

https://doi.org/10.7577/nat.5800

ISSN: 2246-1310

Vol 101, No 1 (2024)

Professional article

Nordic rural policies for future service needs

Elin Slätmo* and Ágúst Bogason**

Abstract

The demand for services in Nordic rural areas is changing. General population decrease poses challenges to rural public authorities to adapt their activities to the shrinking population, which in general is made up of fewer young people and more older people. Combined with a need to adapt the services to a changing climate, the increased budget restraints force the public authorities to focus on providing the most essential service needs now and in the future. The aim of this study is to identify the future service needs in rural areas, and how these are included in rural policy frameworks. The approach was to identify which rural services that are considered essential according to research literature, and to search for these in rural and regional policy in the Nordic countries of Denmark, Finland, Iceland, Norway, Sweden, as well as the island regions of Faroese Islands, Greenland and Åland. The study has identified policy improvements to ensure access to essential services in rural areas, and to 'future proof' service provision. For the countries and regions here studied, especially emergency services and civil defence, as well as climate adaptation of services and the management of climate impacts, need further attention.

Keywords: Services, rural, sustainability, rural proofing, future, policy.

*Elin Slätmo is Senior Research Fellow and Team leader at Nordregio. She is a human geographer specialized in Nordic governance, regional and local planning, urban-rural relations, as well as rural perspectives on labour, energy and agriculture. Email: <u>elin.slatmo@nordregio.org</u>

**Ágúst Bogason is Senior Research Advisor at Nordregio. He is a social researcher with a particular interest in policy and governance of the Nordic countries and Arctic, sustainable rural development, the labour market, local participation in policy processes and tourism studies Email: agust.bogason@nordregio.org

Introduction and background

The demand for rural service solutions is changing in the Nordic Region. Ongoing demographic changes, extreme weather due to climate change and the COVID-19 pandemic have all highlighted the importance of keeping both long-term and short-term perspectives in mind when planning, supporting and arranging service provision.

Within the Nordic region¹, different national, regional and municipal authorities and institutions, public companies, private enterprises and private, public and civil-society actors provide services and infrastructure in rural areas, both individually and in partnerships with each other (Dølvik et al., 2015; Info Norden, 2022; Slätmo et al., 2022; Tillväxtanalys, 2021; Vaalit, 2022). The populations of the Nordic countries² stand out as being the most mobile in Europe, which contributes to the ongoing urbanisation of the population (Heleniak, 2020). The shift away from peripheral rural areas and towards urban centres brings with it complex planning challenges in both shrinking and growing regions (Heleniak, 2020; Norlén & Randall 2020). The general demographic structure emerging in rural areas, comprising more older adults and fewer young people, highlights the need for place-based approaches – for instance, to adapt educational and care facilities to the age and needs of the local population (Heleniak, 2020; Stjernberg, 2020).

Importantly, the rural areas in the Nordic Region are diverse. Not all regions or municipalities that are categorised as 'rural' in statistical terms have a declining and ageing population, and not all urban areas are growing in population. In fact, although there has been a decline in fertility rates in almost all Nordic countries and regions over the past decade (Karlsdóttir et al., 2020), analysing the fertility rates in the Nordic countries during the covid-19 pandemic, Sánchez Gassen et al. (2022) declare a potential change, as the number of births during the pandemic in large parts of the Nordic Region has remained stable or even increased. Moreover, estimations for the Nordic population are that half of the 27 million inhabitants have access to a rural holiday home, via ownership, family or friends (Slätmo et al., 2019). An increased use of second homes during the whole year indicate a continuous counter-urbanisation process in the Nordic Region (Adamiak et al., 2017; Slätmo & Kristensen, 2021). There is a risk of underestimating the welfare system and

¹ By the term 'Nordic Region' we are referring to Denmark, Finland, Iceland, Norway, Sweden and the autonomous islands – Greenland, the Faroe Islands and Åland.

² In this instance, 'Nordic countries' are represented by Denmark, Finland, Iceland, Norway, and Sweden.

services if the flows of voluntary temporary inhabitants are not included in the statistics (Slätmo et al. 2019).

Three indicative trends in relation to rural service delivery have been identified during the time frame of this study: collaborative service agreements, the digitalisation of services and geographical concentration in 'service hubs'.

Collaborative service agreements in the Nordic countries also takes the form of so-called 'smart adaptation to shrinking populations', 'smartly adapting service provision', 'coproduction of services', or 'municipality 3.0' – from service provider to enabler. Services are organised and provided through co-operation agreements involving public, private and civilsociety initiatives. These agreements are, however, not an exclusively Nordic trend (Cedergren et al., 2021). Rauhut et al. (2013) also describe this type of 'co-production of services', and Copus et al. (2020) investigate 'smart shrinking' in a European context.

The post-pandemic era in the labour market also enables a more mobile Nordic population, this as digitalisation enable remote and hybrid work being an established norm in many workplaces. Importantly in this regard is that not all areas have access to digital infrastructure or a stable-enough mobile connection to be able to work or receive digital services from the homes or village. The digitalisation also comes with risks, based in a study of Sweden and United Kingdom, Dubois and Sielker (2022) highlight three risks with digitalisation of public services in sparsely populated areas. First, local actors can perceive the digitalisation as a decommitment of the state and other public authorities in rural areas. Second, vulnerable groups that are in most need of seamless public service are excluded due to the hardship of access the digital service. Third, that cloud-based solutions and data storage cause an increased administrative burden for local authorities already over-stretched.

The identified trend towards geographical service concentration, that several services being provided at the same office or location, may be of particular importance from an equality and security perspective. All people (regardless of where they live) should have access to essential services, and the idea is that service hubs are contributing to minimising wide distances. There are also examples of on-demand transport solutions for rural inhabitants or mobile solutions to temporarily bring the service to the rural area ongoing in the Nordic Region. Some examples are from the health services where mobile nurses and medical doctors are employed, temporary grocery shops, as well as police and library buses going regularly around in areas characterised by the wide distances between houses.

With the above changing prerequisites for services in mind, the aim of this article is to investigate if the rural and regional policy frameworks in the Nordic Region support future

rural service needs, place-based adaptation of service delivery, as well as to identify potential room for improvements. The article takes departure from international research on rural services, to identify what is considered as essential rural services by the research community. The analysis then turns to the rural and/or regional policy in the 5 Nordic countries and 3 self-governing islands to investigate if the essential rural services are included, and how place-based adaptation of service delivery are considered in the governance and policy frameworks. In the following section the method and approach of the study is presented, followed by two sections describing the results from the research and the policy review, respectively. Comparing the research results on what is considered 'essential services' with the focus of the here studied policies an analysis of potential room for improvements is provided. The article ends with main conclusions.

Method and approach

This study is based on a combined research and policy review. A review of research studies was made to identify what the research community depict as essential rural services. The essential services identified in the research was then compared to the rural and/or regional policies in Denmark, Iceland, Finland, Norway, Sweden, Faroese Islands, Greenland, and Åland Islands. The results from the research review were also presented and discussed with a group of actors from public administration in the same countries, to bring their insights to the analysis. In a final step a combined analysis of the potential (mis)match between future service needs and policy frameworks are provided. In the below sections, more details on the methods and the considerations made are provided.

Research review of relevant research publications

To identify and add insights from studies published in journal articles, a structured literature search was used to find published peer-reviewed journal articles via the Science direct platform (2021 10 04). In the fields 'Title, abstract, keywords' we searched for the terms: ((essential needs) AND (service) AND (rural)). This resulted in a sample of 70 documents published between 1981 and 2021. It consisted of six review articles, 54 research articles, two book chapters, four conference abstracts, one discussion paper, one set of practice guidelines, and two short communications. In all, 55 of these 70 results were accessible for download as full-text documents. To ensure the inclusion of future perspectives, an additional search was added. For this, we searched in the fields 'Title, abstract, keywords' for the terms: ((essential needs) AND (rural) AND (future)). This resulted in 46 documents published between 1979 and 2022 and consisted of six review articles, 33 research articles, three book chapters, one conference abstract, two discussion papers and one short

communication. Altogether, 36 of these 46 results were accessible for download as full-text documents. The 91 (55+36) documents were then sorted and read to decide on their relevance for the purposes of this study. In total, 25 journal articles were considered relevant. Some of the 25 articles are not included or elaborated on here because the research findings were considered relevant but peripheral to the theme, such as studies of and results regarding agroforestry and food production, energy, and medical studies about cancer, tuberculosis, and sexual and reproductive health. To ensure the inclusion of other perspectives, other types of studies, such as those produced by the OECD, the European Network for Rural Development, and previous ones conducted by Nordregio, were also collected.

Reviewing policy in the Nordic countries and regions

For the purpose of this study the policy review is focused on the in-force national rural and/or regional policy policies (latest state and/or regional policy) in each country. Only the most relevant policy document from each country was chosen. This was done in consultation with representatives from each country that are members of the Nordic thematic group for Green and Inclusive Rural Development. The work of this thematic group is part of the implementation of the Nordic Co-operation Programme for Regional Development and Planning. Members of the group include individuals working for public authorities at the national and regional levels in the five Nordic countries and the three self-autonomous regions.³ The policy documents were analysed focusing on: 1) Is service delivery included in the policy? 2) If so, which services are included? 3) How does rural policy ensure good, location-based services?

It should be noted that the policy documents are not fully comparable since policy frameworks are of a different nature in each country and self-governing territory. For example, they are written by different institutional actors and cover different aspects of policy. However, all of the documents were drawn up at the national level and have a rural development focus. This enables the review to draw conclusions and make recommendations about how rural policy can enhance the work on services.

Insights from officials in Nordic public authorities

A workshop involving the Nordic Thematic Group for Green and Inclusive Rural Development was held on 22 November 2021 in Helsinki, Finland. The aim was to bring together insights

³ For further information about the Nordic Thematic Group for Green and Inclusive Rural Development, see: <u>https://nordregioprojects.org/rural/</u>

from policy actors working in public authorities at national, regional, local and cross-border institutional levels. As preparation for the workshop, participants were asked to reflect on four questions based on a background paper. This background paper included a draft of the review of research regarding essential rural services (previous version of the results presented in this article). At the workshop, the group was given a summary of the background paper in an introductory and summarising presentation and then divided into three sub-groups of 5–6 per group. These groups had a mix of country and/or regional representatives. The groups discussed for about 30 minutes. The group discussions were held in English and led by Nordregio researchers, who also took notes. The questions forming the basis for the workshop were: 1) Are the results presented so far relevant to you? If yes, in what way? If no, why not? 2) How could rural policy be used to support essential service needs? Is the current use of rural policy sufficient? What type of policy innovation do you suggest? 3) What are the future service needs in the rural areas? The note takers had a dialogue after the workshop to identify the main messages, and these notes have been used to rework the analysis of this paper. Among other comments and inputs during the workshop, policy actors working in Nordic public authorities highlighted the need to add emergency and civil defence services (such as police, fire fighting, ambulance, coast guards, storage and preparedness), as well as harbours, to the list of essential rural services. It should be noted that some services not included in the here presented list of essential services were mentioned during workshops with policy experts. For instance, housing and grocery stores were mentioned as important for people's lives in rural areas. The main reason for these services to not be included in the list of essential services presented here is that they were not identified as essential in the review of peer-reviewed journal articles, and few of the participants in the workshop addressed these topics. However, we mention it here to ensure the transparency of the process and to maintain the possibility of addressing housing and grocery stores as essential for people's lives in future research addressing rural services. It is clear that the categories that are here presented as 'essential rural services' are not a 'final' list, as variations and adaptation clearly need to be done depending on the rural context, and that the list of services considered as essential could be further investigated using for instance in-depth analysis of certain places around in the Nordic Region, or a cross-Nordic household survey. For a further discussion and analysis on this topic we refer the reader to a report the essential services, roles and responsibilities in eight different locations around the Nordics are further explored (Slätmo et al., 2023).

Essential rural services according to the research community

Based on the research reviewed for this study and input from individuals working in Nordic public authorities at national, regional, local and cross-border institutional levels, it appears that the essential service needs for rural areas now (and in the future) 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 (see table 1). More details on what these service categories entails are provided in the following sections.

Table 1

Service category identified	Included in no. of articles and reports	Included in the following articles and reports reviewed for this study
Healthcare and social care	11	Befort et al., 2014; Bremberg, 2020; Douthit et al., 2015; Ellem et al., 2019; Gyedu et al. in 2020; Jana & 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; the European Network for Rural Development, 2020; Karlsdóttir & Cuadrado, 2018; Kull et al. 2020; OECD, 2020; Pettersson et al. 2016; Wang & Gao, 2013
Physical infrastructure	9	Bridgman, 2018; Horn et al., 2021; Israel Schwarzlose et al., 2014; Karahasanovic, 2020; Shay et al., 2016; Shergold & 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 & Strijker, 2018.
Emergency services and civil defence	-	Not in journal articles included in review, identified as missing from workshop with policy actors. Identified articles about rural police in Iceland and Sweden after workshop with policy actors: Hällgren et al., 2021; Oddsson et al., 2021

Essential rural services, now and in the future

Source: authors compilation based on reviewed literature and workshop results with Nordic policy officials.

Healthcare and social care

In a review paper on barriers to healthcare in the USA, Douthit et al. (2015) express concern over significant differences in access to healthcare between rural and urban areas, which result in rural residents having poorer health (cf. OECD, 2020). In a study focused on the situation in India, Jana and Harata (2016) acknowledge that the quality of care is often associated with patient volume. This is also confirmed in a study by Gyedu et al. in 2020, in which they compare patient volume and quality in relation to trauma surgery in New Zeeland and Ghana, indicating lower quality in rural areas. A study from Australia looking at young people with complex health support needs in non-metropolitan areas shows that success in helping them depends on how clearly service providers communicate with each other. It suggests that services in rural areas require appropriate support from policymakers, something which goes beyond the application of models developed primarily from the urban context (Ellem et al., 2019).

Bremberg (2020) demonstrates that in Finland, Norway and Sweden, high mortality rates at the municipal level are particularly associated with rural areas, areas with low population density. There are, however, nuances and regional exceptions to general Nordic trends regarding the relationship between health and rurality (Lundgren & Cuadrado, 2020). Some rural areas have very healthy populations, and even in areas with a statistically high proportion of unhealthy people or high suicides rates, there are still people living prosperously.

The health sector has developed several distance technologies to complement care in hospitals, care homes, and other types of facilities (Rehn-Mendoza & Weber 2018). Lundgren et al. (2020), studying the digital solutions in the health and social sector in the Nordic countries and regions, have found that there is a lack of comprehensive studies on the effects of digital solutions in healthcare and social care. In a study on nursing students' perceptions of telehealth-based simulations (video visits, short message services and video conferences) in Florida, USA, Villegas et al. (2021) conclude that distance-spanning technologies for skills development are a promising way of addressing knowledge gaps among nurses and meeting the needs of breastfeeding mothers in rural settings (Villegas et al., 2021). This indicates the potential for using digital solutions in developing skills and competencies via distance education and web-based courses. Moreover, Befort et al. (2014) highlight the fact that phone-based counselling via digital meetings is cost-effective and can be used for several patient groups; for instance, to provide group support for rural breast cancer survivors in their struggle to overcome barriers to good mental and physical health and wellbeing.

Education and childcare

Kindergartens and schools with trained teachers are a crucial rural service (Beach et al., 2018; Clark & Harrison, 2017; Cras, 2018; the European Network for Rural Development, 2020). To enable children to go to school within a reasonable distance of their home is important for a dynamic rural community. The quality of schools in rural areas, in terms of the number of trained teachers, is highlighted as a challenge facing many governments throughout the world (OECD, 2020). For instance, one of the reviewed research articles using empirical data from China states that the quality of schools is tremendously varied due to the uneven distribution of trained staff (Wang & Gao, 2013). Support for teachers is crucial for schools in Nordic rural areas to be able to consider the needs of all children, including those with special educational needs (Karlsdóttir & Cuadrado, 2018; Pettersson et al., 2016). For European and Nordic countries, the results of analyses of teachers' salaries can be useful for pinpointing how salary increases can be part of the solution to attracting teachers to schools in rural regions, thus enhancing or maintaining the quality of schools (European Commission/EACEA/Eurydice, 2021).

Based on the situation in Finland, Norway and Sweden, Beach et al. (2018) state that even though the national authorities recognise the need to protect and provide key services to local communities, and consider local schools as valuable resources, market-based politics in education seems to have challenged these commitments. The authors say that there is a tendency to close small urban and rural schools in Finland, Norway and Sweden in general (Beach et al., 2018; cf. Karlsdóttir & Cuadrado, 2018).

Physical infrastructure

Land- and sea-based transport is a main concern for people living in rural and remote communities around the world (Horn et al., 2021). Transport poverty or disadvantage, i.e. the lack of affordable and reliable transport, prevents access to education, health services and employment opportunities (Shay et al., 2016; Shirgaokar et al., 2020). Lack of mobility also impacts people's ability to maintain social relationships, which is important for mental health and social inclusion (Karahasanovic, 2020; Shergold & Parkhurst, 2012; Shirgaokar et al., 2020).

In a global review of potential health impacts on older people in rural areas, due to lack of access to affordable transport, Bridgman (2018) highlights that access to public transport in rural communities is an important factor in mitigating social exclusion for older people and for their physical and mental wellbeing and maintaining an active lifestyle (cf. Israel Schwarzlose et al., 2014; Šťastná & Vaishar 2017; Stjernberg et al., 2021).

Not identified in the literature review, but still important to highlight, is the fact that the physical infrastructure is linked to also other aspects of services than transport, such as water and sewage pipes, electricity grid, and the physical installations for broad band and mobile coverage.

Climate adaptation and management of climate impacts

The research reviewed indicates that what is essential for future rural services is to adapt them and the infrastructure that already exists to extreme weather events caused by climate change (Adhikari & Fedler, 2020; Chen et al., 2014; Johnsson et al., 2019; Oven et al., 2012, Wilkinson et al., 2015). In practice, this means conducting risk analyses of existing services and infrastructure and making changes in such a way that basic foundations upon which society relies work properly, even if (for example) a storm should hit road and rail networks, or the electricity grid providing hospitals and nursery homes with power goes down. As stated by IPCC (2022) adaptation, in response to current climate change, is reducing climate risks and vulnerability mostly via adjustment of existing systems. IPCC (2022) state with very high confidence that adaptation can generate multiple additional benefits such as improving agricultural productivity, health and well-being, and biodiversity conservation as well as reduction of risks and damages. As adaptation options often have long implementation times, long-term planning and accelerated implementation, particularly in the next decade, is important to close adaptation gaps, recognising that constraints remain for some regions. More research is needed on Nordic rural climate adaptation and the management of climate impacts. That is how to continue to deliver services in case of extreme weather events such as a flooding, heatwaves, cold waves or storms. Based on research carried out in the USA, Australia, the United Kingdom and Ethiopia, and recent events in the Nordic Region, indicate that one of the areas to focus on for rural climate adaptation and management of climate impacts is the management of water specifically (Adhikari & Fedler, 2020; Chen et al., 2014; Johnsson et al., 2019; Oven et al., 2012, Wilkinson et al., 2015).

Digital infrastructure

Internet technologies are expected to help people to overcome barriers related to transport poverty in rural areas and provide access to important services – including health, finance, education and public administration (Ormstrup Vestergård et al. 2020; Randall et al. 2020). A basic prerequisite for this is access to digital infrastructure, such as broadband. Lack of access to the Internet, or material digital exclusion, has been called the 'rural broadband gap' (Salemink & Strijker 2018). On a European level, the data available for connectivity shows that while the internet gap between urban and rural areas on broadband has been reduced in the last years, the gap related to the fixed very high-capacity network (VHCN) has increased. Based on concerns that older people have limited abilities to access and use the Internet, Hodge et al. (2017) have studied the 'digital divide' in rural areas in South Australia. The digital divide indicates that people with certain demographic and socio-economic characteristics may be disadvantaged in accessing and using the Internet (Löfving et al., 2021). Löfving et al. (2021) have studied these processes in Västerbotten in Sweden. The study by Hodge et al. (2017) does suggest that the digital divide for older people is not necessarily specific to those in rural areas since the results from rural cases are the same as have been found regarding digital participation in urban case studies. Therefore, to overcome the challenges for older people in general, service providers need to adapt their online engagement strategies to the specific needs of older people. Providing the infrastructure, such as high-speed broadband, is not enough on its own (Hodge et al., 2017; Löfving et al., 2021).

Emergency services and civil defence

According to policy officials in the Nordic Thematic Group for Green and Inclusive Rural Development, who participated in the workshop in Helsinki in November 2021, recent years have seen a rise in 'local rescue thinking' and an awareness of the need to have robust response systems in place in rural areas. Such service needs have indeed been furthered with the Russian invasion of Ukraine.

Emergency services and civil defence are crucial for safety and security. In the case of an emergency in a rural area, it is essential that the police, firefighters, ambulances, and/or coast guards are within easy reach and do not take too long to respond. A research project focusing on rural policing in Iceland (Oddsson et al., 2021) confirms that rural police work is, in many respects, different from being a police officer in urban areas. Icelandic society has among the smallest number of police officers in Europe. It experienced Europe's most significant reduction in the number of police officers between 2009 and 2018 (Oddsson et al., 2021). Aside from being under-resourced, rural officers are often deeply embedded in their communities, which presents challenges as well as opportunities. Officers must be excellent communicators and have the skills to de-escalate situations through dialogue. The strong informal social control present in rural areas helps officers in this regard (Oddsson et al., 2021). The fact that police work is much more social in rural areas and must therefore be understood in that context is also confirmed in a recent article focusing on the situation in Sweden (Hällgren et al., 2021).

Services in Nordic rural policy frameworks

The national rural policies of the five Nordic countries and three autonomous territories can roughly be divided into two different categories based on governance structure and the size of the territory. The national policies for rural and peripheral matters in the four larger countries of Denmark, Finland, Norway and Sweden all provide a quite general policy overview. This includes highlighting access to service sectors such as education, social and healthcare, along with physical infrastructure, e.g. transport. In these countries, more tasks are dealt with by regional or local authorities, and it is up to the regional and local authority to find place-specific solutions. Moreover, certain issues are addressed in sectoral plans, e.g. health policy, social policy, educational policy, innovation policies, agricultural policies, and special agreements on co-operation between national and municipal authorities. The autonomous regions of Greenland, the Faroe Islands and Åland share demographic characteristics with Iceland. All have small populations, one main urban city or town, combined with many small communities spread around the rest of the landmass. In Iceland, for example, more public services are a government responsibility because the country has no regional authorities and most of the municipalities have a small population – which also means that the number of people working in the public administration is low and resources limited. That is why Iceland has a more centralised structure that allows national policies to go into greater detail and address specific challenges in specific regions. Often, however, particular topics are also addressed and operationalised in sectoral plans, as is common in the larger countries.

In the following, how services are included as a theme in rural policy in Denmark, Finland, Iceland, Norway, Sweden, Faroese Islands, Greenland and Åland is described.

Denmark

Denmark does not have a specific rural development policy. However, the national government has presented two political plans – *Tættere på I and Tættere på II* (Closer I and II) – designed to create balance and equality of opportunities across the whole country, including the balanced development of rural and urban areas (Indenrigs- og Boligministeriet 2021a, 2021b). These plans focus on the importance of rural areas having a local shop, a well-functioning leisure and cultural life, access to public services and health services, as well as access to nature. These features are seen as essential for the local population, as well as for the attractiveness of the areas to newcomers, businesses and tourists (Indenrigs- og Boligministeriet, 2021b). As a member of the EU, 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).

Finland

The Finnish policy document reviewed for this study is the draft of a new policy, Ajassa uudistuva maaseutu – Maaseutupoliittinen kokonaisohjelma 2021–2027 (Finland's National Rural Policy Programme; Kattilakoski et al., 2021). It is an operational programme for Finland's national rural policy, and the diversity of the countryside is seen as an important factor and opportunity for positive national development – with the regions offering a platform, resources and opportunities for a good life, innovation, entrepreneurship and a sustainable society. The programme emphasises that the countryside presents solutions to the climate crisis and the possibility of contributing to a more sustainable form of development. The goal of rural policy in Finland is to develop location-based opportunities. Strategically, the programme focuses on interdependence, environmental justice and new, knowledge-intensive economics. These are consistent throughout the programme's five themes, which are: 1) Greater added value through 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. The programme includes 73 concrete actions related to the five themes (Kattilakoski et al., 2021).

Iceland

The main policy document reviewed for Iceland is the regional Byggðaáætlun 2018–2024 plan, which is a descriptive national policy for regional affairs that serves as a coordination document for other public policies (Alþingi, 2018). The main goals of this regional plan are to secure equal opportunities for all Icelanders in relation to employment and services, to contribute to more equal living standards, and to promote the sustainable development of communities throughout the country (Alþingi, 2018). The Icelandic policy for regional affairs states specifically that:

...Iceland [shall] be in the forefront of modern infrastructure, advanced services, value creation, equal quality of life, and robust local authorities capable of undertaking local projects and providing residents with good and cost-effective services with the aim of sustainable development as its guiding principle. (Alþingi, 2018)

To achieve these goals, many policy aspects are addressed, and place-specific measures are operationalised in more detail in the policy. Goals and initiatives are also directly connected

to the ministry, regional association and/or relevant institution responsible, with a specific timeframe for the implementation of initiatives and measures. Moreover, proposals for funding and for identifying potential partners are detailed in the policy.

Norway

The two parties forming the new government in Norway since 2021 have laid out their main priorities in a co-operation agreement (Hurdalsplattformen, 2021). The agreement highlights important rural development issues, including that no municipality or county should be coerced or pressured into a merger and that local communities should have more authority. The agreement also calls for good services for all in the country close to the people who need them, including more jobs, better infrastructure, and varied cultural life. It is also emphasised that the public sector should have more of a presence in local communities (Hurdalsplattformen, 2021). The ambition behind Norwegian rural policy, as also expressed by Norman et al. (2020), is that the country should aim to keep rural districts as a living part of a greater national diversity and that rural policy should contribute substantially towards sustainable communities throughout the country.

Sweden

In Sweden, the national strategy for sustainable regional development is the overarching strategy for rural development (Näringsdepartementet, 2021). It includes four strategic areas that form the basis for the implementation of the regional development policy through 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 by means of digital communications and the transport system. As such the strategy for sustainable regional development covers topics like healthcare, social care, education, and physical and digital infrastructure from a sustainable development perspective (Näringsdepartementet, 2021). The implementation of the national regional development policy is to be coordinated with rural policies, the sustainable urban development policy, environmental policy and other relevant policy areas (Näringsdepartementet, 2021).

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, and in particular fishing policies, healthcare and social services, education, and transport. Since more than half the population is scattered between 17 islands, adequate transport provision is one of the most essential rural policy issues in the Faroe Islands. Housing is also something that Faroese policy emphasises, especially the lack of financing for housing construction in the countryside and outside the capital, Tórshavn (Samgonguskjal, 2019).

Greenland

The policy document *Naalakkersuisuts beskæftigelsesstrategi* 2020–2023 (Naalakkersuisuts, 2020) addresses some of the major challenges facing Greenland in relation to the effects of the COVID-19 pandemic. It highlights challenges which in some regions have been accelerated by the effects of the pandemic. Economic affairs are the main theme, with the focus on sectors that can generate economic growth and help develop a diversified and sustainable economy and more jobs. Four priorities are identified for overcoming the biggest challenges: 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.

Åland

Main issues targeted in Åland's rural policies are education, healthcare, social care and physical infrastructure, mainly transport by land and sea (Ålands landskapsregering, 2019, 2021). The name of one of these policy documents, *Tillsammans för Åland*, means 'Together for Åland' (Ålands landskapsregering, 2019). It clearly states that the aim includes collective progress towards a more economically, socially and environmentally sustainable Åland – including the capital, Mariehamn, the countryside and the archipelago as a whole. This is said necessary to provide effective and socially just services for all Ålanders, regardless of where they live (Ålands landskapsregering, 2019).

Comparing research and policy to depict potential policy improvements

The analysis at the national level presented in the above sections presents that Nordic rural policies generally include the theme of 'public and private service delivery'. Which services and how the different countries suggest solving the challenge of service delivery differs, however, according to country or region, governance structure and the politicians in charge. When comparing services that were found essential for rural areas now and in the future according to research (see Table 1), with the policy documents analysed from the Nordic countries, most of the essential services identified in the research literature are found to be covered. However, some services were found not to have been included or were not as prominent in the review. A plausible reason for why some essential rural services identified

in the research review were not included in the Nordic rural or regional policies studied in this report could be that the documents analysed are not fully comparable between countries because of different governance structures. Nevertheless, the documents studied for Denmark, Iceland, Greenland, the Faroe Islands and Åland indicate that these countries and regions might be lacking somewhat in more specific proposals on climate adaptation of basic services and the management of climate impacts to ensure services and infrastructure development in rural areas.

For instance, Denmark could benefit from adding climate adaptation and management of climate impacts 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 future need to adapt the management of basic services to climate impacts such as flooding, droughts and storms. In a Danish context, climate impacts and challenges are often framed as urban challenges and not necessarily rural ones. As a result, there seems to be a lack of focus on the challenges faced by rural areas. Also, Iceland could add more specifics on climate adaptation and the management of climate impacts to ensure safe and secure services and infrastructure in rural areas. While the Icelandic policy for regional affairs specifically mentions adaptations to meet the impact of climate change as a priority in the first chapter of Future Vision and Matters for Action (Alþingi, 2018), this is not operationalised in the context of service provision. For the policy in Faroese Islands and Greenland, climate adaptation of basic services and the management of climate impacts could be addressed in more detail since the islands are particularly vulnerable to climate change and the disruption of the Arctic environment. For Åland the theme of climate adaptation of basic services and the management of climate impacts could be further developed and operationalised beyond the general climate goals. The policy discussion is mainly limited to water quality and the use of water (Ålands landskapsregering, 2019). Finland could be considered a good example in this regard, and Sweden and Norway also cover some important aspects, but also these countries could also do more work on how to adapt rural areas to the more fluctuating and extreme weather conditions that will come with further climate change. In the Finnish rural policy climate action is connected to almost all issues - whether it be transport, tourism, food production or the promotion of biodiversity. Issues regarding sustainable development are also discussed from the perspective of the future need to adapt to climate change and to prepare for changes in water and forest management, for example (Kattilakoski et al., 2021).

Emergency services and civil defence are also topics discussed with the rural dimension in mind in some countries, while others do not mention them in the policies studied here. Finland, Norway, Denmark, the Faroe Islands and Åland include the importance of security, e.g. in the form of a police presence in rural areas, while Iceland, Sweden and Greenland do not address the issue. The policy studied for Iceland do, however, state the right of people to basic public services, including law enforcement and first response (Alþingi, 2018).

While all policies here studied mention the importance of access to education, and some even mention access to higher education, not all the policies discuss these topics from a quality perspective, that is the importance of having qualified and trained teachers. Finland, Norway, Sweden, the Faroe Islands, Greenland and Åland, however, all discuss the need for better skills. Enhancement for educational staff in the rural regions to some extent, e.g., in attracting better-qualified teachers and personnel to more rural education centres.

Digital infrastructure is included in all countries and regions, except in the policies studied for Greenland. It should be recognised, however, that in Greenland, large parts of the region do not have any need for digital infrastructure. However, Sullissivik is an online portal dedicated to providing digital citizen service in Greenland (Sullissivik, 2022). Moreover, Åland has, for the past decade, since 2012, had a special digital policy in place, Digital agenda för Åland, part of which lays out the policy for the digitalisation of public services. This policy could be inspirational for other rural regions (Ålands landskapsregering, 2022).

As a summary, some of the policy directions of Nordic public services can be viewed as strategies of collaborative service agreements, the digitalisation of services and their concentration in 'service hubs'. These are cost-effective strategies for certain services, some rural areas and particular individuals. Different services are based on different logic, however, and not all can be replaced with digital solutions and tools. Nor can they all be covered by local collaborative agreements or placed only in rural centres or 'hubs'. Instead, place-based solutions are required to adapt service provision to the specific needs of the region, municipality or village.

Conclusions

The following services have been identified as essential for rural areas, now and in the future: healthcare and social care; education and childcare; physical infrastructure; climate adaptation and management of climate impacts, digital infrastructure; and emergency services and civil defence. Emergency services and civil defence was not identified as an essential rural service by the research review, but via a workshop with policy actors, which indicate a need for more research especially on this topic ahead.

When analysing relevant policy documents from the five Nordic countries and the three autonomous regions, our analyses indicate that most of these essential services are covered by them. However, the extent to which national policies and priorities provide solutions and operationalise service needs does vary. This combined research and policy review indicates that there is room for improvement. Some essential services would benefit from further policy attention, to ensure safe and secure access to services in Nordic rural areas, both within and between countries and regions. This is especially the case for the emergency services and civil defence, as well as for climate adaptation of basic services and the management of climate impacts. To a certain degree, and for some of the countries, the categories of education and childcare, as well as digital infrastructure, might benefit from further work by policy actors.

A localised democracy, as part of which the national authorities delegate responsibility for placed-based services to local and regional institutional levels, is something that enables the context-specific adaptation of services. This democratic model is included in the Nordic countries' welfare systems especially in the four larger countries of Denmark, Finland, Norway and Sweden, albeit with certain variations (Dølvik et al., 2015; Tillväxtanalys, 2020). From a state perspective, one of the challenges of delegating responsibility is that national bodies are still expected to assure the quality of the services. This makes it important to maintain an ongoing dialogue on which services are the most important for individuals in different parts of the Nordic Region, as well as a continuous multi-level conversation on these matters. For Iceland, Greenland, the Faroe Islands and Åland, responsibility for public services lies with the national governments to a greater extent than in the other Nordic countries. This structure and model for service delivery seems to work well in these contexts, indicating that it is not necessarily the case that delegating responsibility from the state to local authorities (and/or to the private actor) is the only model for rural service provision. The challenge involved in developing good place-based services under this more state-based governance model is, however, to ensure that local knowledge and variations are incorporated when drawing up the national policy. Moreover, on the more processual side on rural policy and governance of services this analysis indicates that the rural policy in Norway is progressive regarding ways of providing services, as the policy encourage more private/public co-operation alongside citizen engagement and increased local participation in decision-making (Hurdalsplattformen, 2021; Norman et al., 2020). Also, the Swedish Association of Local Authorities and Regions has developed methodological support for developing innovative solutions in the public sector, based on an understanding of the users' needs and experiences, rather than continually providing services for which there is no demand (SALAR/SKR, 2022). To have in mind, however, is that demand change over time, so using only statistics and participatory methods focused on the current permanent population for providing rural infrastructure and services, there is a risk of missing the rural Nordic's future service needs.

Acknowledgements

The empirical material for this study was collected September 2021–March 2022 as part of an assignment from the thematic group for 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 authors are grateful for the support from the larger Nordregio team.

References

- Adamiak, C., Pitkänen, K., & Lehtonen, O. (2017). Seasonal residence and counterurbanization: The role of second homes in population redistribution in Finland. *GeoJournal*, 82(5), 1035–1050. <u>https://doi.org/10.1007/s10708-016-9727-x</u>
- Adhikari, K., & Fedler, C. B. (2020). Water sustainability using pond-in-pond wastewater treatment system: Case studies. *Journal of Water Process Engineering*, *36*, 101281. <u>https://doi.org/10.1016/j.jwpe.2020.101281</u>
- Alþingi (2018). Þingsályktun um stefnumótandi byggðaáætlun fyrir árin 2018–2024. 148. löggjafarþing 2017–2018. Nr. 24/148. Þingskjal 1242 — 480. <u>https://www.stjornarradid.is/verkefni/sveitarstjornir-og-</u> <u>byggdamal/byggdamal/byggdaaaetlun/byggdaaaetlun-2018-2024/</u>
- Beach, D., From, T., Johansson, M. and Öhrn, E. (2018). Educational and spatial justice in rural and urban areas in three Nordic countries: a metaethnographic analysis.
 Education Inquiry, 9(1), 4-21, <u>https://doi.org/10.1080/20004508.2018.1430423</u>
- Befort, C. A., Klemp, J. R., Fabian, C., Perri, M. G., Sullivan, D. K., Schmitz, K. H., Diaz, F. J., Shireman, T. (2014). Protocol and recruitment results from a randomized controlled trial comparing group phone-based versus newsletter interventions for weight loss maintenance among rural breast cancer survivors. *Contemporary Clinical Trials*, 37(2), 261-271. <u>https://doi.org/10.1016/j.cct.2014.01.010</u>
- Bremberg, S. (2020). Rural-urban mortality inequalities in four Nordic welfare states. *Scandinavian Journal of Public Health*, 48(8), 791-793. <u>https://doi.org/10.1177/1403494820921684</u>
- Bridgman, J. (2018). 2317 The Health Impact of Rural Transport Deprivation and Social
 Exclusion in the Older Population: A Systematic Literature Review. *Journal of Transport*& Health, 9, S11-S12. <u>https://doi.org/10.1016/i.jth.2018.05.063</u>

- Cedergren, E., Huynh, D., Kull, M., Moodie, J., Sigurjónsdóttir., H.R., & Wøien Meijer, M.
 (2021). Public service delivery in the Nordic Region: An exercise in collaborative governance. Nordregio Report 2021: 4. <u>https://doi.org/10.6027/R2021:4.1403-2503</u>
- Chen, Z., Ngo, H.H., Guo, W., Lim, R., Wang, X. C., O'Halloran, K., Listowski, A., Corby, N., and Miechel, C. (2014). A comprehensive framework for the assessment of new end uses in recycled water schemes. *Science of The Total Environment*, 470-471, 44-52. <u>https://doi.org/10.1016/j.scitotenv.2013.09.061</u>
- Clark, D. & Harrison, K. (2017). European Rural Parliament Sustaining Rural Services and Infrastructure Project Report. September 2017. Accessed via European Rural Parliament homepage, 2021-10-27.
- Copus, A., Kahila, P., Dax, T., Kovács, K., Tagai, G., Weber, R., Grunfelder, J., Meredith, D., Ortega-Reig, M., Piras, S., Löfving, L., Moodie, J., Fritsch, M., & y Ferrandis, A. (2021). European shrinking rural areas: Key messages for a refreshed long-term European policy vision. *TERRA. Revista de Desarrollo Local*, (8), 280-309. <u>http://dx.doi.org/10.7203/terra.8.20366</u>
- Cras, P. (2018). Service i framtidens landsbygdssamhällen. In Syssner, J. (Ed.), *Nya visioner för landsbygden*. Linnefors förlag. Pp.63-94
- Douthit, N., Kiv, S., Dwolatzky, T., and Biswas, S. (2015). Exposing some important barriers to health care access in the rural USA. *Public Health*, *129*(6), 611-620. <u>https://doi.org/10.1016/j.puhe.2015.04.001</u>
- Dubois, A. & Sielker, F. (2022). Digitalization in sparsely populated areas: between placebased practices and the smart region agenda, *Regional Studies*, *56*(10), 1771-1782. <u>https://doi.org/10.1080/00343404.2022.2035707</u>
- Dølvik, J.-E., Fløtten, T., Hippe J.M, & Jordfald, B. (2015). The Nordic model towards 2030 A new chapter? Fafo report 2015:07. Accessed at https://www.fafo.no/images/pub/2015/20412.pdf
- Ellem, K., Baidawi, S., Dowse, L., & Smith, L. (2019). Services to young people with complex support needs in rural and regional Australia: Beyond a metro-centric response. *Children and Youth Services Review*, 99, 97-106. <u>https://doi.org/10.1016/j.childyouth.2019.01.033</u>
- European Commission/EACEA/Eurydice (2021). Teachers' and school heads' salaries and allowances in Europe – 2019/20. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union.

https://eurydice.eacea.ec.europa.eu/publications/teachers-and-school-heads-salariesand-allowances-europe-201920

- European Network for Rural Development (2020). Access to Services Factsheet. Result from 2nd ENRD Workshop on Vibrant Rural Areas: Access to Services. 30/06/2020. Accessed at <u>https://enrd.ec.europa.eu/news-events/events/2nd-enrd-workshop-vibrant-ruralareas-access-services_en</u>
- Gyedu, A., Stewart, B., Gaskill, C., Donkor, P., Quansah, R., & Mock, C. (2020). Benchmarking global trauma care: Defining the unmet need for trauma surgery in Ghana. *Journal of Surgical Research*, 247, 280-286. <u>https://doi.org/10.1016/j.jss.2019.10.013</u>
- Heleniak, T. (2020). Migration and mobility More diverse, more urban. In Grunfelder, J.,
 Norlén, G., Randall, L. & Sánchez Gassen, N. (Eds.), State of the Nordic Region 2020,
 Chapter 3. Nord 2020:001. <u>https://pub.norden.org/nord2020-001/#</u>
- Hodge, H., Carson, D., Carson, D., Newman, L., & Garrett, J. (2017). Using Internet technologies in rural communities to access services: The views of older people and service providers. *Journal of Rural Studies*, *54*, 469-478.
 https://doi.org/10.1016/j.jrurstud.2016.06.016
- Horn, C., Gifford, S. M., & Ting, C. Y. P. (2021). Informal, essential and embedded: Transport strategies in remote Sarawak. *Journal of Transport Geography*, 96, 103181. <u>https://doi.org/10.1016/j.jtrangeo.2021.103181</u>
- Hurdalsplattformen, (2021). For en Regjering Utgått Fra Arbeiderpartiet og Senterpartiet. https://www.regjeringen.no/no/dokumenter/hurdalsplattformen/id2877252/?ch=1
- Hällgren, M., Lindberg, O., & Rantatalo, O. (2021). Sensemaking in detective work: The social nature of crime investigation. *International Journal of Police Science and Management*, 23(2), 119-132. <u>https://doi.org/10.1177/1461355720980759</u>
- Indenrigs- og Boligministeriet (2021a). Tættere på Flere uddannelser og stærke lokalsamfund. Indenrigs- og Boligministeriet, København, maj, 2021.
- Indenrigs- og Boligministeriet (2021b). Tættere på Sundhed, uddannelse og lokal udvikling. Indenrigs- og Boligministeriet, København, oktober, 2021.
- Info Norden (2022). Info Norden is the information service of the Nordic Council of Ministers. <u>https://www.norden.org/da/info-norden</u>
- IPCC (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability. IPCC WGII Sixth Assessment Report. <u>https://www.ipcc.ch/report/ar6/wg2/</u>

- Israel Schwarzlose, A. A., Mjelde, J. W., Dudensing, R. M., Jin, Y., Cherrington, L. K., & Chen, J. (2014). Willingness to pay for public transportation options for improving the quality of life of the rural elderly. *Transportation Research Part A: Policy and Practice*, 61, 1-14. <u>https://doi.org/10.1016/j.tra.2013.12.009</u>
- Jana, A., & Harata, N. (2016). Provisioning health care infrastructure in communities:
 Empirical evidences from West Bengal, India. *Socio-Economic Planning Sciences*, 54, 37-46. <u>https://doi.org/10.1016/j.seps.2016.02.003</u>
- Johnsson, B., Matsson, K., Søyland, V., Krekling, M. F., Nemming, A., Vainio-Mattila, B.,
 Reskola, V-P., Högman, S., Steffensen, L.L., Jóhannesson, T., Rönnberg, J., Hansson, P.,
 Tunberg, M., & Hansson, P. (2019). Det nordiska jordbruket utmaningar i en framtid
 präglad av mer extremväder. TemaNord 2019:536. https://doi.org/10.6027/4d543a9c-sv
- Karahasanovic, A. Culén, A.L., Skjetne, J.H., & Hasle, G., (2020). Key indicators in design for sustainable rural transport. *IADIS International Journal on Computer Science and Information Systems*, *15*(2), 107-122.
 https://www.iadisportal.org/ijcsis/papers/2020150208.pdf
- Karlsdóttir, A., Heleniak, T., &Kull, M. (2020). Births, Children and Young people. In Grunfelder, J., Norlén, G., Randall, L. and Sánchez Gassen, N. (Eds.) State of the Nordic Region 2020, Chapter 2. Nord 2020:001. <u>https://pub.norden.org/nord2020-001/#</u>
- Karlsdóttir, A., & Cuadrado, A. (2018). Young people not thriving in rural areas. Nordregio Policy Brief. <u>https://doi.org/10.30689/PB2018:5.2001-3876</u>
- Kattilakoski, M., Husberg, A., Kuhmonen, H., Rutanen, J., Vihinen, H., Töyli, P., Lukkari, T.,
 Osmonen, E., Väre, T., & Åström, C. (2021). Ajassa uudistuva maaseutu –
 Maaseutupoliittinen kokonaisohjelma 2021–2027. Taitto Valtioneuvoston
 hallintoyksikkö, Julkaisutuotanto, Helsinki, 2021.
- Kull, M., Refsgaard, K., Sigurjónsdóttir, H.R., Bogason, Á., Wøien Meijer, M., Sánchez Gassen, N., & Turunen E. (2020). Attractive Rural Municipalities in the Nordic countries: Jobs, People and Reasons for Success from 14 Case Studies. Nordregio Report 2020:1.
 https://doi.org/10.6027/R2020:1.1403-2503
- Landbrugsstyrelsen (2021). Rapport om den strategiske plan under den fælles landbrugspolitik for 2021 - The Danish Strategic CAP Plan 2023–2027, Ministeriet for Fødevarer, Landbrug og Fiskeri, 2022. <u>https://lbst.dk/fileadmin/user_upload/NaturErhverv/Filer/Tvaergaaende/EU-</u> <u>arbejdet/Landbrugsreform_2022-2027/Den-danske-strategiske-CAP-plan-af-2023-</u> <u>2027-godkendt-310822_.pdf</u>

- Lundgren, A. & Cuadrado, A. (2020). Wellbeing in the Nordic Region. In Grunfelder, J.,
 Norlén, G., Randall, L., and Sánchez Gassen, N. (Eds.) State of the Nordic region 2020.
 Nordic Council of Ministers, Chapter 10. Nord 2020:001.
 https://doi.org/10.6027/NO2020-001
- Lundgren, A. Vestergård, L.O., Bogason, A., Jokinen, J.C., Penje, O., Wang, S., Norlén, G., Löfving, L., & Heleniak, T. (2020). Digital Health Care and Social Care Regional development impacts in the Nordic countries. Nordregio Report 2020:14. <u>https://doi.org/10.6027/R2020:14.1403-2503</u>
- Löfving, L., Kamuf, V., Heleniak, T., Weck, S., & Norlén, G. (2021). Can digitalization be a tool to overcome spatial injustice in sparsely populated regions? The cases of Digital Västerbotten (Sweden) and Smart Country Side (Germany). *European Planning Studies*, 1-18. <u>https://doi.org/10.1080/09654313.2021.1928053</u>
- Naalakkersuisuts (2020). Innovation Potentiale Kompetence Naalakkersuisuts beskæftigelsesstrategi 2020–2023, Departementet for Erhverv og Arbejdsmarked, Nuuk, december 2020.
 <u>https://naalakkersuisut.gl/~/media/Nanoq/Files/Publications/Arbejdsmarked/DK/Besk</u> aeftigelsesstrategi%202020%2023%20DK%20digitalversion1.pdf
- Norlén, G. & Randall. L. (2020). The Nordic labour market in 2040. In Grunfelder, J., Norlén, G., Randall, L. and Sánchez Gassen, N. (Eds.), State of the Nordic Region 2020, Chapter
 6. Nord 2020:001. <u>https://pub.norden.org/nord2020-001/#</u>
- Norman, V., Bønå, H.J., Dehli, W.P., Krogsæter, Å., Stein, J., Syse, A., Aasbrenn, K., Bull, H.H., Teslo, J., Aalerud, J.E., & Reiersen, T. (2020). Det handler om Norge – Bærekraft i hele landet. Utredning om konsekvenser av demografiutfordringer i distriktene. Kommunalog moderniseringsdepartementet.
- Näringsdepartementet (2021). Nationell strategi för hållbar regional utveckling i hela landet 2021–2030. <u>https://www.regeringen.se/4956ea/contentassets/53af87d3b16b4f5087965691ee5fb</u>
- <u>922/nationell-strategi-for-hallbar-regional-utveckling-i-hela-landet-20212030</u> Oddsson, G., Hill, A. P., & Bjarnason, T. (2021). Jacks (and Jills) of all trades: the gentle art of
- policing rural Iceland. *Nordic Journal of Criminology*, 22(2), 129-148. https://doi.org/10.1080/2578983X.2021.1979867
- OECD (2020). Policies for present and future service delivery across territories. Assessment and Recommendations. Working Party on Rural Policy. Centre for Entrepreneurship,

SMEs, Regions and Cities (CFE) Regional Development Policy Committee. CFE/RDPC/RUR(2020)6/REV2/SUM. JT03469897.

- Ormstrup Vestergård, L. Penje, O., Jokinen, J.C. Rotvold, G-H., & Tunby Kristiansen, T. (2020). Improving accessibility through digitalisation in health care and social care. In Lundgren, A., Randall, L., & Norlén, G. (Eds.), State of the Nordic Region 2020 Wellbeing, health and digitalisation edition, Chapter 5. Pp. 52-65. <u>https://nordregio.org/publications/state-of-the-nordic-region-wellbeing-health-anddigitalisation-edition/</u>
- Oven, K. J., Curtis, S. E., Reaney, S., Riva, M., Stewart, M. G., Ohlemüller, R., Dunn, C. E., Nodwell, S., Dominelli, L., & Holden, R. (2012). Climate change and health and social care: Defining future hazard, vulnerability and risk for infrastructure systems supporting older people's health care in England. *Applied Geography*, 33, 16-24. <u>https://doi.org/10.1016/j.apgeog.2011.05.012</u>
- Pettersson, G., Ström, K., & Johansen, J-B. (2016). Teachers' views on support in small rural schools for students with special educational needs. *Nordic Studies in Education*, 20–37. <u>https://doi.org/10.18261/issn.1891-5949-2016-01-03</u>
- Randall, L., Vestergård, L.O., and Wøien Meijer, M. (2020). Rural perspectives on digital innovation: Experiences from small enterprises in the Nordic countries and Latvia. Nordregio Report 2020:4. <u>http://doi.org/10.6027/R2020:4.1403-2503</u>
- Rauhut, D., Smith, C., Humer, A., Ludlow, D., & Borges, L. (Eds.) (2013). SeGI Indicators and perspectives for services of general interest in territorial cohesion and development.
 Applied Research 2013/1/16 Final Report. Version 25/05/2013. ESPON and Royal Institute of Technology KTH.
- Rehn-Mendoza, N. & Weber, R. (2018). Health and welfare. We continue to live longer, but inequalities in health and wellbeing are increasing. In Grunfelder, J., Rispling, L., and Norlén, G. (Eds.), State of the Nordic region 2018, Chapter 13. Nordic Council of Ministers. Nord 2018:001. <u>https://doi.org/10.6027/NORD2018-001</u>
- SALAR/SKR (2022). Sveriges Regioner och Kommuner. Nya metoder och nya sätt att tänka för att lösa framtidens samhällsutmaningar. <u>https://innovationsguiden.se/</u>
- Salemink, K. and D. Strijker (2018). The participation society and its inability to correct the failure of market players to deliver adequate service levels in rural areas.
 Telecommunications Policy, 42(9), 757-765.
 https://doi.org/10.1016/j.telpol.2018.03.013

- Sánchez Gassen, N., Jokinen, J., & Cuadrado, A. (2022). Marriage, divorce, and birth trends. In Norlén, G., Randall, L., Sánchez Gassen, N. and Tapia, C. (Eds.), State of the Nordic region 2022. Nordregio/Nordic Council of Ministers, Chapter 3. Nordregio Report 2022:2. <u>https://nordregio.org/publications/snr22/</u>
- Samgonguskjal (2019). Fólkaflokkurin, Sambandsflokkurin & Miðflokkurin, Tórshavn, 14. September, 2019. <u>https://lms.cdn.fo/media/13038/samgonguskjali-14-september-</u> 2019.pdf?s=8bcdc2MyPm9aH_vmrsVxqsMEPYQ
- Shay, E., Combs, T. S., Findley, D., Kolosna, C., Madeley, M., & Salvesen, D. (2016). Identifying transportation disadvantage: Mixed-methods analysis combining GIS mapping with qualitative data. *Transport Policy*, 48, 129-138. <u>https://doi.org/10.1016/j.tranpol.2016.03.002</u>
- Shergold, I., & Parkhurst, G. (2012). Transport-related social exclusion amongst older people in rural Southwest England and Wales. *Journal of Rural Studies*, 28(4), 412-421. <u>https://doi.org/10.1016/j.jrurstud.2012.01.010</u>
- Shirgaokar, M., Dobbs, B., Anderson, L., & Hussey, E. (2020). Do rural older adults take fewer trips than their urban counterparts for lack of a ride? *Journal of Transport Geography*, *87*, 102819. <u>https://doi.org/10.1016/j.jtrangeo.2020.102819</u>
- Slätmo, E., Bogason, Á., Cedergren, E., Huynh, D., & Salonen, H. (2023). Service provision and access to services in Nordic rural areas. Nordregio Report 2023:2. <u>http://doi.org/10.6027/R2023:2.1403-2503</u>
- Slätmo, E., Bogason, A., Vasilevskaya, A., & Salonen, H. (2022). Essential rural services in the Nordic Region – Challenges and opportunities. Nordregio report 2022:1. <u>https://nordregio.org/publications/essential-rural-services-in-the-nordic-regionchallenges-and-opportunities/</u>
- Slätmo, E., & Kristensen, I. (2021). Urban–rural linkages. An inquiry into second-home tourism in the Nordics. In Bański, J. 2021 (Ed.), *The Routledge Handbook of Small Towns* (1st ed.), Chapter 15. Routledge. <u>https://doi.org/10.4324/9781003094203</u>
- Slätmo, E., Ormstrup Vestergård, L., Lidmo, J., & Turunen, E. (2019). Urban–rural flows from seasonal tourism and second homes: Planning challenges and strategies in the Nordics. Nordregio Report 2019:13. <u>https://doi.org/10.6027/R2019:13.1403-2503</u>
- Šťastná, M., & Vaishar, A. (2017). The relationship between public transport and the progressive development of rural areas. *Land Use Policy*, *67*, 107-114. <u>https://doi.org/10.1016/j.landusepol.2017.05.022</u>

- Stjernberg, M., (2020). Ageing as a major demographic trend. In Grunfelder, J., Norlén, G.,
 Randall, L. and Sánchez Gassen, N. (Eds.), State of the Nordic Region 2020, Chapter 4.
 Nord 2020:00 1. <u>https://nordregio.org/publications/state-of-the-nordic-region-2020/</u>
- Stjernberg, M. Sigurjónsdóttir, H.R., & Wøien Meijer, M. (2021). Unlocking the potential of silver economy in the Nordic Region. Nordregio Report 2021:7. <u>http://doi.org/10.6027/R2021:7.1403-2503</u>
- Sullissivik (2022). Online portal dedicated to provide digital citizen service in Greenland. <u>https://www.sullissivik.gl/?sc_lang=kl-GL</u>
- Tillväxtanalys (2021). Nordisk studie om regionalpolitik och omställningsförmåga. Vi undersöker regionalpolitiken i våra nordiska grannländer och granskar även förekomsten av specifika policyinstrument för att stärka den regionala omställningsförmågan. Rapport 2021:05. <u>https://www.tillvaxtanalys.se/publikationer/pm/pm/2021-09-20-nordisk-studie-omregionalpolitik-och-omstallningsformaga.html</u>
- Vaalit (2022). Val: Välfärdsområdesvalet. https://vaalit.fi/sv/valfardsomradesval
- Villegas, N., Cianelli, R., Cerisier, K., Fernandez-Pineda, M., Jacobson, F., Lin, H. H., Sanchez, H., Davenport, E., & Zavislak, K. (2021). Development and evaluation of a telehealth-based simulation to improce breastfeeding education and skills among nursing students. *Nurse Education in Practice*, *57*, 103226. <u>https://doi.org/10.1016/j.nepr.2021.103226</u>
- Wang, D. & M. Gao (2013). Educational equality or social mobility: The value conflict between preservice teachers and the Free Teacher Education Program in China. *Teaching and Teacher Education*, 32, 66-74. <u>https://doi.org/10.1016/j.tate.2013.01.008</u>
- Wilkinson, M. E., Mackay, E., Quinn, P. F., Stutter, M., Beven, K. J., MacLeod, C. J. A., Macklin, M. G., Elkhatib, Y., Percy, B., Vitolo, C., & Haygarth, P. M. (2015). A cloud based tool for knowledge exchange on local scale flood risk. *Journal of Environmental Management*, *161*, 38-50. <u>https://doi.org/10.1016/j.jenvman.2015.06.009</u>
- Ålands landskapsregering (2022). Digital agenda för Åland. <u>https://www.regeringen.ax/styrdokument-rapporter-publikationer/digital-agenda-</u> <u>aland-0</u>
- Ålands landskapsregering (2021). Ålands landskapsregerings interventioner ingående i Finlands CAP-strategi – Åtgärder som skall ingå i Finlands CAP-strategiplan som regionala interventioner. UTKAST. Ålands landskapsregering, Mariehamn.

https://www.regeringen.ax/sites/default/files/attachments/page/interventionersamla de till remiss ii.pdf

Ålands landskapsregering (2019). Regeringsprogram Tillsammans för Åland. Ålands landskapsregering, Mariehamn, December, 2019. https://www.regeringen.ax/sites/default/files/attachments/guidedocument/m012019

2020-handlingsprogram-2019-2023.pdf



© Author(s). This is an Open Access-article distributed under the terms given in CC-BY 4.0 (<u>https://creativecommons.org/licenses/by/4.0/</u>), which allows to copy and redistribute remix, transform, and build upon the material for any purpose,

even commercially given that proper attribution is made, and indicated if changes were made, and that this licence is specified and linked to.