

THE SIZE, STRUCTURE AND DISTRIBUTION OF THE POPULATION OF ESTONIA BASED ON THE 2011 CENSUS

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The results of the 2011 Population and Housing Census – such as the number of enumerated permanent residents, number of temporary residents, or the distribution and structure of the population – indicate that bigger changes have occurred in the geographic distribution of the population.

According to international consensus, the 2011 Population and Housing Census collected data about persons whose place of usual residence is in Estonia. A permanent resident is a person who has been living in the country for at least one year before the census moment or intends to stay in Estonia for at least a year. All census data had to refer to the midnight of 31 December 2011. Dwellings and households were also enumerated in addition to persons. Three questionnaires were used for that purpose: personal, household and dwelling questionnaires.

The success of the first stage of the census – the e-census – exceeded all expectations. 67% of Estonia's permanent residents completed the census online, which is the highest result in the UN's 2010 census round. The e-census reduced the amount of fieldwork and thus the total cost of the census. The second stage of the census – the interview census – was carried out in a total of 2,000 enumeration areas.

The goal of the census was to get a comprehensive overview of the population. For the first time in history, Estonia used a combined method of census-taking, which allowed the use of existing registers in the preparation and conduct of the census. Also, the quality of the census was analysed for the first time, based on information available in registers.

Population size from 1881 to 2011 according to census data

A country's population increases mainly as a result of births or immigration, and decreases due to deaths or emigration. In Estonia, the population size determined in the 1922, 1934 and 1959 censuses was also influenced by national border changes.

Over the 130-year history of census-taking in Estonia, an increase in population has been registered in eight censuses. The highest relative growth in population size was recorded between the 1897 and 1922 censuses (Figure 1, p. 7). A year-by-year comparison shows that the growth in Estonia's population was the fastest in the 1950s, 1960s and 1970s as a result of immigration.

A clear downward trend can be noticed since the 1990s, caused by negative net migration. It is important to note in this context that in re-independent Estonia immigration is restricted by a quota while emigration is not.

Changes in population size can be estimated on the basis of continuously updated population statistics, but it is unfortunately not possible to estimate unregistered immigration and emigration. During the period between the 2000 and 2011 censuses, Estonia's population decreased by 54,333 persons according to current population statistics, with 32,409 persons lost due to negative natural increase and 22,024 persons lost due to negative net migration.

According to census results, there were 1,294,455 permanent residents in Estonia in 2011 and 1,370,052 permanent residents in 2000. The number of permanent residents has decreased by 75,597 between the two censuses. Consequently, the actual decrease in population has been greater than shown by regular statistics. The main reasons for the difference in these figures are unregistered migration and the fact that some of the persons subject to enumeration could not be

reached and enumerated. It is estimated that about 2.1% of permanent residents were not enumerated in the 2011 census for various reasons.

Population structure by ethnic nationality

The number of permanent residents has now been adjusted, compared to the initial results published by Statistics Estonia on 31 May 2012. The final number of enumerated permanent residents as at 31 December 2011 was 1,294,455, with 5,558 temporary residents also enumerated. The census revealed that 30,444 persons have left Estonia and moved abroad – this number includes both registered and unregistered migration. Unfortunately, these are not definitive figures, but they do allow a more accurate estimation of emigration.

Since the 1990s, the share of Estonians in the population has grown, from 62% in 1989 to 69.7% in 2011. Thus there are 902,547 Estonians living in Estonia according to the 2011 census. The share of Estonians is greater in rural settlements (91.4%), while in urban settlements Estonians constitute 59.5% of the population on average. Since the 2000 census, the share of Estonians has slightly decreased in Ida-Viru county, where Estonians now account for 19.5% of the residents.

Russians, the second-largest ethnic nationality, make up 25.2% of the population. A total of 326,235 persons identified themselves as Russians.

4.9% of the permanent residents (i.e. 64,038 persons) represented other ethnic nationalities, while ethnic nationality remained unknown in case of 1,635 persons (about 0.1% of the enumerated persons). After Estonians, the largest ethnic groups in Estonia are Russians, Ukrainians, Belarusians and Finns. The most ethnically varied population can be found in Harju and Ida-Viru counties.

Age-sex structure of the population

According to the 2011 census, 693,929 permanent residents in Estonia were women and 600,526 were men. The number of women has exceeded the number of men in all censuses conducted in Estonia (Table 1, p. 8). Based on the 2011 census, there are 865 men per 1,000 women in Estonia (Map 1, p. 8); in 2000 there were 856 men per 1,000 women. Compared to the 2000 census, the number of women has decreased less than the number of men.

In the age group 65+, women constitute 11.9% of the population, while men of the same age constitute 5.9%. The smaller number of persons aged 65–70 can be explained by the lower birth rate in the period after the war.

Women in child-bearing age (i.e. aged 15–49) constitute 43.4% of the female population of Estonia, their total number being 301,163. Piirissaare rural municipality does not have any women in this age group. The share of women in childbearing age (among all women) is the lowest in Alajõe rural municipality (18.8%). The share of women aged 15–49 is also low among the women in Peipsiääre (27.8%) and Tootsi (27.8%) rural municipalities.

The age group 0–14 constitutes 15.4% of the population. Here, the share of boys (8%) is slightly bigger than the share of girls (7.5%) in the total population.

The age structure of the population has changed between the two last censuses (Figure 2, p. 9). The share of children aged 0–14 has decreased to 15.4% and the share of persons aged 65 and older has increased to 17.2% over this period. In 2000 the two largest age groups in Estonia were between 10 and 19 years of age (10–14 and 15–19), while according to the 2011 census these groups are now smaller. The adolescent generation of the previous census had decreased by 2011.

According to the latest census, the number of children aged 0–4 exceeds the number of 15–19-year-olds. However, children's generations are generally smaller than their parents' generations.

According to the 2011 census, the average age in Estonia is 40.8 years. It is 37.7 years for men and 43.4 years for women. A younger-than-average population can be found in the rural

municipalities of Harju county (average age 36.3 years) and Tartu county (average age 38.1 years). Piirissaare and Alajõe rural municipalities had the highest average age with 63.1 and 53.9 years, respectively (Map 2, p. 10).

Children and adolescents (i.e. the population aged 0–17) constitute 18.4% of the population. In Alajõe rural municipality, children and adolescents constitute less than 10% of the local population. The share of the age group 0–17 exceeds 25% of the local population in Kiili town (30.1%) and in the rural municipalities of Kiili (28%), Rae (27.5%), Ülenurme (27.1%), Harku (26.1%), Viimsi (26.0%) and Saue (25.7%). The share of the population aged 0–17 is also slightly above the average in Rapla county (a little over 20%).

According to the 2011 census, the share of 18–64-year-olds in the population is 63.9%. In Harju county, the share of this age group is higher than the average. 18–64-year-olds constitute more than 70% of the population in Ruhnu rural municipality (72.7%), in the Kesklinn city district of Tallinn city (70.6%) and in Maardu city (70.1%).

The share of elderly people (aged 65 and older) is the largest in Piirissaare rural municipality (49.1%) and Mõisaküla city (33%). The elderly population accounts for less than 10% of the population in Kiili town (7.1%), Kiili rural municipality (8.5%), Rae rural municipality (7.8%), Ülenurme rural municipality (9.1%) and Harku rural municipality (9.2%).

As for the dependency burden, the children aged 0–14 constituted 18% of the population in 2000, but only 15% in 2011. At the same time, the share of people aged 65 and older has increased to 18% (from 15% in 2000). The share of working-age people (aged 15–65) has remained at the same level as in 2000 (67%).

Figure 3 (p. 10) shows that the dependency burden on the working-age population (aged 15–64) has been stable throughout the 20th century and in the 2000s, meaning that the share of the working-age population has ranged from 66 to 68% (except during the first censuses). Unfortunately, the decreasing share of children and the constantly increasing share of the elderly in the population of Estonia indicate that the steady growth of the working-age population will slow down in the near future and the dependency ratio will start to increase rapidly soon.

Geographic distribution of the population

A country's population is never uniformly distributed, and population density varies in different regions and over time – some areas of agglomeration may become depopulated in subsequent periods. The concentration or dispersion of population at different locations within a country's territory is faster if supported by migration (both external and internal migration).

One of the main parameters describing the geographic distribution of population is the division into urban and rural population (Map 3, p. 11).

The shares of the urban and rural populations have not changed significantly in recent years: based on the data of the 2011 census, 67.9% of permanent residents live in cities (incl. cities without municipal status and towns). In 2000, the corresponding figure was 69.2% of permanent residents (Figure 4, p. 12).

The rate of population decrease has been relatively higher in regions further away from large cities and in outlying rural municipalities of more sparsely populated counties.

Compared to the data of the 2000 census, the permanent population has mainly decreased in cities, with the highest decrease registered in Püssi city (42.1%). Among small cities, the loss of permanent residents was the greatest in Sindi and Paldiski. The size of the permanent population grew in three cities: Saue, Maardu and Keila. Compared to the 2000 census, smaller cities have been the most affected by the relative change. 13 cities with municipal status were smaller than the biggest village (Peetri village, which was a village without municipal status as at 31 December 2011).

According to the census data, 76% of rural municipalities have 300 or fewer residents. In some rural municipalities, the population has more than doubled since 2000. For example, the population has increased to 18,533 in Viimsi rural municipality (from 7,978 in 2000), to 15,721 in

Rae rural municipality (from 7,979 in 2000), and to 14,181 in Harku rural municipality (from 6,617 in 2000).

There has also been a significant increase in population in some rural municipalities around Tartu and Pärnu cities: from 4,780 to 7,751 in Ülenurme rural municipality, from 5,121 to 6,991 in Tartu rural municipality and from 2,535 to 4,474 in Sauga rural municipality.

Haljala and Häädemeeste rural municipalities are the closest to the Estonian average in size – with 2,724 and 2,743 residents, respectively.

According to the 2011 census, there are 327 villages in Estonia with three or fewer permanent residents. There were 102 villages where no permanent residents were enumerated.

Map 4 (p. 12) and Tables 2–5 (p. 13–14) offer an overview of the geographic distribution of population in Estonia.

Based on the 2000 census, there were no villages in Estonia with more than 1,000 residents. In the 2011 census, there were 12 villages with 1,000 or more residents (Table 3, p. 14; Table 5, p. 14). Villages with 300 or fewer residents accounted for 97% of all villages.

Estonia is one of the most sparsely populated areas in Europe, with only 29.8 persons per square kilometre on average. The majority of Estonian residents live in cities, where population density is much higher – 1,300 to 1,400 persons per square kilometre on average. In Estonian rural areas, however, there are only 11 persons per square kilometre on average. The population density in local government units is shown on Map 5 (p. 15).

In the period between the two last censuses, the biggest change has occurred in the density of the rural population. People have moved away from sparsely populated areas, which has further reduced the population density in these areas. The number of residents is decreasing in the peripheral regions of Estonia and increasing in the hinterlands of Tallinn and Tartu cities.

Conclusion

Based on the 2011 Population and Housing Census, we can identify the following characteristics of the population of Estonia.

- The ethnic structure of the population has changed by 1–2% compared to 2000. Although the number of Estonians has decreased, their share in the population has increased.
- There has been a decrease in the population of most larger ethnic minorities.
- Despite a growth trend in the age group 0–4, the children's generation continues to be smaller than their parents' generation.
- The number of the elderly has risen due to an increase in life expectancy.
- The share of Harju county in Estonia's population has increased. Harju county and the capital Tallinn account for 43% of the population of Estonia. In turn, the population of Tallinn constitutes 71% of Harju county's total population. The increase has been the biggest in rural municipalities around Tallinn: Viimsi, Harku, Rae, Saue and Kiili.
- The share of people whose mother tongue is Estonian has increased by 1%. This can be linked to the increased share of ethnic Estonians in the population. The main mother tongues spoken in Estonia are Estonian (68.5% of the enumerated permanent residents), Russian (29.6%) and Ukrainian (0.6%).
- 85.1% of the enumerated permanent residents identified themselves as Estonian citizens and 8.1% as citizens of foreign countries. 6.5% of the enumerated permanent residents had undetermined citizenship. Compared to the 2000 census, the share of persons with undetermined citizenship has decreased (from 12.4% to 6.5%), while the share of foreign citizens has increased (from 6.9% to 8.1%).

The comprehensive data of the 2011 Population and Housing Census have helped us to identify the most important trends in the geographic distribution of the population. These trends must be taken into account in the future.