research finding significance with each subsequent revision. The study had the same goals for Finland and Sweden, aiming to provide the overview of the current state of nature-based services, including demand and supply, as well as institutional structures for the services in the area. Research aims also included the discovery of future perspectives for these services. The main documents used in this review are presented in country analysis.

2.4.3 Definitions

Green Care or Grønn omsørg in Norway

According to the Norwegian Green Care National Strategy (2012), “*Green Care is the term used in Norway for welfare services that use farms as arenas for education, child and youth services, occupational training, health and care services*”. Note that in Norwegian, Green Care is usually expressed as *Grønn omsørg*. In Norway, as a result of national regulation, most Green Care services fall under the banner of Inn på tunet (IPT), which enjoys a formal, if complex national responsibility. Inn på tunet, organised into regional member associations, is both a professional association of specific service providers designed to promote quality standards and the delivery of nature-based services, and at the same time a general term to describe Green Care in Norway. The complex structure of Inn på tunet has profound consequences on the provision of Green Care services and will be further explored later in this report.

The first definition above is a very general definition, meant to include other appropriate services, such as supporting integration of asylum seekers as the field continually develops (Inn på tunet løftet 2). It is the nature of official definitions to be inclusively complex, with the result that different institutions define Green Care slightly differently according to the lens through which they are looking. That said, the main contents of the definitions remain very similar. For example, The Norwegian Food Quality Authority *Matmerk*, one of the key agencies involved in certifying the quality of Inn på tunet (IPT), stated in 2018: “*Inn på tunet services are organized and quality-assured welfare services on a farm. The service will provide mastery, development, and well-being. [For the purposes of IPT] Farm use is a property used for agriculture, forestry, or horticulture. The activity in the service is linked to the farm, farm-life and is worked there. The term farm use should have a broad definition.*” One noticeable factor is the term ‘quality assured’ as this is an aspect that has grown in both priority and implementation over the past decade and will be dealt with in a separate section. Another is the more detailed definition of what a farm is, for the purposes of IPT.

Taking the perspective of nature-based services, we can perhaps provide a slightly simpler definition. Green Care is a prime example of how the use of ‘natural’ environments can provide important benefits for people needing care across a wide range of challenges. The term ‘Green Care’ can be confusing, however, because nature-based service activities can extend to self-care, and even more widely to outdoor experiences in general. This could, for example, be applied to outdoor recreation, which contributes to ‘well-being’. This would include both strenuous and non-strenuous activities, such as mountain climbing, or forest-walking. It is generally agreed, however, that Green Care refers to services delivered

from and within farm environments. This is where the term *Inn på tunet* can be helpful as it refers, as above, directly to farm-based service provision.

The Nordic NaBS project focuses directly on “nature-based service models”. The definition also places ‘well-being’ at the top of its description of nature-based services, and this raises an important point. According to this wide definition, nature-based services are as important to the ‘healthy’ part of the population as to those who are ‘ill’. Indeed, the growing importance of, for example, ‘work-life balance’ in the Nordic countries indicates just how important ‘well-being’ has become. Thus, an emphasis on well-being is partly about prevention of illness, especially as it relates to illness due to lifestyle factors. This emphasis, however, also applies to those who live with chronic ill-health, ranging from physical illness to mental and emotional dysfunction. These people too need ‘well-being’, and whilst the recreational amenities of being on a farm may not cure their ‘condition,’ they will in fact increase their quality of life, increase their well-being, and thus counter some of the most negative impacts of their interactions with the wider society. In other words, alongside the directly-therapeutic activities to be found on the farm, the direct exposure to, and ‘work’ within, natural assets provides an important positive boost to their quality of life.

The point above is vital to emphasize. Given that Green Care services deliver both tailored responses to illness and specific opportunities to improve the quality of life of the clients, we may suggest that what differentiates Green Care from other nature-based services is the nature of the clients themselves. Whereas, for example, ordinary citizens need and benefit from nature-based services (i.e., engaging in outdoor activities for physical fitness, stress-reduction, etc.), Green Care services deliver these benefits to those who participate in either the health care system or the education system. Participants access services delivered by qualified professionals working within farm-based environments.

From this, we can see how the more commonly accepted definitions of Green Care, and the specific uses of *Inn på tunet*, originate. The ‘arenas’ vary from simply a farm to an outdoor ‘natural’ space, but of the ‘social, health care, pedagogical and recreational services’, only recreation stands apart from the more formal sectors. Arguments can be made that ‘recreation’ is a part of social care, especially for those with chronic health conditions—whether physical, mental, or both. For example, how can we separate the impacts of the emotional experience of being around and with horses from the therapeutic influences in equine-assisted activities and therapy? If we include recreation, then, we can see that *Inn på tunet* services are indeed well within the definition here of nature-based services.

More specifically, in a paper on Green Care services in the Nordic countries, Steigen, Krogstad, and Hummelvoll (2016) identify five interrelated components of Green Care and *Inn på tunet*: 1) *Contact with animals*; 2) *Supportive natural environments*; 3) *The*

service leader as significant important Other; 4) Social acceptance and fellowship with other participants; 5) Meaningful and individually-adapted activities in which mastery can be experienced.

Clearly, the emphasis here is on therapeutic environments, led by experts in therapy (the so-called service leaders), including the therapeutic effects of those recreational environments. Although Steigen et al. (2016) specifically mention animals, referring to the increasing identification of the therapeutic benefits of human-animal interactions, in the Norwegian IPT experience, this is not always present or necessary, depending upon the services offered.

Another important set of services delivered by Inn på tunet farms are pedagogical. These include pre-school activities, such as outdoor kindergartens (*barnehage*), outdoor primary school classes, and even outdoor skills training delivered to older learners, including new fields of activity, for example, supporting the integration of asylum seekers. The latter category can also be found within the Norwegian *vidergående skole* and *fagskole* system of vocational learning, depending upon the category of learning. Primarily, though, the use of farm environments within the Inn på tunet system focuses upon early-childhood learning. In such a system, once again, the farmer will either be a qualified early-childhood teacher or will collaborate with a specialist trained in the field. Other services can include using horses to socialize vulnerable teens, to the delivery of specific lifestyles, or on-the-job training to those who might need it in these environments. In fact, the recent totals of Inn på tunet activities show that they seem to be divided nearly equally between the two main sectors: health services; and pedagogical services.

The delivery of educational services remains under the control of specific schools, with participating youngsters being registered at the school, and someone in the school responsible for the learning being delivered. In this way, all national educational guidelines are adhered to. Generally, it appears that either the farmer/educator is directly employed by a school as a provider of educational services, using her or his farm as the arena, or the farm (with its staff) has a direct agreement with the schools for the services in whole. (Giskeødegård, Sudmann, Halvorsen, Børsheim, Agdal & Båtevik 2016.)

From the many different sources that tabulate the numbers of individual services on offer, over the course of several decades of study, the trend is that pedagogical services are delivered by approximately 30–40% of Inn på tunet services in Norway, whilst most of the balance delivers health and wellbeing services within the health or social care sectors. Recent offers such as the use of Green Care environments to aid integration remain limited but are growing as Norwegian national strategies deliver funding to the municipalities to increase such offerings.

Table 2. Types of Green Care services offered under Inn på tunet (Knutsen & Milford 2015).

Green Care Service types
Dementia Day Care services (elderly/dementia/early-stage dementia services)
Nursery schools
School/alternative schools (primary, secondary, or upper-secondary)
After school care
Day care for addicts
Pedagogical services for adults
Day Care services for people with physical disabilities
Day Care services for people with developmental disabilities
Day Care services for people with psychiatric disorders
Accommodation for people with disabilities
Accommodation for people with substance abuse problems
Accommodation for people with developmental disabilities
Accommodation for people with mental illness
Social Care services (under the responsibility of NAV) including 'Green Work'
SFO (School leisure scheme)
Language and work training for immigrants / asylum seekers
Organized tuition, secondary school
Relief, holiday and leisure activities for children and young people
Teaching for whole classes / groups, children etc.
Other

2.4.4 Supply of Green Care services in numbers

Arriving at a definitive number of farms offering Green Care services in Norway is difficult. The most reliable source of numbers is Matmerk, which registers all Inn på tunet farms in the country. There is, however, a group of service providers who for a number of reasons, do not or will not operate under the Inn på tunet imprimatur. This group remains underreported both in the literature, and in official statistics.

There can be many reasons for this, which revolve around alternative organisation of services, as well as the delivery of the same services to other client groups. They may offer, for example, Equine Activities and Therapy (EAAT) services to a private market, or in a few cases, as part of hospital services. Other possibilities for under-counting could include farms offering educational services of one sort or another, such as City Farms. They may provide the services, but not as an Inn på tunet farm.

One example can be found in survey of services in three Counties conducted by Giskeødegård et al. (2016), claiming the following:

“This survey includes first and foremost IPT approved providers in Nordland [Norway]. But 5 of these 16 IPT players are at the same time approved members of the cooperative Gårdsopplevelser Nord SA [Farm Experience North], and one is registered as a 4H farm. In addition, two of the selected informants are only members of Gårdsopplevelser Nord AS, while one of the informants is neither a member of Inn på tunet nor Gårdsopplevelser Nord SA”.

As can be seen by this one small sample, there is a wide variety of potential markets for Green Care services—if individually small in number—resulting in a significant proportion of service providers not participating under the banner of Inn på tunet. This makes it challenging to have an accurate count of service providers when looking at the national level. There are no doubt other categories of farms in this group but what matters here is they are untallied. This is similar to the situation with the registration of horses, where as many as 40% of horses go uncounted on the official statistical tallies.

Haugan and Nyland, et al. (2006) cite a 2002 report stating 500 farms offered Green Care Services. The report claims that the most commonly provided service was general education for schoolchildren, although the number quoted (141) is only barely larger than those service persons in need of psychiatric care (120). Other service categories include children with behavioural problems, farm kindergartens, and services for the elderly with dementia (Haugan et al. 2006). The National Strategy for Green Care (2012) claims that the 2010 Agricultural Census registered 873 Green Care farms in 19 counties. This number would seem to be a positive development as of the mid-2000s.

Another 2012 report (Berget, Lidfors, Pálsdóttir, Soini & Thodberg 2012) claims that Matmerk lists over 1,100 farms offering Green Care services as of 2011. It claims that school and day care services for people with psychiatric disorders constituted approximately 40% of the total. The most recent report from Matmerk indicates that there are approximately 450–500 certified Inn på tunet farms offering Green Care services (Matmerk 2019). Clearly, there must be statistical issues around the definitions of what constitutes a farm that offers Green Care services, between Matmerk only registering Inn på tunet farms, and some of the other wider estimates.

Another aspect to take into consideration is the passage of time. If the estimates list 1,100 farms in 2011 (Berget et al. 2012), then Matmerk's 2019 figure of 475 farms could signify more than just differing methods of calculation. By consensus, there are fewer Green Care service providers than there were a decade ago. There could be several reasons beyond a more rigorous registration process in the present period. Two possible considerations are that some have retired, while others have quit the sector. Anecdotal evidence suggest that both occur, due both to age, and to wishing to do something else with the farm. Another example from Giskeødegård et al. (2016) illustrates:

“[Begun in 2000], as of today, 22 of the farms in the enterprise [Gårdsopplevelser Nord SA] have been wound up, and/or the farmer has retired [...] Of the remaining 38 members of the enterprise, there are 26 farms that are currently active as providers of welfare services”.

With the increase in bureaucracy and capital investment reported most recently, it is much harder, or requires greater time and resources to establish a new Inn på tunet farm than it might have in the past. There is clear guidance and assistance available to new starts, but the process is nonetheless time- and capital-consuming. On the other hand, those farms that have established themselves in the sector within this latest regime of regulation could be said to have a strong commitment to be a service provider.

Reports and published articles tend to disagree with each other about both of the totals, and very few discuss the unaccounted-for service providers, especially in terms of total statistics on the number of Green Care farms in Norway. Interviews with practitioners, policy makers, and academics produced a consensus (in 2019–2020) that there will be between 50% and 100% more than the Matmerk figure of providers, almost doubling the Matmerk total. If that is the case, then we might expect there to be in the range of 700–900 farms delivering Green Care services in the country at the time at the time this report was produced.



2.4.5 Participants

In such a complex system, it is important to clarify the terminology, as has been begun above. Another aspect of this is to use common terms to define the participants in this service. These range from those who actually benefit from the service, through those who facilitate this, to those who pay for it. What follows is a short list of definitions of the various participants (described in a mind map in Figure 34).

Service Users

These are, and should be, the most important participants in this process. Service Users are the people who have needs that are met through participation in Green Care services. They are the ones who benefit from the services. Their needs can vary across a wide range. There are the traditionally-viewed user groups who have disabilities, which prevent them from participating in regular society and societal activities. The strength of their disabilities may range from severe, to mild, measured in terms of the difficulties they face in participating in regular society. And those difficulties can also range from the inability to participate in normal paid work, to total social exclusion. Exclusion from society can, however, be experienced as a result of many other conditions and situations ranging from

age, literacy, appearance as a result of organic trauma and accident, to situational causes such as abuse, immigration, and even extreme poverty. Looking at the list of Inn på tunet services in the previous section gives a sense of the many different types of clients who need nature-based services to improve their quality of life, self-confidence, and socialization. Often, service users experience complex challenges and although a service might be primarily tailored towards a key identifiable characteristic, their needs may require addressing a variety of factors. This may include not only 'diagnosed' conditions, but a full range of personal growth and spiritual support, especially as they grow and learn.

Another category of service users are those who benefit from nature-based services for educational purposes, ranging from early childcare through to outdoor classrooms in vocational training. Here, services may be provided on a full-time basis, or part time. And these services can address a wide range of pedagogical issues from general education, through specific programmes on art, science, vocational skills, etc., as well as simply providing them with structured outdoor recreation opportunities.

Each category of service user needs specific programmes designed and delivered by trained experts to address their needs, and it is their needs that shape the structure of the services offered across the sector. Service users may be called 'clients', 'patients', 'partners' or other terms based upon their own roles within the services offered on the farm.

Service Providers

Service Providers are those who actually deliver the services to the service users. In Green Care this is seen to include both the farmers themselves and the trained specialists who have professional certification in a particular field. In a large Green Care operation, it may include a group of service providers managed by a single service manager who coordinates the farm, pedagogical, and social service delivery across a large number of service users. Such operations may also include specialized care assistants who may come with the client or be fully employed on the farm.

In some cases, especially in smaller operations, the farmers themselves will have undergone special training to allow them to deliver the service. Often in these circumstances, the service providers will include members of a family who work together with complimentary qualifications and skills.

Through interviews with providers, and as reported in other studies, it is clear that most providers' involvement is based upon personal passion. Thus, it is most common that most new Green Care service businesses are created by the providers, rather than the service buyers.

Giskeødegård et al. (2016) report a provider saying, "*I got the job because everyone - colleagues and friends - knew I was passionate about it*". They claim that across the three municipalities they studied, they found only "two farms where municipal agencies have taken the initiative and demanded the development of IPT services for specific farms". Research suggests that a similar phenomenon is obtained across municipalities. Thus, the provision of Green Care services is primarily driven by the involvement and commitment of the service providers.

Service Buyers

Service buyers are those who actually manage the payment for the delivery of services. In the Norwegian system, these generally are employees of the municipality who have specific responsibility for the delivery of services to those they are charged with caring for. The location of such employees within the municipal organisation ranges from primarily health and/or social care departments, through education departments, to in a few cases, the agriculture departments.

The above make up the vast majority of service buyers in Norway. In a few cases, however, service purchasing can come from both public and private health-care organisations, and across Europe, can be the remit of charities that specialize in either specific health or social conditions, or departments of more general charities such as religious foundations.

In addition, Norway's work and welfare directorate NAV (*Nye arbeids- og velferdsetaten*) is one of the key service buyers with its focus upon support for inclusion into Norwegian society despite unemployability, whether as welfare services, unemployment services, or other support schemes. A strong emphasis on 'participation to the limit of the client' means that NAV is responsible for coordinating and paying for a range of Green Care services revolving around supported work on the farm. NAV contracts a wide range of services from providers for its clients, including "work training, work qualification, permanently arranged work, day care, support contact, permanent employment in group housing (using own farm as workplace), hourly fee, day fee, agreements for individual visits or several months" (Giskeødegård et al. 2016). NAV organizes its purchase of services in a different way than the municipalities. The NAV offices have two owners (state and municipality), and two management systems (a detail-controlled state part and a municipal part with little direct control). NAV mainly buys services from providers through an intervention company. These companies also take care of quality assurance and also have purchasing expertise, which is seen as important because NAV bases its purchase of services on tenders (Matmerk 2013). This reliance on an 'intervention company' will have relevance in the section below, on 'brokers'.

The other key service buyer is, of course, the municipalities. They buy Green Care services across the trifold range of education, primary care, and long-term care. Thus, they are responsible for the widest range of services, encompassing those from early-childhood education to day services for elders with dementia. Generally, the ‘market’ for Green Care services is shaped by the municipality as a sole-source buyer, with potentially many ‘sellers’.

Interviews and a review of the literature suggest that the collaboration between municipal buyers and Green Care service providers is important for the further development of existing services, and the development of new services, and for the quality of the service received by service users. Such quality is directly managed by the individual contract between buyer and provider. The user, therefore, is dependent upon the quality management within that contract. Much depends upon that core relationship.

Giskeødegård et al. (2016) in their examination of how to improve the relationships between municipal buyers and local sellers claim that, *“Although the [...] municipalities in part have well-established offers, agreements that regulate the purchase of services, etc., it is difficult to see Inn på tunet as a well-established scheme.”* This is because there appears to be little formal structure in the municipal management of contracts for Green Care services. Giskeødegård et al. (2016) claim that “the municipalities have at best only halfway established organization that can ensure further operation and development of the scheme”. They claim that there is little collaboration between those with these responsibilities across municipalities and suggest that such collaboration and knowledge exchange could help improve the quality of offering and management within the system.

Ultimately, however, the relationship between the Green Care service provider and the service buyer (municipality) is an asymmetric one where the balance of power and responsibility for defining care quality resides with the latter.

Brokers

Brokers are those private consultants who work to connect expressed service demands with service providers. This can often be seen particularly in the case of assisted employment on farms in Norway, which is contracted for by NAV. Brokers can undertake not only to connect buyers and users, but also to maintain the necessary paperwork to manage the transactions and guarantee quality control. This is a part of the sector that is growing in Norway as the challenges of bureaucratic control grow and is beginning to be seen in other activities beyond assisted employment. It is a contemporary issue at this time with a few Inn på tunet member organisations considering that ‘document support’ is a service that their members increasingly need and, in the case of Inn på tunet Norge in particular, they are exploring how this service might be offered to their members. Farmers

in Norway already rely on expert services to manage their taxes, reporting, and other bureaucratic needs. Hence, as such a service is not unknown, it could potentially be welcomed by them.

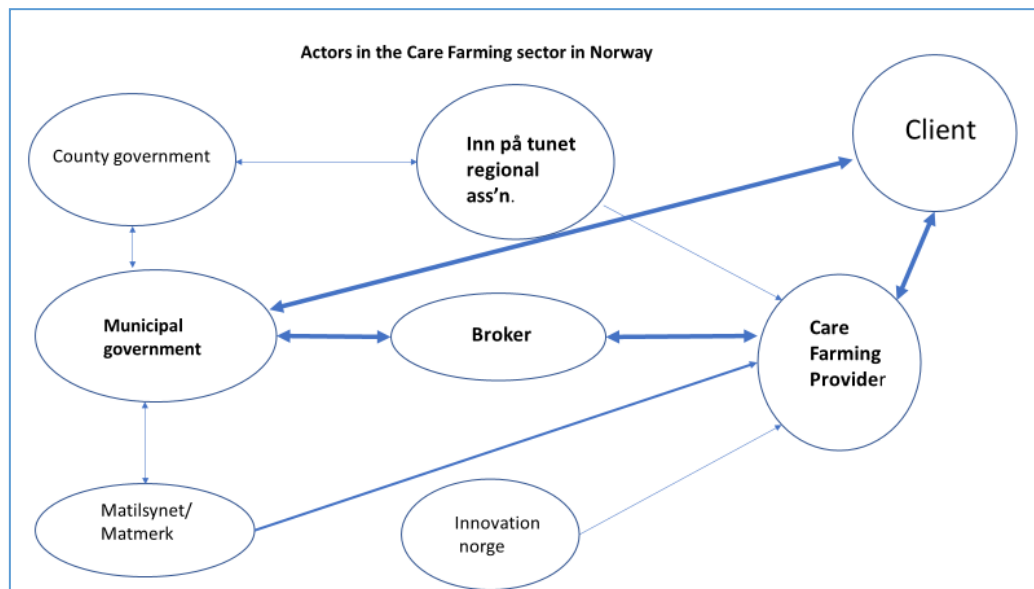


Figure 34. Actors in the Care Farming sector in Norway (Evans 2020).

2.4.6 Inn på tunet

Inn på tunet (IPT) is the key pivot point around which the delivery of Green Care in Norway is organised. It has a fairly complex history, which has resulted in a complex institutional position, as multiple agencies have ownership of one aspect of it or another. The term itself was chosen not only as a professional indication of status and quality but also because ‘velkommen inn på tunet’ is what would be said to welcome a stranger into the farm, and family. Thus, it represents the opening up of the farms and families to others in society. There are many institutional actors who have some involvement with Inn på tunet.

IPT began as a rural development project to create new farm incomes through farm multi-functionality, being included in the national parliament’s Agriculture Act of 2009. It began as the result of national legislation, but what emerged is a collection of regional Inn på tunet member organisations such as Inn på tunet Rogaland, or Inn på tunet Nordland, generally geographically aligned to the counties. Where some counties are small or remote, a single IPT organisation may cover several. These organisations worked with the county governments to implement this new opportunity, but the responsibility for actual, contracted service provision remained, and remains, the direct responsibility of the

municipality. Furthermore, contracts are between individual service providers and the municipal authorities.

During 2011–2012, a national strategy for Green Care was developed between the Ministry of Agriculture and the Ministry of Local Government and Regional Development to create a set of quality standards, research needs, and the setting of roles and responsibilities within Inn på tunet. In 2012 the control of quality standards was made the responsibility of Matmerk, a foundation responsible for quality standards in agriculture and food production. Since that time, the passing of Matmerk’s quality standard examinations has been, in effect, mandatory for an IPT farm, as all municipalities require these national regulations. As Sudmann claims, *“Matmerk ensures farmers follow around 1,800 statutes and regulations in these areas for people, animals, land and produce. Special accreditation for Green Care must be renewed every two years, without accreditation, farmers face constraints in offering welfare services to municipalities, and commissioners hesitate to buy their services”* (Giskeødegård et al. 2016).

If a farm passes Matmerk’s quality standards tests, therefore, it qualifies as an Inn på tunet farm, regardless of whether it has an existing service delivery contract with a municipality.

Inn på tunet® trademark

Inn på tunet became a registered trademark from the 1st of January in 2014. Farms that are not approved cannot use the logo or call themselves an Inn på tunet farm. Inn på tunet is not only a trademark but increasingly is the umbrella term used to describe all Grønn omsørg activities in Norway. Therefore, Inn på tunet is the key name applied to ‘nature-based services’ in the country. It encompasses a fairly wide range of services and activities, from those directly addressed for those with poor health (physical or mental), to ‘normal’ citizens who would benefit from outdoor experiences on a farm. It also is applied to the delivery of learning process-based services, i.e., *gardsbasert barnehage* (farm-based pre-schools). About the only significant nature-based services sub-sector not represented under this banner is what we might call ‘traditional’ outdoor recreation—hunting, fishing, hiking, biking, etc.—and even there, the lines become blurred. For example, the Valnesfjord Sportshelsesenter in Nordland County offers active outdoor activities and horse riding occupational and post-operative recovery services in a mountain environment through the use of adapted mobility tools to get their clients out into the ‘wild’ environment. They do this because they believe it delivers faster therapeutic outcomes to physical injuries, and it also addresses the ‘inner patient’, addressing their mental and spiritual needs during times of recovery or illness. Here, the activities resemble ‘extreme’ outdoor recreation yet deliver prescribed recovery activities. Valnesfjord is not, however, an Inn på tunet member, even though it offers similar services. Nevertheless, even this last

category of nature-based service activity often does fall within the Inn på tunet category depending upon the client group and individual activity.

Inn på tunet has been supported by two key policy initiatives from the central government, labelled as Inn på tunet 1 and Inn på tunet 2. The first marked the process of consolidating the establishment of Inn på tunet in 2014, with funds and directives aimed at establishing and regularizing quality standards for Green Care services across the nation. A new national initiative is now being launched (2020) called *Inn på tunet løftet 2*, which is a follow-up to *Inn på tunet løftet 1*. Inn på tunet 1 was directed at the municipalities, which could apply for funds to establish new IPT offers. Inn på tunet løftet 2 is this time directed to the county governor and county authorities, who will now be able to apply for financial support for new pilot projects. These pilot projects will be in collaboration with the municipalities or other purchasers of IPT services, as well as in collaboration with the involved Inn at the yard gardens and their network organizations. Over a 3-year period, 12 million NOK will be allocated to three or four pilots nationwide.

Actors in a complex scene

To understand some of the complexity surrounding the provision of Inn på tunet services, it is necessary to understand that Norway is divided into three administrative levels—the national state, the counties (*fylke* in Norwegian), and municipalities (*kommune*)—and each has different roles and responsibilities when it comes to creating, implementing, and funding policies. After a recent period of *kommune reform*, the reform of municipalities, there are now 11 counties and 356 municipalities. The latter are responsible for, among other things, kindergartens, elementary schools, and care services. They are also responsible for the delivery of primary care services in the health and welfare sectors. The county authorities are responsible for services such as secondary education and local/regional public transport. Specialist health services (mostly Acute care) are run by the state and are organized through five regional Trusts. For the delivery of Green Care, this implies that in most cases the municipality would be the buyer of a specific service. In other words, beyond the ‘certification’ process with Mattilsynet (Matmerk), to deliver a Green Care service, each farmer or service provider must also enter into a direct agreement with a municipality, as that is where the funding originates.

The municipality’s responsibility rests around three key services: health (both physical and mental); social care; and education. This is because, in Norwegian society, wherever possible, the power to implement policies devolves to the lowest level possible, in this case the municipality. Thus, with a few exceptions that complicate the situation, the municipalities are responsible for active provision of services in education, in the health system, and within the social care system. Thus, they remain the ones who actually contract services with Inn på tunet service providers.

Within social care, another important actor is Norway's work and welfare directorate NAV. Among other remits, it has the responsibility of employment and income, which includes many who live in society but are not able to be fully employed. Thus, it has a role in social care. NAV has two aspects to it: national and municipal. Each municipality has a NAV office and the two work together closely to address local needs. The *Inn på tunet Handbook* states that, "*Those who finance and administer service managers to persons who are at risk of dropping out of education and / or working life can be the Labor and Welfare Administration (NAV), municipalities, county municipalities, schools, companies and possibly other private actors*" (IPT 2016). Thus, NAV can be a significant actor within the Green Care sector, particularly as it concerns alternative employment, and the offering of social care services to those in need. In some cases, in fact, NAV opens a call for a certain number of positions of assisted employment for those who cannot work without such assistance. In many cases, a 'contractor' will either find such positions, such as working in an equine establishment, or in some sort of trade, handwork or basic labour situation, and act as an intermediary between the clients and NAV. This is similar to 'assisted work' which can be found in other countries.

As is the case with much Norwegian bureaucracy, NAV undergoes periodic reform, which can be a challenge as in many cases, it can be at least temporarily unclear where NAV's responsibilities continue and where they change. And, as a result, there can be confusion over whether it is NAV state or NAV municipality and their respective policies that are at play. Social care in Norway, therefore, has many 'owners' or 'actors' and to an extent, Green Care must deal with most of them when it comes to providing social care services on a farm.

There are further actors in the sector as well, each of which has had an active influence. The two main farming unions, *Norges Bondelag* and *Norsk Bonde- og Småbrukarlag*, have maintained committees who wield some influence on the sector with policies relevant to it, and through their lobbying influence, for example on the definition of what a farm must be, on other actors in the sector.

A further actor within the scene is Innovation Norge, responsible for grants and loan funding for economic development. It was originally charged with helping create the economic sector of Grønn omsørg, supporting the creation of *Inn på tunet* farms in the early days, with funds directly received from the national government, which it in turn was given to potential practitioners. Innovation Norge is also partly organised on a regional basis, to provide innovation support suitable to the region, and can be utilized by service providers as a source of investment funds for the development of farmsteads, etc. It should be noted that although Innovation Norge does indeed support the development of Care farming establishments, it does so through a process of application and competition to structured funds, and therefore does not offer a guarantee of funding.

As a result of these various actors, someone who wishes to start an Inn på tunet enterprise faces the challenge of dealing with a significant array of hurdles, from passing Matmerk's approvals on the physical premises, to establishing a contract with their local municipality, who will provide them with access to clients. These steps will occur after the farmer/service provider has decided upon which type of service to provide on the farm. This model of multiple responsibility and action complicates things, but it does allow for local variation and a system that supports heterogeneity and innovation in the development of new services, especially as local needs arise.

Inn på tunet as farm multifunctionality

At the beginning of the creation of Inn på tunet, the drive was to increase farm incomes through supporting the possibilities of additional non-food producing, or non-traditional activities on farms. This followed a similar project in the EU, which resulted in the Second Pillar of the common agricultural policy (CAP), which removed small percentages of funds from the strict production support subsidies to give them to other, 'multifunctional' activities on the farm, such as agro-tourism, biodiversity support and, indeed, Care Farming. The inclusion of Grønn omsorg (Green Care) in the Agricultural Bill of 2009 in Norway created the foundations for the creation of a nature-based services sector focused upon health, education, and well-being.

The stories of the rise of Green Care as farm multifunctionality in Norway pivot around two key origins: the first are professionals 'retiring' from public employment in their field, already living on a farm and setting out to build an enterprise that delivers similar outcomes as their former professional occupation alongside rebuilding the farming activities; and the second are farmers who, for one reason or another, feel that diversifying what is offered by their farm will improve the farm's overall economic viability. The two trajectories towards Inn på tunet develop separate challenges and opportunities for the providers, with the first facing a potential lack of farming knowledge and potential access to land as the Norwegian system requires a purchaser to show competence in farming to buy farmland. The second faces a potential lack of professional knowledge in the sector of the service being delivered on the farm. In many cases, and perhaps in what might be considered 'ideal' cases, one partner is already a farmer and the other is already a service professional, for example, an educator, a physiotherapist or other therapist, or a specialist in social work. Indeed, local fieldwork suggests that those who develop such a configuration are most satisfied with their Green Care service enterprise. This is because 'farm multifunctionality' is already based upon finding multiple income streams when using the same assets. In recent studies of equine farm-based enterprises based on small holding farms, the average number of differing income streams from a single herd of horses was eight, with the most easily identifiable success stories having at least 13

different income streams based around the same herd of horses, their buildings, and facilities. Similarly, the system of industrial agriculture in Norway renders it difficult for small farms and those with environments not easily adapted to current industrial farming practises to generate sufficient income to make a success of it.



Industrial agriculture has, as its core purpose, the reduction of unit pricing for farm outputs through increased scale and increased scope of cultivation. Thus, a farm with limited space or an unsuitable landscape/environment may need to add extra income streams to its operations to make the entire farm financially sustainable. Green Care is clearly one way to do this, by adding regular, stable income from the use of the farm's assets. Of course, it does use those assets, whether buildings, outdoor spaces, or other resources, potentially removing them from use in productive farming, but it seems that most Inn på tunet farms have both traditional farming, and Green Care activities taking place. Indeed, such developments can be seen as utilizing the farm assets more effectively and sustainably due to the co-use. An example might be where one partner (who is the farmer) builds new buildings and the other partner converts the old ones for Inn på tunet use. This complementary use is both a signature of farm multifunctionality, and of Inn på tunet type operations where the services are provided on an active farm. Indeed, on an Inn på tunet farm there is no need for other types of farm multifunctionality, such as plantings

for biodiversity/carbon sequestration, agro-tourism, or other such activities to be restricted so long as the quality and security controls on the provision of the green services are maintained alongside active farming.

The transfer to Matmerk in 2012 of at least partial responsibility for Inn på tunet marked a steep change in the sense that Matmerk took over responsibility for the quality and safety of the farm environment, as well as maintaining a website directly focusing on IPT. Matmerk (also called Matilsynet) is a foundation, or perhaps a QUANGO (Quasi-Governmental Organization), with an overall responsibility for food quality in Norway, and alongside that, a responsibility for quality within the food supply-chain. This includes animal welfare, farm safety, and a wide range of other considerations when it comes to material quality management. It also includes similar responsibilities for Inn på tunet. Before a farm can be called Inn på tunet and can enter an agreement with a municipality to provide a service, it must pass a series of rigorous evaluations from Matmerk. Once passed, these evaluations must be renewed every two years. The 2013 Report on Grønn omsørg states, “The Norwegian Agricultural Quality System and Food Branding Foundation [Matmerk] is responsible for developing and implementing quality assurance systems and approval schemes related to the use of farms as arenas for Green Care services. The Norwegian Agricultural Quality System and Food Branding Foundation has its own Green Care expert group” (Matmerk 2013: 13). At the same time, however, Matmerk does not keep exact databases of all IPT farm enterprises, nor does it separate the farms by type, making it difficult to even approximate the total number of IPT farms in the country.

A farmer/service provider’s encounters with Matmerk begin before they can approach the service buyers (i.e., municipalities) and tend to involve a considerable investment in upgrading the property to fire, building, and health and safety standards before the provider can approach a buyer with a contract. As also noted, those safety certifications must be renewed every two years. The result is that Matmerk is often the first stop upon a long journey of development before a service is actually delivered, one which requires up-front investments that may not yield immediate returns.

2.4.7 PACO analysis of the situation of Green Care in Norway in 2020

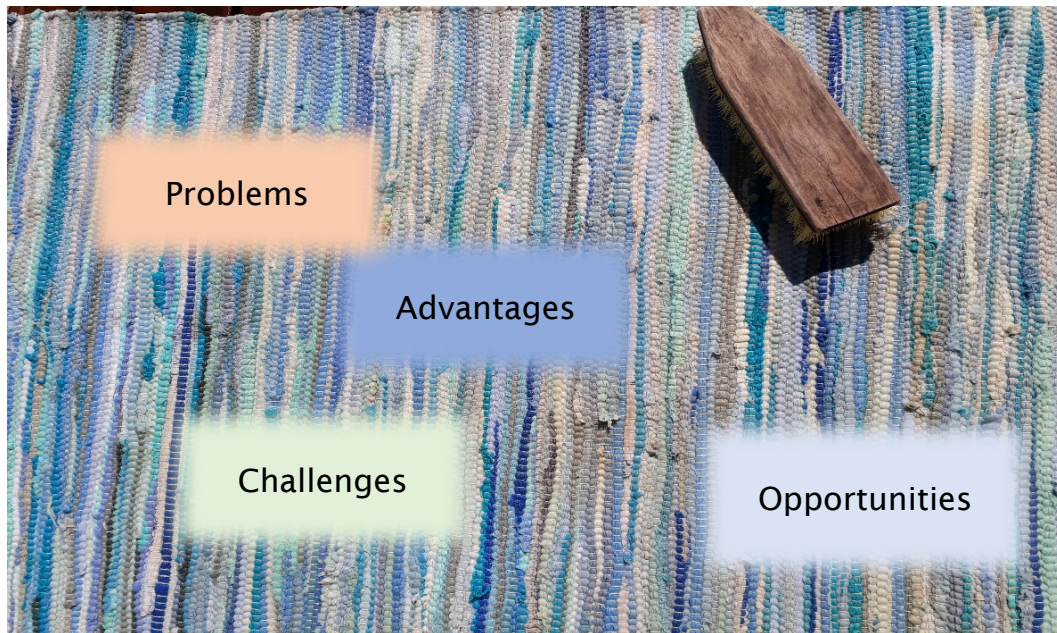
One of the purposes of this project is to learn from the Norwegian experience with Green Care so that other countries who do not have such extensive experience can create and/or promote their own Green Care sectors. Every nation has a unique institutional background, which will affect how Green Care is implemented within its structures. This will also affect expectations of what can be created and applied. For example, recent experience with participants from five European nations in an Erasmus+ project called Social Farming in Higher Education (SoFarEDU) suggests two key differences with the

Norwegian experience. The first is the long-term presence of religious charitable organisations as major actors in the provision of nature-based therapeutic and employment services in the Czech Republic, Austria, and other Central European nations, as well as more public, non-religious charities operating Care Farms in Germany. There is little or nothing of this type of operation to be substantially found in Norway. Secondly, in the Eastern European ‘transition’ countries, there is an expectation that the government Ministries of Health and/or Agriculture will provide a platform and funding for Green Care. Again, as seen here, this is not the way it has been organised in Norway. It is important to recognize that each nation approaches the creation of a Green Care sector with its own history, culture, and ways of structuring its economy. Lessons can be learned from the Norwegian experience, but will need to be adapted to local situations.

The Norwegian experience can thus not be applied generally to another situation without careful, critical analysis of its origins and a careful consideration of its advantages and disadvantages. To facilitate this, we will now undertake a PACO analysis of the current Norwegian situation.

PACO Analysis

A PACO analysis resembles a traditional SWOT analysis in that it considers positive, negative, and contextual issues, which affect the object of examination. It differs slightly in two ways: the categories are somewhat more productive of analysis; and it ends on a positive category, rather than a negative one. What follows below takes the form of a set of bullet points, which is individually, critically evaluated.



Problems

The complex system of provision of Green Care in Norway involves multiple institutional actors across multiple levels of government, from the National Parliament, to the counties, to the municipalities. Each has a separate set of responsibilities. The national government is responsible for making laws and regulations; the county governments are responsible for implementing the policies made by the national government; and the municipalities are responsible for actually implementing those policies on the ground. This can lead to a situation where collaboration between the levels faces the challenges of ‘silo-ization’, which is marked by a lack of actual communication and a deficiency of joined-up policy. In particular, research suggests that those at the foundational level—the municipality—struggle to achieve policy goals set by the higher levels if those goals are not accompanied by appropriate funding.

In the pursuit of increasing Quality Standards, the Norwegian Green Care sector has been subject to increasing amounts of bureaucratic procedures, which, in particular, must be undertaken before a service provider can engage in a contract with a service buyer. This places a burden upon new start-ups requiring significant upfront capital investment in facilities, and similarly in professional qualifications before the enterprise can begin to engage in negotiations for a contract for service provision. This can represent somewhat of a barrier to entry and could be considered one reason why the number of active Green Care farms has declined in the last decade.

The diverse and complex nature of the registration process means there are no single actors with responsibility for the whole sector, meaning that a practitioner requires certification from multiple actors. Although there are fairly clear lines between these multiple actors, it can present challenges to the service provider and create the risk of a lack of ‘joined-up thinking’.

The regional organisation of member organisations (Inn på tunet) means that there has not been a national voice for practitioners until only recently when a new member organisation (Inn på tunet Norge) has been founded, which purports to represent the concerns of the entire sector.

Although Inn på tunet is nationally recognized as the vehicle for Green Care and other nature-based services as a series of regional membership organizations, and not a national certifier and/or deliverer of services, it is still allowable for a provider to gain a contract to deliver services to a municipality without membership. As a result, it is hard to discover, at a national level, how much service is actually being delivered.

Moreover, given that responsibility for both Primary Care and Long-Term Care devolves to the municipalities, there is also an issue related to the size of many municipalities, and their consequent budgets. More than half of Norwegian municipalities have less than 5,000 inhabitants, and historically, a good number had only in the neighbourhood of 2,000 inhabitants (Haugan et al. 2006). A recent reform of municipalities resulted in the consolidation of some of the smallest ones, but there still is a problem with many municipalities having small populations and small resulting tax bases. This will have an obvious impact on the provision of Green Care, given the many competing demands on relatively small budgets. There is, however, a system of public transfers of funding to counteract the small tax base of the smaller municipalities.

The provision of Green Care services remains, for the most part, outside of the formal Health Trust system. The five major Health Trusts do not tend to deliver such services within their own institutions. Rather, such care—social care, occupational medicine, and front-line care—is delivered by the municipalities and funded from their budgets. This is a primary reason why Inn på tunet and Green Care is funded by the municipalities and not the Health Trusts. An attempt at reform (*Samhandlingsreforma*) was passed by the Parliament in 2016 but resulted in little change to the system. *Samhandlingsreforma* was intended to open up the system to innovation and new syntheses between the different parts of the health and wellbeing systems through a re-centring of health care and responsibility for well-being to the local level. Unfortunately, this was not the result, due to the challenges of silo-ization, as each actor sought to protect their own activities and budgets. This mirrors the distance between the formal Health sector and Green Care service providers based upon several possible factors, including the difficulties of providing ‘evidence-based medicine’ in those external fields of practice; existing pressures

on the budgets of the Health Trust system; and a general suspicion of medical practices external to the mainstream medical system.

Advantages

The Green Care sector in Norway has many advantages, based upon its relatively long history, the specific ways in which it has been implemented, the presence of both available small farms, and the decentralization of service delivery, and by a general cultural and policy orientation supporting of solutions to the local level.

The provision of Green Care Services on small farms in Norway extends back to before the turn of the century. It has been a subject of interest, study and policymaking on the part of the national government since the mid-2000s. State policy papers and regulatory rules have been published regularly since then. As a result, the sector has had time to mature, first as a farm multifunctionality economic strategy, bringing along the farming sector; then, from 2010, as a participant in the growth of nature-based services such as outdoor education, human-animal therapies, and quality of life concerns for the long-term, in-need population. From there, it has matured into a well-functioning *Inn på tunet* establishment, which is once again slowly growing. As such, Green Care services offered on farms are a well-established service, with high quality assurance standards that are well recognized as legitimate, across the agricultural sector, and the education, health, and well-being sectors.



Part of this 'maturity' means that there is a well-established path to certification which, though complex, does guarantee well-adapted farm spaces, which are safe and provide appropriate spaces for the clients. Plus, the quality assurance processes again offer well-established, though complex, paths to professional certification, meaning that the quality of services offered to clients will be high. These, then, describe a sector, which is not only well established, but one which is growing, if slowly. This offers opportunities and encouragement to those who might wish to enter the sector.

At the same time, the sector remains flexible and one of its strengths is a fluid movement of persons and expertise between professional spheres, such as teaching, physiotherapy, etc., and the Green Care sector. This is not uncommon and is facilitated by the individual nature of each contract for service. There is a growing acceptance within Norwegian society of the value of these services, which can only be of advantage to the sector. In addition, the perception of the value and benefits of outdoor activity continues to grow in Norway, and this also places Green Care services in an increasingly positive light.

A further advantage is the way in which innovation in the sector responds to challenges with constant new initiatives. The recent creation of Inn på turet Norge as a member organisation of the regional member organisations, to have a national voice for the sector, is just one such example of innovation. Until IPT Norge appeared, there was not a national voice for Green Care. Another example is the recent rise of 'brokers' who stand between service buyers and service providers, managing official paperwork, etc., in return for a percentage fee. Increasingly, these brokers also operate to connect providers with buyer demand. A final example of the many responses to change and growth in the sector is the growth in new activities, such as service for elders with dementia, which may be the fastest growing subsector of provision. As conditions change, the sector is well poised to respond to those changes with even more new initiatives, continuing the history of growth that has characterised the sector from the beginning.

Challenges

Many of the challenges, however, faced by the sector are a product of some of the same factors that ironically stand behind its success. The flexibility and local-centred focus accompanied by a standardized quality assurance process produced by the multiple actors is one such example. Economic concerns also apply here, as well as concerns around the extent of bureaucracy.

The cohort of early pioneers of Green Care services in the 2000s are nearing retirement, and barriers to entry may limit new uptake. This challenge, reported above, is likely responsible for the overall decline in numbers and remains like a boot on the brake of the

sector's growth. Identifying and understanding this problem is necessary to support future growth, which would be nurtured by a new cohort of practitioners.

The complex set of regulations and actors require providers to be expert in fields outside of their own areas of expertise, whether in the provision of social care, or of agriculture. Whomever runs a farm business must be an expert at bureaucratic reporting. This presents a challenge to small family-run businesses, which often require outside help, something which can have an impact on total net receipts.

The lack of long-term contracts being offered to providers by service buyers can put off some potential entries, plus it creates stress for existing service providers. The sector itself is regionally organised and has struggled to find a national voice. Regional diversity, whilst good at the local level, has limited the ability of this 'community of actors' to act collectively at a national level. For those for whom the service is aimed, regional diversity results in access to Green Care services being somewhat of a post-code lottery, according to, for example, the size of a municipality's budget and what it decides are its priorities. As a result, provision is geographically uneven.

Overlapping jurisdictions ('silo-ization'), particularly around separate social care and health sectors, creates competition between sectors and can interfere with provision to both an individual service user, and at the level of service providers. Another factor that affects this is the challenge of limited budgets and an unwillingness, therefore, to spend outside of the municipality's 'silo'.

Opportunities

Despite these challenges, the sector does enjoy fruitful opportunities. These include both growth in recognition and demand, and a growth in quality and diversity of services being delivered. This sector is well established, and its history and regulatory structure forms a strong foundation for the growth of opportunities within it as it moves forward. Overall, demand for nature-based services is increasing, both within the education sector and the health and welfare sectors. This mirrors a greater recognition of the value of nature-based services within the wider population. With ongoing increases in provision, it is likely that further growth will counter the post-code lottery status of service provision across the country. This organic growth will allow for regional variation according to situation and demand, resulting in more appropriate services, meeting more local demands.

There are increasing opportunities to learn how to be a Green Care Farmer across a range of sources. Internally, the Inn på tunet organisations deliver multiple short-course support for their members, either in operating an Inn på tunet business, or in specific fields, such as recent examples, in elder care or dementia care. Within the sector of higher education,

courses and programmes are beginning which help potential practitioners gain expertise in fields such as equine- or animal-assisted therapy services. As teaching is developed in supplementary health care fields, such as physiotherapy, the role of Green Care services is increasingly studied and promoted. As a result, there is a core foundation of knowledge and practice of, and within, Green Care services, which is a key part of the strength of the sector and will be a key base for innovation in provision.

The sector is well supported by national campaigns to promote it. The first *Inn på tunet løftet 1* delivered in 2012 promoted the development of quality standards whilst promoting the service itself. A new policy, *Inn på tunet løftet 2*, delivered a new tranche of development funds given to county governments to stimulate new provisions, especially in terms of opening up new sub-sectors, such as services for elders and those with dementia. This clearly provides an opportunity to develop and grow the sector.

In response to the growth of regulation and reporting, as well as to the complexity of the field, the growth of 'brokers' expertly handling paperwork and accounts allows providers to concentrate on their expertise. Most interviewees reported this to be a valuable service, worth paying for, and the 'national' body *Inn på tunet Norge* is reportedly considering if such a service can be offered widely. The creation and growth of *Inn på tunet Norge* itself as a national body representing all regions of *Inn på tunet* will expose the sector and its issues to greater national attention. It has an ambition to be a national voice for the sector, as well as a place for members and their regional associations to share expertise.

The sector is supported by increasing research, which is beginning to deliver better evidence-based results in the service disciplines, such as human-animal therapies. There is also more research into the practicalities of operating a Green Care farm, including analyses of how to improve the working together of providers and buyers, and how to use the sector for rural economic development and farm multifunctionality. This will hopefully generate improvements and speed up the flow from bottle necks, making the field more attractive both to participate in and to prescribe.

Outside of the sector, Norwegian health policies (i.e., 'Samhandlingsreforma 2016') are now focused upon devolving more responsibility to local levels, and especially placing new emphasis on 'well-being' rather than illness, creating new potential opportunities for nature-based services. New fields of care are emerging from research, such as dementia care on farms, and the role of nature-based solutions for successful integration, creating new opportunities for providers, and ways in which the variety of provision can grow.

Summary of PACO analysis

In summary, it can be confidently said that the Norwegian Green Care sector has a strong history of development and a sense of identity from which to build steady, strong growth in the future. Although the system is complex, which renders it difficult both to understand the system as a whole, and which creates some barriers to entry, especially for new start-ups, it also optimises the diversity of service provision, especially in response to both local needs and to local providers.

New initiatives, i.e., Inn på tunet Norge SA, Inn på tunet løftet 2, increased activity in Equine Assisted Activities and Therapy and the rise of experts to help providers with paperwork and regulations, should ease entry to the field and offer more provision to service users. A strong presence in education, social care, and health, and wellbeing means that the sector has strong foundations. Continued passion not only keeps providers active but also keeps them innovating new services. At the same time, national attention means that, in general, nature-based services are well thought of, and this positive reputation will support further development of the field.

The sector is in need of further research in two aspects. The first is, as always, the continuing need for more evidence-based research on the actual therapeutic benefits enjoyed by service users. This would increase acceptance within the mainstream health sector and could be used as a rationale to promote increased uptake and service provision. The second is policy research, which explores the challenges with a mind to propose remedies for the more negative consequences of the complex certification and quality assurance systems that frame the sector. This might help address another issue, which is the uneven provision of Green Care services across the country. With this, the Green Care services sector in Norway will be able to grow, and more service users will be able to benefit from those services.



2.4.8 Conclusions

This Report was commissioned to provide some insight into the way Green Care on farms has been provided in Norway to support and inspire the further establishment of such services in other countries. The interested countries have provision of these type of services but not necessarily a complete national system. Furthermore, there are great variations in the ways in which such services are currently, and can be in the future, organised and delivered. Having worked internationally within the movement to develop Green Care services, it can be said that the Norwegian system is generally held in high regard due to its relatively well-established status. It is a system which is, however, complex and difficult to comprehend upon casual examination. The emphasis on local control and local provision is, nevertheless, one of its greatest strengths. The relationship between the municipalities acting on behalf of service users through direct contracts with service providers, assures that local provision of Green Care services directly addresses local people and local needs. Further, it offers municipalities a means of supporting the large stock of small farms within their jurisdiction with new multifunctional, agriculture-based activities.

At the same time, such a system of diverse and local control raises the issue of universal quality assurance, and the combination of national regulation under Matmerk, working

with the professional certification of professional practitioners has offered a means to assure high-quality service provision at an extremely local level.

It is a system that has evolved from early attempts to support Green Care as farm multifunctionality, through the imposition of a national system of quality controls, and the support and surveillance of relevant civil society organisations, such as the farming unions, to produce a strong sector with a firm foundation for further growth. The issues it has faced are similar to those faced by all who attempt to promote Green Care services as both valuable alternatives to traditional care, and as new ways to maintain small farms across the land.

The benefits of providing social care, education, and therapeutic activities on farms would appear to be increasingly well established and clear. Moreover, the benefits of providing alternative income sources from such activities for active small farms is also clearly established. The challenges, however, which arise from producing a system that delivers both outcomes can be witnessed in the many steps taken at the national, regional, and local level in Norway. Such challenges will be faced by all who wish to further develop a system of delivery of Green Care services within their society and the Norwegian example is one of a variety of ways in which this can be done. If, in the development of national Green Care services systems, the key aims—which combine the provision of highest quality services to service users with the development of effective farm multifunctionality—are kept at the heart of the project, ultimately it will mean, as it does in Norway, that those who need and benefit from such services (the service users) will remain at the heart of the endeavour. In such a way, the benefits of a competent Green Care service sector will be obtained both by the farmers who need such opportunities, and to the most important parts of the system: those whose quality of life will be improved by accessing Green Care services.



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3 CONCLUSIONS AND RECOMMENDATIONS

The Finnish and Swedish representatives of the social and health care sector, associations, as well as entrepreneurs considered that nature-based activities have plenty of potential in the project area, including wide competence concerning nature-based methods, as well as high-quality natural environments, farms, and other environments suitable for increasing and developing nature-based activities. Altogether, there was a positive attitude on the introduction of new nature-based service models and these kind of activities were considered to have many advantages and possibilities amongst, e.g., supportive services for clients with disabilities, in mental rehabilitation, as well as children and adolescents and families with special needs. Despite the increasing need for senior services, there were not so many entrepreneurs providing services to senior citizens.

There are some pioneer entrepreneurs in all case regions in Finland and Sweden, but the “critical mass” is still missing in most of the case regions. There is a need for more courage and less preconceptions among the buyers of the services regarding experiments of new service forms. Research within the area is seen as important to increase the businesses legitimacy. In Sweden, there is no uniform concept for the nature-based services, which creates confusion in marketing but also for knowledge of what the offer entails, for example, for buyers and customers. The Finnish Green Care concept and national association for coordination, quality management work, and Green Care education or courses could be benchmarked to Sweden.

On the other hand, in Sweden, there is significant, high-quality research about nature-based rehabilitation and its effects, mainly from the south of Sweden, which could be the foundation for implementation of the services in the north of Sweden and in Finland. There are also some regional examples in Finland, which could be recommended for benchmarking, e.g., the Green Care service voucher in Soite, Central Ostrobothnia, which allows clients with disabilities to choose the Green Care farming work activities of their preference. Clients’ accessibility to services plays a major role in rural areas and transportations could also be a suitable issue for joint development.

Despite several verified advantages and active development of the branch, the use of nature-based services is still quite marginal in Northern Finland. The development of nature-based service models is in the earlier stage in Northern Sweden compared to Finland, but some good regional examples exist in both countries. In both countries, the attitudes on introduction of new, nature-based service models are generally positive and these kind of activities are considered to have many advantages and possibilities amongst, e.g., supportive services for clients with disabilities, in mental rehabilitation, services for children, adolescents and families with special needs as well as in elderly care. In addition, positive cost effects have been mentioned, e.g., via health promoting and preventive

effects. However, one of the crucial barriers for using the nature-based services is the lack of financial resources for purchased services in social, health care and pedagogical sectors. Compared to Norway, there is still a significant need both in Finland and in Sweden for informing the potential client organisations about local services and different cooperation models. Accessing the current service system in the social and health care sector is found to be difficult for entrepreneurs, which remains as a challenge. This is true also in Norway with accepting private businesses into the Norwegian health care system. Despite the intensive development efforts, there are still difficulties in setting priorities with and within the social and health care sector to include nature-based services into the current service structures. These challenges can be overcome by improving dialogue across all actors in the system.

Good examples exist and could be benchmarked, such as in the United Kingdom, where the initiative of launching a national program to start cooperation between nature-based service producers and the local authorities via local pilot projects should be also used in Northern countries (gov.uk/government/news/gove-kicks-off-year-of-green-action). In this Nordic project area, Norway has been the most active by addressing national financing schemas already in place for *Inn på tunet* activities. Local piloting is crucially important as the solution for meaningful action can often be locally customized to achieve the most efficient tools of acting. Finding of new sources for financing these activities should be also actively studied, as it is done, e.g., by Thrive Outdoor in Scotland (inspiringscotland.org.uk).

There are also some other shared challenges to be solved in Finland, Sweden, and Norway. Small, private service providers face complicated challenges in getting established, when they must prove their competence with certain qualifications, make additional investments for the premises and equipment, and manage to make economically sustainable longer-term contracts with service buyers. Additionally, there is a common need for more appropriate research, documentation, and measures of success, effects, and effectiveness in different types of nature-based activities. There is also an apparent need for developing client-specific knowledge and methodology that focuses on the specific features of each occupational profession. Such a specific knowledge needs to be further developed and transmitted for the students who are currently acquiring profession in the social and health care sectors.

Finally, there is also a shared challenge in clarifying and documenting the public benefits of nature-based activities for promoting health and well-being in different levels of society, to increase the common acceptance and critical mass among service users and providers. Nature-based services and entrepreneurship of Finland, Sweden, and Norway have developed at different times and in different ways, but still have much in common and can

benefit significantly from cross-border cooperation. The following tables are summarily assembled as the SWOT and PACO analysis of these three Nordic countries.

Table 3. Summary of the characteristics of nature-based activities in Finland, Sweden, and Norway: problems, threats, and challenges.

Common problems, threats, and challenges in Finland, Sweden and Norway
<ul style="list-style-type: none"> • The critical mass is missing or is small: the number of service providers and service users is still quite marginal • Lack of dialogue and functional, cooperating channels between sectors • Lack of coherence between different areas and multiple actors concerning service structures and cooperation models • Complex regulations and other difficulties with accepting small, private businesses in public service systems (e.g., operating licenses) • Organisational obstacles decrease the possibility for development and expansion of nature-based services • Challenges for the entrepreneurs in getting contracts with buyers of the services, as well as difficulties to reach economically-sustainable, long-term contracts • Shortage of financial resources among client organisations or difficulties to reallocate them to nature-based service models • Shortage of appropriate research, documentation, and measures clarifying public benefit and effects of nature-based services in different levels



Table 4. Summary of the characteristics of nature-based activities in Finland, Sweden, and Norway: strengths, advantages, and opportunities.

Common strengths, advantages, and opportunities in Finland, Sweden and Norway
<ul style="list-style-type: none"> • The time for developing nature-based services is right: megatrends, climate change discourse, a global pandemic, as well as nature and health issues in the public and on social media has brought general acceptance for the topic • Good examples exist and both evidence and experience-based knowledge have increased within the last 10–15 years • Among social, health care, and pedagogic sectors, general attitude toward nature-based methods is positive • Versatile competence, high knowledge, and genuine interest exists among entrepreneurs and other nature-based service providers, and is verified with certificates (e.g., IPT, Green Care, Grön arena and NUR) • Nature-based services have managed to increase rural employment through farm/stable/garden multifunctionality • Different actors share a belief that nature-based services will increase in the near future and can be a complement to traditional treatment, social services, and increase health-promoting activities • Many social and health care actors aim to provide more preventive services that can also open new possibilities to nature-based entrepreneurs (new service models and new client groups) • The variation of current and potential client groups offer nature-based entrepreneurs opportunities to specialize in certain client groups • New fields of care also emerge from research





3.1 Recommendations to be implemented in the project in Finland and in Sweden

3.1.1 Knowledge, professional skills, and qualities

The project should increase its general offering of informing the public about nature-based activity forms and methods and their effects, via workshops, webinars, social media, and websites. It is important to strengthen and diversify enterprise and service-specific marketing communication in the project area, e.g., via the project's and the service providers' websites, Green Care Finland, Grön arena, local newspapers, and on social media. There is a need for support in the quality management among different actors, that should be responded via workshops and facilitated, actor tailored service design in the project. Furthermore, there is need for support in business management skills of small enterprises that should also be conducted via workshops and webinars. Evidencing the impacts of nature-based activities should be conducted by informing and utilising valid evaluation tools during the project (analysing and evaluation methods). Along the quantitative indicators, broader kinds of experiences of the participating actors (professionals, customers, and his or her family) can offer valuable information.

From the viewpoint of strengthening the acceptability of nature-based services as a considerable service form, it is important to make systematic evaluations regarding cost-effectiveness and benefits of nature-based services, including comparison of preventive and repairing services. In this project, the aim is to find representative and already functioning service models as cases for the SROI analysis (Social Return on Investment). The scope of these evaluations should not only be limited with prevalence of diseases, but include also the broader elements for maintaining health and being able to tackle with the various health-risks and challenges of living life.

3.1.2 Operational environment and institutional structures

For increasing provision and the use of nature-based services, one of the key tasks of the project is to enhance the implementation of these services through making it as easy as possible to get familiar with them, for example, via pilotings, excursions, and workshops. The project should strengthen communication, especially towards smaller farms and other companies (e.g., through producer associations) and strengthen the dialogue between entrepreneurs and social, health care, and pedagogical organisations via workshops, meetings, mentoring, and personal contacts. By spreading the information of the service models available in the region, the project should support recognition of which are the service models that are more reasonable, easier, or cheaper to buy than produce oneself by the social, health care, and pedagogical sectors. Farm or animal-assisted services or

services in the water areas, for instance, often require special equipment or premises like farms and stables, canoes and safety equipment, as well as educated professionals and animals. This means it is not always worth or even possible to produce the nature-based service by oneself. It is important to benchmark real-life examples showing that nature-based services has helped their clients and enabled them to maintain the farm as viable, for instance.

The project should also investigate and pay attention to requirements of authorities regarding private social and health care service production when developing the nature-based service concepts in the project area. Furthermore, it is important to provide support for establishing contracts and different kinds of cooperation models by generally informing and arranging a meeting with the authorities. The SROI analysis is to be implemented in this project, and should provide the results of the evaluation work to be utilized during the project implementation and to support the decision-making processes with respect to choosing and buying the services.

3.1.3 Actors, networks, and activities

The project should strengthen the opportunities of cooperation by supporting the regional networks of different actors (service providers; social, health care and pedagogical sectors) by regional meetings and easily-accessible digital platforms of networks. The project should also start and support benchmarking groups and other discussion forums including international examples, digitally via social media, and face-to-face during the workshops. In this project, it is essential to find the entrepreneurs and the actors in social, health care, and pedagogical sectors with a real willingness to develop service models, which has demand and also preconditions after the project period. The aim is to bring innovative actors together to conduct high-class experiments via piloting and, as a result of that, achieve confidence-based partnerships and socially, ecologically and economically sustainable cooperation at all levels.

The time for developing nature-based services is favourable with current megatrends, climate change discourse, a global pandemic, as well as nature and health issues in the public and on social media, which has brought general acceptance and positive reputation for the topic in general. Through cross-border and cross-sector learning and collaboration, it is possible to provide new co-created services, products, and methods, as well as to develop joint Nordic quality guidelines or service brands to enhance both well-being and business competitiveness, and to inspire the sustainable development of nature-based services for promoting health and well-being.

Development ideas for the future...

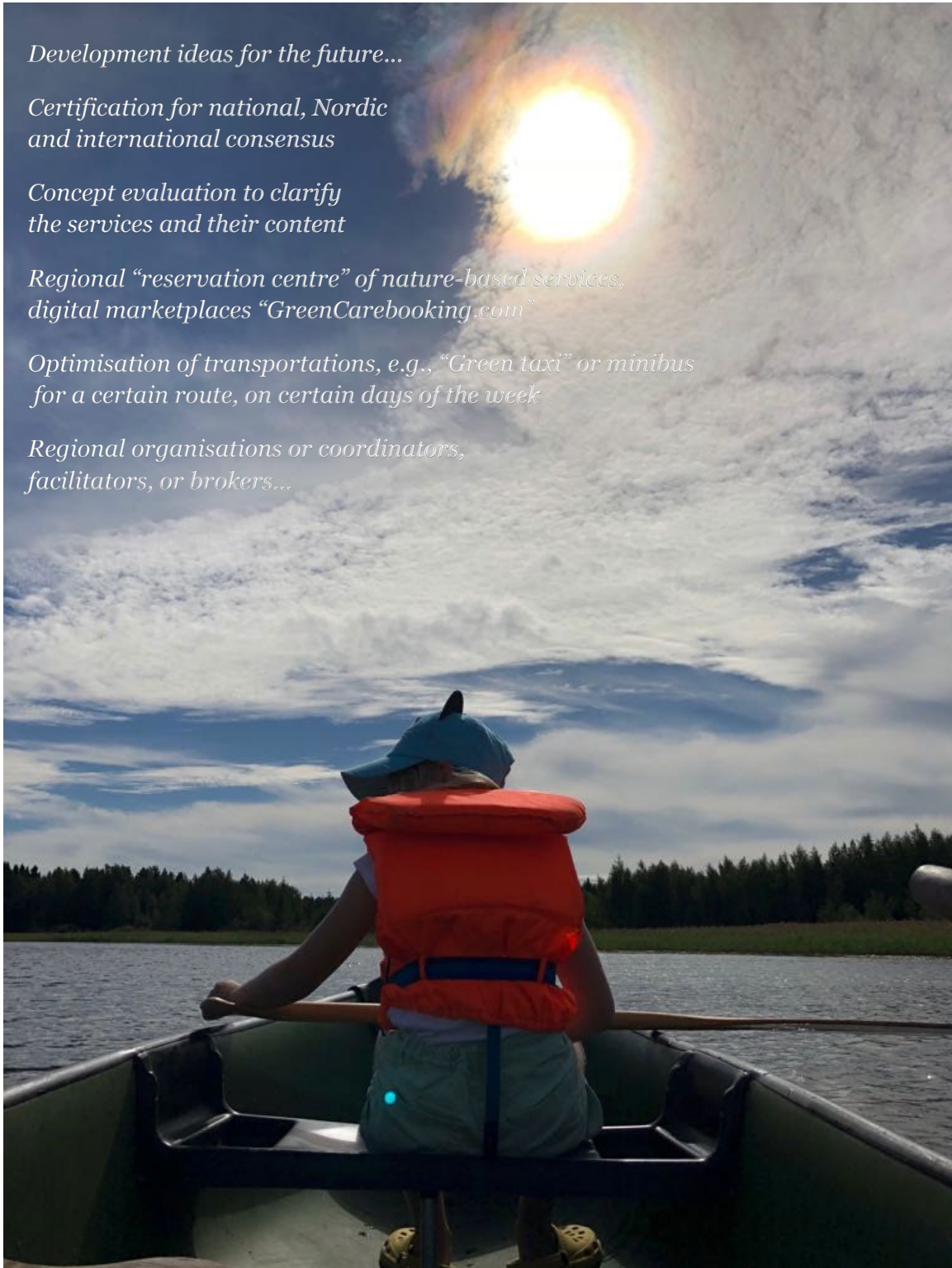
*Certification for national, Nordic
and international consensus*

*Concept evaluation to clarify
the services and their content*

*Regional “reservation centre” of nature-based services,
digital marketplaces “GreenCarebooking.com”*

*Optimisation of transportations, e.g., “Green taxi” or minibus
for a certain route, on certain days of the week*

*Regional organisations or coordinators,
facilitators, or brokers...*



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Päivi Juuso, PhD, RN, Associate Professor in Nursing, is working at the Division of Nursing and Medical Technology, at the Department of Health Science, Luleå University of Technology (LTU). She is a project leader for the Nordic NaBS project at LTU, and has in her research the main focus of health-promotion and illness prevention for people of different ages. In different research groups, she also works with new innovations to promote health for people in the Arctic regions. She has extensive teaching and education experience, in the development of education and programs, as well as research cooperation, nationally and internationally.



Anja Yli-Viikari, research scientist, Dr (Economy in Agriculture and Forestry) has been working within Green Care research for more than 13 years, and was among the key national actors to establish this concept in Finland. She also has been long involved with Green Care Finland, which is a national association to promote these

activities alongside the networking and cooperation with the multiple actors of the field.



Rhys Evans, Dr, Associate Professor of Rural Development, Høgskulen for grøn utvikling (University College of Green Development), Bryne, Norway. Dr Evans is a Human Geographer by training and has worked in the field of Rural and Community Development in Scotland and Norway for more than twenty years. One of his research specialisms is human-horse relations and it is through his research on Equine Assisted Activities and Therapy (EAAT) that he has become involved in supporting Green Care/Social Farming. He has researched and taught Green Care as

a type of farm multifunctionality for a decade. Most recently he has completed a four-year project called Social Farming in Higher Education, creating a European Bachelor curriculum for Social Farming with partners from four Central European countries (www.sofaredu.eu); and is currently working on projects with Slovak and Czech Social Farming networks to promote the further development of the sector in those countries. He is currently the President of the European Association of Animal Sciences Horse Commission and Chair of its Socio-economic Working Group.