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A VISION FOR RURAL AREAS

MAP Discussion Paper

LONG-TERM VISION FOR RURAL AREAS: CONTRIBUTION FROM 20 SCIENCE- SOCIETY-POLICY PLATFORMS

MAP DISCUSSION PAPER

MAP DENMARK

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1. Introduction

The MAP and MAP members

The Multi-Actor Platform (MAP) in Denmark has a national coverage and is a newly established platform anchored at the Rural Council of Denmark. The MAP includes stakeholders from four relevant actor groups that have stakes in rural communities and their development. Those four groups are:

- Society
 - Civil society organisations or citizens engaged in questions related to rural areas
 - Private businesses
- Policy
 - Elected politicians or officials at different policy levels
- Science
 - Researchers with knowledge on relevant topics for rural areas

Factors that were taken into considerations when establishing the MAP were geographical location of the stakeholders, level of policy, gender, age, and diversity in relevant topics.

Table 1. Members of MAP Denmark

Science representatives			
<i>Organisation</i>	<i>Name</i>	<i>Gender</i>	<i>Geography, NUTS3</i>
Center for Regional and Tourism Research	Rikke Brandt Broegaard	F	Bornholm
Danish Centre for Rural Research	Egon Noe	M	Syddjylland
Aarhus University, Danish School of Education	Birgitte Romme Larsen	F	Københavns omegn
Roskilde University, Department of People and Technology	Niels Heine Kristensen	M	Østsjælland
Policy representatives			
<i>Organisation</i>	<i>Name</i>	<i>Gender</i>	<i>Geography, NUTS3</i>
Danish Business Authority, state level	Camilla Nissen	F	Vest- og syddjylland
The Agricultural Agency, state level	Erik Kristensen	M	Østjylland
Svendborg municipality, local level	Søren Bach-Hansen	M	Fyn
Central Denmark Region, regional level	Mette Boel	F	Vestjylland
Lejre municipality, local level	Nynne Friis	F	Østsjælland
Society representatives – Business			
<i>Organisation</i>	<i>Name</i>	<i>Gender</i>	<i>Geography, NUTS3</i>
Danish Agriculture and Food Council	Karsten Willumsen	M	Vestjylland
Strandet, local SME	Julie Møller	F	Nordjylland
GreenLab Skive, green industrial business park	Thea Lyng Thomsen	F	Vestjylland
Thise Mejeri, local business	Poul Pedersen	M	Vestjylland
Society representatives – Civil society organisation/NGOs			
<i>Organisation</i>	<i>Name</i>	<i>Gender</i>	<i>Geography, NUTS3</i>
Rural Council of Denmark	Grethe Saabye	F	Østjylland
Collective Impact	Søren Møller	M	Østjylland

Rural Denmark

Agriculture has for several centuries dominated the Danish landscape and society including rural communities. In the late 19th century a large development of high-quality dairy and meat production took place in Denmark organised through a vast number of cooperatives spread across the country. This enabled a successful management of the competitive pressures of the first wave of economic globalization in a way that distinguished Denmark from most of continental Europe. In 1946, more than 525 000 were employed in agriculture and contributed to the GDP with about 20% while in 2017 only 63 000 were employed and contributed to the export with about 8% (Kærgård 2017). However, agriculture still covers 62% of the land area and is visible in rural areas also due to large machinery, building structures and animal production as well as with employment of foreign labour mainly from Eastern Europe.

The rural areas of today are in transformation and many of them threatened by out-migration, lack of opportunities for education, a mismatch in the housing market, and mismatch in the job market. Many villages have lost everyday functions like schools, shops, and elderly care services and thereby both public and private jobs. However, strong SMEs, strong communities and local creativity exist. In many places citizens are joining forces in order to ensure that their local community is still attractive typically through projects and associations that focus on "the good recreational life" (Tanvig 2020). The digital revolution and the green transition alongside a growing bioeconomy provide many promises for the future of rural areas with for example new types of jobs, education, and changes in economic structures (Grunfelder et al. 2020; Landdistrikernes Fællesråd 2020).

Based on Eurostat's urban-rural typology, two of the five Danish regions are classified as predominantly rural (North Jutland and Zealand), indicated by less than 50% of the population living in urban areas (Figure 1). However, as the Danish regions have an average population of above 1 million each and as all regions have larger cities the regional picture does not provide a very good overview of rural Denmark. Another and more coherent picture of rural areas is presented in the national classification of municipalities that was created after the municipal reform in 2007 where 271 became 98 municipalities (Figure 2) (Kristensen, Kjeldsen, and Dalgaard 2007). The classification is developed based on seven indicators of rurality: urbanisation, center-periphery, the significance of agriculture, development, demography, education, and economy. 16 municipalities are classified as remote rural and 30 as rural. Together these municipalities cover 71% of the land area.

Figure 1: Eurostat urban-rural typology (Grunfelder et al. 2020)

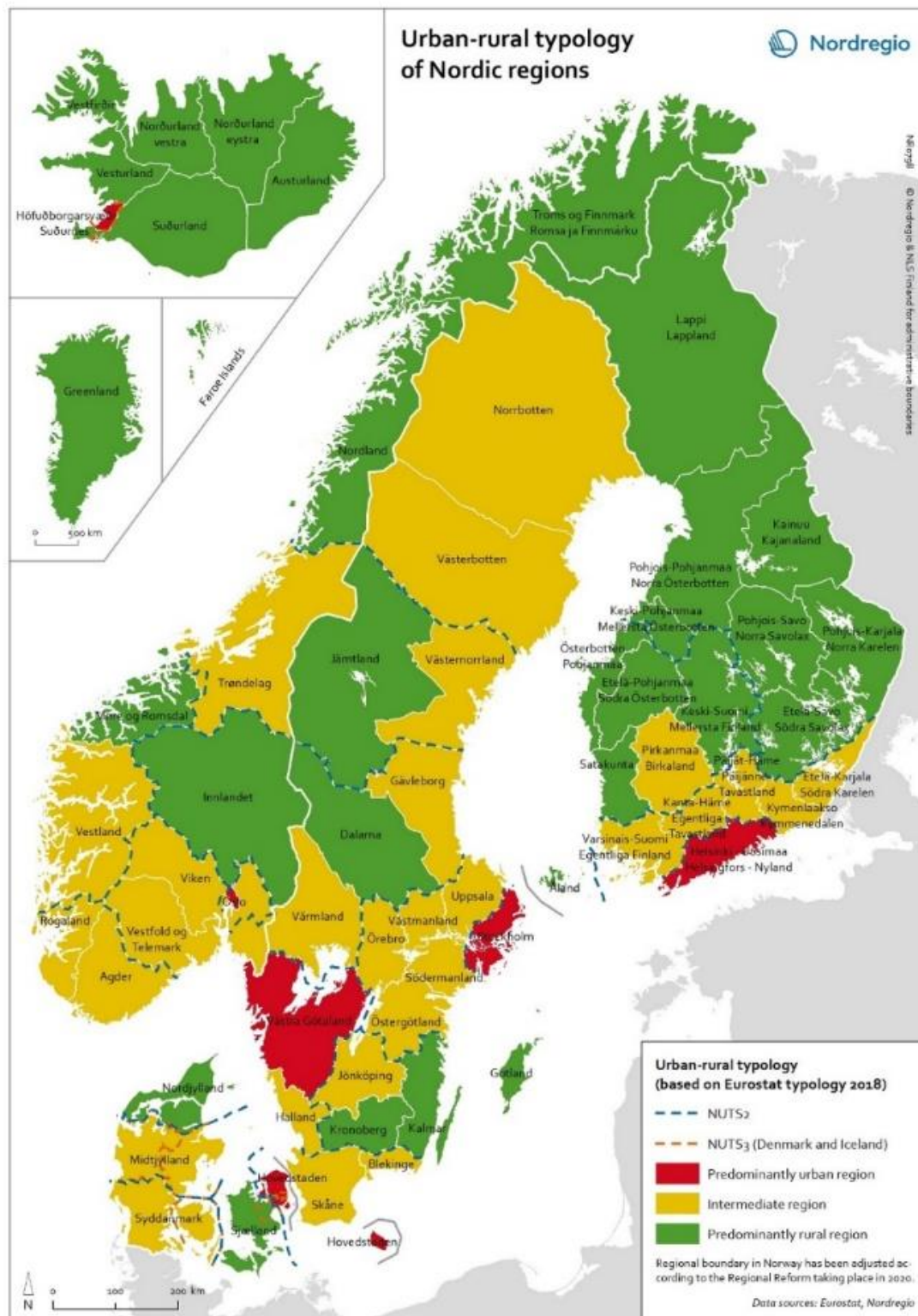
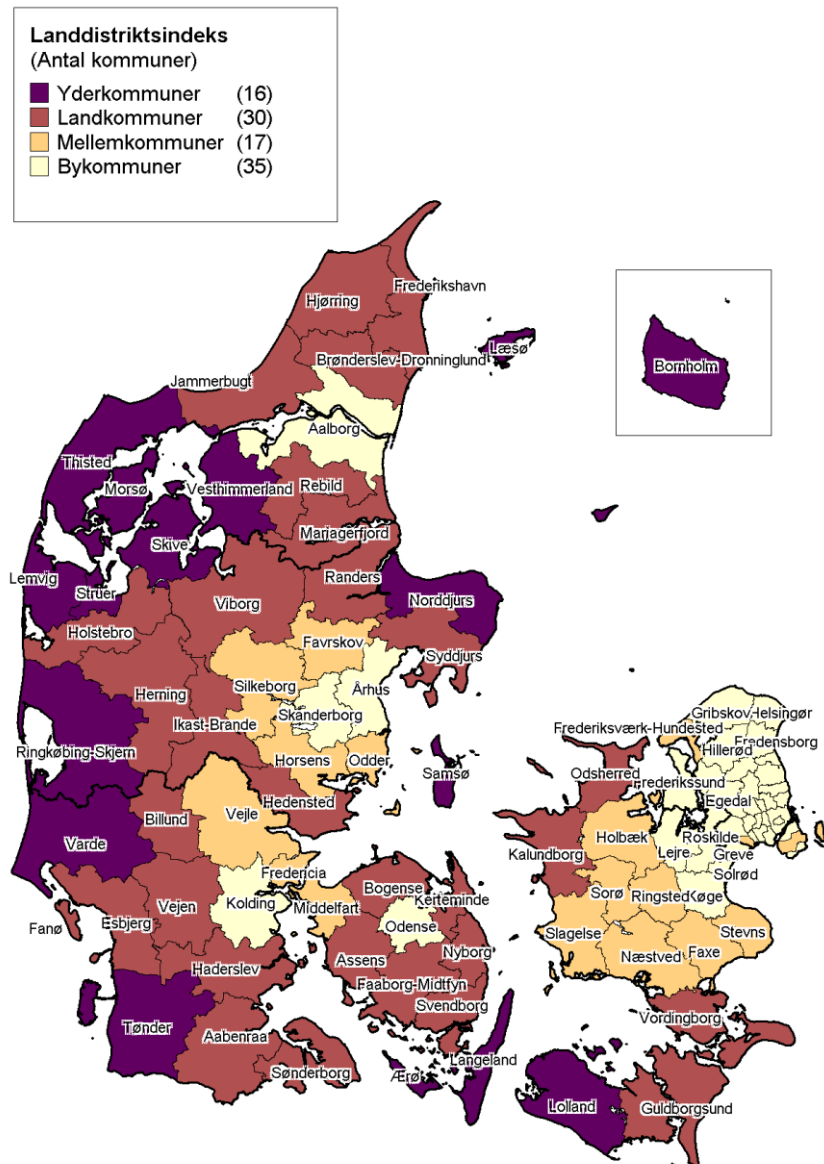


Figure 2. National classification of municipalities (Kristensen et al. 2007)



Keywords: Denmark, challenges, opportunities, vision, trends

2. Results from desk research

2.1 Review of key trends

In 2019, the population of Denmark amounts to 5.8 million. Figure 3 shows the population change that occurred between 2008 and 2017 in Denmark and three other Nordic countries visualised at grid level data on 5000 x 5000 meters. A general process of urbanisation is depicted with population increase (blue areas) in and around bigger cities and population decrease (red and orange areas) in rural areas, especially in the north-western and southern parts of Jutland, Lolland-Falster and the islands. There are more shrinking grids across Denmark than growing grids (Table 2).

Figure 3. Absolute population change at the grid level (5,000 × 5,000 m) in Denmark, Finland, Norway and Sweden between 2008 and 2017 (Stjernberg and Penje 2019)

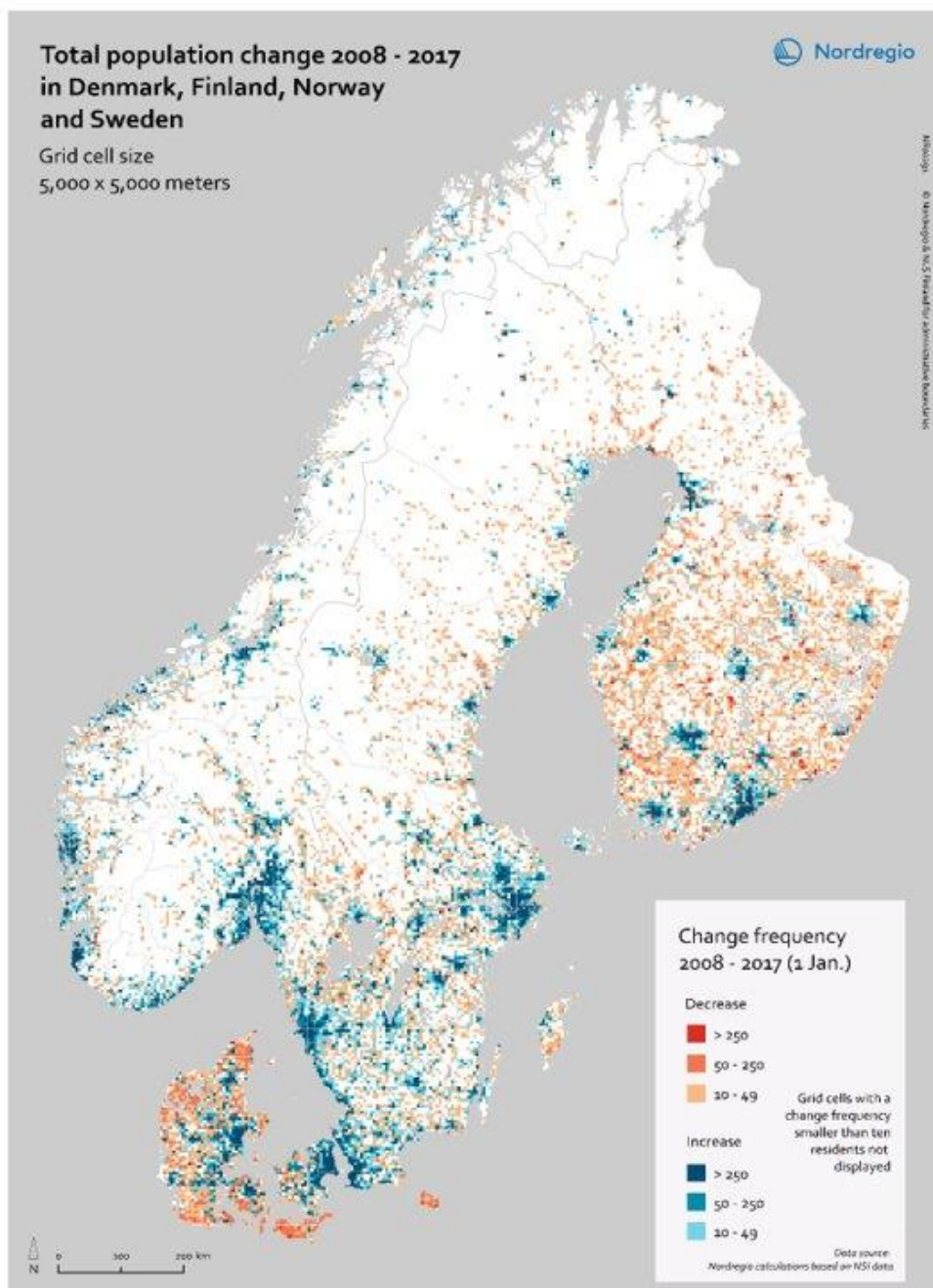
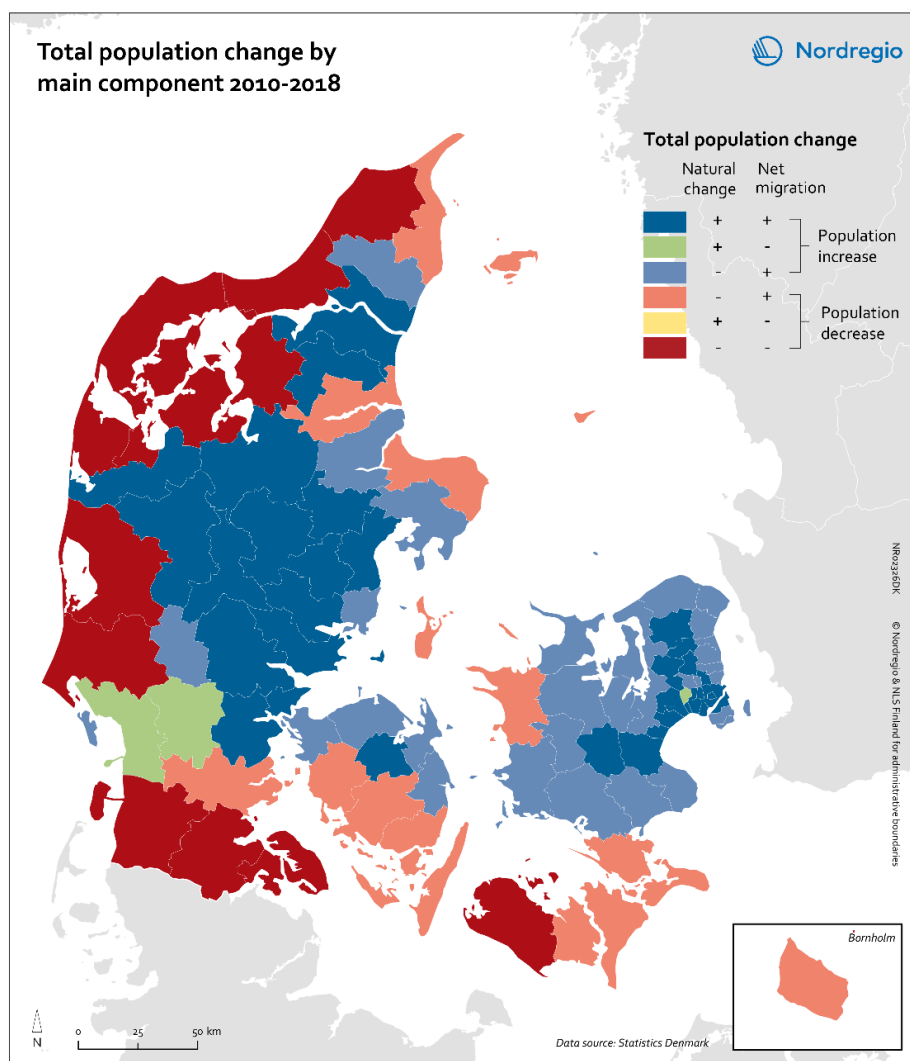


Table 2. The number of grid cells (1,000 × 1,000 m) where the population has grown and decreased between 2008 and 2017 in Denmark, Finland, Norway and Sweden (Stjernberg and Penje 2019)

	Growing grid cells (n)	Shrinking grid cells (n)
Denmark	14 000	20 333
Finland	26 781	46 793
Norway	23 123	23 329
Sweden	52 093	46 867

Zooming in on a single municipality shows that population growth and shrinkage can occur in the same municipality though the general picture is that of population increase (Stjernberg and Penje 2019). The rural municipality of Holstebro experienced population increase in the period 2008-2017, however, the development at grid level shows that the number of shrinking grids is almost double the number of growing grids. Across Denmark a common trend is experienced where the population is increasingly concentrated in the local urban centres while population decrease generally occurs in the more rural areas of the municipalities. As such, a double urbanisation process is happening in Denmark from rural to urban both nationally and locally (KL 2014).

The Danish population is increasing, which for the last decades primarily is due to migration which accounts for more than two thirds of the population increase since 1990 (Grunfelder et al. 2020). Figure 4 depicts the causes behind the population development that took place between 2010 and 2018 and whether increase or decrease occurred due to natural changes and/or net migration. For example, dark red areas are municipalities that have experienced population decrease by both natural change (more deaths than births) as well as net migration (more people emigrated than immigrated). Light red areas also experienced population decrease overall, but in the meantime experienced a positive net migration.

Figure 4. Total population change by main component 2010-2018 (Grunfelder et al. 2020)

People who live in rural areas report a higher quality of life than people in urban areas in Denmark. Survey data collected in the period from 2002-2014 show, that people who live in small, rural villages are more content with their life overall, than people living in cities. For the entire period, the average for rural inhabitants was a score of 8.48 while the score for urban inhabitants was 8.39 (with 1 being not content at all and 10 completely content) (Sørensen 2018).

2.2 Review of main challenges and opportunities

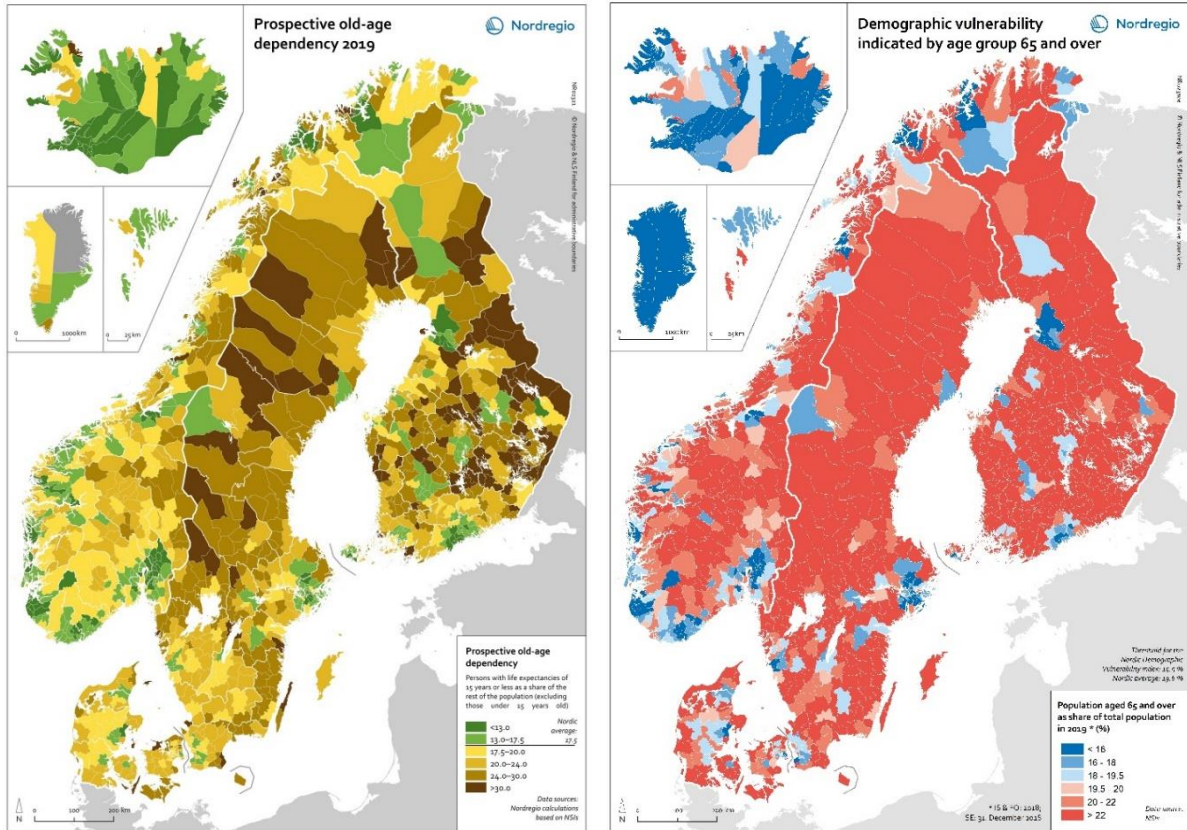
Demographic trends

An ageing population is a general trend in Denmark and especially in rural areas. Figure 5 portrays prospective old-age dependency at municipal level which indicates the amount of people with a life expectancy of 15 years or less as a share of the total population. This is an interesting indicator as the last 15 years of a person's life on average is where the probability of health impairments and the need for care increases. Yellow and brown areas indicate municipalities with high prospective old-age dependency, where rural municipalities as Langeland, Odsherred, Læsø, Ærø and Samsø stand out with ratios above 30%. Figure 6 displays the demographic vulnerability of Danish municipalities indicated by the amount of people aged

65+. Several rural municipalities can be defined as vulnerable (red areas) with the amount of the population aged 65+ as share of the total population exceeds 19.5 %.

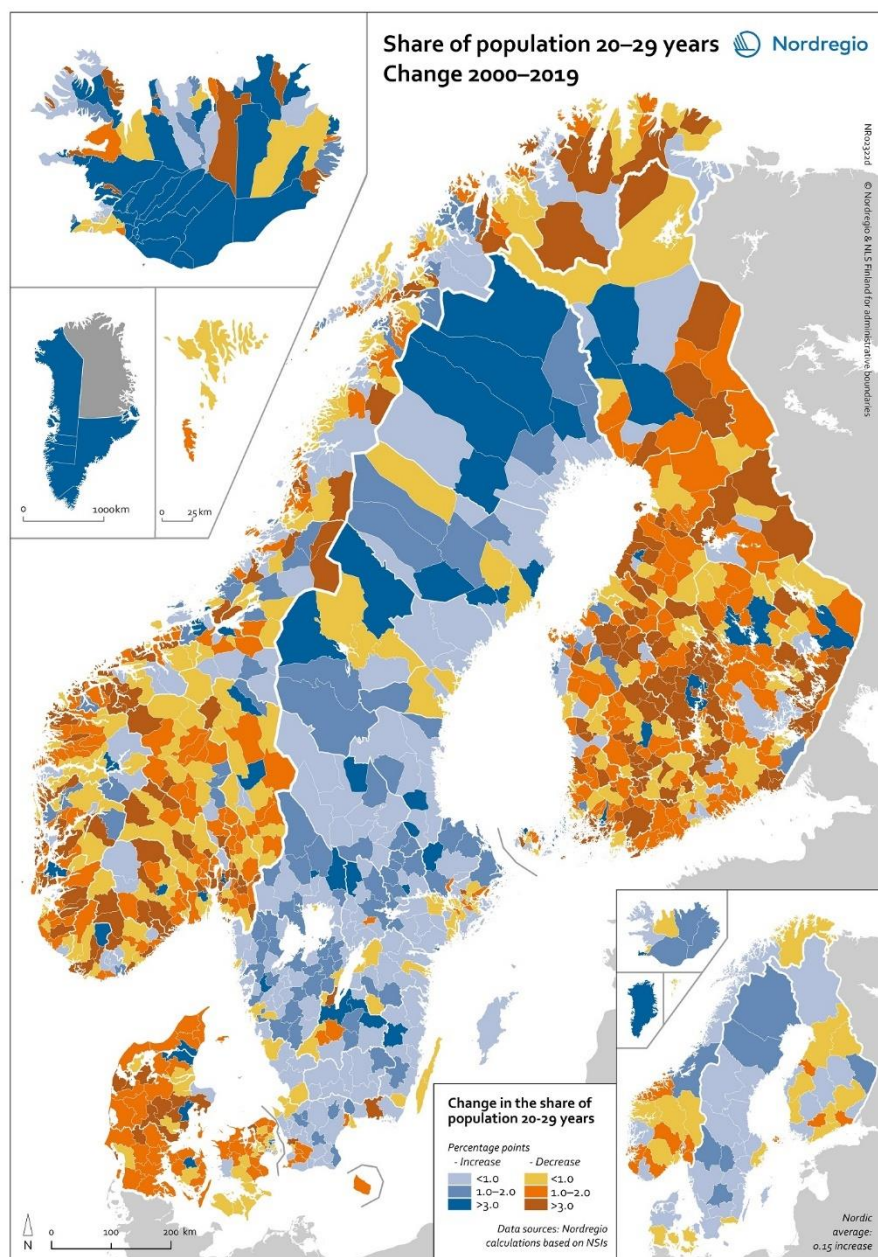
Figure 5 (left): Prospective old-age dependency for municipalities 2019 (Grunfelder et al. 2020)

Figure 6 (right): Demographic vulnerability indicated by age group 65+ (Wang et al. 2019)



Another demographic tendency is that of young people concentrating in and around urban areas. Figure 7 portrays the development of the share of the population aged 20-29 from year 2000 to 2019. There is a clear decrease of young adults in rural and intermediate areas (indicated by brown/orange areas) and an increase in the largest cities. Research indicates that the geographical centralisation of educations especially for e.g. teachers and nurses during the last 25 years have had an impact of youth's decision to leave remote rural areas permanently. Around 20% returns after ended education (Andersen 2017).

Figure 7. Change in young adults (20-29 years) as a share of total population 2000-2019
(Grunfelder et al. 2020)



Economy and production shift

Denmark is like the other Nordic countries characterised by relatively small wage gaps, high employment and high taxation, combined with good quality education and social security, all of which results in relatively low income inequality (Pareliussen, Herman, André and Causa, 2018).

Municipal statistics shed light on where people live and pay taxes, while looking at labour statistics from local labour market areas are useful to reveal the geographic structure of work, commuting patterns, etc. In figure 8 the employment rate at municipality level in 2018 is shown where one can see that the employment rates in general are highest in the rural areas in Denmark being above 85% in many municipalities.

Figure 8. Employment rate 2018 (Grunfelder et al. 2020)

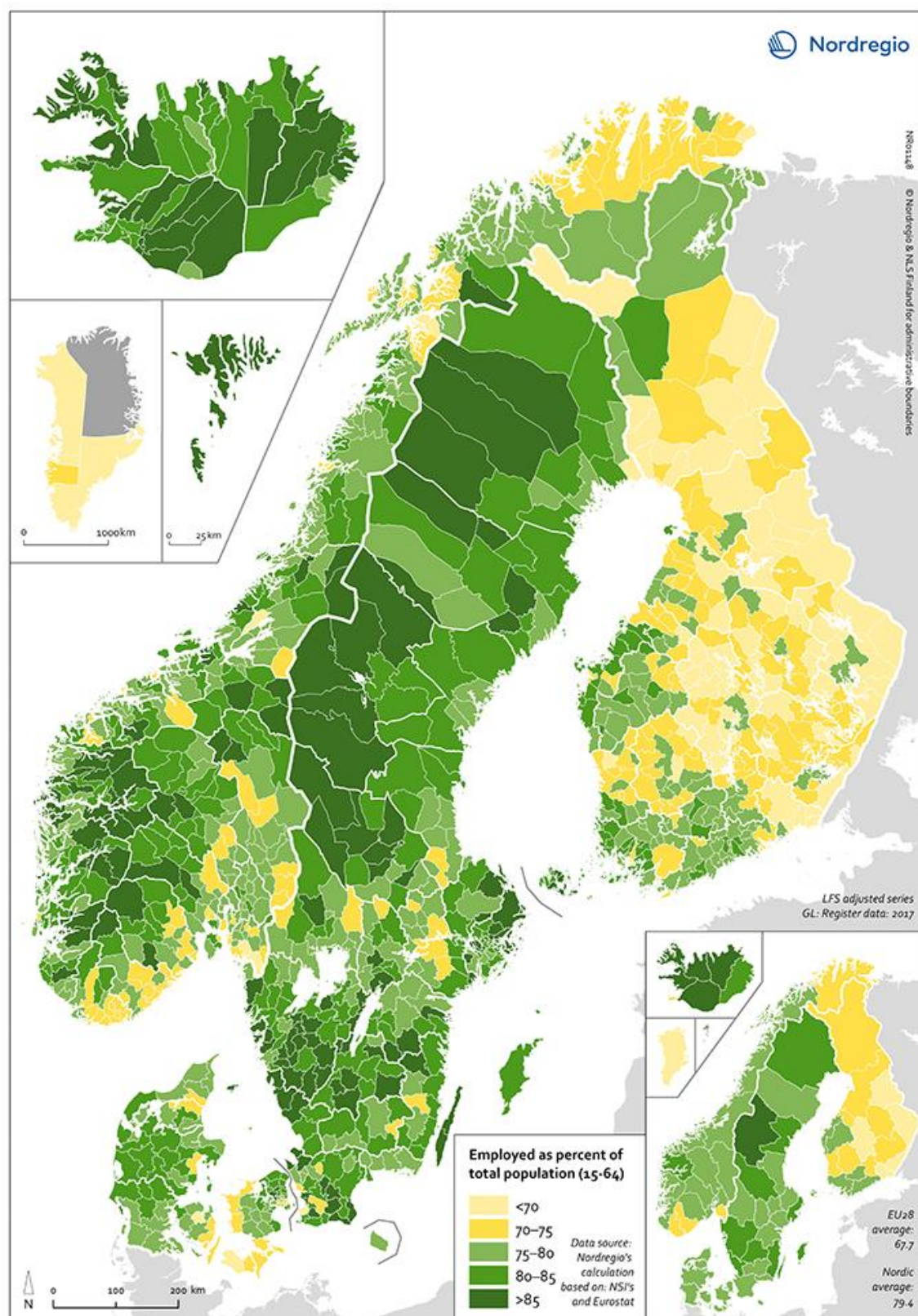


Figure 9 shows new enterprises at municipal level in 2017 in absolute numbers. Interestingly it shows, that a large number of rural municipalities have a high number of new enterprises. In 2019 the regional business councils in Denmark were abolished and a centralised state administration of business development was established.

Figure 9. New enterprises at municipal level in 2017 (Danmarks Statistik 2020)

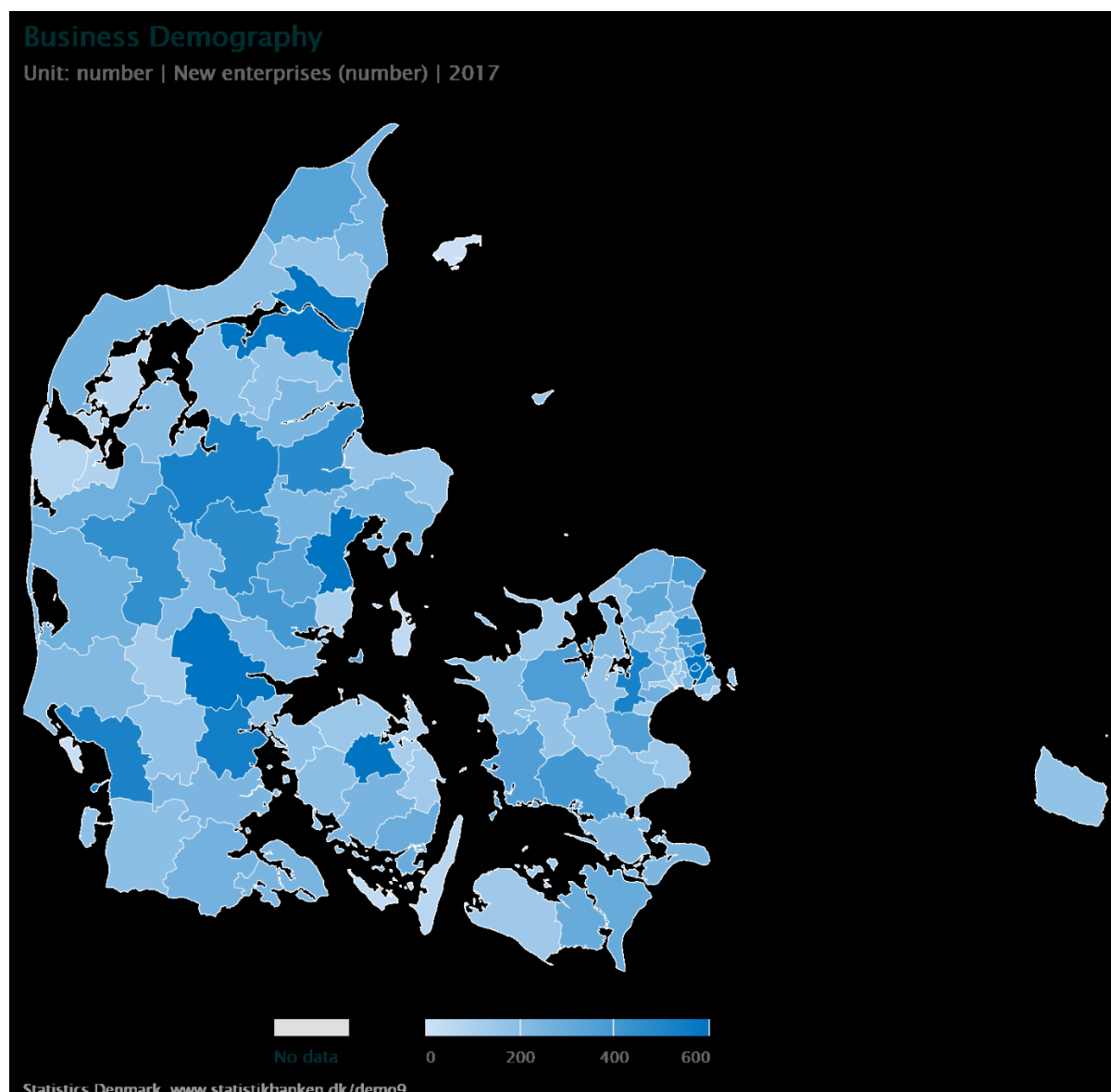
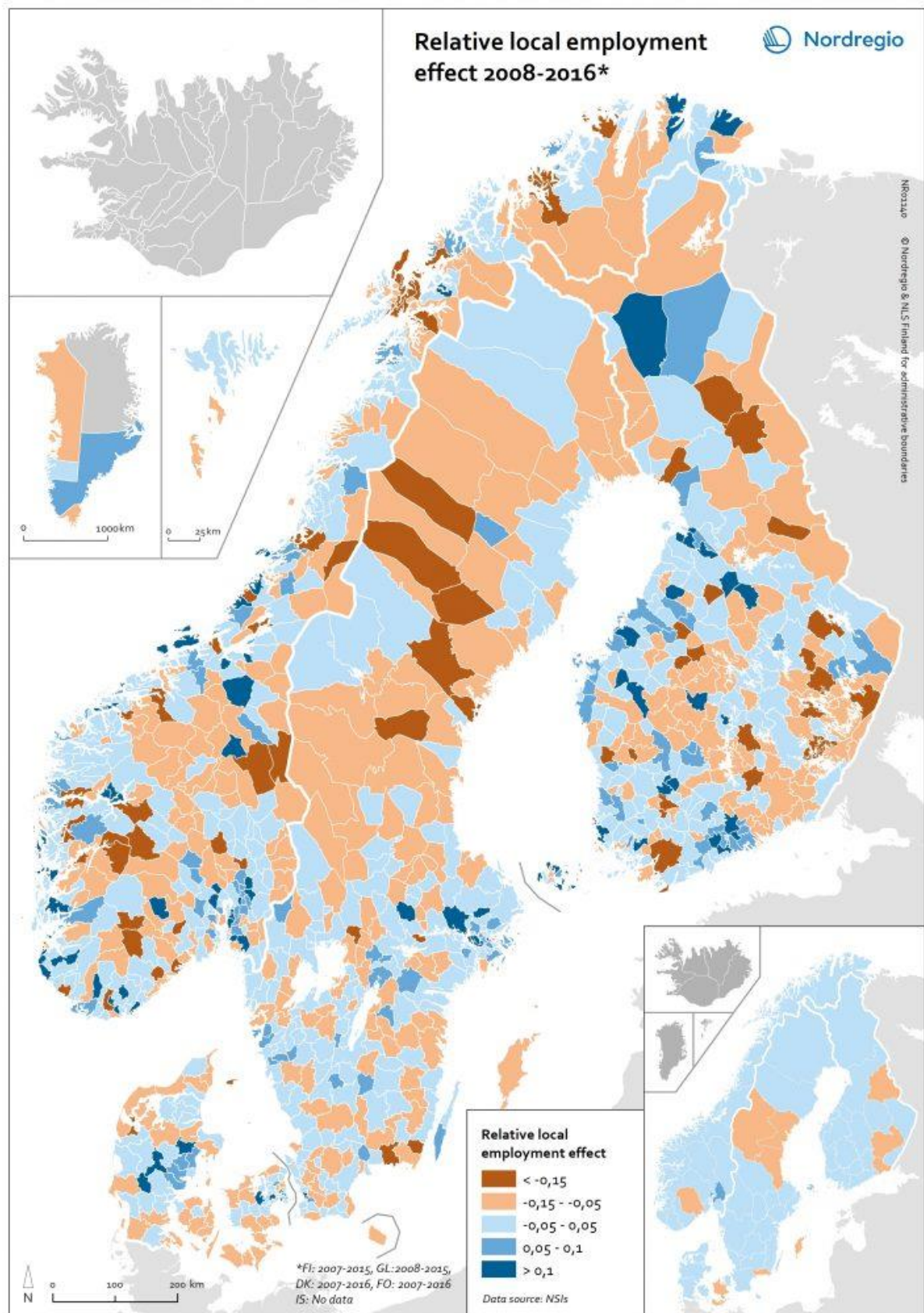


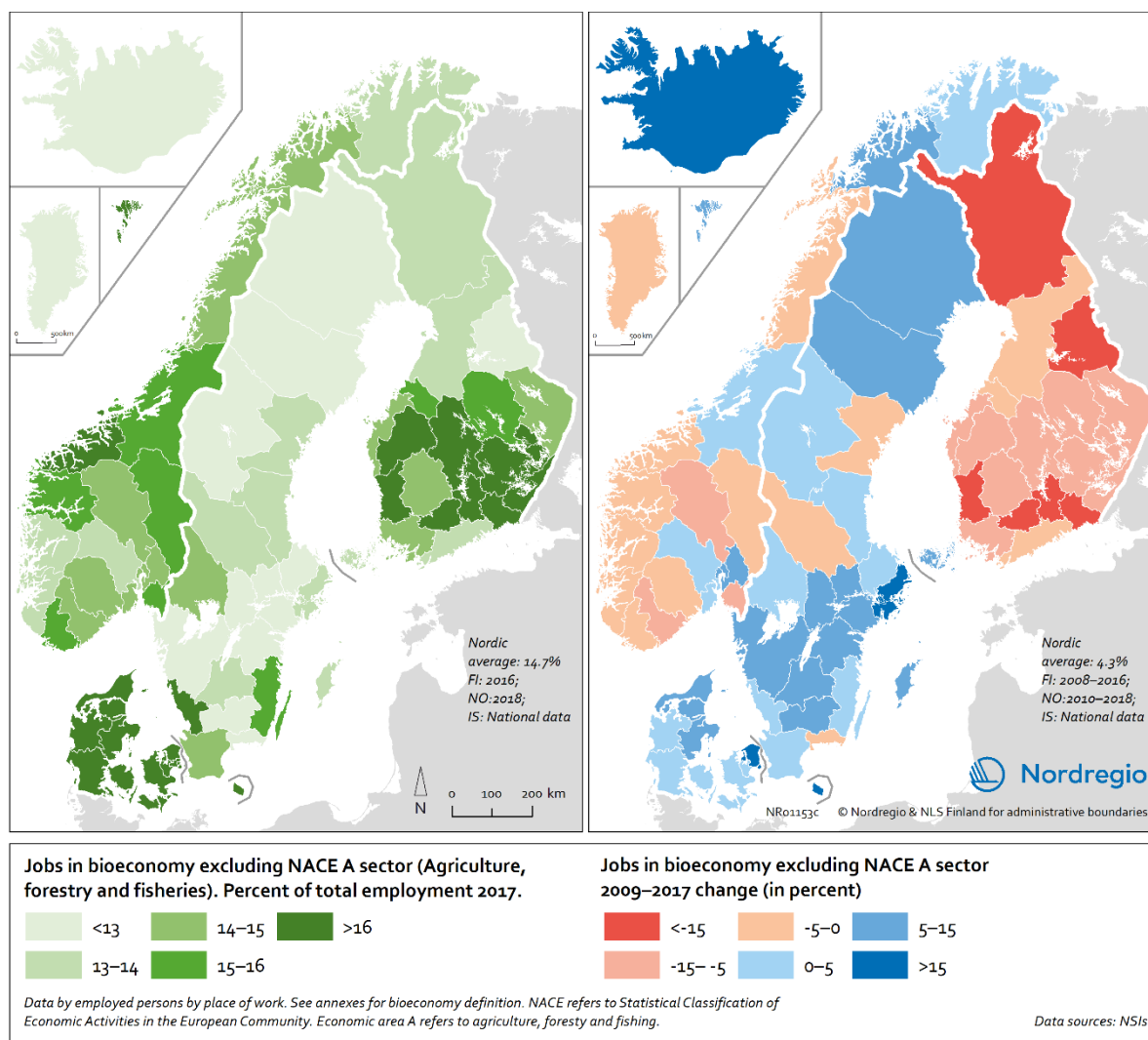
Figure 10 shows the relative local employment effect for the period 2008-2016. The map shows the change in jobs (growth or decline) at municipal level over the period that can be attributed to local factors (e.g. local policies or local natural or institutional conditions) and is thus not due to national or industry trends. There are large differences between municipalities in terms of change in employment due to local factors. For example, some of the municipalities in Mid-Jutland show a high local employment effect while others in the North of Jutland do not. These differences can be due to access to markets, to industrial culture, to municipal or regional facilitation etc.

Figure 10. Relative local employment effect 2008-2016 (Kull et al. 2020)



The map on the right in Figure 11 shows the percentage of total employment in the bioeconomy sector, excluding agriculture, forestry and fisheries, which make up for more than 16% of total employment in all regions in Denmark. The map on the left shows the increase in employment from 2009 to 2017 where a noticeable increase has occurred in all of Denmark.

Figure 11. Employment in the bioeconomy sectors (excluding NACE A sectors agriculture, forestry and fisheries) 2017 and 2009–2017. (Grunfelder et al. 2020)

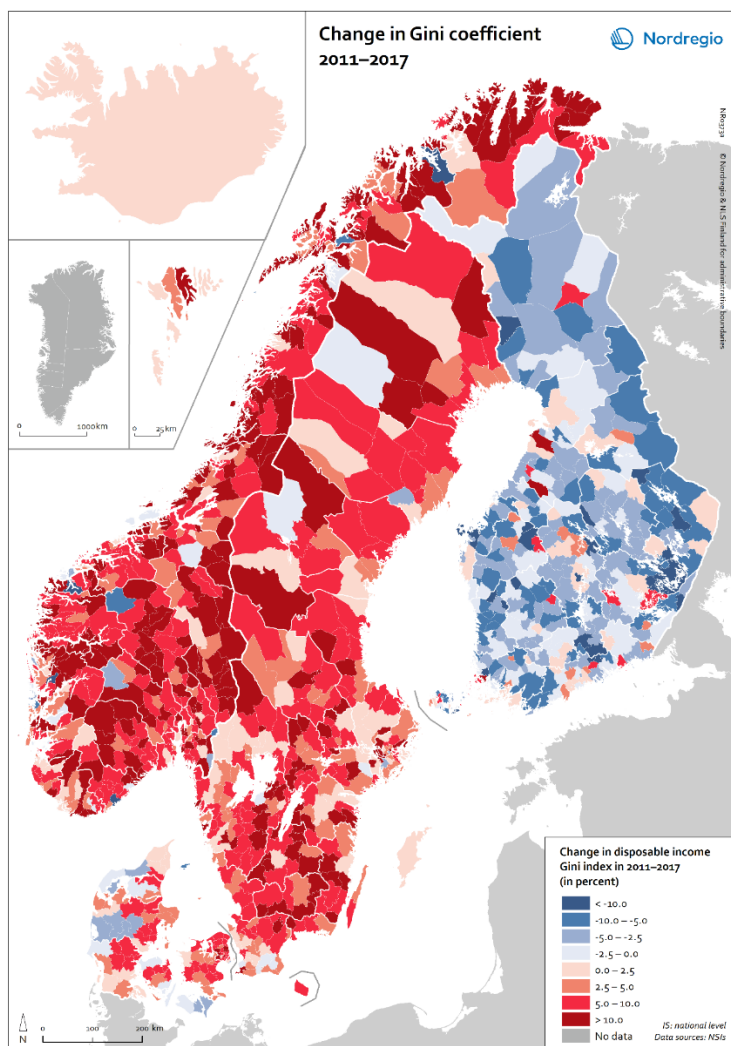


Inequalities

In Denmark, an economic equalization system is in place to address the differences in incomes (from e.g. municipal taxes) and expenses (to e.g. elderly care, integration, and unemployment benefits) between municipalities. The objective with the equalization system is to create a more equal financial system between all Danish municipalities, so the municipalities have equal possibilities to manage and deliver municipal welfare services. In January 2020, the social democratic government presented a proposal to reform the equalization system. One of the initiatives concerns the distribution of more money from urban to rural municipalities (Regeringen 2020). Another political initiative to target inequalities between urban and rural areas is the movement of governmental institutions and workplaces from the capital to other areas in Denmark (Regeringen 2015).

The map below shows the change in Gini coefficient from 2011 to 2017, that is the development of disposable income. In Denmark, an unequal pattern shows with a significant increase of disposable income in and around the urban centres (red areas) and a smaller increase or even decrease in the middle, north-western and southern parts of Jutland and Lolland-Falster.

Figure 12. Household income inequality measured by the Gini coefficient (Grunfelder et al. 2020)



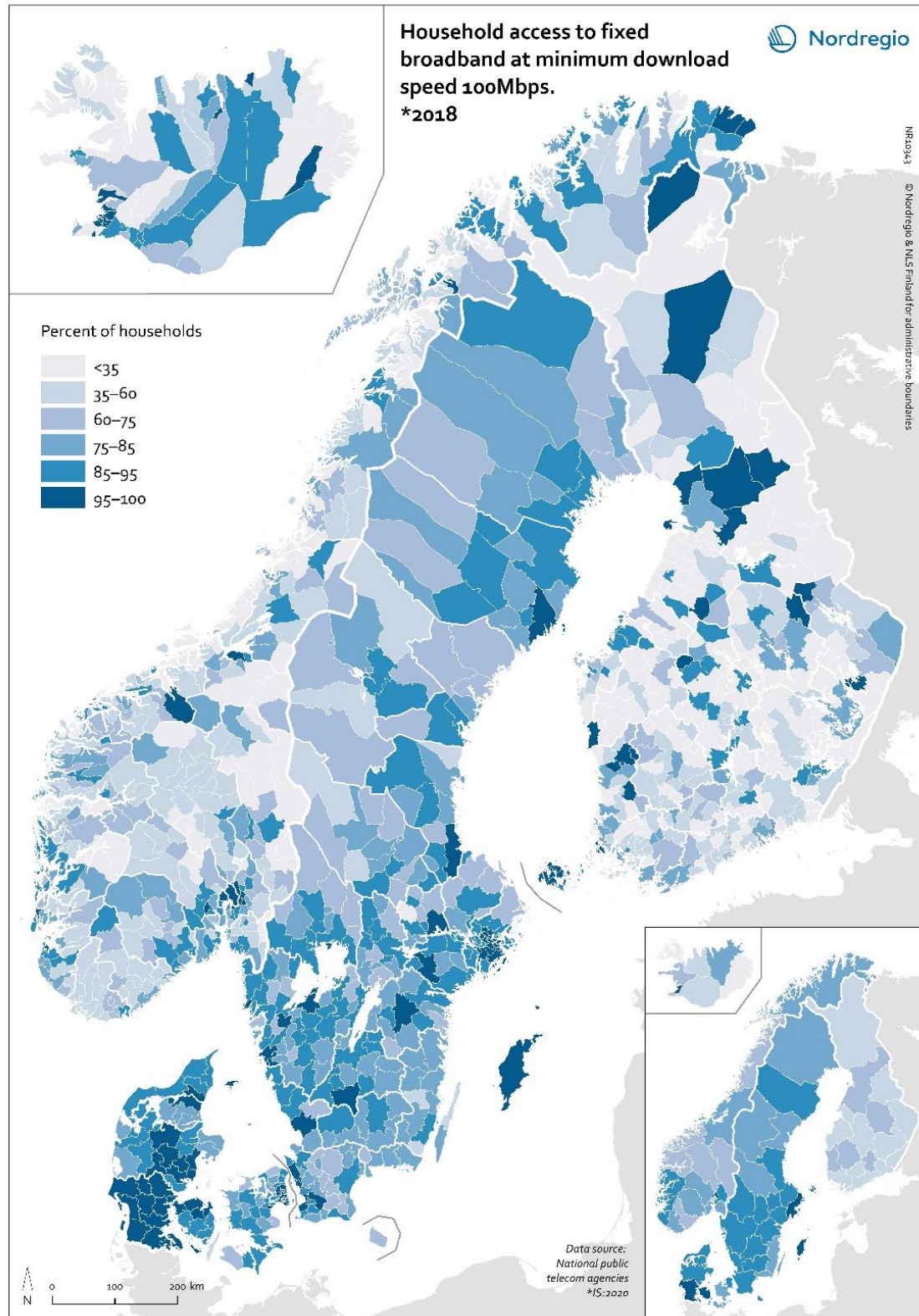
Digitalisation

Well-functioning digital infrastructure is considered essential for running businesses, attracting citizens and the possibility to work from home in rural areas (Erhvervsministeriet 2019). According to the national broadband target, all households and businesses should have access to 100 Mbps download and 30 Mbps upload by 2020 (Danish Ministry of Finance, Danish Regions, and Local Government Denmark 2016). To support the development of broadband coverage in of Denmark, a state fund was introduced in 2016. In the period between 2016–2019, approximately DKK 380 million was granted to provide better broadband, and DKK 100 million is available for 2020 (Energistyrelsen 2020). From 2018, the fund had an increased focus on houses, business and second homes in sparsely populated areas (Erhvervsministeriet 2019).

Though Denmark is performing well in terms of broadband coverage in an international context (European Commission 2020), differences in access for households in rural and urban areas do exist. Figure 13 shows

the percentage of households on a municipal level with access to a broadband connection of at least 100Mbps (fast broadband) in 2018.

Figure 13. Household access to fast broadband at municipal level (Randall, Vestergård, and Meijer 2020)



Land use and planning

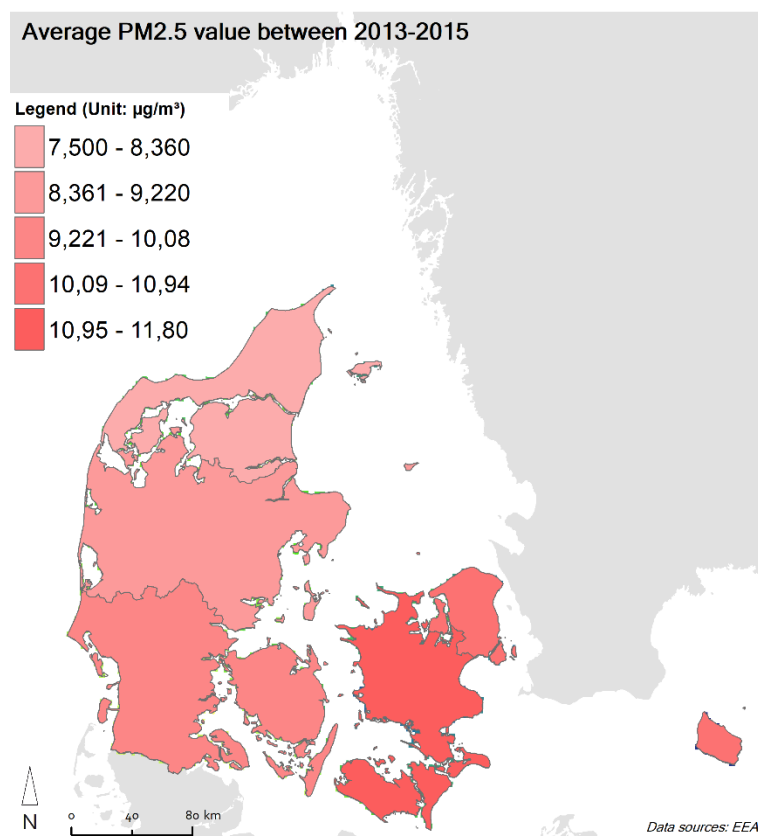
All physical planning in Denmark is anchored in the Planning Act from 1992 where the country is divided into three types of zones: urban, rural and recreational already created in 1970 (Gammelgaard 1993). The Act divides the responsibility for planning between the state and the 98 municipalities.

Denmark has a small land area and is rather densely populated, why multiple society interests coexist in regard to the usage of the 'open land'. If all plans for future land use is gathered, they take up 130-140 % of Denmark's total land scope (Arler, Jørgensen, and Sørensen 2017). A central issue is how to plan and use the scarce land area for the future in a way where the different complex challenges of our time is addressed. A current focus is on multifunctional planning and usage of the land where multiple purposes and interests are considered and incorporated. On a national level, focus is on 'multi-functional land distribution' (Ejrnæs et al. 2016). The purpose with the initiative is, primarily through buying and selling of land plots, to perform multifunctional land distribution as a tool to make possible multifunctional projects. These projects must join agriculture with the development of e.g. clean water environments, clean drinking water, reductions of GHG-emissions, Natura 2000, climate adaptation, afforestation, biodiversity and nature, organic farming, recreation, rural development and reordering of farm properties. Centrally in this work is that it is locally anchored with the inclusion of local citizens and stakeholders. The initiative is a pilot initiative running from 2020-2022 with DKK 150 million allocated. To receive funding at least three of the above-mentioned national interests must be incorporated in the land distribution project.

In 2017 the Planning Act was revised with the objective to spur development in rural areas. Changes included liberalised regulations for second home usage and more flexible rules for usage and enlargement of redundant housing for business and housing purposes (Erhvervsministeriet 2019). Currently, an evaluation of the Planning Act revision is conducted.

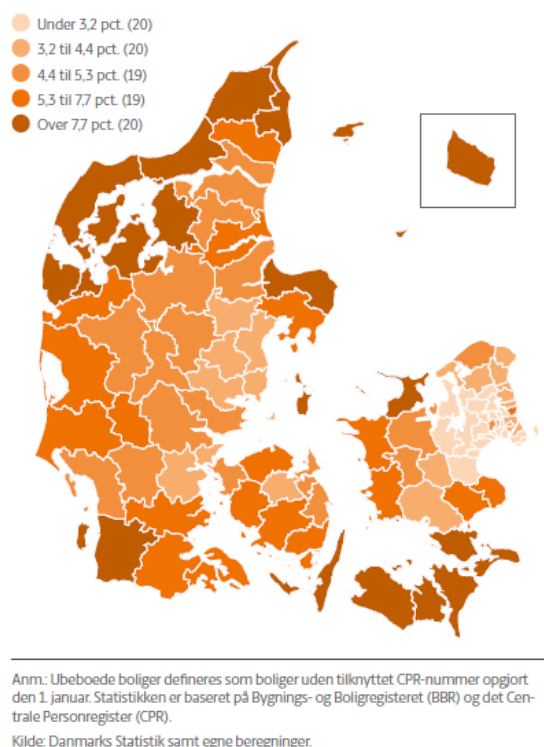
Climate change

Figure 14 shows air pollution in form of PM_{2.5} for the period 2013-2015. PM_{2.5} stands for particulate matter 2.5 and are small particles that can be inhaled by humans and cause serious harm for different organs, such as lung or heart. The light red colors indicate low PM_{2.5} values, whereas the dark red colors indicate high PM_{2.5} values. The highest values are observed in the capital region of Copenhagen and the lowest values in the northern part of Denmark. The regions, Midtjylland and Sydjylland, show more moderate air pollution values. Overall, the values do not exceed the commonly recognized threshold value of 12 µg/m³, thus reflecting a good air quality in Denmark.

Figure 14. Air pollution levels in Denmark between 2013-2015 (OECD 2020)

Housing

Attractive communities and housing are important to attract people to settle in rural areas and secure continued development (Erhvervsministeriet 2019). In relation to housing, central challenges for the rural areas is a difficulty of obtaining loans for purchase, construction, or renovation of houses and a prevalence of old, vacant, and dilapidated houses. The increase in vacant houses has been most significant in remote rural areas where there has been an increase of vacant houses from 6% in 2000 to 9% in 2015. Estimations suggest that between 10.000-21.600 houses were relevant for demolition in 2015 with an expected increase on 2.000 houses per year (Kristensen, Kolodziejczyk, and Wittrup 2017).

Figure 15. Amount of housing stock without residents in 2018 (Erhvervsministeriet 2019)

In 2010, a national fund was established where municipalities can receive statelty co-financing to demolish or renovate vacant and decaying housing. In 2019, DKK 130 million was distributed between the municipalities. The objectives are to create balance between the supply and demand of houses, reduce the negative impact on housing prizes, raise attractiveness of rural areas, and raise the value of neighbouring grounds (Erhvervsministeriet 2019; Jensen and Staunstrup 2019). Evaluations of the national funds show that municipalities experience positive effects as a result (Jensen and Blach 2016; Jensen and Staunstrup 2019).

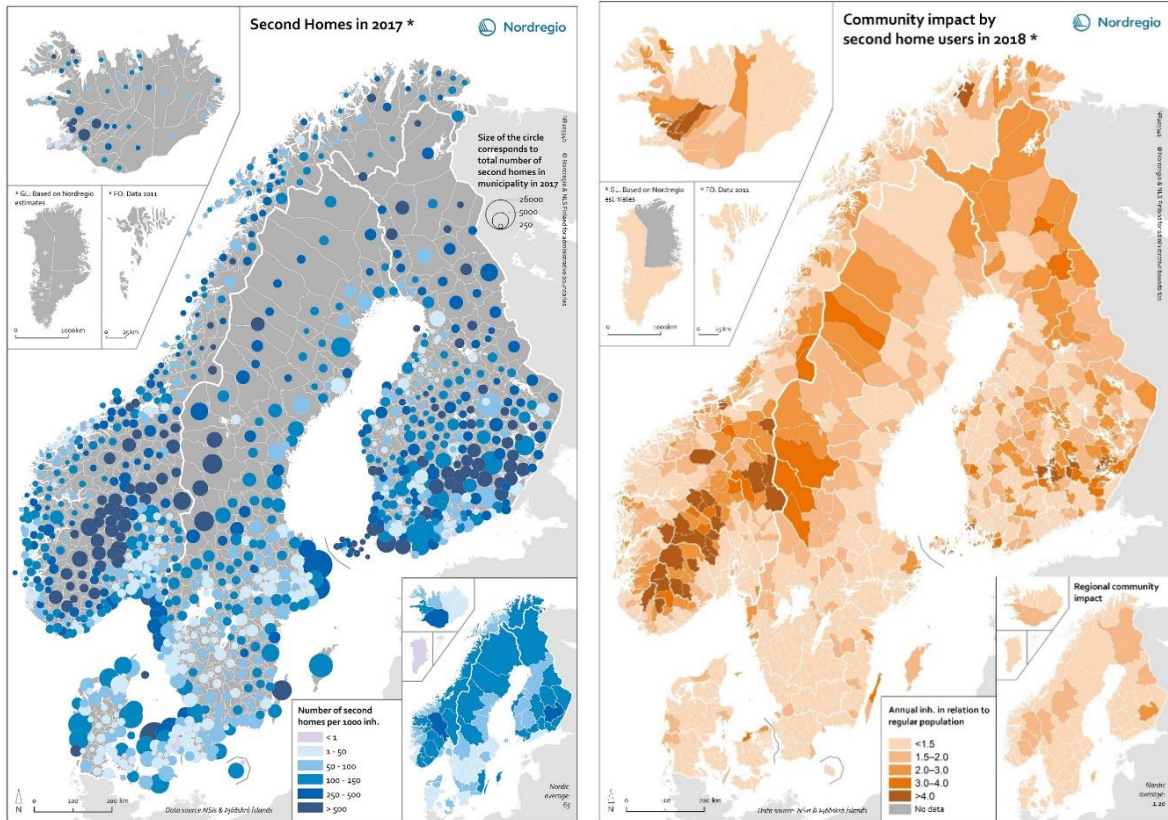
Second home ownership and usage are a significant trend in the entire Nordic region, and estimations suggest that around half of the Nordic population have access to a second home through family and friends (Slätmo et al. 2019). In Denmark, there are approximately 237.000 second homes. Second homes are increasingly used during weekends and holidays throughout the year, and a growing letting trend is witnessed for international and domestic tourists, especially along the west-coast (Holmgaard, Klintefelt, and Lubson 2018). As Figure 16 shows, the majority of second homes in Denmark are located along the coast, primarily in rural municipalities, and owners primarily live in bigger cities. The municipalities with the highest amount of second homes are Odsherred, Gribskov, Ringkøbing-Skjern and Syddjurs.

Recent research has placed focus on the resources and social capital people who are not officially registered in rural municipalities, but has a connection to the place, e.g. through second home ownership, bring to the local areas. Thereby placing focus on the increased mobility of the population between rural and urban areas and the potential ppositive impact for rural development (Topsø Larsen, Broegaard, and Larsen 2018). Figure 17 shows the municipalities where there is a significant increase in population due to second home users, here visualised by community impact. During the COVID-19 pandemic second home purchases have increased significantly, which might result in increased community impact ratios in the years to come.

In 2013, a flex-housing initiative was introduced where permanent residences can change status to be used as a second home and later resume usage as permanent residence. The desired effect is that otherwise vacant and unused houses are maintained and will attract people to spend time in the municipalities with positive rural development impacts as result (Erhvervsministeriet 2019).

Figure 16 (left): Location of second homes in 2017 (Slätmo et al. 2019)

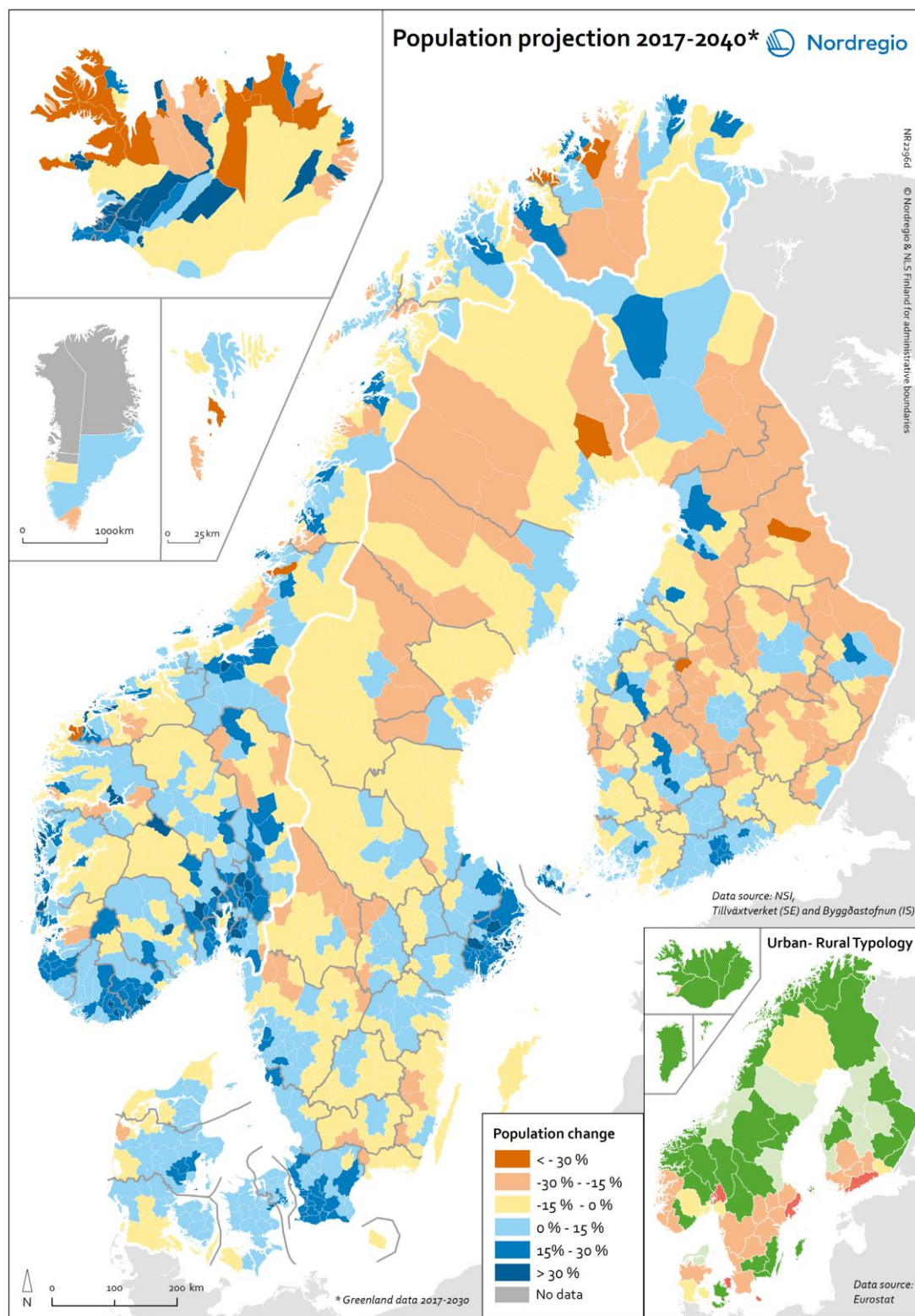
Figure 17 (right): Community impact by second home users (Slätmo et al. 2019)



2.3 Summary of existing foresight(s)

The Danish population is expected to grow in large parts of the country until 2040, in both more rural and urban areas. Population loss is only expected in some of the most remote municipalities in the northern, eastern and southern parts of the country (Sánchez Gassen and Heleniak 2019).

Figure 18. Population projection 2017-2040 (Sánchez Gassen and Heleniak 2019)



The working age population, defined as the part of the population aged 15-64, is expected to decrease in the majority of Danish municipalities until 2040 (Figure 19). Meanwhile, the old-age dependency ratio, that is the share of the population aged 65+ compared to the working age population (15-64 years), is expected to grow in all types of regions in Denmark until 2040 (Table 3). A higher increase is expected in rural areas, with the predominantly remote rural regions having the highest increase at 17%.

Figure 19. Estimated working age population development 2019-2040 (Grunfelder et al. 2020)

Table 3. Estimated Old-age dependency ratio by type of region in 2040 compared with 2017 (Sánchez Gassen and Heleniak 2019)

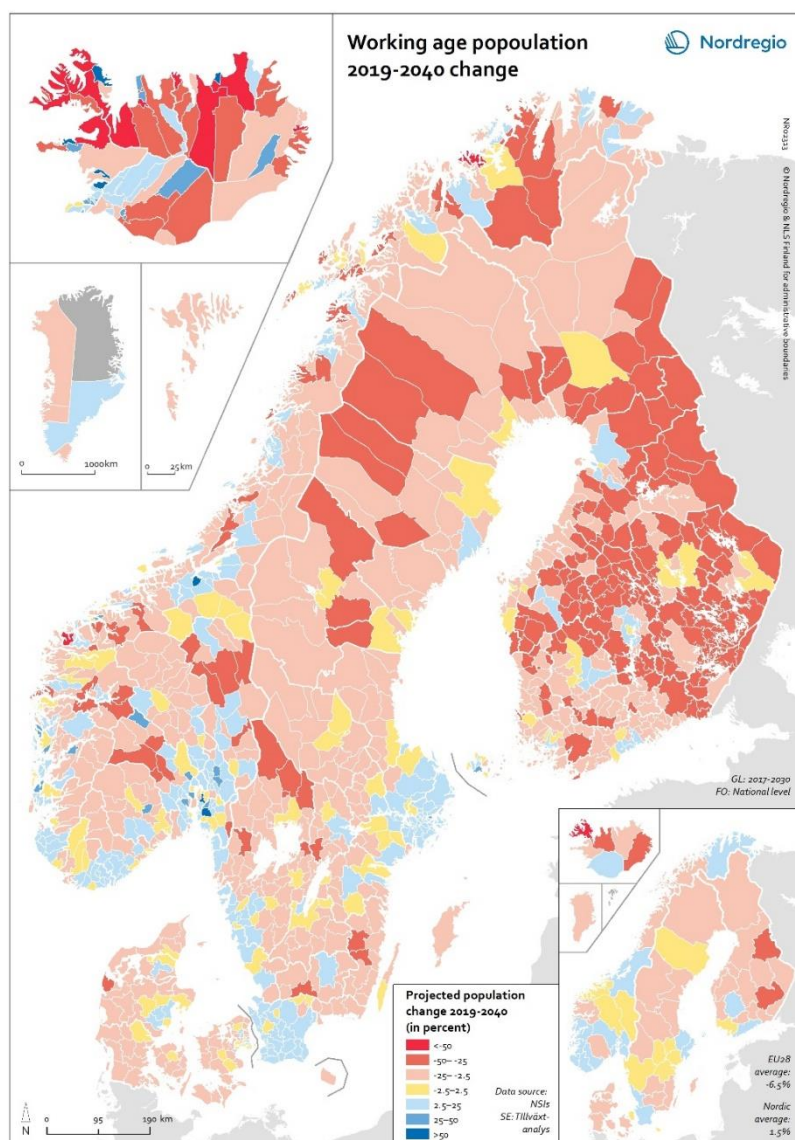


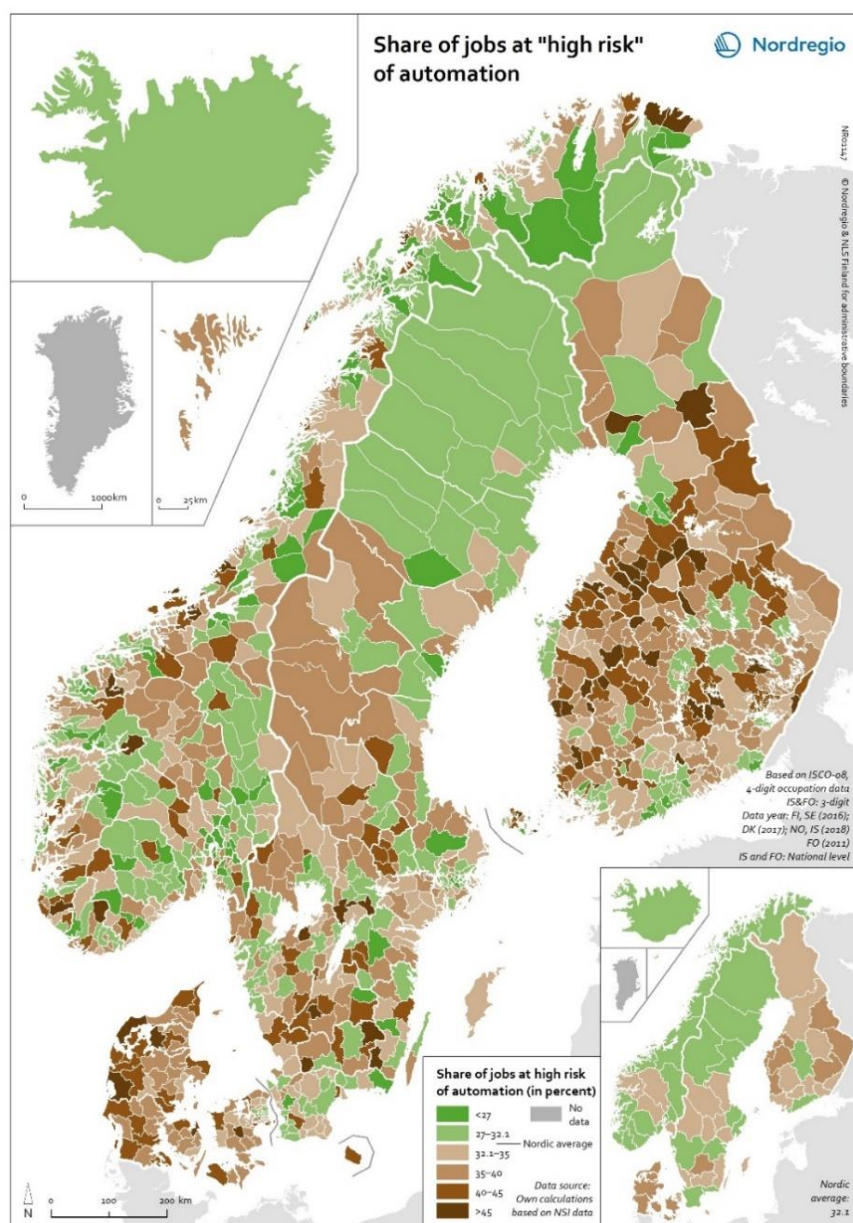
Table 6: Old-age dependency ratios by type of region and country, 2017 and 2040

Urban-rural typology	2017	2040
Predominantly urban	24	33
in Denmark	25	34
in Finland	25	36
in Norway	20	32
in Sweden	24	32
Intermediate regions, close to a city	31	40
in Denmark	29	42
in Finland	35	48
in Iceland	20	29
in Norway	23	37
in Sweden	32	40
Intermediate regions, remote	33	48
in Denmark	33	49
in Finland	43	59
in Norway	29	46
in Sweden	39	47
Predominantly rural regions, close to a city	33	45
in Denmark	33	47
in Finland	35	46
in Norway	26	40
in Sweden	37	45
Predominantly rural regions, remote	35	49
in Denmark	35	52
Faroe Islands	28	45
in Finland	41	55
Åland	34	47
Greenland	11	22
in Iceland	22	41
in Norway	29	46
in Sweden	39	49
Norden – all countries and regions	30	41

Advances in technology is expected to result in significant changes for future jobs. Figure 20 portrays the share of jobs at high risk of automation. Denmark stands out in a Nordic context as all municipalities exceeds the Nordic average on 32.1% of jobs in high risk of automation, with the exception of six municipalities in the capital region. Especially jobs in rural areas are considered at high risk of automation. The top ten municipalities with highest risk are rural municipalities (See table 4). Another estimation proposes 40 % of Danish working hours could be automated (McKinsey & Company 2017). Though jobs will be disrupted, advances in technology and automation of jobs also holds opportunities when seen in the light of the projected decrease of the working age population.

Figure 20. Share of jobs at 'high risk' of automation (Grunfelder et al. 2020)

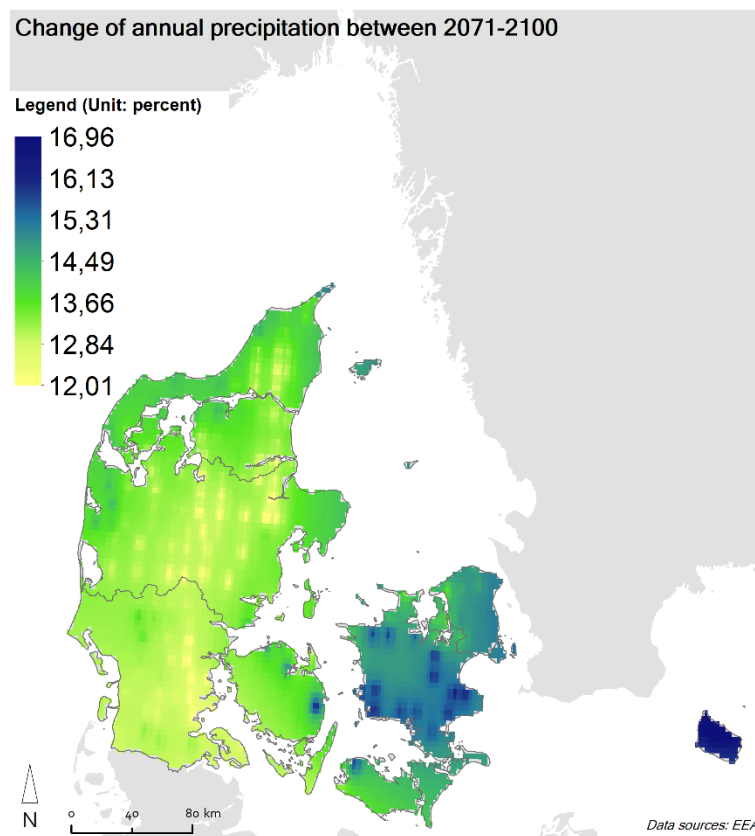
Table 4. The ten municipalities with the highest percentage of jobs at high risk of automation (Grunfelder et al. 2020)



Municipality	Jobs at high risk of automation %
Kerteminde	48.8
Thisted	46.8
Ringkøbing-Skjern	46.2
Ringsted	45.6
Vesthimmerlands	45.1
Lemvig	44.9
Frederikshavn	44.5
Varde	44.3
Skive	44.0
Morsø	43.9

Climate changes already affect Denmark and is expected to increase in the future, especially in terms of water issues: increasing precipitation (rain, snow, etc.) and higher ground water (KL 2019). Figure 21 shows the expected change of annual precipitation in Denmark between 2071-2100 in comparison to the baseline period 1971-2000. The yellow colours indicate a low increase of precipitation, whereas the blue colours indicate a stronger annual increase of precipitation. It is expected that the change of annual precipitation in Denmark is approximately going to change between 12% and 17% between 1971-2000 and 2071-2100. Whereas the south-western regions of Denmark will most likely experience the lowest increase of precipitation, the eastern parts, surrounding Copenhagen, might experience higher changes in precipitation. The eastern island of Bornholm shows a significant high change rate of precipitation.

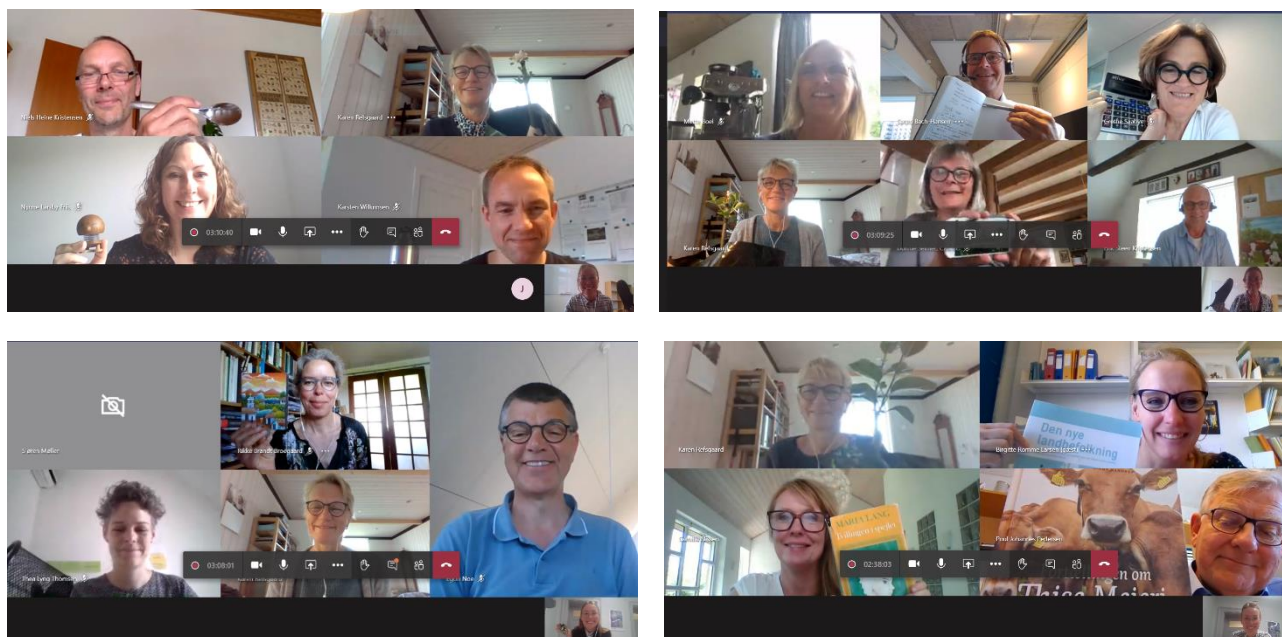
Figure 21. The estimated change of annual precipitation in 2071-2100 for Denmark (European Environmental Agency 2019)



3 Results from interviews with MAP members

Four online workshops were held with MAP members in smaller groups of 3-5 people during May and June 2020. The workshops lasted three hours and were structured around three sections. Firstly, a presentation round followed by a discussion of central challenges and opportunities for the Danish rural areas, and finally a discussion about the desired future for rural areas with a time horizon of 2040.

MAP members had received the central questions on beforehand to prepare for the group discussions. To facilitate a safe and constructive discussion environment, the aim was to include two representatives from the same actor group in the workshops. In each of the workshops, at least two actor groups were represented.



3.1 Challenges and opportunities in the next 20 years

To address the question of challenges and opportunities for rural areas in the next 20 years, a SWOT inspired exercise was conducted. MAP members were asked to present what they saw as strengths and weaknesses, opportunities, challenges, and threats for rural areas followed by a discussion.

The issues reported by MAP members are in many cases intertwined, why strengths are closely linked to opportunities and weaknesses with challenges. In addition, challenges and opportunities are often two sides of the same coin, as several of the MAP members pointed out.

Strengths and opportunities

Nature and natural resources are strengths lifted forward in every workshop and were connected to many different perspectives and issues as food and energy production, recreation and tourism, and responses to environmental changes through e.g. climate adaptation and carbon capture. For all these perspectives, access to nature and the presence of natural resources hold valuable potentials for development. An opportunity is the innovative use of nature, both land and sea, for production and the development of new technologies.

MAP members emphasise that a great opportunity is the rural areas role in the **green transition** and their key position in creating a sustainable and resilient Danish society. This opportunity is supported by the increasing focus among citizens and politicians for a green transition of the entire society. New jobs and educations can be created that can attract people, especially younger generations, to settle in rural areas.

This feeds into another opportunity for rural areas based on **new values and perceptions of the good life** that emphasise sustainability and community which have gained ground in recent years. The sharing economy, new types of living conditions e.g. across generations or in housing communities and focus on local food production are all possibilities anchored in new perceptions and values of the good life.

A strength MAP members report which is also connected to nature is the **availability of space** in rural areas. Space as a strength, MAP members comment, has gained new importance with the corona crisis. Also connected to the insights made in the light of corona, some MAP members address the opportunities of home working that is made possible through digitalisation and good internet access. **Working on a distance** might imply that more people can have their base in rural areas which again have the potential for increased local consumption.

A great capacity and strength lifted forward by MAP members are the **strong community feelings** and engagement in the local areas through **active citizenship**. MAP members find that social relations and the willingness to gather forces are strong in rural areas. However, it is not only the citizens who are officially registered in the rural areas, but also people who are connected to the areas through e.g. second home ownership that provide resources for positive development.

Entrepreneurship, innovation, and creativity are factors that are stressed as strengths in rural areas. Some MAP members report that this could be connected to a slower pace of life than in urban areas as well as access to affordable housing. The necessity to think outside the box to make ends meet might explain the innovative character of some rural areas. Continuing and making innovation possible is key to create viable communities e.g. through multi-functional use of existing buildings. MAP members report a rich cultural life in some of the rural areas in Denmark as well as a rich association life. Denmark in general benefits from high education levels which is considered a strength and a potential opportunity for development in rural areas.

MAP members report that rural areas in general have good **digital infrastructure** which is important for attracting citizens and running businesses. However, some dark spots still exist which needs to be connected. Digitalisation holds opportunities in terms of service provision, job development and new digital products. Some disagreement exists in terms of the physical infrastructure, where some MAP members consider it well-developed and others as limited. However, several MAP members address the fact that Denmark is **a small country with short distances**, but problematically this is not the general perception. As one MAP members puts it: *our distances are not a real problem, but a mental problem*.

To understand **the relationship between urban and rural areas** in new ways that is based on interdependency and cohesion can provide development opportunities and can add to a more positive narrative and status of rural areas. Here **multi-functional planning of the land** creates potentials to reach larger societal goals (e.g. carbon neutrality) and increase the attractiveness of rural areas. Focusing on the potentials of rural areas and using that to develop a positive narrative is considered key to spur positive development.

Weaknesses, challenges, and threats

Centralisation is considered a central challenge for rural areas by MAP members. The political focus on centralisation of key functions throughout the last decades has resulted in closing of services, e.g. schools and leisure activities, poorer infrastructure, fewer job opportunities, and fewer possibilities for education. This creates fewer opportunities for jobs, education, health services, as well as low support for local initiatives and negatively affects the attractiveness and living opportunities. Centralisation of functions as the police

and the courts has also resulted in a lack of resourceful people to uphold cultural activities, MAP members report.

The demographic development of rural areas is lifted forward as a weakness of rural areas with **an ageing population and fewer young people**. The unbalanced demography with many seniors and few young people results in a situation with increased need for public services, as e.g. elderly care, in combination with lower tax incomes. As one MAP member points out, if facts are followed schools should continue to close and more resources should be allocated to elderly care, but thereby the potentials for positive development is also closed. Population decrease challenges the possibility to **assemble critical mass** for upholding services and attracting investments.

Another challenge is the slow **housing market** and the difficulty some can experience with obtaining loans for buying a house. The housing stock is not updated and well-suited to people's needs and wishes and a prevalence of old and outdated buildings in rural areas give people a sense of decline. MAP members talk about the issue of **non-viable villages** and the controlled shrinkage or even demolition of these villages. As some MAP members point to, just because people have once lived in an area, people are not destined to live there forever. However, this is a difficult debate and a politically delicate issue.

Though some political initiatives of decentralisation as the movement of state workplaces and organisations from Copenhagen to other areas of the country has occurred, a challenge is that the **economic systems**, e.g. the supply contracts do not follow, why the impact on the local community by the relocation of state jobs is rather limited. If the new organisation is not allowed to e.g. buy new furniture at the local store the local community will not benefit.

MAP members also point out that a challenge for rural areas is a persistent **negative narrative of rural areas** by the use of negative words in the public debate. However, also persisting internal narratives in the rural areas can be a challenge for development due to a **nostalgic thinking** often presented by the older generations. A nostalgic position fosters low readiness for change. The negative perceptions and social barriers result in low attractiveness of the rural areas e.g. to attract young people after finished education.

In prolongation of the negative narrative, MAP members find that a polarized and unconstructive public debate is a barrier for rural areas, as they find that there is a **lack of understanding across urban and rural areas**. This is a threat not only for the development of rural areas, but for the society as a whole, as increasing polarization can result in frustration among rural dwellers who feel left behind by their urban counterparts. As one MAP member states: *we should avoid "des gilets jaunes"* - referring to the yellow vests movement in France.

A **uniformness** of rural areas and a too industrialised nature are perceived threats for the rural areas. If things become too mainstream and streamlined the attractiveness can disappear.

3.2 Desirable future for 2040

To address the question: "what is the desirable future for the rural areas in 2040?", a vision exercise was conducted. MAP members were asked to reflect about and share their dreams and wishes. The picture below was shared for inspiration.



Hopes and dreams for the Danish rural areas: input from MAP members

Relations between urban and rural areas are close, well-developed, and coherent. Rural and urban areas are in a symbiotic relation where there is a clear understanding that they need each other. This regards holistic planning to reach common societal goals, but also regarding social matters where challenged citizens are not pushed from urban to rural areas. Rural areas are acknowledged by their potentials and unique character that is different from the urban norms and the public narrative of rural areas is positive.

Area development plans are clear, transparent, and long-term, so everyone knows where towns and cities, food production and agricultural land, water, recreation, and renewable energy production are developed and placed. As such, disputes can be avoided as everyone knows the plans.

Multi-functionality and strategic, cross-sectoral development are prevailing and a focus on **sustainability** and **circular economy** are at the core. **Natural resources are used more intelligently** and the **focus on monoculture and rationalization are trends of the past.** Green and natural resources are made center for decisions and not the economy. The land area is used more diversely, some MAP members stress that less land is used for meat production.

Rural areas are a central and acknowledged **part of the societal and economic development.** New economic models are developed where financial means are located to where the activities take place. In political decision-making there is a bigger focus on consequences for rural areas.

Rural areas are **attractive places to live, learn and study** for citizens of all ages. This is made possible through the digital development e.g. for service provision as well as more educational possibilities for young people. Engaging young people are in focus which will increase the possibility that they return and settle in rural areas e.g. by creating 'innovation labs' where creativity and innovation is spurred. This links to an increased focus on **diversity** in rural areas both in terms of activities, people, but also in businesses, production, and agriculture.

It was also emphasized from several MAP-member that it would be have a positive value if the political and economic opportunities would provide for shared housing and working facilities in order to encourage and allow for more diverse **fellowship and community**.

Local councils and local citizens have higher influence on the development of the local areas – and regions might also have a larger role. The strong feeling of community is a valued social capital and the local is cherished

Old, vacant, and dilapidated housing and buildings are removed or renovated, and the **non-viable towns have vanished**, especially the ones along the bigger roads. This adds to the more intelligent use of the land where other important activities can unfold e.g. more coherent nature and the attractiveness of rural areas increase. **More visitors and tourists** are found in rural areas especially domestic or from regions close by supported by a focus on 'staycation'.

3.3 Challenges in reaching the vision

MAP members were asked what they considered central challenges for realising the hopes and dreams for the rural areas. The emphasised challenges were:

- The continuation of the growth narrative in all places of the country is considered a challenge by several MAP members especially concerning non-viable towns and villages. Some places need to be developed into coherent nature for biodiversity, recreation, and spaces for renewable energy. Prioritisation of the land area is key.
- A continued polarization between rural and urban, and that the negative narrative of rural areas is continued.
- That development is still measured against the urban norm, instead of acknowledging and valuing the rural areas by their own terms and qualities. One MAP member says: *You have to acknowledge that rural areas can something else and should be something else [than urban areas]*.
- The existing economic systems is a challenge for realising the vision. Money need to be directed to the actual places where the activities take place. In addition, the difficulty of getting financing for projects in rural areas compared to urban.
- Local ownership to the resources in the countryside is important. It is a challenge if the ownership to land and houses with a good location is sold and/or being concentrated.
- Continued centralisation especially of educations which force young people to move to urban areas, and thereby make it difficult for young people to settle in rural areas.
- The sectorial political system which hampers cross-sectorial collaboration especially at state level.
- That sustainability is not fully integrated in political plans and actions at all government levels.
- Lack of consideration of social capital (vs financial capital) in comparisons and measurements.

4 Conclusion and next steps

The 5.8 million Danish inhabitants are divided into 98 municipalities of which 46 are defined as rural where many have experienced population decline and often with a high prospective old-age dependency¹. 62% of Danish land is agriculture and zoning is common in order to avoid conflicts. Currently, multifunctional land distribution is being implemented to improve the use of land for the benefit of different groups.

As a Nordic welfare state, Denmark is characterised by low income inequality. The employment rate is high especially in rural areas being above 85% in many municipalities and several rural municipalities have a relative high number of new enterprises. A well-functioning digital infrastructure has been politically prioritised although with lower quality in rural areas. There is a mismatch in the housing market in remote municipalities with an over-supply of poor-quality houses and a lack of well-suited houses for young people. In many rural coastal municipalities, there are from 50 to above 500 second homes per 1000 inhabitants with both positive and negative impacts for the communities.

The strengths and opportunities mentioned by the MAP-members are:

- Nature and natural resources with new opportunities for business, livelihood, recreation and positive responses to climate change.
- Opportunities in the green transition in creating a sustainable society with new jobs and types of education being attractive especially for young people.
- New values and perceptions of the good life, e.g. sharing economy, local production, and new types of living gaining, gaining ground.
- Availability of space, not least during Corona, for remote working and with increased local consumption.
- Strong community feelings and active citizenship including involvement of second-home owners.
- Building on strong entrepreneurship, innovation and creativity.
- Good digital infrastructures for businesses and attracting citizens.
- Develop the relationship between rural and urban areas including the potential through multifunctional land planning.

The weaknesses and threats

- Centralisation of key functions resulting in closing of services, degrading infrastructure, providing fewer jobs and possibilities for education.
- An ageing population and fewer young people challenging the possibility for upholding services, attracting investments and assembling a critical mass.
- A slow and dysfunctional housing market with demolition and lack of attractive housing.
- A non-holistic national approach in decentralising state jobs with public procurement dis-favouring local economies.
- A negative narrative of rural areas in the public debate.
- A lack of understanding in the public debate across rural and urban areas.
- A uniformness through a too industrialised nature.

The visions highlighted that rural areas are part of the societal and economic development considering their diversity and with more power to local councils, regions and communities. Further:

¹ The amount of people with a life expectancy of 15 years or less as a share of the total population.

- Close and coherent relations between rural and urban areas including room for visitors and tourists.
- Long-term and clear area development plans.
- A focus on multifunctional sustainable and circular economy with utilisation of the natural resources in an intelligent way.
- Attractive places to live, learn and study including shared housing and working facilities.

The biggest challenges in reaching the vision are:

- The prevailing growth narrative in all places.
- The polarisation between rural and urban.
- The prevailing urban norm.
- The difficulty in financialisation and existing economic structures.
- Decrease in local ownership of land and houses.
- Centralisation of education.
- A political system hampering cross-sectorial collaboration.
- Lack of integration of sustainability in policy instruments.

The Danish MAP has a national coverage and is newly established with 16 members from four relevant stakeholder groups: private businesses in society, civil society organisations, officials or politicians at different policy level and researchers. Four MAP meetings have been held in June, and a draft discussion paper has afterwards been sent out for comments to the MAP members. In August, a survey will be carried out among a larger number of relevant respondents throughout each of the MAP member's individual network. Finally, a MAP meeting with all members will be held the first week of September.

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