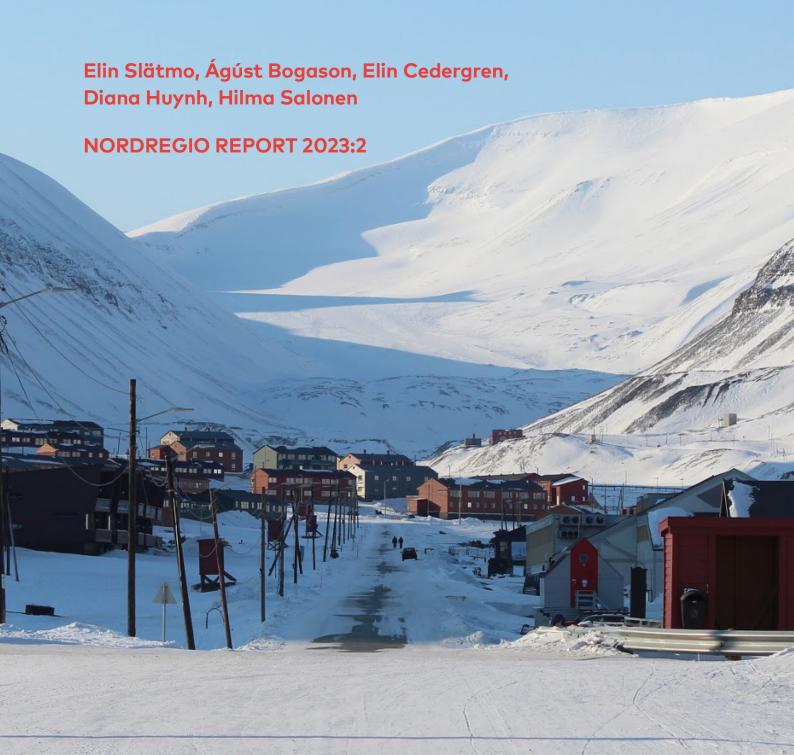
Service provision and access to services in Nordic rural areas



Nordregio

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Preface

This report is a part of the project "– secure, trusted and for all ages". The project is part of an assignment Nordregio has been commissioned to do by the Nordic Thematic Group for Green and Inclusive Rural Development, which is a part of the Nordic Co-operation Programme for Regional Development and Planning. The content of the report is based on fieldwork carried out in 2022 in eight case-study areas, one in each of the Nordic countries and autonomous territories. For further information about the Nordic Thematic Group for Green and Inclusive Rural Development, please see: nordregioprojects.org/rural/

Summary

Service provision is one of the key factors that make rural areas attractive and viable. Recent and ongoing developments, such as migration flows, digitalisation and the effects of climate change influence service accessibility and perceptions of which services are essential for everyday rural lives. It is therefore relevant to investigate service provision and access to services from different perspectives.

This report presents results based on in-depth field work in eight case studies of rural areas identified as having high access to services or as good examples in their national and regional context: Lolland, Suðuroy, Kinnula, Avannaata, Múlaþing, Herøy, Vimmerby and Geta. The aim of the field work has been to investigate service provision and validate the results of a research and policy review focusing on Nordic rural areas (Slätmo et al. 2022). The investigations presented in this report focus on the following questions:

- Which services are considered essential, and how does that vary in rural areas across the Nordics?
- How are services provided, what roles and responsibilities are involved in their provision?
- Which challenges are encountered, and what solutions are being developed to solve challenges associated with access to essential services in Nordic rural areas?

In answering these questions based on the eight case studies, the report aims to create knowledge and inspire actors in and around the Nordic rural areas. The answers can be read as a source of inspiration in their own right. The case study descriptions also enable a cross-Nordic comparison, aimed at identifying common patterns and unique Nordic innovations regarding rural service provisions, from which others can learn. It is therefore possible to gain an overview of the report solely from the cross-Nordic comparison.

Which services are essential, and how does that vary across the Nordics?

The 56 interviews in eight Nordic case study areas have, in general, confirmed the essential rural services identified in Slätmo et al. (2022) as essential. These are: healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence. However, the fieldwork also identifies nuances and variations in each of these categories. As such, the study confirms the importance of adapting services to places, so that the inhabitants of Nordic rural areas can thrive and feel safe and secure. The fieldwork also identified additional services as essential, while revealing that people's perceptions of what constitutes "high access to services" can vary considerably from one location to the next. For instance, commercial services such as local shops and fuel delivery, but also cultural and sports activities, can be viewed as an essential service, as shown in the examples of Lolland, Suðuroy, Kinnula, Herøy, Múlaþing and Geta. These cultural and sport activities are considered essential for improving health, encouraging young people to stay in rural areas, and increasing the municipality's attractiveness.

How are services provided, and how are roles and responsibilities allocated with regard to these services?

Public, private and civil society actors are responsible for ensuring rural services. There are also various collaborations and agreements between these actors that enable service provision. Although the actors interviewed emphasised the importance of the independence of the municipalities and regions for maintaining public services, there are also cooperations and collaborations with other public actors, and with private and civil-society actors, both formal and informal. It can be noted that while collaborative service provision is considered a good idea for resource efficiency, and as an alternative to merging municipalities, there are also risks involved, as it becomes more difficult to directly assign political responsibility for specific actions.

What are the challenges associated with access to essential services in Nordic rural areas, and what solutions are being developed to solve them?

Comparing the results regarding challenges in rural service provision in the case studies, it is evident that several are common across the Nordics. Eight challenges have been identified as common in two or more cases. The most important are labour shortages and attracting the right competencies to provide the rural services; mobilising financial resources to cover the service needs; and physical and geographical characteristics, such as climate and long distances, which affect service provision. In Kinnula, Suðuroy, Múlaþing and Herøy, labour shortages and attracting the right competencies are especially troublesome when it comes to finding skilled workers, while in Avannaata, the challenge concerns both skilled labour and untrained workers. In Åland and Vimmerby, labour shortages mostly affect schools and healthcare. Labour shortages in the areas of healthcare, social care, childcare and schools are a cause of stress, security risks, dissatisfaction, limiting the potential to adapt services to the needs of individuals, and poor morale. The exception is Lolland, where the respondents did mention labour shortages, but rather highlighted the relatively large share of inactive inhabitants - i.e. either unemployed, not in the education system or on early retirement benefits.

The opportunities and strategies identified in the case study areas can act as inspiration for others. The results show that at least nine opportunities and strategies for rural service provision are shared across the Nordics. The most important are digitalisation of services, increased cooperation between neighbouring municipalities and settlements as an alternative to mergers, and increased cooperation between public, private and civil society actors. The digitalisation of services is reported to be both a strategy and an opportunity for rural service provision, as it enables increased remote work from rural locations. Some initiatives are already in place, such as digital components for health services in Avannaata and Múlaþing. In Suðuroy, a distance learning centre enables the provision of higher education, and co-working spaces and residences for digital nomads are provided. Further potential of digitalisation is also mentioned in the cases of Lolland, Herøy, Vimmerby and Geta. Several respondents, especially those in Kinnula, focus also on the fact that the development of digitalisation represents both an opportunity and a challenge for rural areas. When more services can be performed via the internet, the service is made available to many more people in rural areas. However, people who cannot access the internet risk being excluded. It is therefore considered important to also maintain in-person services.

Sammanfattning

Tillhandahållande av och tillgänglighet till samhällsservice i nordiska landsbygder

Förord

Denna rapport är en del av projektet "Tillhandahållande av och tillgänglighet till samhällsservice i nordiska landsbygder-- tryggt, pålitligt och för alla åldrar". Projektet är en del av ett uppdrag som Nordregio utför i den nordiska temagruppen för grön och inkluderande landsbygdsutveckling, inom det nordiska samarbetsprogrammet för regional utveckling och planering. Innehållet i rapporten baseras på fältarbete genomfört i åtta fallstudieområden under 2022, ett i varje nordiskt land och självstyrande territorium. För ytterligare information om den nordiska temagruppen för grön och inkluderande landsbygdsutveckling, se: nordregioprojects.org/rural/

Sammanfattning

Tillgänglighet till samhällsservices är en av nyckelfaktorerna som gör landsbygdsområden attraktiva och livskraftiga. Pågående samhällsutvecklingsriktningar såsom migration, digitalisering och effekter av klimatförändringar påverkar tillgängligheten till services. Dessa påverkar även uppfattningarna om vad som anses vara grundläggande för vardagen på landsbygderna. Därför är det relevant att, ur olika perspektiv, undersöka tillhandahållandet av services och i sin tur tillgängligheten till dessa.

Denna rapport presenterar resultatet av ett fördjupat fältarbete i åtta fallstudier på landsbygder som identifierats ha hög tillgång till services eller som skulle kunna utgöra goda exempel i deras nationella och regionala sammanhang: Lolland, Suðuroy, Kinnula, Avannaata, Múlaþing, Herøy, Vimmerby, Geta. Syftet med fältarbetet har varit att undersöka försörjningen av services och validera resultaten från en forsknings- och policyöversikt med fokus på nordiska landsbygder (Slätmo et al. 2022). Den studie som presenteras i denna rapport fokuserar på frågorna:

- Vilka tjänster är viktiga och hur varierar det på landsbygden i Norden?
- Hur tillhandahålls tjänster, vilka roller och ansvarsområden för att tillhandahålla tjänster?
- Vilka utmaningar stöter man på och vilka lösningar utvecklas för att tillhandahålla tillgång till väsentliga tjänster på nordiska landsbygdsområden?

För att inspirera och inhämta kunskap från aktörer runt om på nordiska landsbygder presenteras svaren på dessa frågor utifrån de åtta fallen. Dessa kan läsas som inspiration på egen hand. Fallstudiebeskrivningarna gör det också möjligt att ge en tvärnordisk jämförelse. Denna gränsöverskridande jämförelse syftar till att identifiera gemensamma mönster och unika nordiska innovationer när det gäller services på landsbygden som andra kan lära av. Således är det möjligt att enbart fokusera på denna tvärnordiska jämförelse när man läser rapporten.

Vilka services är viktiga och hur varierar det mellan Norden?

De 56 intervjuerna i åtta nordiska fallstudieområden har generellt sett bekräftat de landsbygdsservices som identifierats i Slätmo et al. (2022) som grundläggande. Dessa inkluderar; vård och omsorg; utbildning och barnomsorg; fysisk infrastruktur; klimatanpassning och hantering av klimatpåverkan, digital infrastruktur; och räddningstjänst och civilförsvar. Fältarbetet som gjorts synliggör dock också nyanser och variationer för var och en av dessa servicekategorier. Som sådan bekräftar studien vikten av platsanpassning av services för att invånare på landsbygden i Norden ska trivas och känna sig säkra och trygga. Fältarbetet identifierade också ytterligare services som väsentliga samtidigt som det avslöjade att människors uppfattningar om vad som utgör "hög tillgång till services" kan variera ganska mycket från en plats till en annan. Till exempel kan kommersiella services som livsmedelsbutiker och tankstationer, men även kultur- och sportaktiviteter ses som viktig tjänster, som exemplen på Lolland, Suðuroy, Kinnula, Herøy, Múlaþing och Geta. Dessa kultur- och idrottsaktiviteter uppges öka invånarnas hälsa, underlätta för ungdomar att vistas på landsbygden och öka kommunens attraktionskraft.

Hur tillhandahålls services och vilka är rollerna och ansvarsområdena för att tillhandahålla services?

Offentliga, privata och civilsamhällets aktörer tillhandahåller landsbygdsservices. Det finns också olika former av samarbeten och överenskommelser mellan dessa aktörer som möjliggör serviceutbudet. Även om de intervjuade aktörerna betonade vikten av kommunernas och regionernas självständighet som ett viktigt verktyg för att upprätthålla offentlig service, finns det även samarbeten och samverkan med andra offentliga aktörer, med privata och civila samhällets aktörer på plats, både under formella och informella former. Det kan noteras att samtidigt som samverkande serviceförsörjning anses vara en god idé för resurseffektivitet och som ett alternativ till kommunsammanslagningar finns det också risker då det gör det svårare att styra det politiska ansvaret för de åtgärder som pågår.

Vilka utmaningar stöter man på och vilka lösningar utvecklas för att tillhandahålla grundläggande services på nordiska landsbygdsområden?

Om man jämför resultaten kring utmaningarna med tillhandahållande av landsbygdsservices i fallstudierna är det uppenbart att flera är vanliga i Norden. Åtta utmaningar har identifierats som vanliga i två eller flera av de studerade fallen. De viktigaste är brist på arbetskraft och att attrahera rätt kompetens för att tillhandahålla landsbygdsservices, att mobilisera ekonomiska resurser för att täcka servicebehoven och att fysiska förutsättningar som klimat och långa avstånd påverkar serviceutbudet. Arbetskraftsbrist och att attrahera rätt kompetens beskrivs i Kinnula, Suðuroy, Múlaþing och Herøy vara särskilt besvärande när det gäller yrkesarbetare med rätt kompetens, medan utmaningen i Avannaata gäller både yrkeskunnig arbetskraft och outbildad arbetskraft. På Åland och Vimmerby drabbar det mest skolan och vården. Brist på arbetskraft inom vård och omsorg, barnomsorg och skola orsakar stress, säkerhetsrisker, missnöje, minimala möjligheter att anpassa tjänsterna till individers behov och förlorad arbetsglädje. Undantaget är Lolland, där respondenterna inte talade om arbetskraft utan snarare lyfte fram den

relativt stora andelen av invånarna som är inaktiva, antingen arbetslösa, inte i utbildningssystemet eller på förtidspension.

Möjligheter och strategier som identifieras inom fallstudieområdena kan fungera som inspiration för andra. Resultaten från fallstudierna visar att minst nio möjligheter och strategier för tillhandahållande av landsbygdstjänster delas i ett nordiskt perspektiv. De viktigaste är digitalisering av tjänster, ökat samarbete mellan grannkommuner och tätorter som alternativ till sammanslagningar, samt ökat samarbete mellan offentliga, privata och civila samhällets aktörer. Digitalisering av tjänster rapporteras vara en strategi och en möjlighet för tillhandahållande av landsbygdstjänster eftersom det möjliggör ökat distansarbete från landsbygdsområden. Vissa initiativ är på plats, till exempel digitala komponenter i hälso- och sjukvården i Avannaata och Múlaþing. I Suðuroy möjliggör distansutbildningscentret tillhandahållande av högre utbildning, och samarbetsutrymme och bostad för så kallade digitala nomader tillhandahålls. Ytterligare digitaliseringspotential nämns också i fallen Lolland, Herøy, Vimmerby och Geta. Flera av respondenterna, särskilt de i Kinnula, fokuserar också på att den digitala utvecklingen både är en möjlighet och en utmaning för landsbygden. När fler services kan utföras via Internet görs dessa tillgängliga för många människor på landsbygden. Men personer som inte kan använda internet riskerar att uteslutas eller utelämnas. Det anses därför viktigt att i viss mån även behålla fysiska services.



The Farø Bridges are two road bridges that connect the islands of Falster and Zealand in Denmark by way of the small island of Farø Photo: iStock

1. Introduction

Service provision is one of the key factors in helping rural areas to thrive and make them more attractive and viable. It is therefore important that services are available for rural and regional development. Access to services in Nordic rural areas facilitates support for everyday activities, and also ensures that help can be provided in the event of an emergency. What is considered a high level of access to services depends on a person's experiences, values and expectations. Which services are considered essential also varies over time, and can differ depending on geographic location.

Digitalisation, the COVID-19 pandemic and the effects of climate change, in the form of landslides, power cuts and floodings, are examples of large, incremental developments that affect rural lives. Simultaneously, demographics are changing in many rural communities across the Nordics – in particular, the proportions of young people and the working population in relation to older adults are shrinking. These demographic changes have an effect on the tax base, as the available resources to spend on public services decrease when there are fewer people of working age who pay income tax.

Together, these and other societal developments indicate a need to plan for different scenarios for service provision in rural areas. It is therefore considered relevant to investigate the following questions:

- 1. Which services are considered essential, and how does that vary in rural places across the Nordics?
- 2. How are services provided, and how are roles and responsibilities allocated with regard to these services?
- 3. What are the challenges associated with providing access to essential services in Nordic rural areas, and what solutions are being developed to solve them?

After this introduction, a background section is presented, outlining the methods and approaches used to generate the results presented in this report. This is followed by in-depth descriptions of services in eight Nordic rural areas. A cross-Nordic comparison is then presented in order to identify common patterns and unique innovations from which others can learn. The report ends with some concluding remarks.



Husavik village near the coast in Sandoy island, Faroe Islands

Photo: iStock

2. Background

Based on a structured literature review and a workshop involving policy experts, this project drew up a list of essential rural services. This resulted in a list of service categories that are considered essential in rural areas, both now and in the future. The list was initially presented in the report Slätmo et al. (2022), and is repeated here, as it serves as background knowledge for this study (table 1). The service categories considered essential are: healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

The list of essential rural services presented in Table 1 was developed following a literature review based on certain key
words at the platform ScienceDirect, and a workshop involving rural policy experts from the Nordic Thematic group for
Green and Inclusive Rural Development. The method is described in full in the report by Slätmo et al. (2022).

Service category identified	Included in no. of articles and reports	Included in the following articles and reports reviewed
Healthcare and social care	11	Befort et al. 2014; Bremberg, 2020; Douthit et al., 2015; Ellem et al., 2019; Gyedu et al., 2020; Jana and Harata, 2016; OECD, 2020; Lundgren et al., 2020; Lundgren & Cuadrado, 2020; Rehn-Mendoza & Weber, 2018; Villegas et al., 2021.
Education and childcare	10	Beach et al., 2018; Clark and Harrison 2017, Cras 2018; European Commission/EACEA/ Eurydice, 2021; European Network for Rural Development, 2020; Karlsdóttir and Cuadrado, 2018; Kull et al., 2020; OECD, 2020; Pettersson et al. 2016; Wang and Gao, 2013
Physical infrastructure	9	Bridgman, 2018; Horn et al., 2021; Israel Schwarzlose et al., 2014; Karahasanovic, 2020; Shay et al., 2016; Shergold and Parkhurst, 2012; Shirgaokar et al., 2020; Šťastná & Vaishar 2017; Stjernberg et al., 2021
Climate adaptation and management of climate impacts	6	Adhikari and Fedler, 2020; Chen et al., 2014; IPCC, 2022; Johnsson et al., 2019; Oven et al., 2012; Wilkinson et al., 2015
Digital infrastructure	5	Hodge et al. 2017; Löfving et al., 2021; Ormstrup Vestergård et al., 2020; Randall et al., 2020; Salemink and Strijker, 2018.
Emergency services and civil defence	-	Not mentioned in the initial journal articles included in this review. Instead, this category was identified in the workshop with the policy actors. Identified articles about rural police in Iceland and Sweden following workshop with policy officials: Hällgren et al., 2021; Oddsson et al., 2021; Ceccato and Abraham, 2022.

Table 1: Essential rural services, now and in the future. Source: Slätmo et al. 2022, and authors' analysis based on literature review and workshop with Nordic policy officials.

Based on the literature review, the situation in rural areas and current trends in service provision are causing specific challenges and opportunities. The key challenges for secure and safe service provision in Nordic rural and sparsely populated areas, as identified in Slätmo et al. (2022), can be summarised as follows:

- Demographic changes (more older adults and fewer young people) are creating rural-specific challenges for service provision, which highlights the need to adapt, e.g. educational and care facilities to the age profile and needs of the local population
- · The public sector does not have the funds to cover rural service needs
- In many rural areas, it is hard to attract highly skilled workers
- A lack of capacity and lack of digital competence on the part of the public authorities affects the uptake and spread of digital solutions
- There is a perceived risk of decreased service quality in the processes of digitalisation
- The different governance models throughout the Nordic Region face differing challenges in terms of developing good location-specific services.

In turn, the key opportunities for secure and safe service provision in Nordic rural and sparsely populated areas identified in Slätmo et al. (2022) can be summarised as follows:

- Mitigating long distances via digital delivery and closing the digital divide
- Furthering the work with and utilising tools for collaboration agreements
- Increasing location-sensitivity of service delivery by going beyond permanent inhabitants' statistical thresholds
- Tackling demographic challenges via fiscal innovation
- Communicating with Nordic rural inhabitants to calibrate the level and model of service delivery
- · Acknowledging the different functions fulfilled by rural services
- Recognising the silver economy and seniors as active inhabitants in the rural north
- Creating policy innovations adapted to rural areas in the Nordic Region by cross-Nordic learning

The findings in this report are based on in-depth fieldwork in eight case studies – one in each Nordic country and autonomous territory. The results on secure and safe service provision in Nordic rural and sparsely populated areas, as summarised above and presented in the background report on research and policy concerning Nordic rural services, have been used as the foundation for the fieldwork (Slätmo et al. 2022). The aim of the fieldwork presented in this report has been to confirm, nuance and/or discard the results presented in the background report. The next section presents and discusses the methods used.



Ilulissat in western Greenland

Photo: iStock

3. Approach and methods for fieldwork in eight Nordic rural areas

For the purposes of this study, the research team wanted to identify examples, solutions and service initiatives within the Nordic region that can be considered positive and from which others can learn. The starting point was the results of the previous report for this project (Slätmo et al. 2022). That report investigated the current and future service needs in Nordic rural and sparsely populated areas by conducting a literature review and policy analysis of rural policy documents from all five Nordic countries and the autonomous territories. Based on those results, the research team wanted to verify the previous findings, and also identify possible services that were considered "essential", but which had not been identified in the literature review.

The approach involved choosing one case study municipality per country and region, and investigating the situation regarding rural services in that location. The fieldwork consisted of a combined quantitative and qualitative study. Statistical work guided the choice of case studies and provided background knowledge, but the main part of the work has been qualitative, in the form of document studies, interviews and observations.

3.1. Choice of cases

The choice of case studies in this project is based on a combination of statistics and expert knowledge. For each of the five Nordic countries and three autonomous territories, a statistical analysis was performed to identify municipalities that are categorised as rural (having low population density) and high accessibility to four services (libraries, pharmacies, local shops and education). These services were chosen as they are accessible through Nordregio's interactive "service mapper tool", which visualises the proximity to these different types of services across the Nordic region. This analysis resulted in a list of the rural municipalities in each country that had the highest level of access to services. The list was presented and discussed with

^{2.} See https://nordregio.org/nordic-service-mapper/

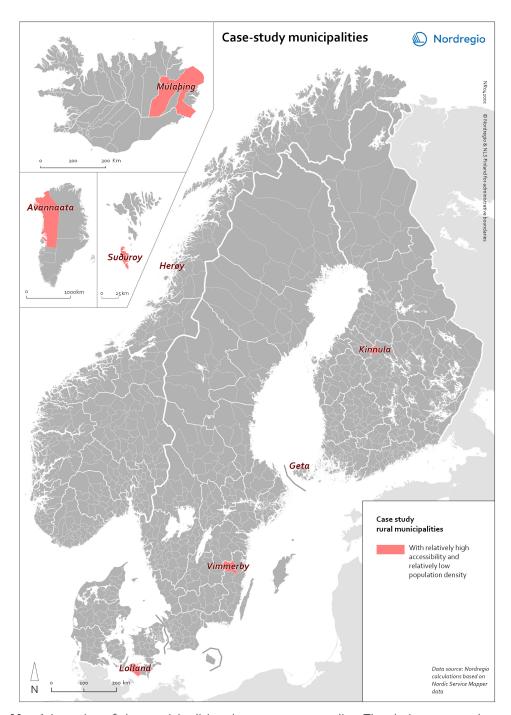
the group of actors working within national, regional and cross-border public authorities in the Nordics, who are members of the Nordic Thematic Group on Green and Inclusive Rural Development. Based on this discussion, the following case study areas were chosen:

- · Denmark, Lolland municipality
- Finland, Kinnula municipality
- Faroe Islands, Suðuroy region
- Greenland, Avannaata municipality
- · Iceland, Múlaþing, municipality
- · Norway, Herøy municipality
- Sweden, Vimmerby municipality
- Åland, Geta municipality

Map 1 below shows the location of the chosen case studies.

For six of the eight case studies, the municipalities included are cases that have in common the fact that they are among the rural municipalities within each country (or autonomous territory) that have the highest level of access to the service categories libraries, pharmacies, local shops and education. The exceptions are the case studies in Norway and the Faroe Islands. For Norway, the case study focuses on Herøy municipality, in the Nordland region. This choice was informed by the preference of the Norwegian members of the Nordic Thematic Group of Green And Inclusive Rural Development. The municipality of Herøy can be considered a flagship example, as the national members of the thematic group nominated the municipality because of its innovative solutions to rural service provision. For the Faroe Islands, the selected case study is the Suðuroy region. Due to an error in the Nordregio database, our fieldwork was performed in Suðuroy, rather than the Vagar region, which is in fact the rural region with the highest level of access to libraries, pharmacies, local shops and education. However, this data error enabled us to learn about one of the more remote regions in the Faroes.

It should be noted that even though the statistical analysis depicts the selected municipalities as having relatively high access to the chosen service categories, not all of the actors in the municipalities agreed that this was the case, and did not perceive themselves as having a high degree of access to services. One of the points of discussion with the actors involved was whether the municipality's high level of access to services is incidental, or if it is due to a deliberate strategy that could inspire others.



Map 1: Location of the municipalities chosen as case studies. The choice was made from a list of rural municipalities within each country that had the highest level of access to four services (libraries, pharmacies, local shops and education). The exceptions are the cases in Norway and the Faroe Islands. Map by Nordregio, Anna Vasilevskaya.

3.2. Fieldwork – interviews, document analyses and field visits

The fieldwork was performed between April to October 2022, and involved document analysis (of strategies, plans and policies), physical and digital interviews, field observation and photography. Statistics and accessibility analyses of proximity

to four service categories were used as background material to contextualise and understand the findings. The goal was to interview 5–10 persons per case, depending on the case study and the role of the interviewees.

The first phase of the fieldwork involved contacting public actors at local, regional or national level. Efforts were also made to speak to private actors who play a role in rural service solutions. Table 2 presents the number of interviews for each case. The titles and names of the persons interviewed are not included, for reasons of confidentiality and the sensitivity of some topics in the context within which these persons work.

Country case	Interviewed	Date of interviews
Lolland, Region Zealand, Denmark	7 persons in municipal and regional administration	June 8–10, 2022
Suðuroy region, Faroe Islands	7 persons in municipal administration	Digital interviews between October 10–20, 2022.
Kinnula region, Central Finland	6 persons in municipal and regional administration	August 9–11 2022
Avannaata municipality, Greenland	11 persons in municipal, regional and state administration	Digital interviews September 2–16, 2022
Múlaþing municipality, Iceland	6 persons in municipal administration	August 8–10, 2022
Herøy municipality, Norway	7 persons in municipal administration	September 12–30, 2022
Vimmerby municipality, Kalmar län region, Sweden	7 persons in municipal and regional administration	Digital interviews September 19–23, 2022
Geta municipality, Åland	5 persons in municipal and regional administration	August 17–September 9, 2022
Total number of interviews	56 persons in municipal and regional administration	June–October 2022

Table 2: Interviews in the Nordic cases

Five of the eight case-study areas were visited in person by one of the researchers in the team, while the remaining three were investigated remotely, both for cost reasons and due to time restraints. Field visits and meeting people in person for interviews can enable richer and more nuanced knowledge about the situation at hand. However, it is also important to note that, in areas where field visits were conducted, more time for field work would have enabled greater in-depth knowledge about essential rural services, the actors involved in rural service provision, temporal, geographical and seasonal variations, and the innovative solutions being developed to solve challenges related to access to essential services in rural areas.

The interviews were guided by a set of questions, divided into five themes:

- Essential rural services and variations
- Roles and responsibilities
- Challenges and problems in rural service provision
- Opportunities and strategies for solving challenges in rural service provision
- Learnings and improvements.

The interview guide (see Appendix 1) and the questions under each theme were

developed based on the knowledge overview that started this project, the aim of which was to confirm, nuance or discard its results. For instance, as previously mentioned, the aim of the first theme, "essential rural services and variations" was to verify which services were considered essential or less essential, and to identify other services that might be prioritised in certain regions. The essential rural services identified in Slätmo et al. (2022) were healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence. Regarding "roles and responsibilities", the aim of this theme was to explore who enables and provides services in the rural case studies. Although the majority of the actors interviewed come from the public sector, the importance of private actors is at least somewhat acknowledged, as the interview questions under this theme address the roles and responsibilities of both public and private actors at different institutional levels. The theme "challenges and problems in rural service provision" sets out to determine what actors working in service provision perceive as the main challenges, while the theme "opportunities and strategies for solving challenges in rural service provision" aims to identify what is functioning well and what others can learn from the way in which the actors work. Finally, under the theme "learnings and improvements", the actors were asked what they are proud of and what needs further work. The interview guide was translated and locally adapted by the individual researcher carrying out the study, in dialogue with the research team.

3.3. Compiling and verifying results

Demographic and employment statistics provide the background to each case. The results from the interviews are contextualized and combined with reading strategies, plans and policies related to services in the municipalities. The combined impressions, along with analysis of the interviews, plans, strategies, policies, statistics, observations, and photography were summarised in a case study template. This template was developed in parallel with the interview guide, and focuses on the same themes. In each case, key informants were asked to check the case description prior to publication. The aim of this was not that the key informants would agree on each aspect of the analysis, but to ensure that no errors were present in the results.

This report presents the case study summaries. The advantage of presenting the results in this way – in their specific context, with the prerequisites clearly stated – is that the individual case study can also indicate conclusions for other rural areas and municipalities. A common analysis was performed with a view to drawing conclusions and finding recommendations for future study and policy. This analysis entailed reading, sorting and rearranging the material from all cases, in order to find both common patterns and divergent findings. These findings have also been compared with previous studies.

The results were discussed with members of the Nordic Thematic Group for Green and Inclusive Rural Development on November 23 in Hamar, Norway. Presenting the report before publication meant that additional insights from policy actors working in public authorities at national, regional, local and cross-border institutional levels could be incorporated into the final version. In turn, the results presented in this report, and the network of actors created by the study, will form the basis for a cross-Nordic workshop in 2023.



4.1. Rural Services in Lolland, Denmark

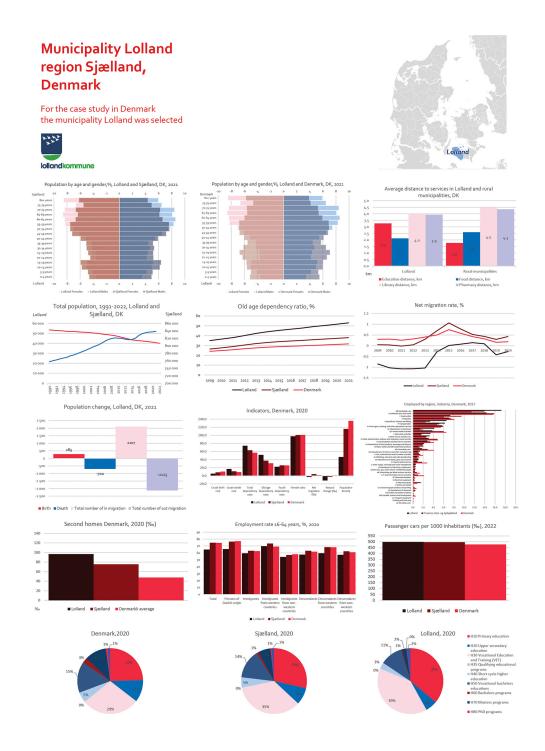


Figure 1: Key statistics for Lolland. Source: Authors' analysis and compiled data.

Lolland, located in the Baltic Sea and a part of Region Sjælland (*Region Zealand*), is Denmark's fourth largest island, with an area of 1,243 km². The island is connected to the neighbouring island of Falster at three points, and has ferry connections to Langeland and Germany. It is divided into two municipalities, of which Lolland municipality has 40,103 inhabitants as of 1 January 2022 (Lolland, 2022a). Within this municipality are two larger settlements: Nakskov, with around 12,500 inhabitants; and Maribo with a just under 6,000 (Statistikbanken, 2022). The towns of Rødby, Rødbyhavn, Holeby and Søllested have around 1,300–2,000 inhabitants, while other settlements have far fewer.

The municipality has a high old-age dependency ratio, where the population aged 65+, as a proportion of the working age population, is between 40% and 51% (Cedergren et al, 2021). Lolland also has a fast-declining population, higher unemployment rates than neighbouring regions and Denmark as an average, as well as more inhabitants that have only completed primary education compared to other Danish regions (see **figure 1**). According to Statistics Denmark, recent figures show that 45% of young people in Lolland do not continue with their education after the final year of secondary school (Region Sjælland, 2020).

Lolland-Falster is the one of the big tourist destinations in Eastern Denmark, apart from the Capital Region, and has a large number of second homes compared to the rest of the country. Regarding business development and employment, Lolland has several well-established industries. The area is well-known for its fertile farmland and key competencies within arable production, as well as food processing and suppliers. In addition, the island is home to Northern Europe's strongest cluster of seed-breeding companies (Business Lolland-Falster, 2020). Lolland also has an a growing cleantech sector, with the world's first offshore wind power farm, and a blossoming transport and logistics node. The Fehmarn Belt Fixed Link, a tunnel connection from Denmark to Germany, is also a source of great potential. The construction process is expected to bring businesses to the area, along with opportunities for industrial production, particularly within high-end products (Cedergren et al, 2021). The large building and construction sector is very important to the region, employing approximately 13% of the population in Lolland-Falster (Business Lolland-Falster, 2020).

Although Denmark does not have a specific rural development policy at the national level, it conducts an annual review of rural issues and their progress. However, the national government has presented two political plans – *Tættere på I* and *Tættere på II* (Closer I and II) – designed to ensure equality of opportunities across the whole country, including greater balance in the development of rural and urban areas (Indenrigs- og Boligministeriet 2021a; Indenrigs- og Boligministeriet, 2021b). Overall, the documents frame the central issues common to most rural regions, but specific issues and tasks are generally not operationalised. Instead, particular topics are addressed via sectoral plans. With regard to services, the central issue is that many services have in recent decades moved away from the rural regions and towards urban centres (Indenrigs- og Boligministeriet, 2021c). As an EU member state, Denmark's rural policy is also framed by European policy objectives, priority areas and funding streams. Danish actors can also access funds for rural service provision from the Common Agricultural Policy (CAP), as well as regional, structural and other EU funds (cf. The Danish Strategic CAP Plan, 2023–2027; Landbrugsstyrelsen, 2021).

At the local level, Lolland municipality prioritises the services it is obligated to provide. For this purpose, it sets its own local policies, which are in line with the policies provided by the government. For example, Lolland has prioritised education, social care and job recruitment.

The policy overview performed by Slätmo et al. (2022) indicates that rural policy in Denmark could benefit from incorporating a focus on climate adaptation and management of climate impacts, in order to ensure safe and secure services and infrastructure in rural areas. Climate and environmental issues are certainly mentioned, but not in the context of the need to adapt the management of basic services in response to climate impacts such as flooding, droughts and storms. Emergency services and civil defence, e.g. the response time of police and paramedics, are also rarely addressed from a rural perspective in Danish policies. At the local level, however, these issues seem to be a higher priority.





Lolland has good public transport communications both within the municipality and to neighbouring regions and Copenhagen.

Photos: Ágúst Bogason.

Essential rural services and variations in Lolland

Rural issues have attracted more attention at the national level in recent years, according to some of our interviewees, as a result of which several services have been identified as essential. The Danish government recognises the importance of rural areas having a local shop and is providing financial aid for this service. Well-functioning leisure and cultural services are also seen as very important. Public services and health services, naturally, are considered vital, as is access to nature. These features are considered essential not only for the local population, but for the area's attractiveness to newcomers, businesses and tourists (Indenrigs- og Boligministeriet, 2021b).

Residents of Lolland expressed surprise that Nordregio's service mapper had identified their municipality as having good access to services in a Danish context. It was generally understood that the quality level of services could be higher, as the municipality is struggling to acquire sufficient funds to provide services, and some sectors are experiencing difficulties in terms of recruiting qualified and trained staff. However, when looking at distances to services, the interviewees agreed that they were reasonable, which could play a role in the assessment of access to services in the municipality.

"When it comes to the basic services the municipality provides, like primary education and childcare, I believe it is of sufficient standard. We have quality activities for the youngest people. Our main problem is keeping them here once they reach a certain age," said one interviewee. They added that social problems are common in the municipality, and the number of inactive young people is too high. One challenge is therefore to get these young people into employment, education or

other sorts of training: "It seems that many of those with higher ambitions move to other areas for higher education."

It was commonly thought that services like security and transport were very important, and operating well. However, the interviewees did not emphasise climate adaptation and management of climate impacts as an essential service. However, one respondent did mention that the long beaches and low-lying character of Lolland entailed specific climate challenges for the region, which had been addressed with flood protection measures. It was also mentioned that Lolland has a high level of energy self-sufficiency, with substantial electricity surpluses from wind and sun, and 50% of the heat supply covered by renewable energy sources. In a Danish context, climate impacts and challenges are often framed as urban challenges, rather than rural ones. As a result, there seems to be a lack of focus on the climate challenges faced by rural areas.

In addition, some services regarded as essential in Lolland were missing from the list of rural services identified in Slätmo et al (2022)³, e.g. better cultural activities, integration of new Danes and better functioning employment services, both to address the current labour shortage and to get inactive locals to join the job market. It was also mentioned that seasonal residents had some impact on public service needs, mainly on infrastructure and the use of resources, since Lolland has a much higher proportion of holiday homes then the rest of Denmark. However, remote work and multilocality were mainly considered a source of new opportunities to utilise part-time residents and attract new permanent ones.



Among other responsibilities, Lolland municipality provides childcare and education for its inhabitants.

Photo: Ágúst Bogason.

The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

Roles and responsibilities

Public services in Denmark, they can be divided between the municipal (or regional) level and the state level. Sectoral plans issued at the national level are often used to address specific topics – and when relevant, related services and plans for how to implement them are drawn up at the local level. In recent decades, many services have moved away from the rural regions and towards more urban centres (Indenrigs- og Boligministeriet, 2021c). This centralisation of services is said to have been spurred by political decisions. The change has left its mark in many areas, with the closure of shops and a housing market that is under pressure in some parts of Denmark. The government has taken responsibility for helping to turn this trend around by funding action at local level.

In connection with moving services closer to the citizens also in rural areas, in 2020 a political agreement was negotiated that includes establishing 20 new local police units, with 110 new local police officers, to ensure that the police are present and accessible all over the country (Justitsministeriet, 2020). In late 2021, the government also presented a new plan outlining initiatives for the creation of 20 decentralised hospitals, more defibrillators, and new rapid alert systems that improve emergency response capacity (Indenrigs- og Boligministeriet, 2021b). In this way, along with actively moving state jobs and institutions from the larger cities to rural regions, the government has actively contributed to better rural development and enhancing services in peripheral areas.

The municipalities' responsibilities also include pre-school, primary, lower secondary and specialised education, healthcare (including preventive medicine, dental care, and home care), social welfare, support services such as unemployment insurance and early retirement benefits, sports and culture, job centres, the integration of immigrants and the maintenance of local roads.



The location of emergency services contributes to safety and security throughout the Nordics. In Lolland, the ambulance and part-time firefighters are co-located. Photo: Ágúst Bogason.

Challenges and problems in rural service provision

Some of the main challenges mentioned in Denmark relate to demographic changes in the rural areas, and providing sufficient education, employment and sustainable business development, transport, the accessibility of welfare provision and digital infrastructure. The housing market is also mentioned as a challenge, in both an urban and rural context, as the rural areas often lack both high-quality housing and the right kind of housing (Indenrigs- og Boligministeriet, 2021c). In Lolland, the challenges are more specific. As one of Denmark's lowest-lying islands, with flat terrain and little altitude, Lolland is at a special risk of flooding and rising sea levels. As mentioned earlier, this is a challenge that is constantly being addressed with preventive measures. When it comes to social challenges, Lolland has a higher rate of inactive persons – either unemployed, not in the education system or on early retirement benefits. While many other places in Denmark face the same challenges, Lolland's problems are more severe, yet it has less funds and resources to tackle them.

"The further you get away from Copenhagen, the older the population gets. So, in our areas furthest to the west, we have challenges regarding elderly care and sufficient staff, while the population in the eastern areas is a bit younger, with other problems and challenges," one interviewee stated, adding that the municipality has a high level of social problems, unemployment and negative demographic developments: "This contributes to a negative spiral."

Some interviewees also mentioned the contrast between the service needs in the municipality's urban centres, compared to more rural areas. Some of the interviewees reported that the governmental system was constantly delegating new tasks to the local level, without allocating the necessary funds to implement them. Therefore, the municipality must prioritise between the tasks they have been assigned by the state and for which they are legally responsible.



Lolland is quite active in recruiting people from abroad to fill the positions needed. The international school contributes to the integration of new residents. Photo: Ágúst Bogason.

Opportunities and strategies for solving challenges in rural service provision

Lolland already has some limited cooperation with its neighbouring municipalities, and the interviewees see opportunities to increase this in the near future, to enable the provision of improved services. Increased public-private partnership is also something that some interviewees say is necessary to look further into in order for the municipality to carry out its tasks and meet its service obligations. However, others are not as keen to follow this path, and point out that a lack of funding is the main reason for any shortfall in service. From their perspective, the municipality's most important task is to increase its income so as to be able to provide better services

Also mentioned as an area of opportunity for Lolland is increasing digitalisation of work and services. The possibilities for enhancing remote work are seen as a promising way of attracting new residents, who can continue to work in the Copenhagen region or even Germany once the Fehmarn Belt Fixed Link between the two countries opens up in 2029.

Indeed, Lolland has great expectations for the Fehmarn Belt. The construction will open up many growth opportunities in Lolland, since the municipality will be in a favourable location between Hamburg and Copenhagen, and this new transport corridor to Europe will provide growth opportunities for new and existing companies. This is viewed as an excellent opportunity to increase international tourism and attract new residents, and especially skilled labour, which can in turn contribute to a more robust community and generate more income for the municipality. This extra income is needed to provide better services and tackle existing demographic and social problems.

Lolland is already quite active when it comes to recruiting people from abroad to fill vacancies, and have approached this in various innovative ways. For example, representatives have attended foreign job fairs and recruited people with promises of language training and skills enhancement. This has enabled the municipality to acquire dedicated staff who intend to stay on as permanent residents and continue their job development within the fields where they are most needed. This initiative began as an experiment, but has thus far has proved to be successful, and will therefore likely be increased.

The interviewees also agreed that they received a great deal of political support, enjoyed active dialogue with elected officials in the local municipal administration, and had good mutual understanding of the most important tasks. This was also the case between supervisors and employees in different service sectors, who are described as being in sync with what is needed and going the extra mile to get it done, even with limited resources. It was also commonly mentioned that the "small team mentality" could be highly beneficial, since smaller units often mean more dialogue between different departments, which facilitates active cooperation between people within the different service sectors. While there was agreement that more funds and resources are necessary, the interviewees also believed that there would be great value in further building trust and cooperation between departments and employees in small workplaces.



The "small team mentality" in the municipality is very positive, as dialogue between departments facilitates active cooperation between the different service sectors. Photo: Ágúst Bogason.

Learnings and improvements

Based on the study in Lolland, the section below summarises some of the recommendations for future policy and actions for rural services.

Policy-makers at national level can continue to delegate responsibilities to the local level, allowing those working with the issues at hand to implement the policies and find the best place-based solutions in each case. However, increased funding is necessary for the municipalities to be able to carry out the tasks properly.

Further cooperation between governmental levels will also facilitate better understanding of the tasks at hand. In concrete terms, it seems feasible to increase support at national level for local services, in terms of how best to prioritise the delegated tasks in line with current legislation. There are also great opportunities in terms of more collaboration between municipalities on providing better services, as well as increased public-private cooperation.

Delegating more funds to get inactive people back into the labour market or training is an investment that will pay off greatly in the future. Each inactive person that stops accepting unemployment benefits and enters the labour market has a double positive effect – instead of being inactive, and often placing a financial and social burden on the community, that individual begins contributing to society through their work and tax contributions.

Lolland is already quite active in recruiting people from abroad to fill vacancies, and have done so in various innovative ways. For example, representatives have attended foreign job fairs to recruit people with promises of language training and skills enhancement.

The new connection to Germany via Lolland provides great opportunities for

establishing new companies along the route. Lolland should make the most of this opportunity to attract new businesses and new residents, who can enjoy the region's nature and rural surroundings, while also being within commuting distance of two major hubs – Hamburg and Copenhagen. The relatively low cost of housing compared to other areas in Denmark could also be attractive for workers who have the option to work remotely, at least part-time.

4.2. Rural Services in Suðuroy, Faroe Islands



Figure 2. Key statistics for Suðuroy. Source: Authors' analysis and compiled data.

The Faroe Islands is a self-governing part of Denmark, with a high degree of autonomy over most internal affairs and external trade. The Faroes are an archipelago comprising 18 islands located in the North Atlantic. The islands have a total area of about 1,400 km², with a population of around 54,000 as of 2022. Suðuroy is the southernmost of the Faroe Islands. The island covers 164 km² and the population is 4,674 as of September 2022 (Hagstova, 2022a). There are 14 inhabited settlements on Suðuroy (from north to south): Sandvík, Hvalba, Froðba, Tvøroyri, Trongisvágur, Øravík, Fámjin, Hov, Porkeri, Nes, Vágur, Fámara, Akrar, Lopra and Sumba. The largest single settlement is Vágur, with about 1,300 inhabitants, while Tvøroyri and its surrounding areas and settlements collectively count around 1,700 people. Tvøroyri and Vágur are economic and traffic hubs for Suðuroy, while other settlements have fewer inhabitants (Hagstova, 2022b).

Suðuroy is relatively cut off from the central Faroe Islands, most of which are interlinked by bridges and undersea tunnels. Almost 90% of the islands' population have a road connection to the capital area Tórshavn, and can reach the capital in 90 minutes or less by car. Consequently, most Faroese people can participate in the central labour market, and obtain goods and services from Tórshavn (Pristed Nielsen, 2020). The residents of Suðuroy, on the other hand, are dependent on ferry transport. The ferry to Tórshavn takes about two hours, and runs two or three times a day. This has implications for both service opportunities and general mobility (Hayfield, 2018).

The largest employment sectors in Suðuroy are in public administration, fish processing and fisheries, sea transport, trade and construction (see key statistics in figure 2; Hagstova, 2022d). Across the Faroe Islands as a whole, levels of employment are generally high (and conversely, unemployment rates are very low), but the labour activity rate is lower in Suðuroy than other parts of the archipelago (Hagstova, 2022c). This is in part caused by the island's demographics, as it has a higher ratio of older people, and the most people who are inactive on the labour market (interviews). This trend is of concern, as the population of Suðuroy has been in decline for many years, even as the population of Faroe Islands as a whole has grown substantially of late (Municipalities of Suðuroy, 2018). However, both the total population and the net migration rate show a slight increase in population for Suðuroy in the period 2018–2020 (key statistics in figure 2).

Since the Faroe Islands are home to just over 50,000 people, many public services that in larger countries would be the responsibility of regions or municipalities lie with the government. This remains the case despite the many amalgamations of municipalities in recent years and a public policy of decentralisation of responsibilities. The demand for better public services and the decentralisation process has increased pressure on small municipalities. As an alternative to amalgamation, some smaller municipalities have explored the possibilities of expanding existing intermunicipal cooperation (Jákupsstovu, 2020).

The primary role of Faroese municipalities is to provide welfare services and lead local planning. The policy of the national government in power is of vital importance for rural development in the Faroe Islands. The agreement between the current three-party coalition government of the Faroe Islands, Samgonguskjal 2019–2023, lays out the priorities for the islands (Samgonguskjal, 2019). The focus is on economic and financial activities for the whole Faroese population – in particular, fishing policies, healthcare and social services, education and transport. Since more than half the population is scattered over 17 islands, adequate transport provision is one of the most essential rural policy issues. Housing is also a high priority for Faroese policy, especially the lack of financing for housing construction in the countryside and outside the capital, Tórshavn (Samgonguskjal, 2019). The combined

policy and research review provided in this project's previous report (Slätmo et al., 2022) indicates that Faroese policy could benefit from an increased focus on climate adaptation and the management of climate impacts in relation to providing services and infrastructure. There is a considerable focus on the green transition and on minimising greenhouse gas emissions, but little weight is given to the possible effects of climate change on everyday life on the islands, including the provision of basic public and private services.



The inhabitants of Suðuroy have access to essential services. The photo shows Sumba, population 255, the southernmost village in the Faroe Islands.

Photo: Timothy Heleniak.

Essential rural services and variations in Suðuroy

The demographics and geography of the Faroes create a unique situation when it comes to service provision. With a population of 52,000 people spread over 17 different islands, and following the significant social changes due to centralisation and urbanisation in recent decades, it can be a challenge to uphold a certain level of service in less populated areas. The interviewees in this study did not dispute which services were identified as essential in the report by Slätmo et al. (2022)⁴. The services in Suðuroy are considered high quality, especially as there are fewer than 5,000 people living on the island, and it is quite remote compared to the other islands of the archipelago.

The topics that most people mentioned as essential were child-, social-, health- and elderly care, as well ensuring a certain supply of activities for younger people. During 2004–2012, Suðuroy experienced some drastic changes – primarily, a negative demographic development. The region's population was declining and getting older because fewer children were being born, and young people were moving away from

The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

Suðuroy - and very few returned (interviews; Kull et al, 2020).

"The island needed to change its public image. People in other places almost felt sorry for us. There was so much negative public discussion about our situation. So we went to work. We focused on making the island an attractive place to live and getting the message out there. That included improving the services we offer, making public investments, and providing things other places in the Faroes don't have," said one interviewee, adding that public participation was extensively used to create a new plan for the region. This plan was implemented in an inclusive manner, which called for the involvement of the municipal councils and administration, but the work was done by engaging locals, bringing them on board and creating a high level of ownership of the changes in infrastructure. This resulted in a plan for implementing certain structural changes and developing infrastructure for and with the people.

In parallel with the structural transformation of the labour market, a project to launch a sports high school was initiated. Action was also taken to prevent the further outward migration of young people and to create an attractive environment that would encourage students and young families to return. The establishment of new kindergartens, along with other infrastructure investments, e.g. an Olympic-sized swimming pool, an indoor football hall and a sports high school, were intended to increase the island's attractiveness. "This was, and is, seen as essential service in that it makes the place more attractive for families. And that's what we need. We invest in services and leisure to attract more people, so we are able to improve other services as well," said another interviewee. Several of the respondents stated that the investments and the new way of working had helped to create a collaborative culture. However, tensions do still arise, particularly between those in the larger settlements of Suðuroy and those on the periphery.

Culture, sports and leisure opportunities are therefore seen as essential services in Suðuroy, but naturally, people also discussed more traditional service needs, too. Transport by boat and ferry is a key issue for Suðuroy, since after 2023, it will be the only island in the Faroes with no road connection to the capital. Transport within Suðuroy is quite good – there are roads between the settlements and into more rural areas. There is also a public bus system with two routes – one between Tvøroyri and Sumba, which functions as the southern line; and the northern line between Fámjin and Sandvík. Then there also is a heliport at Froðba, from which flights run to Tórshavn and Vágar Airport (Visit Suðuroy, 2022; interviews).

Despite its small size, there is a hospital in Tvøroyri, on the east coast of Suðuroy. After prior debates about the locations of hospitals on the Faroes, it was deemed essential to have one at Suðuroy, due to its isolation and poor transport connections compared to the other islands of the archipelago (Almanna- and Heilsumálaráðið, 2007). The hospital has capacity for 22 admitted patients, and services all of the Faroe Islands. It has three full-time medical doctors, who also perform some surgeries. The doctors are often stationed there for a limited amount of time. On a daily basis, the hospital employs around 110 people full time (Sjúkrahúsverkið, 2022). More recently, the maternity ward at Suðuroy hospital was transferred to Tórshavn, which means that pregnant women must relocate to the Faroese capital 2–4 weeks prior to their due date (Pristed Nielsen, 2020).

When discussing safety and security with interviewees in Suðuroy, their main concern was the importance of health and rescue services, rather than law and order. "We do not discuss so much the need for security, in the form of police. Of course, that is an essential service, but since there is next to no crime here, we are not preoccupied with this issue," said one of the interviewees.

On the topic of climate adaptation of essential services, the main focus was on

energy issues, since Suðuroy is not connected to the Faroe Islands' main grid. The island must therefore produce its own electricity, partly via a diesel-operated power station in the town of Vágur. In addition, some renewable energy sources have been installed in recent years. Some interviewees consider the further development of non-fossil energy sources a priority, and note that new projects in that direction are being planned for the near future. This is seen as necessary from both an environmental perspective as well as an economic one, since such an investment would mean significant savings on imported fuel in the coming years.

Roles and responsibilities

Compared to municipalities elsewhere in the Nordic region, the municipalities on Suðuroy have fewer areas of responsibility. Much of what in other areas would be either a municipal or regional responsibility is in the Faroe Islands a governmental one. For example, the Ministry of Culture is responsible for schools, while the municipalities' only role is to maintain and operate the buildings that host the education centres (Kull et al, 2020). There are a few schools in Suðuroy – some only provide education up to the seventh grade, which means that some students must go elsewhere to complete grades up to and including the tenth. The upper secondary school in the village of Hov, Miðnámsskúlin í Suðuroy, caters for the whole island and provides general secondary education. Bus connections to and from the high school are available. In addition, there is the aforementioned sport school (Heilsuskúli Føroya), a new educational establishment in Hov, which offers post-primary level qualifications within health work. Since it's the only one of its kind, it serves all of the Faroe Islands, and not just Suðuroy (Pristed Nielsen, 2020; interviews).

The municipality provides afternoon activities and homework support. In addition, there is a department for pupils with special needs, which means they do not have to leave for Tórshavn, but can get their education in Vágur. The municipality also provides childcare facilities. As a legal requirement, municipalities are obliged to offer childcare places for children from around 9 months old until they start primary school. In some places, like Vágur, the strategy is to open up new kindergartens to become more attractive to young people and families.

Elderly care is seen as an opportunity in Suðuroy. Recently, some major advancements have been made to ensure the provision of high-quality care. As Suðuroy's population is older than most other places in the Faroe Islands, and high-quality care is therefore a priority. Elderly care used to be a state responsibility until 2015, when responsibility was transferred to the municipalities. It is now jointly organised by the seven municipalities on the island (interviews; Kull et al, 2020). As such, while transport is mainly the responsibility of the government, and the ferries and roads between towns are a national responsibility, the municipalities remain responsible for roads within each town and village (Faroe Islands, 2022).

As the Faroe Islands are a self-governing territory under the external sovereignty of the Kingdom of Denmark, they have exclusive competence to legislate and govern independently in a wide range of areas. These include, for example, the conservation and management of living marine resources, protection of the environment, subsurface resources, trade, taxation, industrial relations, energy, transport, communications, social security, culture, education and research (Government, 2005). However, security, in the form of police and civil defence, is a Danish responsibility. The Faroe Islands Police are Danish, and the police districts are divided into a main station in Tórshavn and five substations, one of which is located in Tvøroyri on Suðuroy.

Challenges and problems in rural service provision

Among the main challenges associated with service provision in Suðuroy are the geographical location and transport connectivity to and from the island. While the service supply for an island of less than 5,000 people is generally good and considered high quality, some services are not available. For instance, it may be necessary to visit the main hospital in Tórshavn for specialist appointments that are not available on the island hospital, for dental appointments and other specialised treatments. The hospital on Suðuroy sometimes faces challenges related to attracting qualified and skilled staff, and therefore specialised healthcare staff are often brought in from abroad, usually from Denmark, but generally only work there for a limited period.

There can also be challenges related to attracting skilled staff for other positions. In the past, qualified teachers often tended to be Danish, but that is now very rare. The demographic development of Suðuroy also calls for extensive staffing for elderly care, which sometimes can be hard to find, and there difficulties in securing the services of skilled people in social care. In addition, it is particularly hard to find enough school and kindergarten teachers, as well as psychologists.

Economic development, businesses support and insufficient municipal revenues were among the other challenges mentioned in Suðuroy. One interviewee pointed out that it was extremely hard to get investment outside of the fishing industry in the region, which made public investment even more important. The national policy of merging municipalities has proceeded somewhat slower and received more objections than anticipated – even though the smallest municipalities have a severe lack of income and therefore do not have the resources to provide the necessary services. However, instead of amalgamation, many municipalities have sought further intermunicipal cooperation (Jákupsstovu, 2020). The municipalities in Suðuroy cooperate in many different areas, with a view to providing better services and making better use of public funds.

Finally, the supply of housing – both for sale and in the rental market – has proved to be challenging in some parts of Suðuroy, mainly the larger settlements. The lack of housing on the island in recent years has made it even harder to attract the necessary labour.

At present, it is a disadvantage for graduates that few jobs in the Faroes require higher education – especially on the more remote parts, such as Suðuroy. The House of Industry in the Faroe Islands estimates that around 50% of young Faroese are currently studying abroad, and roughly half of those will not return. Efforts are currently being made to improve job prospects and make life on the Faroe Islands more attractive, but a prerequisite for this is the creation of more relevant jobs and an environment that fosters innovation (interview). Currently, many of the employment opportunities that require higher qualifications are located in the central labour market in Tórshavn, which means it can be difficult for more highly qualified individuals to find work in Suðuroy (Føroya landsstýri, 2013). This is reflected in the educational level of the island's population, which is lower than the rest of the Faroe Islands (see key statistics in **figure 2**, Pristed Nielsen, 2020).



Transport to and from Suðuroy is a challenge. It is the only island on the Faroese archipelago that has no road connection to the capital, Tórshavn. Instead, inhabitants must take a two-hour ferry, which limits their mobility. View of sea cliffs near Vágu Photo: Timothy Heleniak.

Opportunities and strategies for solving challenges in rural service provision

In Vágur, a combination of municipal and private projects, public funding combined with crowdsourcing and crowdfunding, plus the in-kind contribution of residents, has led to a successful transformation, and has increased the municipality's perceived attractiveness (Kull et al, 2020; interviews). As mentioned earlier, a plan to make Suðuroy more attractive for families was put in place some years ago, and as an alternative to amalgamation, some smaller municipalities have explored options for expanding existing intermunicipal cooperation.

A number of infrastructure investments and projects have been developed to help drive change in the region and make it more attractive. One example is the indoor swimming pool, Páls Höll – the first 50-metre pool in the Faroe Islands, and one of the community projects part-financed through a combination of crowdfunding, the government and municipal funds. Another example is the new sports hall which opened in 2018, featuring a half-size football pitch, the first indoor facility for athletics in the Faroe Islands, and a large climbing wall. In addition, a new service centre has been built, housing a library and a tourist office, and a new youth centre has been established in a former office building purchased by the municipality of Vágur. The small municipalities in Suðuroy have used the opening of new kindergartens to attract families to the Island. The aim of all of these initiatives is to create a more welcoming community and foster a sense of belonging. This builds on the traditions of the small island community, which value family ties and social networks that can create a further sense of intimacy, interconnectedness and interdependency (Hayfield & Schug, 2019).

A newly established distance learning centre facilitates higher education in Vágur. For instance, kindergarten student teachers are able to follow lectures given at Danish universities, and local people can take selected courses. The centre could also be used to broaden the range of education possibilities available on the island. Distance learning is seen as an opportunity, especially in higher education. Some of the subjects currently taught in Tórshavn could be further expanded to include distance learning.

Another initiative is the introduction of so-called "digital nomads", to whom the Suðuroy community has opened its door. A co-working space and residence are provided, in return for which the nomads must give something back to the community during their visit. This project has been sponsored by Nordic funding, and more initiatives of this kind are required to create more jobs for highly skilled and educated people, and to foster innovation. The island's public infrastructure has also received sponsorships from private entities, like Klaksvík-based CIG68 and other local donors, representing an important and much-needed source of investment.

Some interviewees see great opportunities in energy production in terms of creating more high-skilled jobs, contributing to the local economy and protecting the environment. Currently, the Suðuroy electricity grid depends on the main power plant in Vágur (which runs on diesel), along with smaller wind turbines and hydropower plant. Electricity consumption on the island has increased significantly. As a consequence, SEV – a electricity company owned by the Faroese municipalities – has called on the Faroese Earth and Energy Directorate to issue a tender for wind power on Suðuroy in an effort to reduce oil costs and cut emissions, while also increasing electricity production on Suðuroy (SEV, 2022). This is seen as essential preparation for the job market of the future – i.e. for creating more attractive jobs that attract new inhabitants.

Recently, there have been discussions about building a subsea tunnel that would turn a two-hour ferry journey to Tórshavn into a one-hour drive. However, some of our interviewees describe this as a "pipe dream". Currently, all vehicles and cargo, and virtually all passenger traffic, must use the ferry service. The *Suðuroyartunnilin* (Suðuroy Tunnel) is a proposed submerged fixed-link in the Faroe Islands, linking the island of Suðuroy to Sandoy. This project would be a game-changing development, and those in favour are convinced that new jobs can be created on both sides of the tunnel. The proposed project would, of course, make commuting to the capital easier and therefore motivate highly qualified people to live on Suðuroy while working in Tórshavn. Others expect that better connectivity to the capital would lead to more varied jobs being created on Suðuroy, and also attract new inhabitants.

Tourism is viewed as one of the key industries of tomorrow. In recent years, there has been insufficient accommodation for tourists. In order to make Suðuroy more attractive to both guests and new permanent residents, some older industrial areas have been changed to house visitors. Tvøroyri, for example, was once the main trading town in the Faroe Islands, but now the old unused warehouses have been transformed into a pub and restaurant. Some smaller independent tourism companies have also been established, but for the moment, most people only work in tourism as a second job. The focus on developing facilities for tourists has put additional pressure on building housing for residents. Nonetheless, tourism is viewed as one way of diversifying the local economy and labour market, ensuring a thriving community and providing more private services for both locals and visitors.



Over the past few years, several "lighthouse" projects have been developed to make Suðuroy more attractive to younger people. Improving service provision has been a vital part of this effort. Akraberg Lighthouse at the southern-most point in the Faroe Isl Photo: Timothy Heleniak.

Learnings and improvements

Although the population of Suðuroy only amounts to around 4,600 people, it is large enough to both support a certain level of activity and require a range of basic amenities and public welfare services. Therefore, in terms of the most immediate needs, such as household consumption, manual trades, education, childcare and healthcare, the island is a self-contained unit (Pristed Nielsen, 2020). The job market, however, requires diversification. Currently, the public sector provides a sufficiently stable base to sustain an income for the people of the island. Almost 800 people on Suðuroy work in the public sector, as teachers, nurses, doctors, civil servants, and so on. The size of the public sector in Suðuroy is slightly larger than in other areas in the Faroe Islands, accounting for just over 1/3 of the workforce (Pristed Nielsen, 2020). This also indicates that there is high supply of services on the island. However, there is a need for diversification in order to create more resilience, preferably with jobs that require special competences and higher skills. Jobs that rely on distance work and digitalisation should also be included – this process has already begun in Suðuroy, albeit on a small scale.

To boost employment in Suðuroy, certain public-sector organisations have been relocated from Tórshavn to the island, e.g. the Faroese official transportation organisation and a division of the tax revenue office (Pristed Nielsen, 2020). More transfers of skills-based governmental jobs would further benefit the region.

The tourism industry is an added source of income for Suðuroy. It had been growing in recent years, and seems to be picking up again after the lifting of COVID restrictions (interview). If the tourism sector is to attract more visitors and have more of an impact on the local economy, transport connectivity needs to be improved. This could involve either transport by air or the proposed tunnel from Suðuroy to the main islands of the Faroes. Such an investment would not only

benefit visitors, but also the local population. As some have pointed out, it would also open up the possibility of connecting Suðuroy to the job market in Tórshavn, which would enable the people of Suðuroy to work in the capital, and also attract current residents of the capital to live in Suðuroy.

Other recommendations highlighted in our remote fieldwork were the importance of further cooperation between different levels of government and related institutions, and between municipalities and private and public actors. One interviewee pointed out that, given the community's focus on attracting new families, it would be greatly beneficial to reopen the maternity department at Suðuroy hospital. At present, mothers-to-be must travel to Tórshavn well in advance of their due date. Often, their partners cannot join them, since they would have to take time off work, leaving them without an income for indeterminate period.

4.3. Rural Services in Kinnula, Finland

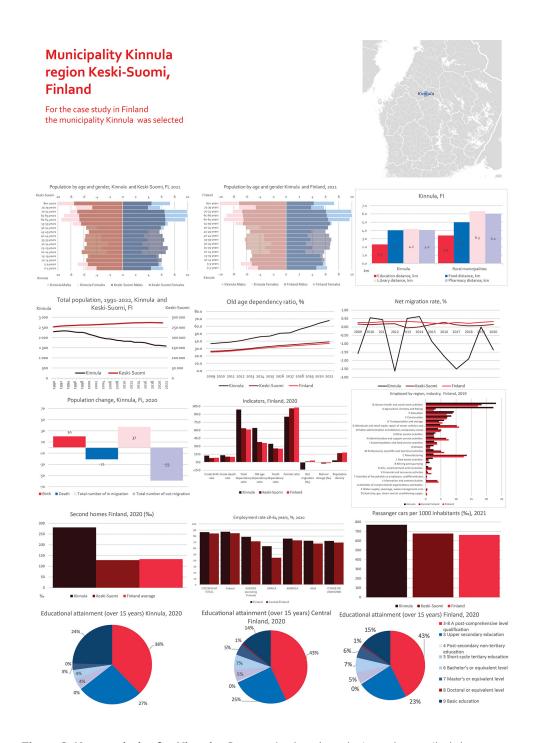


Figure 3. Key statistics for Kinnula. Source: Authors' analysis and compiled data.

The municipality of Kinnula, located in Northern Central Finland, is home to 1,581 people. Traditional livelihoods consist of agriculture and forestry, and the region has a large number of summer houses. Its high level of service provision is acknowledged beyond the municipality – for example, the regional land use plan considers it an important service hub (Kinnula website). As described in Slätmo et al. (2022), the core policy document governing rural services in Finland is *Ajassa uudistuva maaseutu – Maaseutupoliittinen kokonaisohjelma 2021–2027* (Finland's National Rural Policy Programme; Kattilakoski et al., 2021). This is a comprehensive operational rural policy programme for 2021–2027, which takes into account both national and regional adaptation of EU policies. The Rural Policy Council implements the programme in broad co-operation with stakeholders (Kattilakoski et al., 2021).

At the national level, other relevant policies include the Regional Development Decision: Rural Development Programme 2014-2020 (in operation until 2025) and CAP Development Strategic Plan 2023-2027, Sustainable and Vital Regions, Innovation and Skills in Finland 2021–2027, the EU Regional and Structural Policy Programme, the National Island Programme, and an action plan adopted by the current and second Parliamentary Working Group for Sparsely Populated Areas. The overall goal of Finnish rural policy is to develop location-based opportunities that prioritise interdependence, environmental justice and new, knowledge-intensive economics. These priorities remain consistent throughout the programme's five themes: 1) greater added value through the sustainable use of natural resources; 2) rural actors as part of the solution to a sustainable transition; 3) strengthening competitiveness and vitality; 4) ensuring a good everyday life; and 5) strengthening local participation and local communities. Sustainable transition is an essential part of Finnish rural policy, and has relevance for issues such as transport, tourism, food production and the promotion of biodiversity.

As stated in Slätmo et al. (2022), although it could do more in the areas of climate adaptation and management of climate impacts, Finland is performing well overall in terms of enabling access to essential services in rural areas. As such, it represents a good example of a sustainable national rural policy. The newest policy reform, "welfare regions", which introduces a new national administrative level with responsibility for healthcare, social services and emergency services, was established at the start of 2022 (Vaalit, 2022).



Dental care in Kinnula. Photo: Hilma Salonen.

Essential rural services and variations in Kinnula

In general, the public services in Kinnula are well maintained. Although there is no overarching public services strategy, Kinnula's strong local identity, and related motivation to maintain its independence by providing public services, is often mentioned as a reason for the region's success. However, its remote location demands a certain degree of independence, but this can also be seen as a strength. The perceptions of people who live in remote areas also tend to include acknowledgment of geographic restrictions – in other words, they do not expect services beyond the basic level. As one interviewee put it, "It's enough if a harmonica plays and there's porridge and pizza" (interview). The interviewees generally agreed upon the list of essential services identified in the report by Slätmo et al. (2022).

The importance of environmental preservation and action to combat climate change is well acknowledged, but most respondents were not aware of any practical examples of climate management. Nonetheless, they suggested that "climate thinking" should be embedded within all public services, as it is relevant to all sectors of society. In the field of environmental health inspection, however, the impacts of climate change are already visible. For example, every year, several wells become polluted with dirty water following heavy rainfall, which illustrates the increasing need for preparedness and infrastructure repairs.

In terms of education and childcare, the municipality has actively worked to maintain high standards, e.g. by providing childcare during the night for shift workers. Investment in education and childcare has also generated benefits, such as an increased focus on the strengths and needs of individual students. Regarding emergency services, the importance of the police force was emphasised as a recent topic of discussion.

In addition, some services regarded as highly essential in Kinnula were missing from

the list of rural services identified in Slätmo et al (2022), including employment services (which are especially relevant to the ongoing employment shortage), culture (which is important for increasing the municipality's attractiveness) and community integration (as cited by two interviewees). Libraries were also mentioned as necessary additions to the list of essential services, since they serve an important community role in municipalities, such as supporting schools by providing learning environments. In Kinnula, library access has been improved by having a digital code that allows people to enter the building outside of the usual opening hours. In addition, private services such as local shops and fuel delivery should be maintained, along with a service that arrange for substitutes for farmers.

Kinnula is a small, sparsely populated municipality, and all interviewees agreed that there are no substantial differences in terms of service needs within the region. The most significant demographic variations are mainly due to the greater service needs of older people. In addition, more small children are now in day-care, since fees are decreasing and municipal employment rates are improving, which makes it more attractive for both parents to work. Seasonal residents have little effect on public services, since their needs are usually small, pertaining primarily to healthcare and water-dispensing services. According to two of the interviewees commuting from the second homes, i.e. multilocality, and increased possibilities for remote working may change this situation (especially in relation to digital infrastructure), but this is a long-term development and the concrete implications remain to be seen.



Kinnula's library and the entrance code system used outside of opening hours.Photo: Hilma Salonen.

Roles and responsibilities

Public services in Central Finland (Keski-Suomi) are mainly organised by the individual municipalities. There are currently over 20 service providers in social and healthcare services, in a range of configurations, including private enterprises; joint organisations consisting of municipalities working in cooperation or buying services from one host municipality; individual municipalities organising all services independently; and privatized healthcare centres. In 2018, Kinnula privatised all their healthcare services, after which they were run by the private company Terveystalo. From 2023 onwards, social, healthcare and wellbeing services will be managed by the wellbeing services county of Central Finland, in line with the national policy reform on "welfare regions".

The municipality of Kinnula is in charge of educational services, environmental and technical operations, services related to economic development, and potentially, from 2024 onwards, employment services (legislation pending) (interview). In theory, the municipality is not responsible for digital infrastructure and broadband, but in line with the region's independent approach, Kinnula manages them too (interview). Rescue Services of Central Finland takes care of emergency services. However, it is notable that volunteer fire departments and first-aid teams are also very active in Kinnula, especially among young people.

Although Kinnula has emphasised its independence as an important factor in maintaining public services, it also cooperates with other municipalities in certain sectors, e.g. by having a joint office of permits, a shared school curator, and joint management with the municipality of Lestijärvi . One interviewee, currently working as a shared official, pointed out that while collaborative service provision is a good idea, it can also be confusing for citizens. For instance, they may not be sure when they should seek public services from a certain regional collaborative consortium, and when the municipality manages them independently.

Challenges and problems in rural service provision

The most prominent challenges in public service provision in Kinnula are related to labour shortages, especially skilled workers, as there are insufficient nurses, doctors, social workers, teachers and kindergarten teachers. Lack of time is also a factor, and closely linked to the lack of labour resources – in other words, if there were enough workers, there would likely be enough time to find the right solutions. In municipal administration, there is also a need for more broadly based expertise with regard to current national affairs and national networks.

The respondents note that simple administrative tasks take up an excessive number of working hours. They report that extra bureaucratic steps have been introduced that impede cooperation between regional officials, and the new healthcare reform entails even broader cooperation, which adds an extra layer of complexity. A lack of both money and skilled workers presents challenges in terms of ensuring the high quality of municipal services. This was one of the considerations that informed the decision to privatise the whole municipal healthcare system.

In addition, the residents have various concerns related to digitalisation, and emphasise the need to also maintain some physical service points. It is also likely that some problems in this area will only become visible later, as the services are digitalised.



Kinnula High School.Photo: Hilma Salonen.

Opportunities and strategies for solving challenges in rural service provision

Kinnula High School has initiated a new project to attract students from beyond the EU. The project aims to both maintain the municipal secondary school and also attract more skilled labour by providing more opportunities for teachers. In the long term, it will also encourage some former students to stay in Kinnula.

The healthcare reform may present an important opportunity to alleviate the public service burden of small municipalities. As one interviewee put it, "Now we are entering a new era" (interview). As elderly care is no longer financed from the municipal budget, but is managed by the welfare region with state funding, an ageing population places less stress on the municipal economy, and may even lead to local benefits in the form of increased investment in private services. The privatisation of all healthcare services in Kinnula in 2018 seems to have led to good outcomes. For example, access to dental care is considerably faster in Kinnula compared to the national average, queues to see a doctor are also short, and there is a 24/7 ambulance service. The private healthcare provider Terveystalo also seems to have had more success in recruiting doctors than the public sector did before the reform, and people already working in the sector kept their jobs.

Kinnula has also succeeded in aligning its resources. One such case simultaneously involved the installation of new broadband cables, the construction of a new water supply system and roadworks. Similarly, collaborative schemes that bring together public officials with different responsibilities under the same roof increase organisational efficiency and make it easier to find areas of common interest. Another positive example is the regional leadership model, introduced in 2021, in which a team of six municipal leaders come together to make strategic alignments, while a team of developers is responsible for practical work. This enables the

creation of a shared resource pool and allows all participants to benefit from diverse expertise.

Cooperation between public authorities, and public service provision in general, may work better in a small municipality such as Kinnula, since the threshold for visiting a municipal office is low. As a result, public officials have a good overview of the population's situation and wishes .

"Leaders are not in a tower, but a small wooden house," says one public official in Kinnula, describing the low threshold for visiting a municipal office.



Kinnula swimming pool is located in the ground floor of the parish hall.Photo: Hilma Salonen.

Learnings and improvements

Based on the study in Kinnula, the following paragraphs outline some recommendations for future policy and actions for rural services.

Actors at national level actors can improve the situation by investing in digital infrastructure and broadband connections. Of all of the proposed future solutions, investment in digital infrastructure and broadband connections are the most essential. In addition, regulatory tools such as taxation can be utilised to solve problems related to lack of skilled labour, e.g. by lowering taxes for certain groups of people – a model previously tested in Norway. Another possibility is using salary incentives to attract labour with the right skills. In general, legislation should take the differing realities of urban and rural regions into account, e.g. by not setting up regulations that create unnecessary work for rural municipalities without addressing their pressing issues. For example, when it comes to accessing medical care, urban and rural communities have fundamentally different problems.

Regional actors can continue to further public-private cooperation, or cooperation between public bodies. In addition, acknowledging the resource value of active older people is one way of broadening capacity and the competence of actors in municipalities.

Actors at local level actors can continue to adapt solutions to the needs of citizens, e.g. by arranging preventive home visits targeting older people who, with some small assistance, are able to live at home .

Regional and local actors can work to attract new labour to municipalities by busting persistent myths regarding rural regions, e.g. that they have poor public services or not enough work. They could more effectively disseminate information about good practices and solutions, so that this information actually reaches people and enables them to participate in decision-making in a meaningful way. One solution in terms of knowledge-sharing might be a digital platform that enables municipal officials to interact and ask for advice.

4.4. Rural Services in Avannaata, Greenland

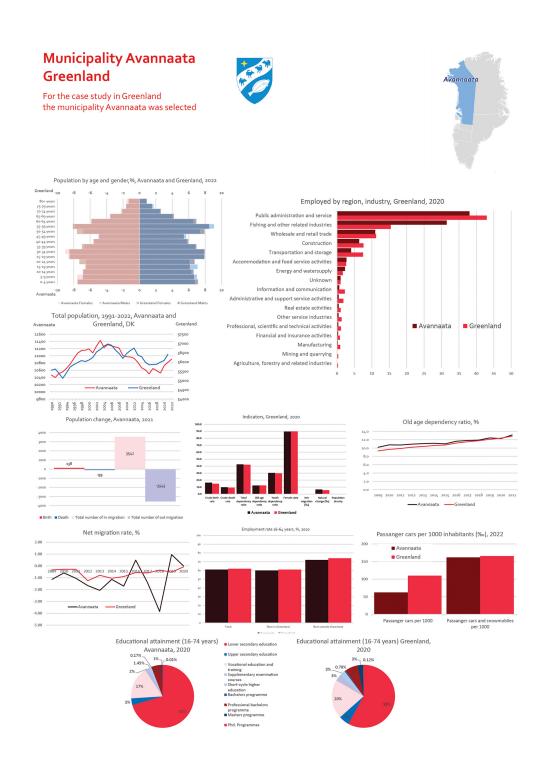


Figure 4. Key statistics for Avannaata, Greenland. Source: Authors' analysis and compiled data.

Avannaata is a municipality on the north-western coast of Greenland. Geographically speaking, it is very large, covering 522,700 km², with a total population of 10,820 people as of April 2021. The municipality consists of four towns – Ilulissat, Uummannaq, Upernavik and Qaanaq – and 23 inhabited settlements (Avannaata, 2022). The municipality's central administration is located in Ilulissat (population 4,710), on the well-known Icefjord, which is a UNESCO World Heritage Site (UNESCO, 2022). The Uummannaq settlement, which is home to 1,428 people, is located on an island with a distinctive 1,175-metre-high heart-shaped mountain. Upernavik is the collective name of a gathering of nine settlements inhabited by 1,076 people. Qaanaaq has 619 inhabitants and is Greenland's northernmost town (Avannaata, 2022). From a global perspective, Greenland is a remote and rural country, with great distances and difficult terrain between settlements, which creates a unique set of challenges for service provision (Slätmo et al. 2022).

Greenland's economy is dependent on fisheries and raw materials (OECD, 2011). Fisheries account for around 90% of exports from Greenland (CIA, 2019). The public sector, including publicly owned enterprises and the municipalities, play a dominant role in the economy. Construction, raw material industries and services account for a significant proportion of employment, but tourism is a growing industry, especially in the area around Ilulissat, which is situated in Avannaata (Bogason et al, 2021).

The national policy document *Innovation, Potential, Competence 2020–2023* (*Naalakkersuisuts beskæftigelsesstrategi*) identified some major challenges that are to be addressed in the wake of the COVID-19 pandemic: 1) strengthening sectors that can create economic growth; 2) cutting youth unemployment; 3) special regional employment initiatives; and 4) creating better matches between companies and workers (Naalakkersuisuts, 2020). At the municipal level, the main tasks include providing the services required by law and implementing the policies set at state level. However, since all of the municipalities comprise many smaller settlements, often with vast distances between them, next to no transport connections and very few inhabitants, different measures are taken in each area to provide the necessary services. This means that access to services within Avannaata can differ widely depending on location.



The services available in Greenland vary greatly, both between the different areas and throughout the year. During winter, travel by sea to the far northern and eastern regions is impeded by the High Arctic sea ice.

Photo: Leneisja Jungsberg.

Essential rural services and variations in Avannagta

Greenland is the world's largest non-continental island, vast expanses of which are entirely inaccessible – especially since much of the interior is covered by an ice sheet. The lack of an internal road network makes it practically impossible to travel from one destination to another by land. International accessibility to Greenland is also limited (Bogason et al. 2021). The available service provision in Avannaata therefore varies greatly between the different areas, depending on geographical location.

Ten years of primary and lower secondary education is mandatory in Greenland. Children start primary school at the age of six (Statistics Greenland, 2021). Children from small settlements often need to leave home and move to the nearest town while attending grades 8-10. After finishing primary school, about half of the children do one year at a continuation school in Greenland or Denmark (interview). Only one in seven pupils proceed directly to upper-secondary education, and many young people have to move to another town to do so. Only four towns in the country have secondary schools, and most vocational courses are offered at the six main vocational colleges spread around the country (Statistics Greenland, 2021). Greenland's University, Ilisimatusarfik, is located in the capital, Nuuk. It has a limited number of places, and short-cycle higher educations are also offered at some vocational schools. Since the options for higher education in Greenland are limited, around 30% of students go abroad, with the majority studying in Denmark (Statistics Greenland, 2021). Historically, the structure of the education system has caused significant internal migration from smaller to larger settlements, as well as outmigration from Greenland. "Brain drain" is especially high among Greenlanders, with many younger people moving abroad, especially to Denmark, for higher education. Denmark also tends to offer better job opportunities for skilled people,

which results in many Greenlanders permanently settling there (OECD, 2011). Education is therefore frequently mentioned as the most important service provided in Greenland, as it is considered a vital part of national development (interviews). It is therefore included alongside other essential services, like social care, healthcare, psychological healthcare, child care and transport.

Transportation in Greenland is very different than in the other Nordic countries. Transport by sea and air are common, but the limited road network only serves local areas. Greenland has a total of 12 airports, five heliports and 42 helistops in smaller villages (Bogason et al, 2021). Passengers and goods are transported by sea or air only (Statistics Greenland, 2021), which naturally poses major challenges to service provision in such a large and sparsely populated municipality like Avannaata. During winter, travel by sea to the far northern and eastern regions is impeded by the High Arctic sea ice, which also limits the main economic activity (fishing), as well as freight routes to towns and settlements in Avannaata. In these areas, fishing and ship arrivals only take place between spring and autumn (Statistics Greenland, 2021).

In general, the interviewees agreed on the services that were considered essential in Slätmo et al. (2022), but added that housing was often viewed as an important service in Greenland (interviews). In some settlements, household waste and sewage services are severely lacking, which causes various problems and environmental impacts. Regarding public services aimed at climate adaptation and the management of climate impacts, a few interviewees considered these essential, while others did not mention them at all. Those who saw climate adaptation as important mainly spoke about preparation for warmer and more extreme weather conditions, as well as general preparations related to climate change, the impacts of which are more severe in the High Arctic than in many other places. There was also a strong focus on physical infrastructure, mainly in relation to transport.

The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.



The High Arctic is considered particularly vulnerable to climate change. Climate adaptation of infrastructure and services is therefore particularly important in Greenland. The picture shows the effects of thawing permafrost on a building's stairs. Photo: Leneisja Jungsberg.

Roles and responsibilities

"The towns and settlements are so different in structure, size and characteristics – with great distances between them – that it's impossible to provide all services in all locations," said one interviewee. Others mentioned similar experiences, while adding that resources were also very limited: "The municipality's are limited, as are the funds from the home rule government. We do as well as we can, and many of the services are provided by companies and corporations. Those actors often play a large part in some of the service provision, e.g. housing and providing transport infrastructure."

While the municipalities have formal responsibility for elderly care, childcare, primary education, job centres, benefits and social care, the government is responsible for transport infrastructure, hospitals, emergency responses and higher education. Since Greenland is an autonomous region and part of the Kingdom of Denmark, Denmark contributes financial aid and provides defence and emergency services on land, air and sea. It should also be noted that the US Army operates the Thule Air Base in Northern Avannaata. There are therefore many different relevant actors when it comes to service provision in Greenland, including private ones. Private actors are most often involved in relation to transport and housing, which companies primarily provide for their employees and products. This is done in cooperation with the authorities, which often complement this infrastructure by providing other services in the area concerned.

Challenges and problems in rural service provision

In addition to the long distances that lead to isolated communities, labour shortages of both skilled labour and untrained workers are a challenge in Avannaata. A lack of specialised healthcare staff, such as nurses and doctors, is a major challenge, as is attracting qualified social workers, teachers and kindergarten teachers. A significant number of non-Greenlanders, especially from Denmark, occupy senior positions in the administration of both the home rule government and the municipalities.

"We also need electricians, carpenters, plumbers etc., in great numbers. The same can be said for general workers for the public sector, and the service sector, since the tourism-related job market is growing and needs people in large numbers," said one interviewee, adding that essential workers, e.g. in healthcare, are all too often employed on short-term contracts from Denmark. This is neither sustainable nor economically beneficial for Greenland, as it not only means that salaries have to be quite high, but housing must be arranged and all transport costs covered.

"The housing issue is the tightest bottleneck when it comes to recruitment, since we cannot house all of the people we need at the moment. Because of the lack of housing, when hiring someone who needs to migrate, we must also provide housing. This is very limiting for the public sector. Larger companies, such as those working in construction and hotels, have solved this by building their own housing for employees. However, this too is a problem, since employers own the housing and people cannot easily find other work, because it would also mean finding new housing. This makes the job market quite static and inflexible. If people are dependent on a specific job for a specific employer for housing, they cannot easily move to another job unless their new employer also provides housing," said the interviewee. They also added that municipalities and the state provide social and public housing, but cannot do so at the same rate as private actors, partly because of cost, but also because of a labour shortage in the construction sector.

Another challenge with service provision in rural Avannaata is something specific to the Greenlandic labour market, namely the large degree of seasonal variation in employment due to the climate and geographic dispersion (Statistics Greenland, 2021). Large parts of the labour market work in fishing-related industries, which are inactive during the colder months. Although work could be found in other areas during this period, people's mobility is very limited, since most transportation takes place by air or sea.

Providing health services is another significant challenge in such a harsh and inaccessible landscape, since residents of Greenland often live far from a healthcare centre or a regional hospital. This issue is compounded by the physical transportation network in Greenland, which is subject to high levels of seasonal dependency and sensitive to climate change.



Lack of public and private housing is a major issue in Greenland, which impedes the efforts of municipalities and other service providers to attract essential workers. Photo: Leneisja Jungsberg.

Opportunities and strategies for solving challenges in rural service provision

Over the centuries, Greenlanders have learned to rely on each other and collaborate for survival, and this is still a quality that many see as essential in them being able to provide the services needed for a functional society. Collaboration and cooperation between settlements, different service departments and institutions are commonplace and necessary. Some interviewees point out that the culture of volunteering and cooperating is similarly beneficial and necessary, but that it is crucial to increase resources and funds to ensure safe service provision.

In some instances, digital solutions have been utilised as strategy for the provision of health services. Outside of the main towns, there are healthcare centres, healthcare

stations and rural healthcare consultation services that can be equipped with telemedicine facilities (interviews; Statistics Greenland, 2021). In cases of serious illness, citizens will be transported to the nearest hospital for medical examination and treatment. Patients in need of specialised treatment are transferred to hospital in Nuuk or Denmark. In the event of a severe emergency, patients may also be transferred to a hospital in Iceland (Statistics Greenland, 2021).

Due to the cold climate, Greenland has significant energy needs. Five hydropower plants have been built since the 1990s to supply the larger towns, including Ilulissat. Before the introduction of hydropower plants, fossil fuels were the sole energy source on Greenland. Smaller towns, settlements and outer districts still rely entirely on fossil fuels to generate electricity (Statistics Greenland, 2021). Greenland's energy consumption has gone from 100% fossil fuels to 70% renewables, which is among the highest in the world (Nymann Rud, 2018). Greenlanders are extremely proud of this, and frequently mention it in relation to the climate-mitigation aspects of their services.

However, there are many other aspects of Greenland that also require climate adaptation and management. The impacts of climate change are particularly severe in the Arctic – and the effects of this are already evident, and are expected to worsen. Permafrost thaw poses a threat to the foundations of Greenlandic infrastructure and housing, the warmer climate will melt glaciers, and incidents like the tsunami that devastated the Nuugaatsiaq settlement in Avannaata in 2017 will become more common (Kokkegård, 2017).



Long, cold winters and lack of transport infrastructure greatly limit mobility in Greenland. There are practically no roads between settlements, and for several months of the year the frozen waters limit transport by sea.

Photo: Leneisja Jungsberg.

Learnings and improvements

Based on the study in Avannaata, the following paragraphs outline some recommendations for future policy and actions for rural services.

The fact that Greenlanders have made a significant contribution to climate mitigation efforts with their 70% share of renewable energy should be an inspiration to others around the Arctic and Nordic regions. The effects of climate change on the Arctic region indicate the need for public planning and management that considers how different services must be adapted to a changing climate with more severe weather events. Such adaptation entails, for instance, having a plan in place for ensuring electricity, water and sewage services for residential areas and crucial facilities such as healthcare centres, hospitals and schools, as well securing local roads and transportation hubs such as airports and harbours during extreme weather events.

The governmental level in Greenland could further focus on housing and continue to disseminate information to the public in order to secure better services and attract the needed labour. Improved transport infrastructure and better digital connections were often mentioned as vital to Avannaata's positive development in the years to come – both are active and ongoing policy fields that will be expanded and therefore facilitate a better foundation for more secure service provision.

In the more long-term perspective, there are opportunities for local and governmental public actors to use public spatial (territorial) land-use planning as a tool to further enhance housing. Via active and inclusive land-use planning, public actors should try to exert control over areas in which private actors are allowed to build new housing and other projects, and link the issuing of building permits to obligations that (at least part of) the housing should be publicly accessible access, and not reserved solely for their own employees.

The education level in Greenland remains the lowest in the Nordic region. Around half of the population aged 25–64 have no education beyond lower-secondary level, compared to about 25% in other Nordic countries (Statistics Greenland, 2021). In the past 10–15 years, there have been active policy efforts to raise the education level in Greenland – and while there is some improvement, the emigration level remains very high. In 2009, 14,376 Greenlandic-born people lived in Denmark. In 2020, that figure had risen to 16,770 (Statistics Greenland, 2021). It's vital that Greenland will be able to retain their educated young people and ensure that those who move away for educational purposes return in greater numbers.

The emphasis on the tourism sector is a source of optimism, in terms of both creating jobs and offering development incentives for communities. However, in recent years, many tourism service jobs have been occupied by migrant labourers from Denmark or elsewhere, due to lack of competences among local inhabitants (Karlsdóttir et al. 2020). This situation indicates a need to further enhance efforts to supply training in hospitality skills, and to address the lack of personnel in terms of cleaners and hotel and restaurant staff, e.g. in Ilulissat (Preisler, 2019). This is something on which both public actors, through both policy and supplying relevant training, and private actors could cooperate, since a proportion of the population are inactive on the labour market. At present, it is primarily migrant workers who make up the shortfall in the tourism and service sectors.

It is therefore recommended that the Greenlandic government continues with its active policy work in order to get more people off of social and unemployment benefits and into the labour market. Efforts in this area have been somewhat successful in recent years – e.g. a total of 7,111 recipients of public benefits were

found in Greenland in 2016, but by 2021 that number had fallen to 4,760. For Avannaata, a total of 594 people were in receipt of unemployment benefits in 2016, but that number fell to 477 in 2021 (StatBank, 2022). This of course has a double positive effect, in that it reduces public expenditure on benefits, while securing more taxpayers to contribute to public funds, thereby making more resources available for the provision of high-quality services.



Transportation by air is crucial for the everyday lives of inhabitants in Avannaata, Greenland.

Photo: Ágúst Bogason.

4.5. Rural Services in Múlaþing, Iceland

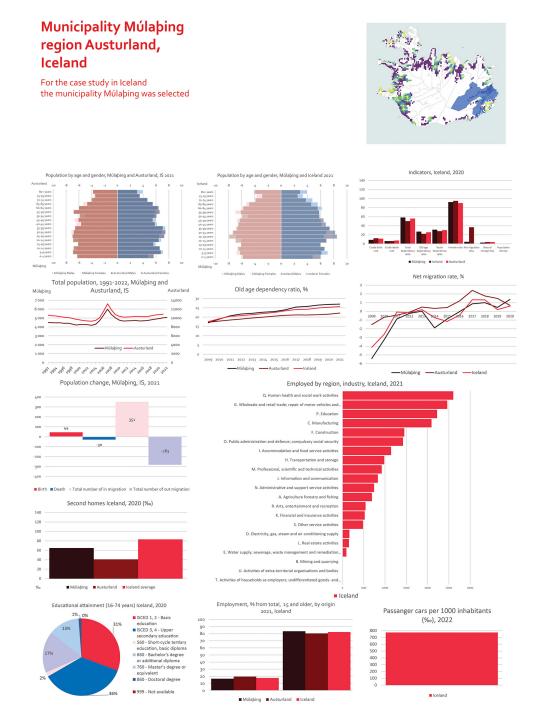


Figure 5. Key statistics for Múlaþing. Source: Authors' analysis and compiled data.

Múlaþing is located in the eastern part of Iceland and consists of four main settlements – Borgarfjörður eystri, Djúpivogur, Fljótsdalshérað and Seyðisfjarðarkaupstaður - merged in 2020 (Stjórnartíðindi, 2020). Along with the four main settlements, there are farmlands and highland areas. Geographically, the municipality is one of the largest in Iceland, yet only has 5,140 residents as of June 2022 (Austurbrú, 2022; Hagstofa, 2022). Fljótsdalshérað is the largest urban area in East Iceland and in effect functions as the quarter's centre. Around 3,000 people reside in the inland urban core of Fljótsdalshérað. Between the mountains of Bjólfur and Strandartindur, both of which are over 1,000 metres high, is the long and narrow fjord of Seyðisfjörður. A town of the same name is located at the bottom of the fjord, at the foot of the mountains (Austurland, 2022). Around 700 people live in Seyðisfjörður (Hagstofa, 2022). Djúpivogur in the most southern part of east Iceland has a population of around 500, while Borgarfjörður in the northern region has a population of 130 (Austurland, 2022). The countryside surrounding the four main settlements account for the rest of the roughly 5,000 inhabitants of Múlaþing (Hagstofa, 2022). The area covers 10,671 km² and has a population density of 0.47/ km2 (Múlaþing, 2022a).

The municipality accounts for around 10% of Iceland's total landmass, while only housing about 3% of the total population (Landmælingar Íslands, 2020 & Hagstofa, 2022). Geographically, the area is highly varied, ranging from the narrow fjords by the Atlantic Sea to the glaciers and volcanic highlands, in between which are vast tracts of farmland. The diverse landscapes of Múlaþing are also echoed in its diverse labour market, but agriculture, tourism-related services, public services and transport are of great importance. In the coastal settlements, fishing is a large economic activity, along with fish farming in the town of Djúpivogur. The nearby municipality of Fjarðabyggð is home to an aluminium plant, which also, along with related economic activities, provides employment for the people of Múlaþing. There are daily flights from Reykjavik and bus connections to the larger towns of east Iceland, as well as Akureyri, the largest municipality in northern Iceland.

The main policy document for Múlaþing is *Byggðaáætlun* (The National Rural Policy of Iceland; (Alþingi, 2018; Alþingi, 2022), which outlines the rural policy programme at national level. It is both a descriptive national policy for regional affairs and a coordination document for other public policies (Alþingi, 2018). It should be noted that the Icelandic governance structure has only two levels – governmental and municipal. Formally, there is no regional level, although informal cooperation does exist between municipalities in certain regions. A newly established regional planning strategy for the period 2022–2044 (Austurbrú, 2022b) is therefore also a relevant document, as is *Sóknaráætlun Austurlands* – a special development plan for east Iceland (Austurland, 2020). At the local level, the agreement of the parties that make up the majority of Múlaþing's municipal council (Múlaþing, 2022b) is the most significant, along with the individual municipalities' plans in different sectors.

In the previous report for this project, *Essential Services in the Nordic Region:* Challenges and opportunities by Slätmo et al. (2022), some key services were identified for the Nordic region. In the report's policy review, both "climate adaption and management of climate impacts" as well as "emergency services and civil defence" were considered to be lacking from Iceland's national rural policy, although the policy does mention the general improvement of emergency services and that security is to be increased throughout the country. Aside from that, the policy addresses the sectors considered most essential, and operationalises location-

The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

specific measures in some detail. Goals and initiatives are directly connected to the relevant ministry, regional association and/or responsible institution, with a specific timeframe for the implementation of initiatives and measures. It is therefore a positive feature of Icelandic rural policy that it specifies goals, and establishes who is responsible for implementing them, how they will be achieved, and when (Alþingi, 2018).

While the rural policy constitutes an overall framework for the future of rural development (Alþingi, 2018; Alþingi, 2022), the hands-on tasks and service provision are further operationalised at local level. The Icelandic municipalities' main responsibilities are childcare and primary schools, along with afterschool activities for young people (e.g. sports and cultural institutions), social care and elderly care. Although the government has overall responsibility for health services, the country is divided into certain "health regions" for this purpose. Múlaþing has its own healthcare centres – e.g. in Egilsstaðir, including a nursing home and assisted living facilities – but the nearest hospital is in the neighbouring municipality of Fjarðabyggð (Austurland, 2022; Lundgren *et al*, 2020).

Because of Iceland's relatively small population, quite a few public services that are considered essential are fully administered at the state level. Beyond health services, secondary and higher education, law enforcement, and much of the transport, physical and digital infrastructure are controlled at the state level. Although the formal responsibility for providing essential services in Múlaþing lies with different authorities at different levels, their importance is well defined at the local level.



Dyngja is a modern nursing home located in Egilsstaåir, Múlaþing municipality. Photo: Ágúst Bogason.

Essential rural services and variations in Múlaþing

Múlaþing has no overall service policy, but instead works towards providing inhabitants with the best possible services in accordance with the tasks municipalities are legally obligated to provide. These obligations are set out in the Icelandic laws on municipalities (*Sveitastjórnarlög*; Alþingi, 2011) and further expanded upon in the relevant sectoral plans at state level. The municipality then has its own policies regarding these tasks, which are often hard to fully implement, given the geography of the municipality and the large distances between settlements and inhabitants in peripheral areas. Despite this, the interviewees generally agreed that, overall, the municipality provided good, high-quality services, although access to them could vary substantially due to the vastly different distances involved.

"It does come as a bit of a surprise that we are considered as the municipality that has best access to services of all rural regions in Iceland. But if we look, for example, at the average distances to services in Múlaþing, this might not come as a surprise. Geographically, Múlaþing is very large and therefore it makes sense that for most people, those in the urban cores the services are good. However, for those at the edges, in the most peripheral areas, the distances can be great, and these parts can be inaccessible during the winter months. So, I would assume that the distances and access to certain services for those are among the worst in the country," said one interviewee in Múlaþing.

Looking at the list of essential services identified in the report by Slätmo et al. (2022), the interviewees generally agreed about which were considered essential. Some made comments about how well these essential services were managed, mainly based on what was the municipality's responsibility, and what was controlled at the state level. In addition, two interviewees mentioned cultural activities as an essential service to be added to the list.

Social, elderly and childcare, as well as primary schools, were generally the most-discussed topics regarding services for which responsibility lies at the municipal level. However, services controlled at the state level were also discussed, including health services, police and maintenance of transport infrastructure like main roads and the airport. A few healthcare centres are operated within the municipality, which is part of the East Iceland Health Region, along with the neighbouring municipality of Fjarðabyggð, where the regional hospital is located. Múlaþing also has a number of telemedical centres.

Telemedical solutions are a necessity for offering certain types of services. This technology makes it possible to increase the availability of regional services for which people would otherwise have to travel great distances. In other words, digital solutions enable services that have not been available before to be offered in more remote places, like the settlement in Borgarfjörður Eystri. The changes in services due to digitalisation have been described as revolutionary. For a long time, Borgarfjörður had no medical staff at all. However, since late 2020, a nurse has been employed on a part-time basis, and is currently being trained to operate a telemedical clinic. In other words, the health service here was previously non-existent, but the digital solution makes it possible to meet a nurse and "see" a doctor, and do so with short notice, in the village (Lundgren et al. 2020; interviews).

Digital solutions have also been utilised for educational purposes, both in primary and secondary schools, as well as for music instruction. Although the priority is to provide "in person" teaching, and transport is often provided to ensure that children can get to school, digital solutions can also be used in some cases. That is sometimes

the case during the winter, when the weather prevents people from travelling – which in some regions can last for many days, or even weeks.

When discussing climate adaptation of services, the interviewees clearly recognised the importance of the topic. Often, it was discussed in terms of the risk of avalanches in certain areas. In particular, the interviewees mentioned the mudslides in Seyðisfjörður in late 2020, which demolished several residential and industrial buildings (Veðurstofa Íslands, 2020). In addition, in the last two years, severe winter storms have hit the Eastern part of Iceland, causing as yet-unquantified destruction of important infrastructure like powerlines, leaving large areas without power for long periods. The importance of addressing climate adaptation of services is therefore a top priority in Múlaþing and neighbouring municipalities. However, much of the responsibility for taking action is at the governmental level. Often, therefore, lobbying and putting pressure on the government are the only options available to local people, in an attempt to draw attention to importance of taking action to prepare different public services and guard against climate change-related events.





Emergency services in Múlaþing can be a challenge in such a geographically large municipality with long distances between settlements. The harsh climate during and stormy winters can intensify the challenge. Emergency rescue squads, made up of local volunteers, operate in all settlements in Múlaþing.

Photos: Ágúst Bogason.

Roles and responsibilities

The merger of 2020 that created Múlaþing also introduced an experimental municipal governing structure. This means that special town councils located within each of the old municipal borders have some decision-making power on issues directly involving their area. This includes formal decision-making power in some local planning affairs, as well as in cultural affairs, while also serving as advisory boards to the municipal council. The municipality's main governing body is the municipal council, which sets political priorities and makes spending decisions accordingly. The major also has an administrative role, must be an active participant in the Icelandic Association of Local Authorities (Samband, 2022), and lobbies the state for special prioritised projects, e.g. for the necessary maintenance of transport infrastructure. The national redistribution fund for municipalities also provides some extra funds to ensure that the municipalities meet certain criteria to qualify for national contributions, and are thus better equipped to fulfil their responsibilities.

As mentioned earlier, many responsibilities for many of the services provided in

Iceland lies at the state level. These include some emergency response services, like police and rescue. The rescue services are almost exclusively manned by volunteers, but operate under the control of and in close coordination with the National Coast Gard at sea and the police on land. Healthcare is also organised at the national level, as is secondary and higher education.

Digital infrastructure, broadband and phone services are also mainly organised at the national level, and largely by private actors. The government is engaged in ongoing projects involving the installation of fibre-optic cables in rural areas and smaller settlements, where the telecommunication companies do not consider it profitable to do so. This is a part of the current regional plan. The uneven geographical spread has resulted in uneven access to many location-based services – in other words, the service varies depending on where people live in the municipality. Nonetheless, most interviewees agree that the overall digital infrastructure was at a very high level, even in many of the most peripheral areas.



Healthcare centres are located at several places across the geographically large municipality. In the smaller and most isolated areas, medical telecommunication centres provide some healthcare services.

Photo: Ágúst Bogason.

Challenges and problems in rural service provision

The main challenges in terms of providing essential services in Múlaþing are mostly related to labour shortages and being able to attract skilled and qualified labour. Interviewees report a general shortage of labour in the municipality in different service sectors, e.g. tourism, as well as workers with special skills. Within healthcare, there are always challenges in recruiting staff for the region – an issue that has in part been solved by e-health solutions and telehealth centres, but there is also a need for qualified staff offering in-person services. Some interviewees also reported difficulties related to attracting skilled social workers, primary-school teachers,

kindergarten teachers, and psychologists.

Some of the most essential staff, e.g. psychologists and specialised healthcare workers, are therefore hired on short-term contracts from other regions or the capital area, and only work in the region for a limited time on a regular basis. This is, however, neither a sustainable nor cost-effective solution.

Another challenge in providing specific services relates to the long distances and travel times between settlements. Since some services must be provided in person, this demands long journeys on the part of either residents or service providers. All interviewees agreed that location within the municipality did affect the inhabitants' access to services.

Generally, seasonal residents were not reported as being a problem or putting extra strain on the services provided by the municipality, but the seasonal increase in tourism does put extra pressure on certain infrastructure, mainly roads and other transport-related structures (cf. Bogason et al, 2021).

Opportunities and strategies for solving challenges in rural service provision

As mentioned before, certain staff, such as healthcare specialists and psychologists, have been hired on short-term contracts from other areas to fill gaps. This is done by necessity, and is not seen as a feasible permanent solution. Digitalisation has, to some extent, addressed issues relating to the lack of labour, but it can never fully replace in-person services. Nonetheless, people within Múlaþing generally see great opportunities in digital solutions, and they have been increasing the use of such solutions since before the COVID pandemic. During the pandemic, the use of digital meetings became the norm, so the development of these tools was accelerated out of necessity, leading people who may previously have been unwilling to use this technology to do so. This has enabled people to use digital solutions for work, studies and medical appointments, which saves time and trips that otherwise would have had to be taken to the urban cores of the municipality, where most services are located, or even to the capital for some medical appointments. The digital infrastructure in Múlaþing is generally quite good, and more services will be provided digitally in the years to come.

Múlaþing municipality has a policy that certain municipal employees can stay for shorter periods of time in places where they are needed or are engaged in certain tasks. They are then provided with accommodation while carrying out tasks that take them far from their place of residence. This solution is in place to avoid spending hours each day commuting.

Cooperation with other municipalities is taking place in certain service sectors. Healthcare is provided at the regional level, and cooperation and staff sharing is quite common within the fields of education and social care. Currently, the municipalities in the eastern islands are open to and actively looking into ways to expand collaboration in a variety of service sectors. As of 2022, there are four municipalities in the region. Fjarðabyggð and Múlaþing collectively have around 12,000 inhabitants, while the remaining two together have fewer than 1,000. Already, many of the services in the smaller two municipalities are provided in agreement with the larger two. Currently, the privatisation of services is not high on the agenda, and private actors are responsible only for very limited aspects of public services.

The current national government, which took office in autumn 2021, aims to strengthen the rural communities in Iceland by giving them more responsibility, so that they take over certain roles and plan and carry out tasks locally. Another aspect of increasing cooperation among municipalities in Iceland is the increased importance of facilitating cooperation through the Icelandic Association of Municipalities (Samband, 2022). This has led to the establishment of a platform for more regional collaboration, and specific projects on specific tasks. Byggðastofnun, the Icelandic Regional Development Institute, another key player in this development, is a state institution that leads important projects and provides guidance. Its initiative include a new project called Municipalities, Climate Change Impacts and Adaptation Measures, in which municipalities carry out risk assessments of climate change impact so that appropriate action can be taken (Byggðastofnun, 2022).





Building protective structures against avalanches has been part of security measures in eastern Iceland for many decades. Warmer weather means that mudslides and floodings are becoming a significant threat.

Photos: Ágúst Bogason.

Learnings and improvements

Based on the study in Múlaþing, the following paragraphs offer a few recommendations on future policy and action for rural services.

Regional actors – or actors in municipalities – can expand their cooperation in different service sectors, and pool their resources to speak in a more unified voice when conveying their needs to the national government. For example, the climate adaptation of services is a top priority in Múlaþing and neighbouring municipalities, but much of the responsibility for taking action to prepare and provide services during extreme weather events lies at governmental level.

Although it's already on the agenda, the government could implement their ideas to place more decision-making power at local and regional level, even though the state performs and carries out the services in question.

The national level could speed up the development of high-speed internet connections and digital infrastructure to ensure equal access – a process that is already underway. The state could also further utilise subsidies and regulatory tools such as taxation to solve problems associated with the lack of both labour and skills.

In addition, along with regulatory assistance from the state, rural and local actors can work together to attract new residents. The rural regions have many attractive qualities that recently have become of added value among the general population –

like solitude, access to nature and a more stress-free environment. These factors, along with lower housing prices and the greatly increased opportunities for remote working, could be utilised to attract more residents, and thus more skilled labour.



Múlaþing has several primary schools and a secondary school. When it comes to vocational and higher education, students must move to other parts of the country or register for one of the limited number of distance-learning programmes. Photo: Ágúst Bogason.

4.6. Rural services in Herøy, Norway

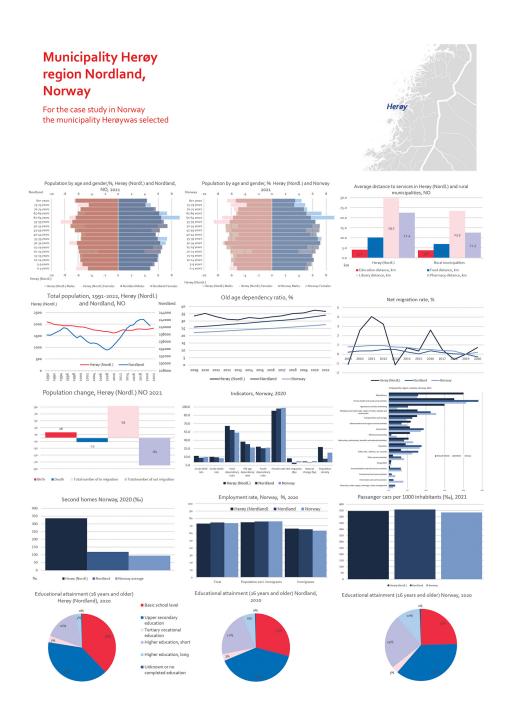


Figure 6. Key statistics for Herøy. Source: Authors' analysis and compiled data.

The provision of and support for accessible local services for all has been a priority for the Norwegian government in recent years. This is reflected in the white paper *Distriktsmeldingen – Levende lokalsamfunn for fremtiden* (Meld. St. 5. 2019–2020), which highlights the importance of ensuring employment opportunities alongside sustainable growth through the utilisation of natural resources. Similarly, Hurdalsplattformen (2021), the current coalition government's political agreement, calls for improved infrastructure, a just and equal service supply and a varied sociocultural life, with an emphasis on the presence of the public sector in local communities.



The municipality of Herøy consists of more than 2,500 islands and islets. Photo: iStock.

Other key national reports and policies also emphasise the priorities for local public services, including *Det handler om Norge - Bærekraft i hele landet. Utredning om konsekvenser av demografiutfordringer i distriktene* (NOU 2020: 15), which evaluates the main challenges for rural development in Norway. The committee behind the report sought to gather knowledge about how demographic trends towards a larger proportion of older people and fewer people of working age will affect remote areas of the country. The report further aims to identify consequences and challenges, especially with regard to maintaining the sustainability of communities, and to make suggestions for how these challenges can be met by both public authorities and private individuals (Slätmo et. al. 2022). Given this context, the main themes considered most challenging in Norway are "providing a good health service", "care and social services", "education", "emergency services", "access to culture" and "places to meet" (Norman et. al. 2020 cited in Slätmo et. al. 2022).

Based on these reviews and other findings, the report *Essential Rural Services in the Nordic Region: Challenges and opportunities* (Slätmo et. al. 2022) nevertheless observed that Norway does cover the most essential rural services identified. However, the same report did identify some shortcomings, including the

effects of the national police reform implemented in 2015–2016 (DFØ, 2021) – and more generally, work on climate adaptation measures in the municipalities. The report adds that Norway seems to be at the forefront of discussions when it comes to new ways of providing local services and how they can be implemented (Slätmo et al. 2022). Examples include encouraging more private-public co-operation alongside deliberate citizen engagement, and increasing local participation in decision-making processes. *Hurddalsplatformen* (2021) identified these aspects as important issues for a new rural development policy under the current government.

The Norwegian case study selected to illustrate the challenges and opportunities related to essential rural services is Herøy in Nordland County. As a small rural municipality located by the outermost part of the country's north-central coast, it faces all the challenges associated with a remote location, but nevertheless has a slightly different landscape of possibilities and opportunities than other municipalities in both the Norwegian and Nordic contexts.

Herøy has a population of 1,819 (SSB, 2022), which is the result of a steady growth trend that began in 2010 after the municipality initiated the project 'Økt bosetting' to attract new inhabitants (Herøyfjerdingen, 2014; Herøy, interview, 2022). While this trajectory is quite unique in a Norwegian rural context, Herøy's current population growth is mainly due to the influx of migrant workers and settlement of refugees. The number continues to vary slightly from year to year.





Political meeting at Husvær/Brasøy. Right: Herøy municipal centre/city hall and administrative offices.

Photos: Diana Huynh.

As an island community, Herøy is only accessible by ferry, and is located around 15 kilometres (9.3 mi) west of Sandnessjøen. The municipality's total size is 64 km², spread across approximately 2,500 small islands – or 3,200 if all of the islets are included, too. The population density is 27.8 inhabitants per km². It comes as no surprise, then, that Herøy's slogan is "Et hav av muligheter" ("A sea of opportunities"). The main islands are Nord-Herøy, Sør-Herøy, Tenna, Ytre Øksningan, Indre Øksningan, Seløya and Staulen, which are interconnected by the bridges Hoholmen and Kalvøyrevet, as well as Åkviksundet, which also links Herøy to the neighbouring municipality of Dønna.

The main industries in the municipality are fish farming and associated processing activities. Other important industries include agriculture, transportation, service industries and tourism. Herøy is aware that a generational change will take place in the municipality over the next 10 years. This means that it will have to recruit several positions in local services, e.g. nurses, teachers and engineers. It will therefore be

important for the municipality to facilitate the further development of business, and to support families with children and younger residents by strengthening and marketing the municipality's advantages. To this end, the municipality anticipates drawing up new strategies to manage further growth.

In connection with addressing its local development processes, the municipality was recognised in a recent national Municipal Index, which compares the management of Norwegian municipalities in 2022, based on data from 2021, and measures the quality of public services delivery per krona of public money spent. Herøy was ranked 21st out of the country's 356 municipalities (Agenda Kaupang, 2022; Lundestad, 2022a;2022b).

Essential rural services and variations in Herøy

Herøy's key municipal plan (Herøy municipality, 2022) accounts for the essential rural services addressed in this report, and also identifies local initiatives planned for the coming years. These initiatives were confirmed during interviews with local leaders and practitioners conducted during September 2022. According to the plan, the most important essential service area is the provision of infrastructure and transportation, followed by health and social care, emergency services and civil defence, education and childcare, emergency services and civil defence, and, lastly, digital infrastructure (although the latter was considered a cross-cutting service area).

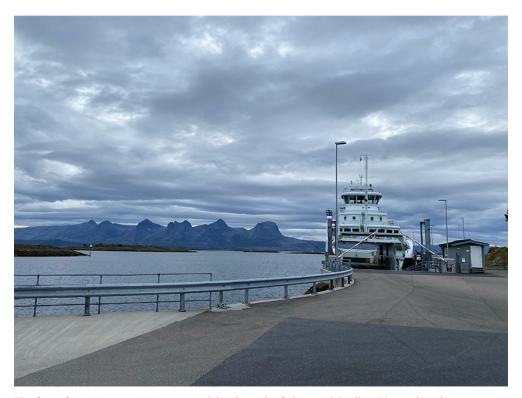
Given the importance of the fish industry, ferry traffic and accessible roads are an essential part of operational logistics. Around 26–27 trailers, carrying various goods, arrive and leave the islands every day. Herøy is therefore highly dependent on ferries and bridges as part of the public road structure. Other aspects, including roads, ports and quay facilities, telecommunications, buildings, water and sewage networks, are also important for sustainable settlement patterns and industrial activities.

Herøy's infrastructure is also closely tied to health and social care. While most of the local care services are located near the municipal centre in Silvalen, these are inaccessible to the smaller groups of the population who live on Herøy's more remote islands. When it comes to the emergency services and civil defence, Herøy is part of a collaboration between municipalities (HALD – Herøy, Alstahaug, Lerøy and Dønna). This means, for instance, that police station is located in Alstahaug. As with health and social care, education and childcare services are also located near the centre, following a school reform that was implemented over the course of several years. Herøy went from having 7–8 local schools to just one school attended by all children aged 6–18. This merger is an example of how Herøy overcame the task of transforming a local service to increase the efficacy of public resources – although the merger was met with some local resistance along the way. There is also one public kindergarten, located near the health centre.

During the interviews, it was clear that the potential for digitalization could be expanded. For instance, it was interesting to note that the health and social care services had not yet taken full advantage of the opportunities for distance-spanning tools for remote work, grocery stores and health sector. Nonetheless, the municipality was among the first in the region to install fibre cables to provide high-speed internet, back in 2010. It was a highly costly undertaking, which was

considered an enormous risk at the time, but has since proved to be a sound investment. Herøy has not experienced any drastic digital "transitions" within the municipality's administration or among its local population. The municipality is currently part of a new regional cooperation programme called Digital Helgeland (Digitale Helgeland, 2022).

Finally, a service that was not identified in the initial literature review of this study as "essential" turned out to be critical in Herøy's case – namely culture, volunteering and leisure activities, especially for children and young people aged 6–16. While sports seem to be a popular activity for many, and are well attended, opportunities for musical and other arts activities are lacking, yet remain of great importance. As of 2021, 27.5% of children are enrolled in the municipal music and culture school – but this is nevertheless an area that has been allocated the least resources compared to other services such as libraries and sports facilities (SSB, 2022). There is intrinsic value in ensuring that a range of activities are offered for children and young people – it boosts the municipality's attractiveness and improves the living environment and public health, both for individuals and among the local communities (SSB, 2022).



The ferry from Herøy to Husvær – an island south of the municipality. Discussions have been ongoing for a long time regarding whether a bridge should be built between Tenna and Husvær to establish a road connection within the municipality.

Photo: Diana Huynh.

Roles and responsibilities

Like all municipalities in Norway, Herøy is responsible for providing the local public services addressed in this report. This includes primary education through 10th grade, health services, senior citizen services, unemployment schemes and other social services, planning and zoning regulation, economic development, and

municipal roads. The municipality is governed by a council of elected representatives, which in turn elects the mayor. The municipal director is responsible for three departments, each of which has a director overseeing the coordination of the 13 "essential" service units, with an appointed for leader for each one (Herøy municipality, 2022). The staff members have at least one monthly cross-departmental meeting to discuss updates and issues from each unit.

While Herøy operates independently with regard to its service provision, it also works in close collaboration with other municipalities, especially with Alstahaug, Leirfjord and Dønna (which together with Herøy are known as the HALD municipalities). For example, the four share functions related to emergency services and civil defence (Lundestad, 2022a;2022b).

Herøy is a small municipality, and it became apparent during the interviews that those working in the administration and the unit coordinators share many overlapping responsibilities when it comes to delivering services to the population. As one employee put it, "the workday can be fragmented with different capacities to solve the issue at hand". Nonetheless, the public services are consistently delivered, the demand is generally met, and the development is heading in the right direction.

Challenges and problems in rural service provision

One of the interviewed officials summarised the overarching issue facing the municipality as follows: "Herøy has [in many ways] a larger task when it comes to delivering public services than other rural municipalities due to its location" (interview). The critical need for and reliance on well-functioning infrastructure and transportation services has already been highlighted, as this affects the municipality's capacity to deliver to the local community on an everyday basis – but it is also necessary to ensure that the municipality can meet its future development potential. As of October 2022, Herøy is waiting for the government to subsidise free ferry services on local routes, which will be highly significant for the local population (Strøm et al, 2022).

The municipality is dependent on population growth and retainment, but is having to contend with an ageing population, which means that demands for services might exceed tax income. However, attracting new inhabitants to the local community also entails having enough housing units, and Herøy currently has a housing shortage. In fact, there are almost as many second homes here as permanent homes, but most are left empty for most of the year (Herbo AS, 2022; SSB, 2022). Moreover, the summer seasons of 2020 and 2021 brought some indication of what the future challenges might entail, as the COVID-19 pandemic highlighted the limitations of the municipality's capacity for local service delivery. Given the high amounts of tourist traffic, the ferry routes were barely able to cope with the increased demand, which also had an impact on the local population's mobility, causing long queues and delays. At the same time, the municipality exceeded its capacity in terms of waste management and accommodation options.

Another challenge mentioned by the interviewees was the workload burden placed on individuals, particularly leaders and unit coordinators. This is the consequence of a long period of difficulties with recruitment and attracting the right competencies for jobs in the municipality. For example, a senior position in the municipality's environment and technical department was vacant for more than a year before the current employee was hired. In other words, the municipality faces a lot of uncertainty when trying to attract people with the right competencies – especially

operational and engineering skills, and technical knowledge, including law.

More generally, new structural processes in Herøy have been put in motion to streamline several development initiatives across all sectors in the years to come. There is evidently untapped potential in digital infrastructure and IT solutions across several sectors, including healthcare and technical services. For instance, while the older population can receive care either at the healthcare centre or in their homes, more emphasis must be placed on public health measures that include preventive action related to physical activity and mental health for all ages.

Opportunities and strategies for solving challenges in rural service provision

Despite the many tasks that lay ahead to ensure that the municipality can deliver services for all, Herøy has a lot going for it at present. From an economic perspective, despite the fact that public ownership is often intertwined with private resources originating in the fishing industry, the municipality is operating at a 7.4% surplus per capita. The highest level of expenditure occurs in the healthcare services (SSB, 2022), but a lot of resources are also allocated to integration services aimed at new residents. The work culture in Herøy encourages collaboration, and in a sense represents another "surplus". As one informant put it, there is, "A lot of communication all the time between the leaders [...] a high level of trust and a lot of local knowledge." It should also be noted that during the pandemic, virtual meetings with other municipalities worked very well – and while this is way of working is not unique to Herøy, it is important to take full advantage of the opportunities it offers, such as networking and collaborations beyond the Helgeland region.

The ongoing revision of the municipal strategy's social plan (kommuneplanens samfunnsdel), which is expected to be approved in 2023, includes an evaluation of the potential for merging services. While the social plan is a formal part of the planning system and procedures, it has served as a unifying process for those working in Herøy. The previous strategy was outdated, and considerable effort has gone into ensuring that this process results in a steering document for the administration in the coming years. Citizen engagement is an important part of this process, so a digital survey was sent out to everyone living in the municipality, inviting them to share their thoughts on local development and needs.

In the future, it will be important to enhance collaborate with the local business community in order to jointly address some of the services for the local population. This could involve, e.g. the development of new public spaces for children and young people. Public-private partnerships can also help address issues related to expanding tourism, including general improvements in terms of attractiveness, but also new ways of thinking about adapting and designing innovative and sustainable places (e.g. Herøy could qualify for the Gnist programme in Norway). A good example is the refurbishment of the former primary school, Skolo. This was a private initiative that transformed one of the old school buildings into a lively hotel and restaurant with a year-round cultural programme (Skolo, 2022). As one interviewee stated, while Herøy might not be "...fully prepared to receive large amounts of tourists [...] we are at a place we need to be to adequately deliver services to the local community". Through new partnerships and the right planning among relevant stakeholders, Herøy can thrive even more.

Ytre Helgeland – the region of which Herøy is part of – is a tourism destination with significant potential. The expectation is that the development of sustainable tourism

will help to maintain and further develop the local community. In 2020, 597 holiday homes were listed in the municipality, in addition to several tourism businesses. Increasing the tourism-based industry will be an important source of growth for the municipality in the future and ease dependence on fishing, which will make the region and municipality more resilient to events such as relocation of processing factories or disease outbreaks at fish farms, to which the local economy is vulnerable.

Issues of climate and sustainability cut across several strategic plans in Herøy, as adaption of the fish industry and sustainability are crucial concerns. The establishment of the Brasøysund bridge has the potential to consolidate and integrate many local services, and help establish a new connection between the communities within the municipality and the rest of the region (Herøy municipality, 2022). In addition, another planned mainland connection between Herøy and Dønna-Alstahaug is also critically important. This is a major infrastructure undertaking that will require coordination and efforts from the municipalities involved, as well as the region (in Norwegian Fylkeskommune) and national government. Feasibility studies have been conducted for both tunnel and bridge alternatives, which are currently being serviced by ferries. Establishing a mainland connection will have enormous significance for Herøy municipality's population growth and attractiveness. However, while both mainland connections will help develop larger parts of the municipality's key functions, Herøy's socio-economic and cultural capital is also the sea. As such, the investment in a mainland connection must be done in a way that takes account of place identity and "the sea of opportunities" it brings.

Learnings and improvements

Based on the study in Herøy, the following paragraphs summarise some recommendations for future policy and actions for rural services.

From the local level's perspective, it is important for actors at the national level to be realistic and flexible about the need for remote working opportunities, in order to attract the right competencies. Support for skills-matching is needed, which means striking a balance between attracting population and maintaining growth and delivering services – especially when it comes to work that can be done remotely. The assumption is that attracting and recruiting relevant competencies will be an ongoing challenge.

Further, it is important to plan for younger people who are looking to settle down, or are returning to Herøy/the Helgeland region. This includes more opportunities for cultural and leisure activities, such as music and the arts, for children and young people. Ensuring a wide range of activities for children and young people is vitally important for the municipality's attractiveness, living environment, public health and well-being.

For actors at regional and local level, based on the research and observations in this project, it will be important to expand Herøy's network beyond Nordland county, and include other municipalities, not only elsewhere in Norway, but also in other Nordic countries, which could benefit the provision of local services in the future. Based on the studies, the topics for collaboration could include climate adaptation and related vulnerabilities, especially with regard to the fishing industry. The potential developments in the tourism industry are another topic to be addressed by future collaborations. The high number of visitors during the pandemic showed that the municipality was operating at maximum capacity. Collaborating with other

municipalities will therefore further increase capacity, and also ensure that Herøy and Ytre Helgelandskysten offer a sustainable tourism experience.

The interviewees also indicated that digital services and IT infrastructure need to be expanded to ensure resource-efficient service delivery in Herøy's rural and island regions. This includes developing distance-spanning technologies in healthcare. Another approach to ensuring the efficient and effective use of resources is to explore ways of making flexible use of residential and other buildings over time – for example, Skolo 1954, a former school, is now a guest house and local restaurant.



Skolo 1954 is a renovated school building that now serves as a guest house and local restaurant with year-round cultural programme.

Photo: Diana Huynh.

4.7. Rural Services in Vimmerby, Sweden

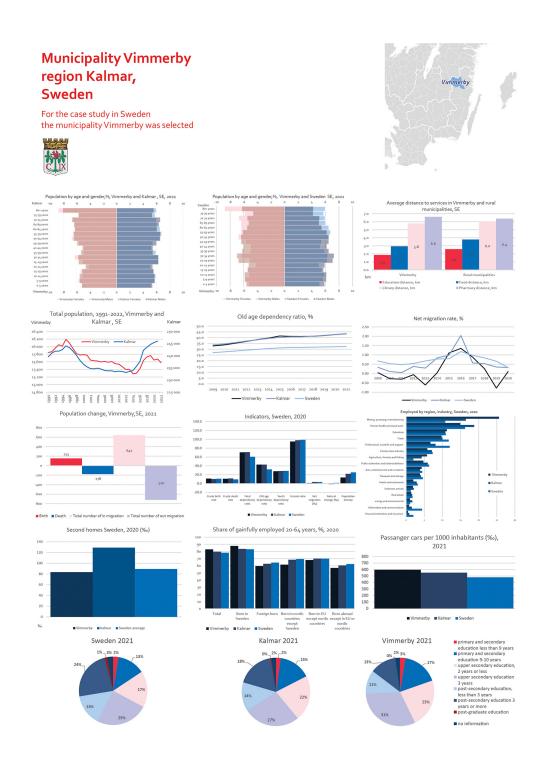


Figure 7. Key statistics for Vimmerby, Sweden. Source: Authors' analysis and compiled data.

Vimmerby municipality is located in the northernmost part of Kalmar county in Sweden, and has 15,578 inhabitants (2021). Vimmerby, Gullringen, Storebro and Södra Vi are the largest settlements in the municipality. 73.2% of the population live in urban areas, while 26.8% live in rural areas (Vimmerby Municipality, 2022). The municipality has seen a slight population decrease between 1990-2021, while the old-age dependency ratio has increased over the same period (see figure 7). The municipality is characterised by varied businesses, a high degree of local engagement, active life and diverse nature. There is also a strong tourism industry surrounding the author Astrid Lindgren's cultural heritage. As shown in figure 7, according to the authors' geostatistical analysis, the municipality ranks higher than other rural municipalities in Sweden in terms of access to libraries, education, local shops and pharmacies. The municipality's economic profile is characterised by two key types of industry: manufacturing and extractive industries, as well as healthcare and social services, followed by agriculture, forestry, and fishery, as well as hotels and restaurants (figure 7). This economic profile is similar to the county Kalmar (Region Kalmar, 2020).

Administratively speaking, Vimmerby is part of Region Kalmar, which has a regional development strategy (RUS) for 2030⁷ (Region Kalmar län, 2019) and a regional service programme for rural areas and service supply (Region Kalmar län, 2020). In addition, a public transport supply programme is in place for 2021–2029 (Region Kalmar län, 2021). These regional development strategies generally point to solving challenges linked to intra-regional balance, opportunities with digital solutions, and investments in infrastructure and communications, with a view to connecting different services and labour-market nodes throughout the region and neighbouring cities.

In Sweden, the national strategy for sustainable regional development is called *Nationell strategi för hållbar regional utveckling i hela landet 2021–2030* (Näringsdepartementet, 2021). It is to be implemented in coordination with rural policies, the sustainable urban development policy, environmental policy, and other relevant policy areas (Näringsdepartementet, 2021). The National Strategy for Sustainable Regional Development covers topics like healthcare, social care, education, and physical and digital infrastructure from a sustainable development perspective (Näringsdepartementet, 2021). In order to meet current and future challenges while also finding solutions, the government has identified four strategic policy areas that will form the basis for the implementation of the regional development policy throughout 2030. These are: 1) equal opportunities for housing, work and welfare throughout the country; 2) skills supply and skills development; 3) innovation, renewal and entrepreneurship; and 4) accessibility throughout the country via digital communications and the transport system (Näringsdepartementet, 2021).

Sweden is an EU member state, and as such its rural and regional policy is also influenced by the EU programmes and policy, including the Regional Funds, the Just Transition Funds, the Common Agricultural Program, and the LEADER Local Development Strategies (Jordbruksverket, 2022a, 2022b; Tillväxtverket, 2022).

Moreover, the Swedish Agency for Economic and Regional Growth, the 21 regional councils, and the County Administrative Boards (Länsstyrelserna) have responsibility for the development and implementation of rural and regional policy in Sweden (Tillväxtanalys, 2021).

A report published by the Swedish Agency for Economic and Regional Growth (Tillväxtverket, 2021) addresses issues regarding access to more privately owned and

^{7.} Which is currently being updated.

managed services, and is intended to serve as a set of guidelines for regional planning and development for commercial and public service sectors. To ensure the regional presence of the services provided by Swedish national authorities and agencies, the county administrative boards have carried out an accessibility analysis focusing on all parts of the country (Länsstyrelsen i Örebro län 2022). These analyses serve as a guide for the planning and development of access to services in Sweden.

A policy analysis of services in rural areas depicts that policy in Sweden covers most of the essential services identified in the research literature (Slätmo et al. 2022, p.29). Although the Swedish national strategy often only makes general reference to specific priorities and challenges, it also refers to other, more detailed policies and sectoral plans, as well as EU policies. However, the same analysis finds that the climate adaptation of basic rural services, along with the management of climate impacts on rural services, could be addressed in greater depth in Sweden. In addition, it should be noted that Swedish regional and rural policy does not address the availability of emergency services such as ambulances and police, nor civil defence in rural areas. This indicates that there is some room for improvement (Slätmo et al. 2022).

Essential rural services and variations in Vimmerby

The interviewees generally agreed with the services identified as essential in the project by Slätmo et al. (2022). They highlighted the variety of services in the municipality, both in the rural areas and in the central towns. These services include both basic or statutory public services and other commercial services. The municipality offers a range of services including healthcare, social services, school transport, libraries, municipal roads, comprehensive and detailed planning, emergency services and preparedness, as well as providing drinking water and sewage systems. Moreover, there are municipal and independent pre-schools, municipal primary schools, a secondary school, colleges, and vocational education programmes offered through Campus Vimmerby. Vimmerby Lärcenter also provides adult learning and vocational training (e.g. Komvux). Commercial services include, e.g. local shops, pharmacies, petrol stations, postal service points, cafés, restaurants, mechanical workshops, and agricultural and industrial services. The municipality also has a well-established fibre-optic and broadband network, as well a variety of lively cultural and sport-related associations.

Public transport is organised at regional level. Kalmar is a large county with a relatively sparse population, which makes it difficult to offer comprehensive public transport in sparsely populated areas. Kalmars länstrafik are working to develop a network of important exchange points along the major regional routes (Region Kalmar län, 2021). Other traffic services that have become important in the municipality's efforts to increase climate mitigation actions include charging stations for electrical cars, and facilities for hydrogen and biogas refuelling (Länsstyrelsen Kalmar, 2019; interviewee).

The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

^{9.} However, the municipality is only responsible for certain parts of healthcare, such as nursing homes, short-term places for older people and people with disabilities. The municipality also provides day activities with assistance, and makes decisions regarding and carries out healthcare interventions such as habilitation and/or rehabilitation, as well as home visits/home healthcare.



Photo: Vimmerby municipality.

In terms of climate adaptation as a service, the respondents considered this an important issue, but one that has no specific strategy in relation to services. The municipality is working on a climate adaptation analysis. which will be implemented in the new comprehensive plan, providing a cross-sectoral perspective on climate adaptation in various societal functions. Otherwise, water management and safety, as well as road networks, are concrete examples of services in which climate adaptation issues are more evident. In addition, Agenda 2030 is increasingly used as a strategic tool for addressing these issues.

When asked about the variation in service needs, the interviewees reflected on the geographical conditions for service provision. For example, one respondent highlighted the fact that, in terms of shape, the municipality is almost round than elongated, with the services concentrated in the middle. This creates more opportunities to minimise differences in distance compared to more elongated municipalities. It was also highlighted that service needs differ in relation to the area's demographics and livelihoods. However, in more sparsely populated areas, access to public transport, infrastructure, digital services, i.e. fibre-optics, and to some extent road maintenance, is generally less good than in more densely populated areas. There are also seasonal variations in the demand for services. This is partly affected by the demand for infrastructure for holiday homes, but also the demand for visitor and outdoor activities. The interviewees consistently mentioned outdoor activities as an important service, which contributes to the municipality's rural attractiveness. One respondent also mentioned "ecosystem-services", which highlight the role of nature and ecosystems as service providers that can enhance wellbeing and the attractiveness of the built and lived environment.

Roles and responsibilities

In Sweden, the municipalities are responsible for many of the services available locally, including certain parts of education, healthcare, social services and elderly care functions, libraries, school transport and comprehensive planning. While the municipalities are legally obliged to maintain some activities, others are voluntary and decided by local politicians (Sveriges Kommuner & Regioner, 2022). In turn, the regions have responsibility for healthcare, public transport, culture and regional development. One of the municipalities' most important sector-wide tools is comprehensive planning. Vimmerby is currently developing a new comprehensive plan for 2050, based on dialogue with inhabitants, businesses and civil society in both the rural communities and the central towns. This dialogue process has covered various issues related to service, economic development, young people's and children's perspectives, and the development of residential and rural areas.

The municipality and the region have many common points of contact, in terms of responsibility and mandate, for the provision of services in Vimmerby. For example although the mandate for healthcare and public transport planning lies with the region, there is also a need for coordination with the municipality in general, as well as detailed planning, to facilitate synergies and develop seamless systems. Intermunicipal collaboration is also important. For example, in order to expand the range of education programmes offered, six municipalities in northern Kalmar County formed a joint high school region. Vimmerby municipality also cooperates with other municipalities in the county, e.g. in relation to general planning, the school system, and coordinating the appointment of legal guardians (in Swedish a so called "god man"). The municipality is also part of a joint public procurement centre together with neighbouring municipalities (Vimmerby kommun, 2021).

National authorities are also important. For example, Kalmar County Administrative Board coordinates regional climate and energy work and deals with many issues, including outdoor activities, social sustainability and gender equality, as well as water management at county level (in effect, acting in the capacity of a water-management authority). Funds from the Swedish state and the European Union (EU) are also important for the municipality's planning and development of services in the countryside, e.g. state funds for service development, the EU's Leader funding and other investment support within the EU Rural Policy Programme.

In addition to this multi-level cooperation, the municipality cooperates with the private sector and civil society, which are seen as playing vital roles in the future of rural areas. The development of villages, including the availability of different types of commercial services and a rich cultural life, depends on the willingness of individuals and companies to engage with and invest in their local communities. This is reflected in the regional service programme, which points out that collaboration with business and the promotion of local involvement are important critical issues for the future of service provision in the county's rural areas (Region Kalmars län, 2019). Some aspects of the services are provided by or in collaboration with the private sector. Vimmerby municipality has established several platforms for stakeholder dialogue, e.g. Vimmerby tillsammans (Together for Vimmerby). Another

^{10.} In Region Stockholm and Region Skåne, the Planning and Building Act entails an obligation to develop regional spatial plans (Boverket, 2022).

In Region Stockholm and Region Skåne, the Planning and Building Act entails an obligation to develop regional spatial plans (Boverket, 2022).

Including Västervik, Oskarshamn, Hultsfred and Högsby.

example is Vimmerby municipality's social local development strategy (SLUS, 2017), which aims to develop a shared visioning and enhance local attractiveness. Furthermore, several civil society organisations have been established in a bottom-up manner aimed at monitoring and discussing rural issues, and matters concerning older adults as well as people with functional impairments or disabilities. Local rural development groups can also, via associations or companies, apply for municipal village grants to strengthen local organisation.

Challenges and problems in rural service provision

The main challenge facing public and basic services in the municipality is the economy. The municipality's areas of responsibility are increasing, while the tax base, on the whole, is decreasing. At the same time, the municipality has an ageing population with increasingly multi-faceted service needs.

Other major challenges are recruitment and a shortfall of competences, particularly in schools and healthcare functions. Many services in rural areas also depend on voluntary participation, which means that individuals and local entrepreneurs are under considerable pressure to engage. A high level of dependence on individuals instead of cohesive systems leads to unpredictability and built-in fragility. This is the case, for example, with the municipality's part-time firefighters. The presence of public authorities was also highlighted as key service in rural areas. This depends on national spatial prioritisation when budgeting transport and road network investments and regional prioritisations, as well as the municipalities' ability to attract sufficient competences both in public services and in a budgetary capacity.



Rumskulla, Vimmerby municipality.

Photo: Vimmerby municipality.

^{13.} This includes, e.g. the rural council, a forum for consultation and discussions between rural interest organisations, and the municipality's committees on issues of principle (Vimmerby kommun, 2018a). There is also a pensioners' council, which functions as the municipality's referral body in matters of principle concerning older people (Vimmerby kommun, 2022), and the Accessibility Council, which is an important channel for individuals with disabilities (Vimmerby kommun, 2018b).

The rural schools and their status is a recurring theme in the interviews. The policy pursued in the municipality has meant that many rural schools have remained open. In the past, there have been numerous debates, proposals and even decisions taken for school closures for budgetary reasons and challenges in recruiting teachers. However, following a referendum a few years ago, it was decided that rural schools debated for closures would remain. Thus far, the politicians have held that line (interviews; SVT Nyheter, 2016). Rural schools are often regarded as decisive for the very existence of the villages, in terms of fostering local identity and closeness, and ensuring safety. At the same time, both researchers and the municipality's administration highlight the complexity of the schools' role in the development of populations and services (interviewees; Amcoff, 2012). Accessibility and a locationoriented perspective are among the many parameters taken into consideration when it comes to education planning and provision. The Convention on the Rights of the Child became law in Sweden in 2020, which means that all relevant measures must prioritise the children's wellbeing. One respondent this as an important principle in relation to the development and planning of the municipality's rural schools. Fundamentally, it is a matter of balancing resource distribution with how best to offer equal schooling for children throughout the whole municipality.

Other issues mentioned during the interview were the needs of older citizens and the challenges of maintaining services adapted for this demographic group. Many want to remain at their rural homes as long as possible, which places demands on the municipality in terms of care and support. Streamlining and reducing costs in connection with schools, education and care, while also maintaining a local presence, are major challenges. There are also costs associated with road maintenance, snow removal and street lighting – but the social service functions are seen as more pressing.

Opportunities and strategies for solving challenges in rural service provision

Vimmerby's location enables functional connections to be made to various regional centres and labour markets. For example, the connection to the city of Linköping is important for broadening the labour market. Also important for rural areas are the upgrading of the railway and improving commuting opportunities in Vimmerby. The interviewees also mentioned the importance of multi-modal systems and seamless commuting solutions being connected to the railway network. Here, the interplay between city and countryside is seen as both an enabler and resource.

The municipality cooperates in various ways with other municipalities in order to fulfil its mission. At the same time, civil society and the private sector perform more tasks today that were previously the municipality's responsibility. Several interviewees highlight this cooperation with business and the promotion of local involvement as important for future service supply in rural areas. The importance of cooperation with civil society and the private sector is also highlighted in local and regional strategies, as a means of solving future service supply and sustainability challenges in rural areas.

There are several examples of services being offered in new ways in rural areas. A home delivery allowance enables permanent residents in rural areas to get help obtaining groceries. There are also unmanned local shops in the municipality, which

has boosted the villages in which they are located.

Digital developments represent both an opportunity and a challenge for rural areas. For each service that can be performed online, that service becomes available to many more people in rural areas. Examples include, for example, the new, unmanned 24-hour local shops in rural communities. At the same time, people who cannot take part in the digital transition, for various reasons, e.g. lack of digital literacy or inadequate fibre-optic networks, are at risk of being excluded from changing or new types of service. This risk is especially evident when digitalisation is followed by a dismantling of non-digital services. At the same time, it can enable sustainable travel, e.g. digital solutions for carpooling or on-demand public transport, as well as increased access to local shops, postal services or digital books.



Stångådalsbanan, Vimmerby municipality.

Photo: Vimmerby municipality.

An interviewee from the municipality's administration mentioned that the regional service programme addresses the possibility of municipalities developing their own local service programmes. In doing so, the municipalities can also identify strategically important service locations that enable the bundling of services, also known as "service hubs". Furthermore, the possibilities for adaptation policies to address the challenges associated with a declining tax base were also highlighted. The priorities for this work can be set in parallel with the development and implementation of innovative solutions that take advantage of new opportunities, e.g. digitalisation and multi-actor collaboration. The development of a new and comprehensive plan for the municipality can lay the foundation for this work.

Learnings and improvements

It is important to retain analogue service and contact points, to ensure that people are not excluded from services that are in the process of being digitalised.

Another priority is to develop a new and comprehensive plan that includes an adaptation policy aimed at addressing the challenges associated with a declining tax base in the municipality – e.g. using established dialogue platforms to identify the most strategic service locations, and which services can be further digitalised.

When allocating funds to schools, national and regional public actors can aid the municipality by prioritising budgetary and development measures for schools.

4.8. Rural Services in Geta, Åland

Municipality Geta region Åland, Finland For the case study in Åland the municipality Geta was selected Population by age and gender, Geta and Åland, 2021 Population by age and gender, Geta and Åland, 2021 Population by age and gender, Geta and Finland 2021 Average distance to services in Geta and rural municipalities Åland

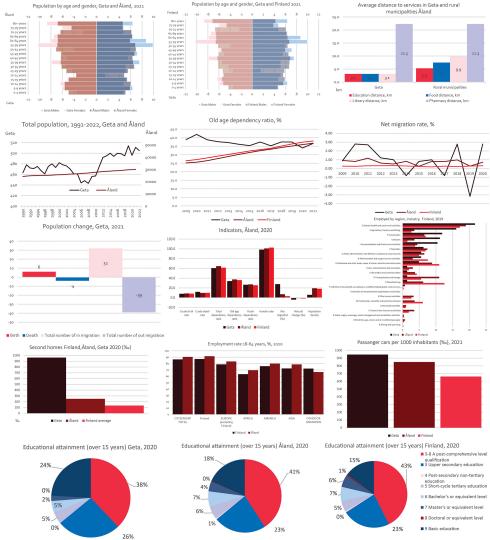


Figure 8. Key statistics regarding Geta, Åland. Source: Authors' analysis and compiled data.

Geographically located between Sweden and Finland, Åland is an autonomous territory comprising more than 6,500 islands, islets, and reefs. It has a population of 30,344 people, spread across 65 islands. Geta, one of Åland's 16 municipalities, is located in the northern part of the main island, and is home to around 500 people. Key livelihoods in Geta consist of agriculture and the service sector, both in the municipality itself and elsewhere on Åland. Apple cultivation, for example, is very widespread. There are also a number of local businesses connected to fishing, handicrafts and tourism. The housing is spread out across the municipality, while most of the services are concentrated around Vestergeta village. Geta's housing stock consists of both permanent housing and summer cottages.

The government of Åland has an overarching political goal of maintaining thriving rural and archipelagic areas, although the preconditions for this vary between the municipalities and local communities. It is vital for the local municipalities to offer accessible rural essential services in order to enable thriving rural communities. This includes, e.g. schools, workplaces, healthcare, social services and care for older people, as well as commercial services such as a local shops and other local enterprises (Ålands landskapsregering, 2019). The public sector is large and employs almost a third of the working population of Åland (Ålands landskapsregering, 2015).

Some of the main sectors targeted in Åland's rural policies are education, healthcare, social care, and physical infrastructure which mainly addresses road and maritime transport (Ålands landskapsregering, 2019; Ålands landskapsregering, 2021 as referenced in Slätmo et al., 2022). The Agenda for Sustainable Development on Åland 2030 also sets out strategic goals for a sustainable Åland, which targets wellbeing, participation, and inclusion (Bärkraft, 2016). Moreover, since 2012, Åland has been pursuing the "Digital agenda för Åland", which set out the regional policy for the digitalisation of public services (Ålands landskapsregering, 2022 as referenced in Slätmo et al., 2022). Åland, as a self-governing territory, applies its own legislation in many economic and societal areas. However, it also shares some mandates and responsibilities with Finland. Examples of these are found in contingency matters, such as providing health equipment and transport in the event of emergencies (Försörjningsberedskapscentralen, 2021).

Essential rural services and variations in Geta

A range of municipal services are provided in Geta, such as housing (with night care) for older people, a daycare centre with approximately 30 places, and a modern school for grades 1–6. The school also has a library and a multi-purpose hall that everyone in the municipality can use. The recycling station is one of the municipality's more popular services. Geta also has various important commercial services, including a local shop, postal service and a petrol station (Geta municipality, 2021). The close proximity of the service points, many of which are clustered in Vestergeta village, offers possibilities for synergies. The municipal office is also located in Vestergeta, handles general administration, finances, invoicing and bookkeeping, and also serves as a common hub for the various sectoral units in the municipality.

The interviewees agree that Geta offers public services at a high level. Due to the small size of the municipality and its close proximity to residential areas, the municipal administration maintains close contact with the population, and communicates through various channels, including the local newspaper *Getabladet* and the municipality's website, as well as via the reception desk at the municipal office.





Left: Vestergeta service point in Geta municipality. Right: Geta municipal office in Vestergeta village.

Photos: Elin Cedergren, Nordregio.

The services are funded by municipal taxes, fees and rental income, as well as from a provincial support share from the government of Åland, called "landskapsandelar". ¹⁴ For commercial services, different sources of funding are available to companies and associations. For example, the local shop receives retail support (in Swedish *stöd till detaljhandeln*) from the government of Åland. ¹⁵ Other examples include the distribution of European structural and investment funds.

Although there is no overarching public services strategy, Geta applies a variety of sectoral plans and strategies for coordinating and planning services and other infrastructure. The interviewees generally agreed with the list of essential rural services identified in the report by Slätmo et al. (2022). In particular, the interviewees emphasised the importance of the statutory services that the municipalities must provide, such as schools, kindergartens and care homes for the older people. They also mentioned commercial services such as the grocer, the postal service and close proximity to a pharmacy.

In addition, the interviewees highlighted the importance of emergency and preparedness services in the municipalities, such as fire safety, reserve units and water-safety issues. When it comes to fire safety, the municipality is highly dependent on local volunteers, and co-organises rescue and safety services with neighbouring municipalities. The interviewees acknowledged the importance of environmental preservation and climate change adaptation, but most did not present practical examples of climate management in services per se. Rather, it was seen as a cross-cutting issue to be integrated across different service areas. The municipality is currently in the midst of a strong expansion phase, particularly with regard to the municipal water supply network, with a view to expanding housing provision and attracting people to the municipality.

In addition, some services regarded as essential in Åland were missing from the list of rural services identified in Slätmo et al (2022). Among other things, the role of civil society and the church were highlighted, especially regarding cultural services and social networks. "It has been quite important now that we have received Ukrainian refugees," said one interviewee. The interviewees also highlighted the importance of providing natural and recreational services to both citizens and tourists. Geta

^{14.} The municipalities receive provincial shares to finance services. These shares constitute a supplement to the municipal tax income from permanent residents. The municipalities are allocated cost-based provincial shares in the area of social care and within primary schools. The cost-based regional shares are calculated according to a base amount per resident in the municipality. In the area of social care, municipalities are allocated two cost-based provincial shares, one for social care and one for coordinated social services (Ålands landskapsregering, 2021b).

Retail support: https://www.regeringen.ax/naringsliv-foretagande/finansiering/stod-detaljhandeln

This includes, for example, an elderly care plan, a contingency plan, a sector plan for the technical sector and the Roadmap for a Sustainable Geta.

^{17.} The essential rural services identified in Slätmo et al. (2022) are healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts; digital infrastructure; and emergency services and civil defence.

municipality, for example, invests in being a municipality that offers good opportunities for outdoor activities, e.g. climbing, hiking and frisbee golf.

As Geta is a small and sparsely populated municipality, the interviewees agreed that there are no substantial differences in service needs within the region. The key differences in terms of needs and demands are delineated by societal groups. Regarding seasonal variety, the seasonal residents have little impact on public service needs. The increasing demands during the summer months are largely confined to water-dispensing points, waste-collection and recycling for seasonal housing, as well as accessibility to public beaches and outdoor activities.

Asked about digitalisation in the use of services and the provision of digital services, the interviewees identified good access to a well-developed fibre-optic network as an important asset. At the same time, they also felt that the digitalisation of services has not yet come that far. Funding for such investments is key, and the appropriate resources are not yet available in the municipality. The digitalisation of systems and services also requires a great deal of know-how. As one interviewee put it, "Small municipalities lack those muscles". The joint company ÅDA AB is an example of one means by which municipalities can receive support with the digitalisation process. Furthermore, the Åland Digitalisation Council, which has been put together to support digital transition processes and Åland's digitalisation agenda, can support the implementation of desired changes. For example, in February 2021, the Government of Åland appointed a working group of officials to investigate the need for legislation for the public sector concerning information management, in order to aid digitalisation processes in the public sector. This has highlighted potential pathways that will support local authorities' efforts in the digital transition (Lagtinget, 2021).

Roles and responsibilities

The government of Åland and its sectoral authorities are responsible for all areas in which the Autonomy Act devolves authority to Åland. In relation to service provision, Åland's responsibility for the overarching regional and physical structural development and regional development is of particular importance. The government is responsible for public transport and physical infrastructure, including main roads and maritime transport (Ålands Landskapsregering, 2019), as well as healthcare, the central hospital and maintaining upper-secondary schools.

The individual municipalities are largely responsible for organising public services, localisation and the use of land for buildings and development. The municipalities are also responsible for providing social services to residents, as well as maintaining fire and rescue services, in accordance with the Rescue Act for the Province of Åland. The rescue service's operations are largely based on the extensive network of voluntary firefighters. The municipalities on Åland are also responsible for waterworks and water-supply networks. They also offer municipal public housing, either under their own auspices or through subsidiaries or associated companies. Regarding the distribution of electricity, water, telephone connections, food and supplies, the municipality is dependent on central arrangements and cooperation. These services are financed by provincial shares (as addressed above) – which, along with municipal tax revenue, constitute the municipalities' core funding source (Ålands Landskapsregering, 2019).

In recent years, the prospect of municipal structural reform has been on the agenda. In 2018, the government of Åland proposed a legislative amendment in the Provincial Act that would allow for mergers between small municipalities. The proposal was motivated by differences between the municipalities in terms of population

structure, tax base and financial conditions, leading to challenges such as a lack of administrative competences required for service provision. While small municipalities already co-operate on a voluntary basis, the government argued in the reform proposal that the people managing such voluntary collaborations are not directly elected by the municipal residents, which makes it more difficult to direct political responsibility for action (Ålands landskapsregering, 2018). The amendment was approved. However, the interviewees in this case study highlighted that there has been little further debate on this issue during the current term of office.

There are several areas in which voluntary cooperation already takes place via municipal associations. ¹⁸ One example of this is Åland's municipal association, which represents the municipalities' interests. Geta is also part of a joint educational district (Norra Ålands Utbildningsdistrikt), established in voluntary cooperation between the municipalities of Finström, Geta, Sund, Saltvik and Vårdö, which collectively run Godby high school. The municipalities' joint social service (Kommunernas socialtjänst, KST) is also highlighted as an important collaboration. Following a major societal reform of the municipal sector in 2021, all municipalities in Åland have merged the management and administration of social care (excluding childcare and elderly care, for which the individual municipalities remain responsible). Geta is a member of KST and works closely with the municipal association (Geta municipality, 2021a). Previously, each municipality managed these services separately.

Most of the municipalities' services are carried out by the public sector, and the statutory services are publicly driven. Cooperation with private actors exists, albeit on a small scale. Cooperation with civil society and associations in rural areas is common across Åland, e.g. in areas such as cultural services, social networks and wellbeing, and several interviewees note that this is also the case in Geta.

Challenges and problems in rural service provision

The municipal sector is important on Åland, and maintains a good level of service. However, one interviewee noted that there are certain challenges typically faced by small, rural municipalities, as exemplified by several aspects of service provision in Geta. One central challenge involves mobilising sufficient financial resources, as a small municipality with a limited tax base, to be able to provide diverse services in close proximity to the municipality's residents. According to the interviewees, the municipalities' finances are a burning issue, and the biggest challenge in terms of municipal service provision. Geta municipality faces a structural challenge in that the provincial shares account for a large proportion of the municipality's funding (almost 50%). One respondent highlighted that "the municipality is dependent on the provincial shares and the good will of the Government of Åland". The provincial shares have been temporarily increased for elderly care, but according to one respondent, the government would have to increase the provincial shares overall, because they are no longer in line with the development of service costs in the municipalities.

The interviewees also mentioned other challenges, e.g. concerning the recruitment of competent personnel to various service agencies. This mainly affects the school system. One respondent highlighted that there were major challenges in recruiting school staff in the municipality.

Several interviewees noted that the municipality's small size is both a vulnerability and a strength. Close proximity to service, local democracy and the relationships

^{18.} Basic agreements regulate the form and financing of these.

between citizens, politicians and institutions are highlighted as strengths. The scale of Geta also allows for the possibility of incorporating local businesses and civil society efforts to improve services. For example, the municipality's primary school has, among other things, entered into a cooperation with local farmers and fishermen to provide local produce. It is also highlighted that, in a Nordic context, Åland has a high level of services provided by civil society and volunteers. However, the interviewees also mentioned the vulnerabilities in the system, such as the dependence on individuals and enthusiasts (known as "eldsjälar", fiery souls, in Swedish). One respondent said: "I would say that the biggest challenges are maintaining commitment to different service areas [...] In a small community, each service becomes person-dependent, so when someone retires or moves, it can be a challenge to get someone else to take the helm." This applies to a whole range of situations – from elected representatives to people who are active in civil society and local associations.

Opportunities and strategies for solving challenges in rural service provision

Among those interviewed, further voluntary cooperation between municipalities was highlighted as an opportunity. Several interviewees highlighted that the municipal boundaries are quite sharp when it comes to services – each municipality has its own school, shop and library. However, by pooling resources, the municipalities can use those resources more efficiently, strengthen anonymity and legal protection, and attract the necessary competences and specialisations.

Åland's municipal association is also highlighted as important, partly as a platform for monitoring and lobbying for the municipalities' interests, but also a source of knowledge, tips and advice or counselling in various matters. The interviewees emphasised the importance of the collaboration being driven by the interests and needs of the municipalities, rather than forced upon the actors involved. They also repeatedly mention the double-edged nature of the municipality's size – on the one hand, it means a limited population base and a lack of resources; on the other, being small is a strength, as it promotes closeness, local democracy and helps nurture a sense of identity. Several respondents also highlighted the close social contract and the municipality administration's loyalty to the locals.

In order to maintain the existing service base, retaining skills and ensuring commitment, as well as attracting new residents and skills, are of the utmost importance.

According to several interviewees, new technologies and enabling the municipalities to digitise certain types of services (and the administration thereof) will be key for Geta's development – in fact, the municipality's administration systems are already being digitised (Geta municipality, 2021b). The municipality already has a good broadband network, which helps to facilitate these investments. At the same time, the interviewees also highlighted that proximity to services and presence in the villages is important. For example, Geta's management plan strongly highlights location-based services: "Geta's core activities must be characterized by proximity between the providers of services and those who use them" (Geta municipality, 2018, p. 3).

According to the data (see figure 8), the population in Geta has increased during the past 30 years. The interviewees consistently identify this trend as an important part of the municipality's future, along with attracting younger people to permanently settle here. The proximity to nature and outdoor leisure activities are factors that

are highlighted as being advantageous to the municipality. Commuter links to Mariehamn are important in order to attract citizens to the area. In this context, good road networks, public transport and digital communications, which enable a more flexible way of working, are important building blocks.

Learnings and improvements

The municipality can continue to further the cooperation with other municipalities, as well as other governance levels, in order to pool competencies and resources within and across different sectors, and thereby enable the provision of services.

At provincial level, actors can improve the situation by investing in digital infrastructure and competences. At the same time, resource pooling can facilitate innovation in service provision, while taking local variation into account and retaining the closeness between municipal service providers and the recipients of those services. One example of this might be a service bank, from which the municipalities can apply for funding for new ways of providing services.

At local level, actors can continue adapting solutions to the needs of citizens by complementing physical services with digital tools and digital presence.



Geta public beach.

Photo: Elin Cedergren, Nordregio.



Herøy bridge connecting Gurskøya and Leinøya, Norway

Photo: iStock

5. Cross-Nordic Comparison and Analysis

To identify common patterns and innovations from which others can learn, the results from all eight case studies have been compared. The three research questions guiding the field work – which services are essential in rural areas, how rural services are provided, and how solutions to rural service provision challenges can be organised in the Nordic countries – are here presented across four themes: essential rural services and variations, roles and responsibilities, challenges and problems in rural service provision, and opportunities and strategies for solving challenges in rural service provision.

The method used to select the case study areas means that all of the chosen municipalities have relatively high access to the four service categories: local shops, education, libraries and pharmacies. It should be noted that not all actors interviewed agreed with the consensus that their municipality had a high level of access to these services. The interviewees also stated that there is no overarching service strategy in place to enable a high level of access to these or other services. Nonetheless, most of the actors interviewed were content with the services provided in their municipality and region.

5.1. Essential rural services and variations

As mentioned in the introduction to this report, the starting point for the overarching discussion of safety and security was to interview local and regional actors about the status of essential rural services. A list of essential services was developed based on the research and policy review conducted by Slätmo et al. (2022). This list of essential rural services was presented to the actors in the cases studied. The essential rural services identified in Slätmo et al. (2022) are:

- healthcare and social care
- education and childcare
- physical infrastructure
- climate adaptation and management of climate impacts

- digital infrastructure
- emergency services and civil defence

The interviews in the eight Nordic case study areas confirmed these services as essential. However, the fieldwork revealed nuances and variations within these categories. For instance, several interviewees acknowledged the importance of the service category "climate adaptation and management of climate impacts" in relation to service provision, but there was a degree of variation within the Nordics. The importance of addressing climate adaptation of services is a top priority in Múlaþing and neighbouring municipalities in Iceland. This reflects the fact that these areas have to contend with avalanches, mudslides and severe winter storms, which have already led to the destruction of residential and industrial buildings, as well as important infrastructure like powerlines. In Suðuroy, the climate focus was on energy issues, and the further development of non-fossil energy sources is seen as necessary from both an environmental and economic perspective, since such investment would save large amounts of money on imported fuel in the coming years. Respondents in Geta in Åland, Vimmerby in Sweden, and Kinnula in Finland confirmed the policy review's conclusion that "climate thinking" should be embedded within all public services, as it is relevant to all sectors of society. One interviewee in Lolland, Denmark noted specific-climate challenges due to municipality's coastal location and low-lying geography. In these cases, the climate issues were primarily linked to overarching planning of societal functions, e.g. the water-supply network and floodprotection measures in Lolland in Denmark, and the pollution of wells every year following heavy rains in Kinnula, Finland. In Avannaata in Greenland, climate adaptation and the mitigation of climate impacts were identified as being of fundamental importance in relation to transport, and as a threat to infrastructure and houses. Moreover, it was suggested that the climate vulnerabilities of the fishing industry in Herøy in Norway should be a focus for further regional cooperation.

During the fieldwork, the interviewees were also asked about which services they considered essential, but that were not listed in either the research literature or the Nordic workshop (Slätmo et al. 2022). Table 3 lists these additional essential services.

Essential services – additions to those listed in the policy review and Nordic workshop	Identified in case study
Cultural activities	Lolland, Denmark
Integration of new inhabitants	Lolland, Denmark
Employment services	Lolland, Denmark
Housing, especially financing for housing construction in the countryside and outside the capital, Tórshavn	Suðuroy, Faroe Island
Culture, sports and possibilities for activities for younger people	Suðuroy, Faroe Island
Employment services	Kinnula, Finland
Culture (as an important attracting factor)	Kinnula, Finland
Community integration	Kinnula, Finland
Libraries serve an important community role, by supporting schools by providing learning environments	Kinnula, Finland
Local shops	Kinnula, Finland
Fuel delivery	Kinnula, Finland
Substitutes for farmers	Kinnula, Finland
Housing	Avannaata, Greenland
Cultural activities	Múlaþing, Iceland
Culture, volunteering and leisure activities, especially for children and young people, which have great importance for the municipality's attractiveness, living environment and public health	Herøy, Norway
Outdoor life contributing to the municipality's attractiveness	Vimmerby, Sweden
The presence of public authorities as a service	Vimmerby, Sweden
Commercial services, such as local shop, postal service and pharmacy.	Geta, Åland
The role of civil society and the church, especially in providing cultural services and social networks	Geta, Åland
Natural and recreational services	Geta, Åland

Table 3: Local and regional variations services perceived as essential

The additional services identified as essential in the Nordic case studies include commercial services such as local shops and fuel delivery, but also housing, employment services, integration, and the presence of public authorities as a service. Cultural activities were described as an essential service in the cases of Lolland, Suðuroy, Kinnula, Herøy, Múlaþing and Geta, alongside recreational services in Geta and Vimmerby. It was emphasised that cultural and leisure activities, e.g. sports, music, literature and other arts, are of great importance for ensuring an attractive living environment and improving public health in rural communities. Interviewees in Suðuroy also emphasised that activities for younger people are essential.

5.2. Roles and responsibilities

The results in the cases indicate that a variety of actors are responsible for service provision in the Nordic rural areas. The list of essential services focused on services traditionally provided by public actors in the Nordics. However, the cases studied confirmed that private and civil-society actors also play important roles in both service provision and everyday life in Nordic rural areas (Slätmo et al. 2022). Public, private and civil society actors work both individually and in collaboration – which takes various forms, based on a range of agreements – to ensure the provision of rural services.

Although the municipalities emphasised the importance of independence as a tool for maintaining public services, they also work in cooperation and collaboration with other municipalities in certain sectors. For instance, Herøy in Norway has a close collaboration with the municipalities of Alstahaug, Leirfjord and Dønna related to emergency services and civil defence. Vimmerby in Sweden is part of a collaboration of six municipalities in northern Kalmar County, which together form a joint high school region. The municipality is also part of a joint purchasing centre, together with the municipalities of Västervik, Oskarshamn, Hultsfred and Högsby. In 2021, Geta in Åland handed over the responsibility for social care to a regional body, and is also part of a joint educational district, established in voluntary cooperation between the municipalities of Finström, Geta, Sund, Saltvik and Vårdö. Kinnula in Finland has a joint management with the municipality of Lestijärvi, including a joint permits office and a shared school curator. On Suðuroy, the Faroe Islands, the seven municipalities have jointly organised care for older people since 2015, and the municipalities jointly own the electricity company.

In Kinnula, Finland, private actors have had responsibility for healthcare services since 2018. In Greenland, public and private actors are working to solve the lack of housing to combat labour shortages. Private actors, especially in construction and hotels, are building their own housing for employees. This is positive in terms of attracting labour, but makes the job market quite static and inflexible. When people's housing depends on them working for a specific employer, they cannot easily move to another job, unless the new employer also provides housing.

It can be noted that while collaborative service provision is considered a good idea for resource efficiency, it also entails some risks. For instance, actors in Kinnula in Finland highlight the risk of creating confusion among citizens. Inhabitants may be unsure of when they should seek services within a certain regional collaborative consortium, when they are to be found in the private sector, and when the municipality manages them independently. Moreover, as pointed out by actors in Åland, the individuals who manage voluntary municipal collaborations are not directly elected by the municipal residents. This makes it more difficult to direct

political responsibility for action.

If mergers of municipalities are considered necessary in the future, the innovative governance model implemented in Múlaþing, Iceland, may be a source of inspiration. When Múlaþing was created by the merger of municipalities in 2020, special town councils, located within the old municipal borders, retained some decision-making power on issues directly involving their area. This includes some local planning issues, as cultural affairs. The town councils also act as advisory boards to the municipal council.

Cross-Nordic challenges	Reported in no. of cases	Reported in which cases
Labour shortages and attracting the right competencies	7	Suðuroy region, Faroe Islands Kinnula, Finland Avannaata, Greenland Múlaþing, Iceland Herøy, Norway Vimmerby, Sweden Geta, Åland
Mobilising financial resources to cover needs	6	Lolland, Denmark Suðuroy, Faroe Islands Kinnula, Finland Herøy, Norway Vimmerby, Sweden Geta, Åland
Physical characteristics affecting service provision: lowlands, long distances, islands, seasonal climate variations, harsh and inaccessible landscape	5	Lolland, Denmark Suðuroy, Faroe Islands Avannaata, Greenland Múlaþing, Iceland Herøy, Norway
Lack of housing	4	Lolland, Denmark Suðuroy, Faroe Islands Avannaata, Greenland Herøy, Norway
Bureaucracy and administration	3	Lolland, Denmark Kinnula, Finland Herøy, Norway
Digitalisation as a challenge	3	Herøy, Norway Kinnula, Finland Vimmerby, Sweden
Dependency on individuals and volunteering	2	Vimmerby, Sweden Geta, Åland
Tourism as a pressure during peak season	2	Múlaþing, Iceland Herøy, Norway

Table 4. Cross-Nordic challenges in rural service provision

5.3. Challenges and problems in rural service provision

Comparing the results regarding challenges in rural service provision in the case studies, it is evident that there are several common issues across the Nordics. Eight challenges have been identified as common in two or more of the cases studied (see **Table 4)**. Together, these results enhance existing knowledge of the key challenges facing secure and safe service provision in Nordic rural and sparsely populated areas (cf. Slätmo et al. 2022).

Labour shortages and attracting the right competencies was reported as a challenge in seven out of eight cases. In Kinnula, Suðuroy, Múlaþing and Herøy, this challenge particularly relates to attracting skilled workers with the right competencies, while in Avannaata the challenge concerns both skilled labour and untrained workers. In Åland and Vimmerby, it mostly affects schools and healthcare. Labour shortages in healthcare, social care, childcare and schools are a source of stress, security risks, dissatisfaction, poor morale and an inability to adapt services to the needs of individuals. The exception is Lolland, where the respondents did mention labour shortages, but rather emphasised the relatively large share of inhabitants who are inactive – either unemployed, not in the education system or on early retirement benefits.

Mobilising financial resources to cover service needs was reported as a problem in Lolland, Suðuroy, Kinnula, Herøy, Vimmerby and Geta. The interviewees noted that the demands for services may exceed tax income, and that a lack of money, combined with a lack of skilled workers, poses a risk to the provision of high-quality services

In five cases, physical characteristics were mentioned as a challenge to service provision, albeit in different ways. In Lolland, the lowlands cause flooding, which constantly require preventive measures. In Avannaata and Múlaþing, long distances are an issue when it comes to ensuring access to services. As islands, Suðuroy and Herøy both highlight the need for well-functioning transport links and infrastructure. In Avannaata, seasonal climate variations and an inaccessible landscape limit mobility, which causes challenges related to both broad labour-market access and healthcare.

Other cross-Nordic challenges include lack of housing to attract and welcome new inhabitants; increased bureaucracy and administration that burdens public officials; high levels of dependency on individuals and volunteering to maintain service provision; tourism as a pressure on service facilities and infrastructure during peak season; and digitalisation, which entails a risk of excluding certain inhabitants.

5.4. Opportunities and strategies for solving challenges in rural service provision

The results from the case studies show that several opportunities and strategies for rural service provision are shared across the Nordics. The opportunities identified as common across the Nordics, which are reported in two or more case studies, are presented in Table 5. The three most common are described below.

Cross-Nordic opportunities	Reported in no. of cases	Reported in which cases
Digitalisation of services	7	Lolland, Denmark Suðuroy, Faroe Islands Avannaata, Greenland Múlaþing, Iceland Herøy, Norway Vimmerby, Sweden Geta, Åland
ncreased cooperation between municipalities and ettlements	6	Lolland, Denmark Suðuroy, Faroe Islands Kinnula, Finland Avannaata, Greenland Múlaþing, Iceland Geta, Åland
ncreased cooperation between public, private and ivil-society actors	6	Lolland, Denmark Suðuroy, Faroe Islands Kinnula, Finland Herøy, Norway Vimmerby, Sweden Geta, Åland
ecruitment strategies and attracting new esidents from abroad, by investing in sport acilities and kindergartens, and using nature to ttract new residents	4	Lolland, Denmark Suðuroy, Faroe Islands Kinnula, Finland Geta, Åland
Small municipalities as opportunities due to close contact, active dialogue and good overview of the copulation	3	Lolland, Denmark Kinnula, Finland Geta, Åland
Strategic planning at local level: align resources, nerge services and identify strategically mportant service locations	3	Kinnula, Finland Herøy, Norway Vimmerby, Sweden
Enhance mobility via infrastructural investment	3	Lolland, Denmark Suðuroy, Faroe Islands Herøy, Norway
Regional support for local collaborations, and hifting responsibility from local to regional administration	2	Kinnula, Finland Múlaþing, Iceland
Management strategies to combat long distances and low population density	2	Vimmerby, Sweden Múlaþing, Iceland

Table 5: Cross-Nordic opportunities for enhanced rural service provision

Digitalisation of services is reported to be a strategy and an opportunity for rural service provision in seven out of eight cases. Digitalisation enables more people to work remotely from rural locations. Some initiatives are already in place, such as digital components of health services in Avannaata and Múlaþing. In Suðuroy, the distance learning centre enables the provision of higher education, and the municipality provides co-working spaces and residences for digital nomads. The potential of digitalisation is also mentioned in the case studies from Lolland, Herøy, Vimmerby and Geta. Several respondents, especially those in Kinnula and Vimmerby, focus on the fact that the digitalisation is both an opportunity and a challenge for rural areas. When more services can be performed via the internet, the service is made available to many more people in rural areas. However, people who cannot access the internet are at risk of being excluded from the service. It is therefore considered important to also retain in-person services.

Increased cooperation between neighbouring municipalities and settlements is identified as an opportunity, and as an alternative to mergers, in six cases: Lolland, Suðuroy, Kinnula, Avannaata, Múlaþing and Geta. Expanding the existing intermunicipal cooperations can contribute to more efficient use of the resources, and attract the required competencies and skilled labour.

Increased cooperation between public, private and civil society actors was identified as an opportunity in six cases. In Lolland, Denmark, some respondents described increased public-private partnerships as an opportunity, whereas others expressed a preference for increased state funding for public services. In Suðuroy, Faroe Islands, collaborations, in the form of public and private funding and implementation via crowdsourcing and in-kind contributions by residents, have formalised investments aimed at providing services and attracting new residents. In 2018, Kinnula in Finland privatised all healthcare services, which seems to have had positive results, in the form of improved access to doctors' appointments and dental care. In Vimmerby in Sweden, Geta in Åland, and Herøy in Norway, more collaborations with civil society and the local business community are perceived as key components for solving future issues relating to service provision in rural areas.

Other common opportunities and strategies for solving challenges in rural service provision included recruiting students and labour from abroad; investing in sport facilities and kindergartens; using nature to attract new residents; recognising the potential of small municipalities, in the form of close contact, active dialogue and a good overview of the population; and utilising strategic planning at local level. Several interviewees also mentioned enhancing mobility via infrastructural investments, using regional actors to support local collaborations or even assume responsibility, and using different management strategies to mitigate the effects of long distances and low population density. These management strategies might include, for instance, a home delivery allowance that helps permanent residents in rural areas get their groceries, and providing certain municipal employees with accommodation when they are performing duties some distance from their place of residence, to avoid spending hours each day commuting.

Some of the opportunities identified in the policy and research review (Slätmo et al. 2022) not mentioned in the cases here presented can be repeated in order to ensure the messages to come forth: policy innovations adapted to rural areas in the Nordic Region can be developed by cross-Nordic learning via interactive meetings and workshops. Such innovations can focus on potentials in digitalisation, but also acknowledging the different functions fulfilled by rural services, e.g. service locations functions as meeting places creating common identity. To adapt the service provision throughout the year by mobile postal and grocery deliveries, using drones and mini-shops on trailers, is already in pilot-phase and aim to assure inclusion of both permanent and temporary rural inhabitants (SVT Nyheter, 2022).



Djupivogur is a small town and harbor in the eastern fjords of Iceland

Photo: iStock

6. Concluding remarks

The aim with this study has been to investigate rural service provision, and validate the results of a research and policy review focusing on Nordic rural areas through the use of (primarily) qualitative field work. The fieldwork has been guided by three research questions – which services are essential in rural areas, how rural services are provided, and how solutions to rural service provision challenges can be organised in the Nordic countries. The responses to these questions are presented throughout the report, organised into four themes: essential rural services and variations; roles and responsibilities; challenges and problems in rural service provision; and opportunities and strategies for solving challenges in rural service provision.

The essential services, the challenges and the opportunities identified during the field work and presented in this report, confirm the research and policy reviewed in Slätmo et al. (2022). However, nuances and additions have been made possible, and enrich the understanding of the situation for rural services in the Nordics.

The results show that collaborations between actors who are sure of their roles and responsibilities are vital for safe and secure services in rural Nordic areas. That collaboration is key for rural service provision is also confirmed in previous studies (Cedergren et al., 2021; Chartier et al., 2021; Chmieliński et al., 2021, Rauhut et al., 2013). For instance, one Nordregio policy brief presents six examples of collaborative public service delivery from across the Nordic region (Cedergren et al., 2021). These six cases also demonstrate that collaboration between companies, NGOs, research and civil society is of fundamental importance for rural services. Collaborations are also key for the development and discussion of welfare institutes in sparsely populated areas (WIiSPAs) (Jokinen, 2022). The results in this study imply a need to continue cooperation between municipalities, as well as with other governance levels and societal actors, and to pool competencies and resources within and across different sectors in order to ensure future service delivery in rural areas.

The results regarding rural service provision in the eight Nordic case studies highlight that services are crucial for attractive regions. Overall, the results indicate that the contextual adaptation of services is crucial for inhabitants in Nordic rural areas to feel safe and secure, and to thrive. The reason for this is that although the rural

services that are considered essential are similar in the rural areas studied, there are also variations and exceptions that must be taken into account. Multi-level and multi-actor dialogue is needed to ensure that such geographical variations are considered in policy development and the financing of services by private actors and public administration at state, regional and municipal levels.

The results across the Nordics also indicate a need for further support by national governments for actors at regional and local levels when it comes to prioritising tasks that are delegated and legislatively mandated. Concrete guidance on prioritisation within limited budgets can help to facilitate, or even avoid, local conflicts regarding which service facilities to keep and when new ones should be developed. At the local and regional level, strategic planning, accessibility analysis and participatory dialogue are potential tools that can be used to adapt service sites to local variations in terms of which services are considered essential. These strategic planning tools can also be used to find a balance between optimal service locations and digital solutions.

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Appendix 1: Interview guide

Service provision and access to services in Nordic rural areas - secure, trusted and for all ages

Projectleader: Senior Research Fellow, Dr. Elin Slätmo elin.slatmo[a]nordregio.org

Contact person for the case study: [Add name and e-mail here depending on who that makes the interview]

Please read the below information before you decide to participate in the research. You are welcome to ask questions and your participation in the research is volontary.

Who are Nordregio

Nordregio is an international research centre for regional development and planning – established by the Nordic Council of Ministers.

What is the project about?

The objective of the project is to analyse how essential rural service needs can be understood and defined and how solutions to rural service provision challenges can be organised in the Nordic countries. We are doing that in several ways, primarily via a desk-based knowledge overview, and case study work. The project time is 2021-2023.

How will the interview and other information be used?

Your expertise, experience and knowledge as an inhabitant, official in public administration, politican, business owner, representative in a civil society organisation or other function in the society is very valuable for the project. If you agree to participate in the project and share your knowledge with us, your contribution will not be directly linked to you as a person, although we might refer to your organisation or the place or website you are related to. In the communication from the project we will not use sensitive or personal information, and all information collected will be secured in line with public regulations. You can at any moment ask to withdraw the information you have contributed with, or to not be part of the project anymore.

Consent

We need consent and permission to use the interview data for our analysis. Furthermore, that we are allowed to tape record the interview for internal analytical purposes. At any time, the respondent can retrieve the consent without argumentation. Is informed consent given:

•	•		
Yes 🗌			
Signature: Name of respondent:			
Date:			

Background questions about respondent

Name of Nordregio researcher: Date of interview: Name:

Title/Role/Work description:

Municipality/region/country: How long at current position:

Essential rural services and variations

The choice of case studies in this project is based on a combination of statistics and expert knowledge. For each of the 5 Nordic countries and 3 regions, a statistical analysis was utilized to identify municipalities that are categorized as rural (having low population density) and high accessibility to four services (libraries, pharmacies, grocery stores and education). [name of municipality] is one of the municipalities in [country] that have highest access to these services.

- 1. Do you agree that you have high access to services? *If found suitable for the respondent, ask* On a scale from 1-5 how much do you agree that you have high access to services?
- 2. Do you think it is a coincidence, or intentional strategy from your side that you manage to have the highest accessibility to these four services in your country?
- 3. If we take a step back and think about service provision in rural areas more broadly. In this project we focus on service provision and access to services in Nordic rural areas. From your perspective, can you describe how that is organized in [name of municipality]?
- 4. In a knowledge overview for this project, we identified the following services as essential for Nordic rural areas now and in the future:
- a) climate adaptation and the management of climate impacts
- b) emergency services and civil defence
- c) education and childcare
- d) health and social care
- e) physical infrastructure, and
- f) digital infrastructure.

Do you agree that these services are essential in your municipality and region?

- 5. Are there other services that you consider essential? Do you feel something is "missing" from the list as "essential"?
- 6. Do the service needs vary within your municipality, for instance are there any differences in the different parts of the municipality?
- 7. Have the service needs changed over time, I mean is it differences before/after covid-19?
- 8. Do the service needs fluctuate with seasons, for instance because of seasonal tourism and use of second homes?

Roles and responsibilities

- 9. First of, in general, who provides services in your municipality and region? Private? Public actors? Other actors?
- 10. Do you have experience in delegating responsibility of service provision or procuring services from private actors?
- 11. Is there collaboration of service provision between municipalities, for instance regarding procurements that is done together

Challenges and problems with rural service provision

12. From your perspective, what are the main challenges regarding rural service

provision and access to services?

13. In the knowledge overview starting this project, key challenges for rural service provision were identified. I wonder if you have experience of/recognise the following challenges:

[use mind map with challenges for discussion around the aspects not raised in Q12, 13]

Opportunities and strategies to solve challenges with rural service provision

- 14. How do you solve the challenges? Do you have any strategies or ongoing reforms?
- 15. Are these strategies functioning?
- 16. In the knowledge overview starting this project, key opportunities for rural service provision were identified. I wonder if you have experience with/recognise the following opportunities/solutions:

[use mind map with opportunities for discussion around the aspects not raised in Q 14, 15, 16]

Learning and improvements

- 17. Is it something you are especially proud of regarding rural service provision and access to services?
- 18. What support do you need? From whom (regional/national level or other)?
- 19. Is there some perspectives or other matters I have not addressed, but you think are important in this regard?

About this publication

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Nordic co-operation

Nordic co-operation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, the Faroe Islands, Greenland, and Åland.

Nordic co-operation has firm traditions in politics, the economy, and culture. It plays an important role in European and international collaboration, and aims at creating a strong Nordic community in a strong Europe.

Nordic co-operation seeks to safeguard Nordic and regional interests and principles in the global community. Shared Nordic values help the region solidify its position as one of the world's most innovative and competitive.

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