

# Chapter 4

## AGE AND GENDER:

### Growing challenges for rural and remote areas

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It is well known that rural areas tend to suffer more from demographic challenges than their urban counterparts. The Nordic Region contains many sparsely populated municipalities that are affected by these demography challenges due to their remote location. This chapter provides an overview of the status and recent trends in population change, demographic dependency, youth age dependency and old age dependency, paying particularly attention to rural municipalities. It reveals that there are some interesting subtleties behind these notions of sparsity and demographic challenge.

The need to study and react to these socio-economic trends, structural transformations and demographic changes in European rural areas resulted in the development of a number of regional typologies. Typologies constructed at the regional level (NUTS3) tend however to obscure important details of the demographic redistribution; hence an analysis at the municipal level would be more pertinent.

The first section of this chapter introduces a classification of Nordic municipalities, based upon access to urban areas, which is subsequently used for analysing demographic trends. Section two describes the ongoing process of demographic redistribution while section three focuses on how this affects the composition of population in different kinds of locations, in terms of both age and gender.

#### **Towards a typology of rural municipalities**

A number of urban-rural typologies already exist at the NUTS3 level. These include, for example, the OECD Regional Typology of 2010, the EUROSTAT Urban-rural typology (2010) and the updated version of the ESPON Urban-Rural typology 2010. These typologies

## **Rural areas tend to suffer more from demographic challenges than their urban counterparts.**

cannot effectively capture the more nuanced pattern at the municipal level and are therefore less useful as a framework for illustrating recent adjustments in demographic geography. The benefits of a higher resolution approach are illustrated by the typology by Malinen et al (2006) developed as a tool to support the implementation of rural policy in Finland. The Malinen typology was developed using a large number of indicators, including labour market and economic indicators.

Although the typology presented below is much simpler and less demanding in terms of data, it is encouraging to see that the results for Finland are similar to those of the Malinen typology. The typology distinguishes between municipalities which are dominated by an urban centre, those which are “urban adjacent”, and those which are rural. The rural group is further subdivided into those which are relatively accessible, and those which are more remote.

#### **The drift towards urban and urban adjacent municipalities**

The graph (figure 4.2) on population change during the period 2005-2015 provides a clear picture of the overall trend in rural-urban population redistribution in the

## Classification of rural municipalities

Any attempt to better understand rural trends in the Nordic Region leading to the development of a classification of rural municipalities to serve as a basis for the analysis of demographic change needs to include elements related to their demographic size and the location vis-à-vis urban areas. This is because the vast majority of rural areas are reliant on towns and cities in their near or far proximity. Hence, this classification was developed for this chapter by including both population size (total municipal population in 2015) and accessibility measures to urban areas (an index summing up the share of the municipal population that can reach urban settlements of different sizes within 45 minutes by car; the index was developed by Tillväxtanalys for NordMap.se). The size of municipalities in the Nordic Region varies considerably in terms of population (and area), ranging from 53 to 911 989 inhabitants. A threshold of 20 000 is used in this typology (the average population size of a municipality being 21 703 in 2015, and the median 7 977). This threshold may be too high in some countries with very small municipalities in terms of both population and area sizes, while it is slightly too low in the Danish and Swedish contexts. It does however seem to provide a rather appropriate measure for the Nordic Region as a whole.

### The four types of municipalities are:

- **Urban:** municipalities with 20 000 inhabitants and more where at least 90% of the population

can reach an urban settlement of 30 000 inhabitants and more within 45 minutes by car (240 municipalities, 17 802 963 inhabitants).

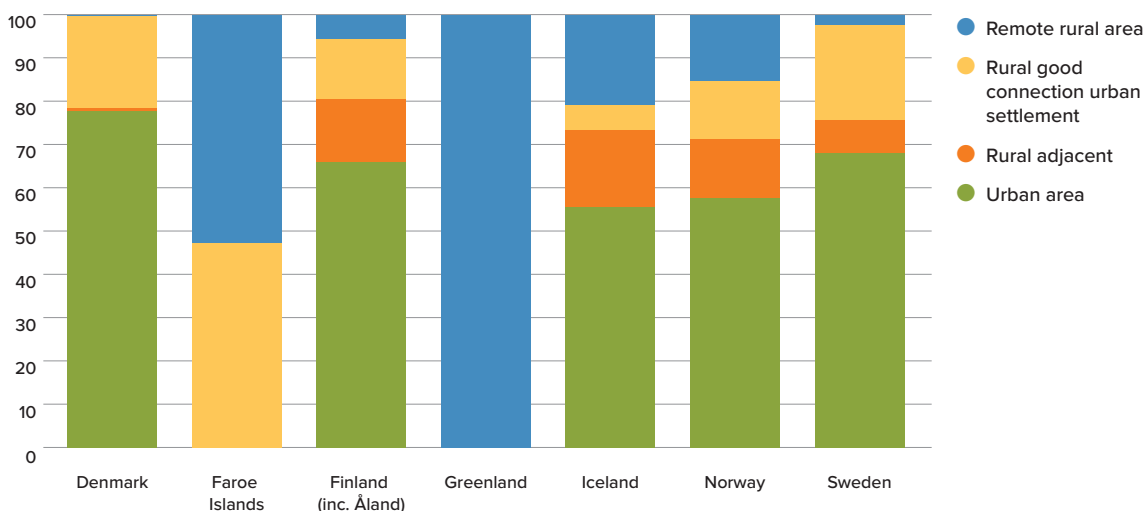
- **Urban adjacent:** rural municipalities with less than 20 000 inhabitants where at least 75% of the population can reach an urban settlement of 30 000 inhabitants and more within 45 minutes by car (238 municipalities, 2 311 744 inhabitants).

The remaining rural municipalities are divided in two groups:

- **Accessible rural:** indexed accessibility of 200 and more (286 municipalities, 4 852 633 inhabitants).
- **Remote rural:** indexed accessibility of less than 200 (455 municipalities, 1 511 073 inhabitants).

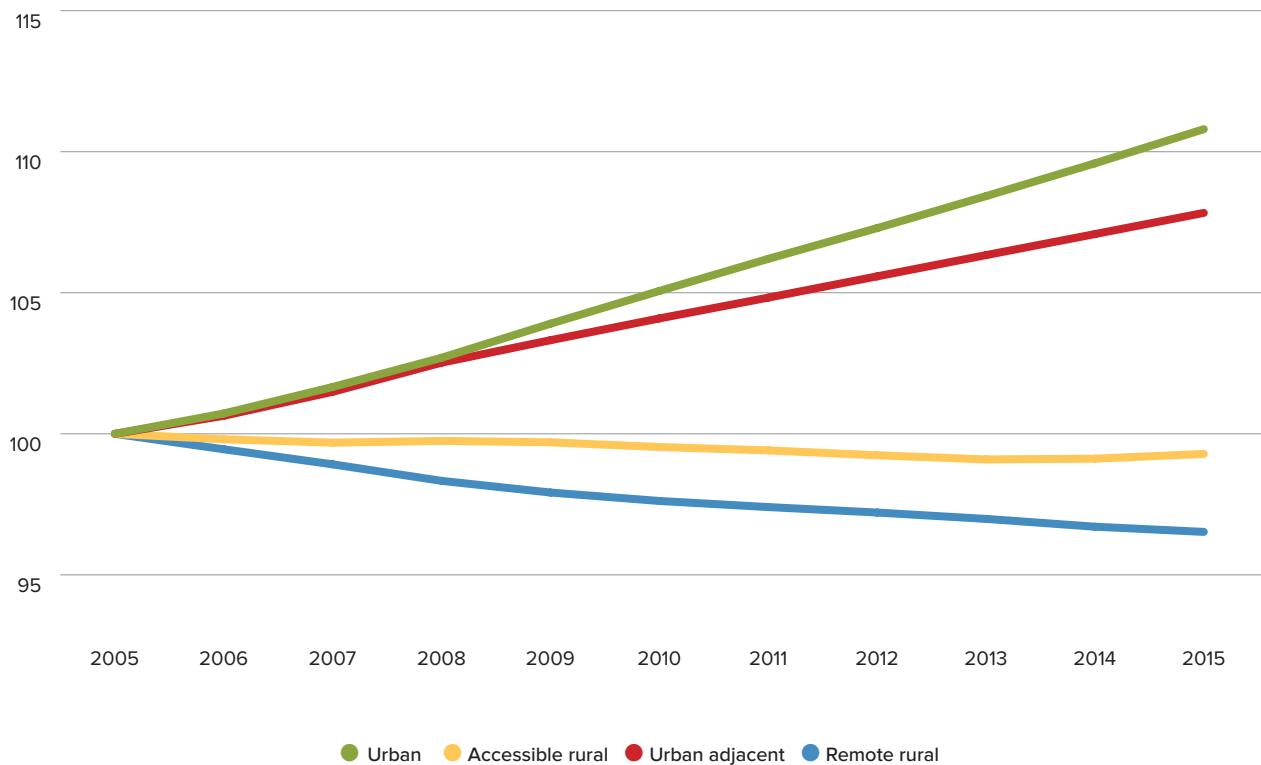
A fifth of the municipalities in the Nordic Region would accordingly be classified as urban, and these account for 67% of the total population. A further 20% (and 9% of the population) are classified as urban adjacent. Of the remaining 60% classified as rural, the majority (37% of all Nordic municipalities) are classified as remote rural, and 23% as accessible rural. These two types of rural municipality account for less than 25% of the population of the Nordic area. Most of this population (18% of the Nordic total) is in the more accessible rural municipalities. This means that although they account for well over one third of all municipalities, the remote rural group has less than 6% of the Nordic population.

Figure 4.1: Share of population in 2015, by type of municipality



**Figure 4.2: Total population by class of the rural classification of the Nordic Region, 2005-2015**

Population change, year 2006=100



Data source: NSI's

Nordic countries. It highlights the fact that increases have been associated with urban (+11%) and urban-adjacent municipalities (+8%), whilst population decline has continued in the majority of rural municipalities, and especially in the remote areas (-3.5%). This pattern is common across Northern Europe. It implies obvious challenges for rural municipalities in terms of sustaining economic activity and adapting to new modes of service provision.

It is interesting to note that in the accessible rural municipalities the decline levelled off from 2013 onwards, and that these municipalities actually saw an increase in population between 2014 and 2015. It is tempting to speculate that this could be evidence of the beginnings of an outward 'ripple' of 'counter urbanisation', as observed in other parts of Northern Europe. This could imply a more positive socio-economic outlook in accessible rural municipalities. However only time will tell, and Nordic analysis has already shown that the configuration of administrative boundaries can mean that processes of sub-urbanisation around the urban fringe can "masquerade" as true counter-urbanisation (Amcoff 2006).

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## Men out-number women outside urban areas

The overall population shift described in the previous section hides some interesting nuances in relation to population composition, both in terms of gender and age. It has long been observed that employment push factors in rural and remote areas and educational pull factors in the cities are particularly strong in relation to younger women. One consequence of this is that gender ratios tend to show a deficit of women in the countryside and a ratio of more than 1:1 in urban and accessible areas (Figure 4.3 and figure 4.4). Indeed Figure 4.4 shows that in remote rural municipalities there are now only 96 women for every 100 men. Even in more accessible rural and urban adjacent municipalities the ratio is less than 1:1. Only in the cities are there more women than men.

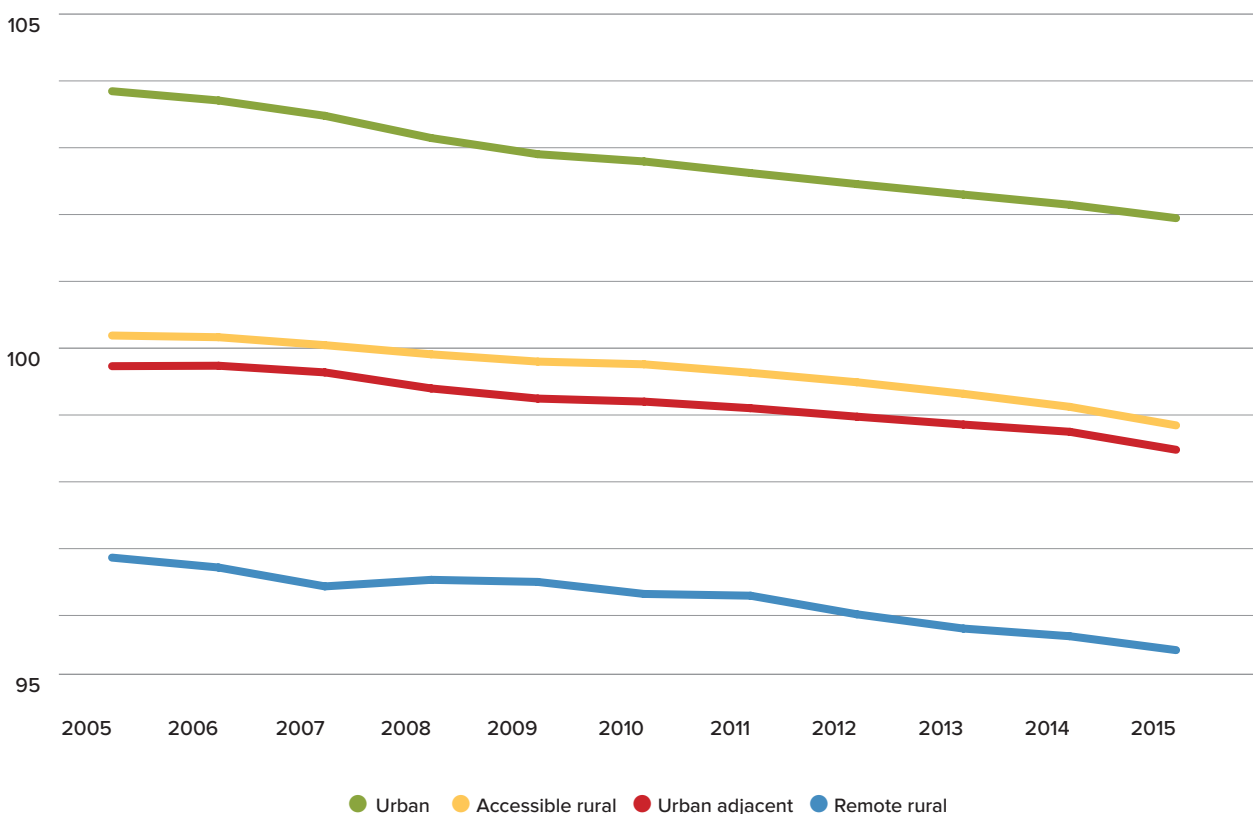
The map (figure 4.4) highlights differences between the countries and territories. For instance, gender imbalance is a more common situation in the rural and peripheral parts of Finland, the Faroe Islands, Greenland and Sweden than it is in Denmark and Norway. These

**In remote rural municipalities there are now only 96 women for every 100 men.**

differences can result from the presence or absence of policies on gender. For instance the Finnish ERDF programme aims at diversifying the rural labour market by making it more attractive to women, whereas Norwegian policies do not directly include this issue (Hörnström et al., 2015).

**Figure 4.3: Female ratio by class of the rural classification of the Nordic Region, 2005-2015**

Total number of females per 100 males



Data source: NSI's

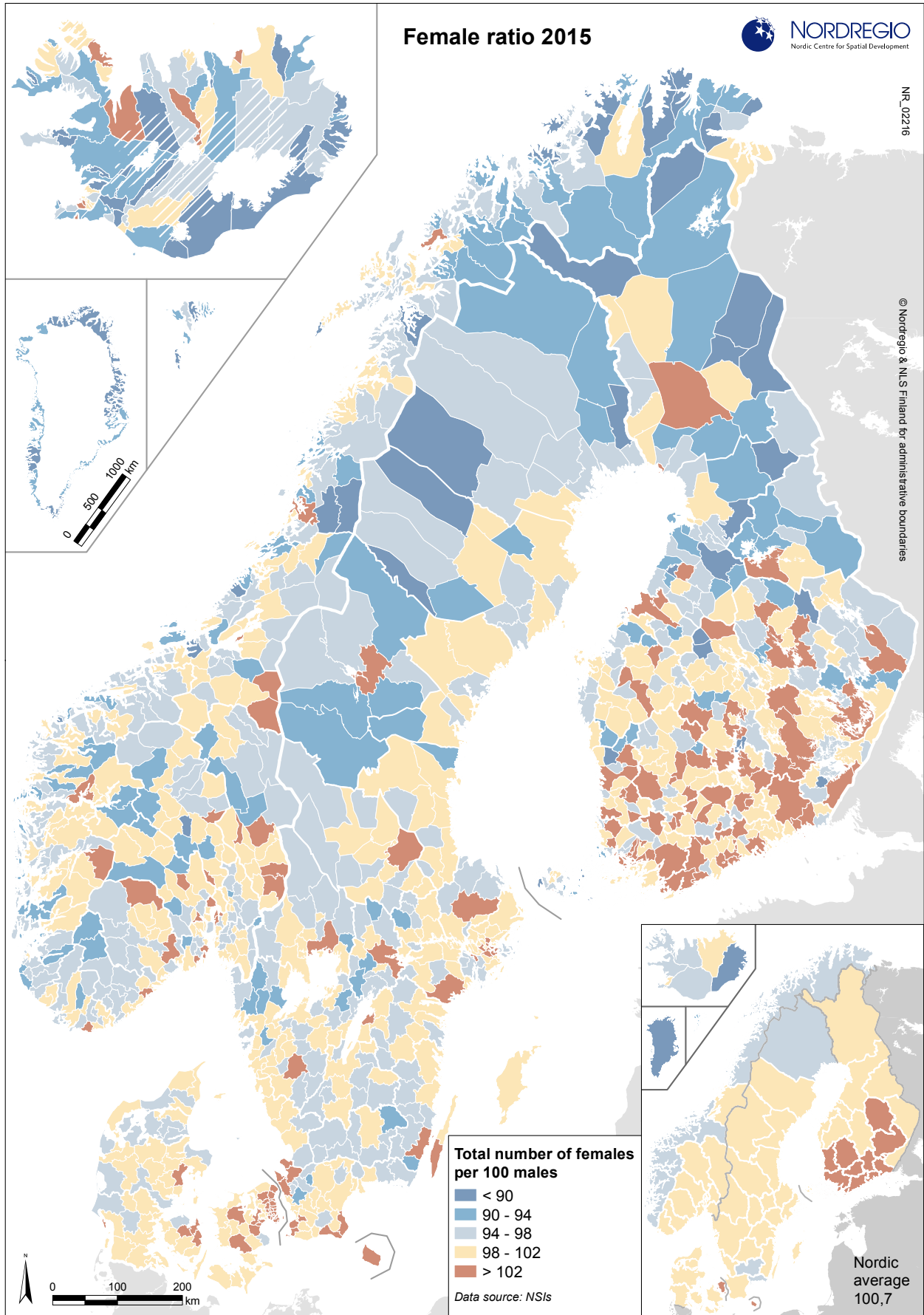


Figure 4.4: Female ratio in 2015

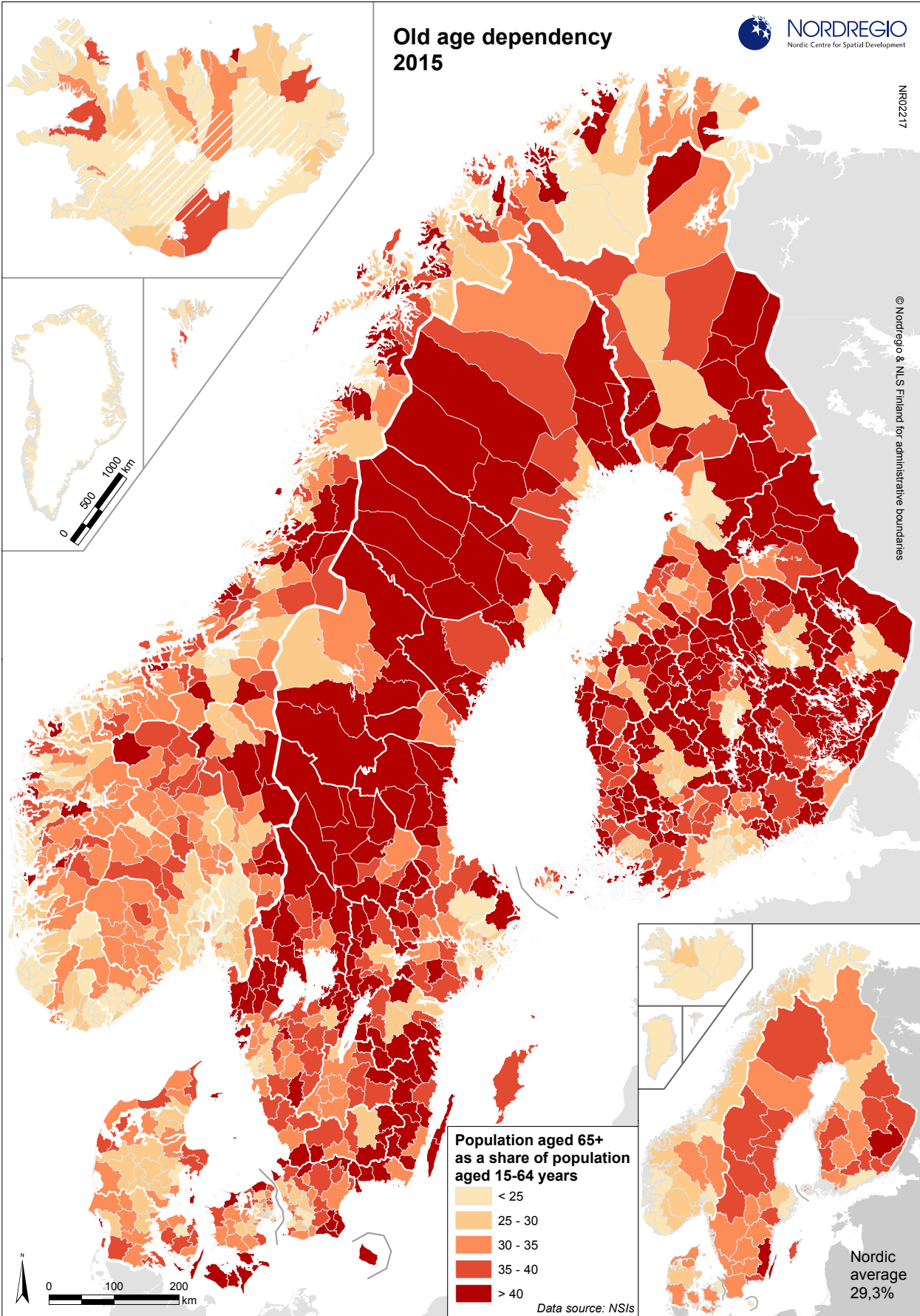
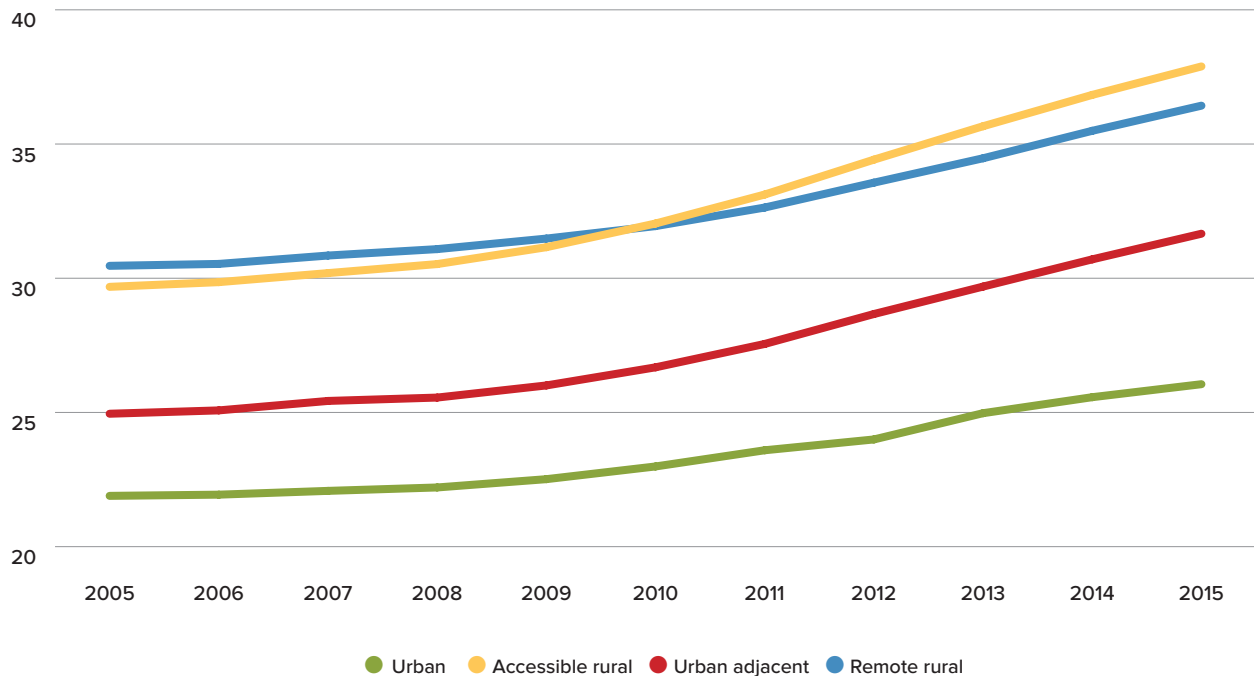


Figure 4.5: Old age dependency in 2015

**Figure 4.6: Old age dependency ratio by class of the rural classification in the Nordic Region, 2005-2015**

Population aged 65+ as a share of population aged 15-64 years



Data source: NSI's

## Old age dependency puts pressure on Nordic healthcare systems

Dependency ratios show the proportion of the population which is outside the normal working age and is therefore dependent upon the economic activity and taxpaying capacity of others. For young people this is of course normally in the context of families and schools, but for older people this involves pensions and the provision of various social and health care services.

Old age dependency rates are rising across the Nordic countries (as they are across much of the Western World), but due to the selective outmigration of younger people towards the cities and adjacent areas, dependency rates are particularly high in rural municipalities (Figure 4.5). The highest rates can be found predominantly in insular municipalities of Finland (e.g. Kustavi) and Denmark (e.g. Læsø) and in a rather large number of rural municipalities in Finland (e.g. Luhanka) and along the Finnish-Swedish border (e.g. Pajala). The lowest rates can be found in both Greenland and most of Iceland as well as in the largest urban areas in Denmark, Finland, Norway and Sweden. What is particularly interesting in Figure 4.6 is the fact that since 2010 old age dependency rates in more accessible rural areas have outstripped those of the

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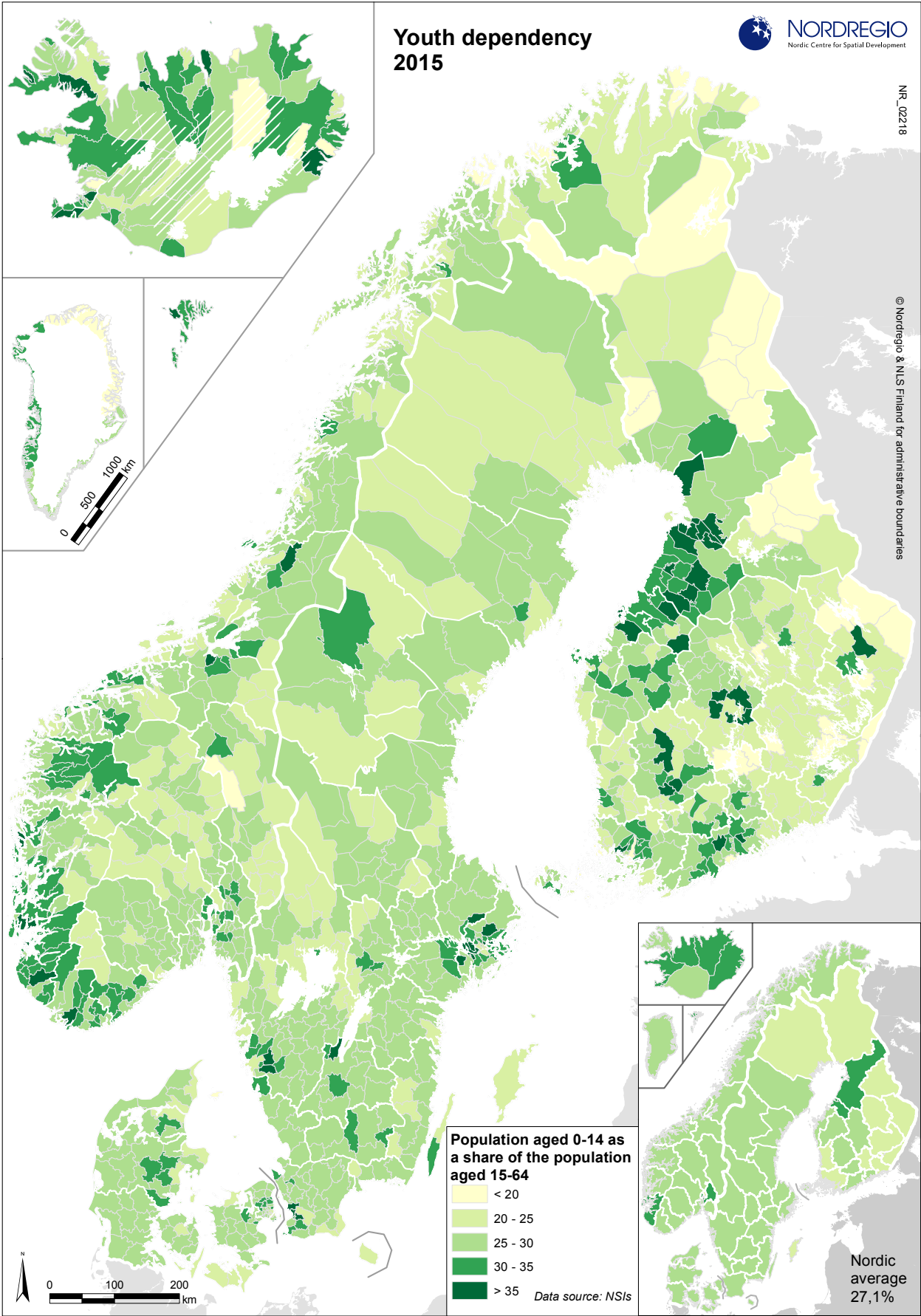
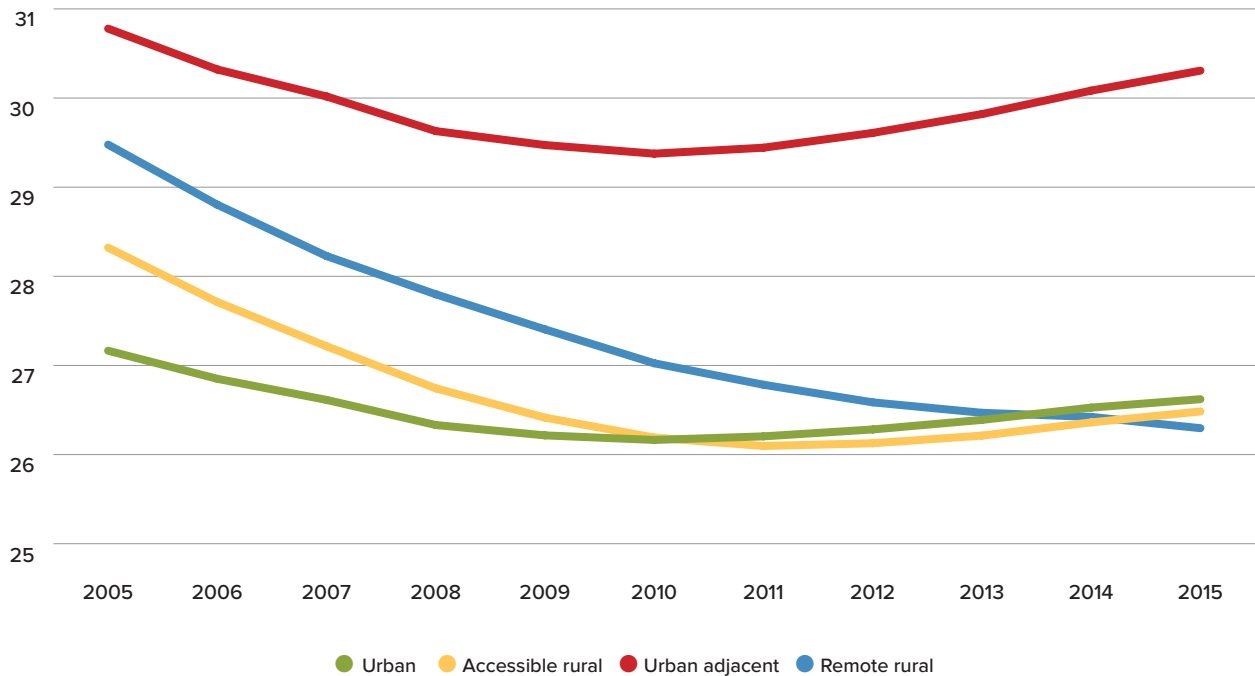


Figure 4.7: Youth dependency in 2015



**Figure 4.8: Youth dependency ratio by class of the rural classification in the Nordic Region, 2005-2015**

Population aged 0-14 as a share of the population aged 15-64 (in %)



Data source: NSI's

remote rural municipalities. One may speculate that this reflects the tendency for frailer elderly people to move to slightly larger settlements where specialist care and health services are easier to access.

Access to health and care services is one of the major issues in areas with high old age dependency ratios. A number of innovative solutions have been put in place in several parts of the Nordic Region. The region being the main authority responsible for providing health services, these solutions often emerge as the result of cooperation between regions, both within a single country and between adjacent regions in different countries. For instance cross-border solutions have been developed between Sweden and Finland and between Norway and Sweden with some success, even though some challenges remain (Johnsen & Perjo, 2014). National authorities are also key players in the struggle to tackle the basket of issues associated with having a high share of elderly population. For instance, digital solutions for access to health care services constitute part of a national strategy in Denmark with a focus, among other things, on telemedicine and telehealth (Hörnström et al., 2015).

A number of innovative activities designed to address the consequences of old age dependency have therefore been developed throughout the Nordic Region. In Finland, as in other peripheral parts of the Nordic Region, centralised care systems for the elderly based in munic-

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ipal centres with the aim of 'reaching out' to customers in remote and distant places, are expensive to organise (Vihinen & Moilanen, 2013). Furthermore, profitability levels for private sector service providers under these conditions are likely to be limited, further threatening the supply of social and health services. Under their service obligation agreements, municipalities might arrange home care services not by themselves but through other service providers in the countryside - small organisations or companies whose main objective is not profit

maximization but rather the safeguarding of services addressing local needs (Kettunen et al. 2015). These services are viewed as Services of General Interest or as Services of General Economic Interest (e.g. Kull 2013).

## Drastic decline as youth move to urban areas

The pattern of youth dependency rates (Figure 4.7) is rather different, and, again raises interesting questions for policy, particularly as it relates to education and training provision. Over the previous decade, the highest youth dependency rates have been in urban adjacent municipalities (e.g. Liminka and Ii in Finland, Rennesøy in Norway, Knivsta and Vaxholm in Sweden). Some have seen a net increase in the under 15 age group, as young families move (for well-being reasons) to municipalities which are close to the countryside but still within commuting distance of major employment centres (figure 4.8). In fact, prior to 2010, dependency rates in such areas showed a gentle decline. Since 2011 they have however displayed a consistently positive trend. In 2005 Urban municipalities had the lowest youth dependency rates, with rural (both accessible and remote), occupying intermediate positions. By 2015 these three types of municipality had converged, all having youth dependency rates about 4 percentage points below those of the urban adjacent municipalities. In other words the rural municipalities (especially the remote ones) had seen a significant fall in the proportion of their population in the under 15 age group.

A manifestation and illustration of youth dependency trends can be seen in Finland, where in the 2000-2009 period one-fifth of all primary schools were closed, mainly in sparsely populated areas (40%) and rural heartland areas (25%) (see Vihinen & Moilanen 2013, Ponnikas et al. 2011). The majority of sparsely populated rural municipalities are located in the northern and eastern parts of Finland, such as in the regions of Lappi, Kainuu, Pohjois-Karjala and Etelä-Savo. The majority of municipalities located in rural heartland areas are in the regions of western and southern Finland, such as in Etelä-Pohjanmaa and Varsinais-Suomi. From a local perspective, schools, and village schools in particular, are often seen as central to keeping rural areas populated (e.g. Kettunen 2013). The reduction in public transport provision represents a further threat in terms of curtailing the ability of some to access centrally located schools - private arrangements on behalf of the parents to organise joint transportation are used. Remote schooling is conditioned by an available and functioning broadband internet service (Vihinen & Moilanen 2013).

## Concluding comments

The key point which may be derived from the above brief analysis of gender and age profiles across the four types

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of municipality is that the pattern of change is more complex than the crude generalisations about patterns of demographic ageing would suggest. It shows that the simple binary distinction between urban and rural is not as helpful as is often assumed to be. Urban adjacent, accessible and remote rural municipalities are each experiencing different combinations of change in terms of gender, old-age and youth dependency.

One way to secure services in rural areas that cater to the needs of a range of residents is to introduce multi-service points. Multi-service points are, for instance, arranged in village schools or village shops. Services provided include municipal catering for the elderly, collection of groceries, transport as part of home care, internet points to access electronic public services or afternoon care for pupils (Kettunen et al. 2015). A number of other noteworthy examples exist throughout the country, where activities are arranged to tackle the different dimensions of demographic challenges in a concerted manner. The non-profit association Velkuan Kummeli in the archipelago municipality of Velkua in south western Finland for instance combines day care, afternoon activities for pupils, accommodation for the elderly / homecare for elderly people and health services etc., "under one roof".

Various policy recommendations for youth involvement have been listed as a result of workshops with young people in a number of case studies throughout the arctic part of the Nordic Region (Karlsdottir & Jungsborg, 2015). One of the listed recommendations is to include the local youth population by creating a youth council facilitated by an adult and a contact person from the municipality. Similar experiences can be found in other parts of the Nordic Region as in the region of Kalmar in Sweden (Johnsen & Perjo, 2014). At the regional level, the authorities are also working on increasing their attractiveness as a method of addressing the demographic challenges they face.