An Example of Phenomenon-based Project in Geography

Geography of Finland. Invironment, population, natural recources and economic

How to Integrate Modern Tehnologies in Phenomenon-baced Learning?

- Phenomenon-baced learning usually consists of a multistage learning process with several different learning environments, working methodes, and pedagogical aims.
  - Texts
  - Maps and thematic maps
  - Pictures
  - Diagrams
  - Fotos and videos

1. Activation

- In the beginning of a phenomenon-baced learning process, it is important to somehow activate the phenomenon in the students´mind
- The best option would be to go out and experience the phenomenon in a real-world contex, but this is not always possible > **You have Erasmus-project visit at Finland**

2. Process

- On idea could simply be the writing or editing of Wikipedia articles or writing blogs
- The best solution would be a cloud-baced digital platform for collaborative knowledge creation an a team-specific portfolio

3. Summary

- PowerPoint precentation
- Team-specific portfolio
- Poster

FINLAND IN FACTS

5.5 million

(**1.4 million** inhabitants in Helsinki metropolitan area)

Life expectancy

78 84

Official languages are **FINNISH**... (spoken by 87.9%)

...and **SWEDISH** (spoken by 5.2%)

SÁMI is the mother tongue of about 1,900 people.

GDP per capita (2017)

40,612 €

Currency unit: **EURO**

REPUBLIC, parliamentary democracy; 200-member, unicameral parliament

Christianity; 70.9% **LUTHERAN** and about 1.1% **ORTHODOX**

Independence Day
DECEMBER 6
1917

1995

1955

Finland Facts

Geography & Climate

Area: 338,440 km² (131,991 square miles), the fifth-largest country in Western Europe
Greatest length from north to south: 1,157 km (717 miles)
Greatest width from east to west: 542 km (336 miles)
Capital: Helsinki (1.4 million inhabitants in metropolitan area)
Climate: Great contrasts – cold winters and fairly warm summers (2017 extremes: coldest day in Muonio -41.2 C/-42.1 F, warmest day in Utsjoki 29.1 C/84.3 F)

People

Population: 5.5 million, 18.1 inhabitants per km² (46.6 per square mile)
Life expectancy: Men 78 years, women 84 years
Languages: Official languages are Finnish (spoken by 87.9%) and Swedish (5.2%). Sámi is the mother tongue of about 1,900 people, members of the indigenous Sámi people of northern Lapland
Religion: Christianity; 70.9 % Lutheran and about 1.1% Orthodox. In practice society is fairly secularised.

State & Government

Independence: Declared on December 6, 1917. Previously a grand duchy in the Russian empire for 108 years, and a part of Sweden for 600 years before that
Form of government: Republic, parliamentary democracy
Parliament: 200 members in one chamber, elected every 4 years in a direct vote (next elections in 2019)
Cabinet: Multiparty coalition cabinet. The current Cabinet is run by Prime Minister Juha Sipilä
Head of State: President of the Republic, elected every 6 years, two-term maximum. Currently Mr Sauli Niinistö, elected in 2012 and re-elected in 2018.
International cooperation: Member of United Nations since 1955 and European Union since 1995.

Society & Economy

Key features: High standard of education, social security and healthcare, all financed by the state
GDP per capita: 40,612 euros (2017)
Main exports: Electrotechnical goods, metal products, machinery, transport equipment, wood and paper products, chemicals
Main imports: Raw materials, investment goods, energy, consumer goods (for example cars and textiles)
Currency unit: Euro

Finland in Northern Europe

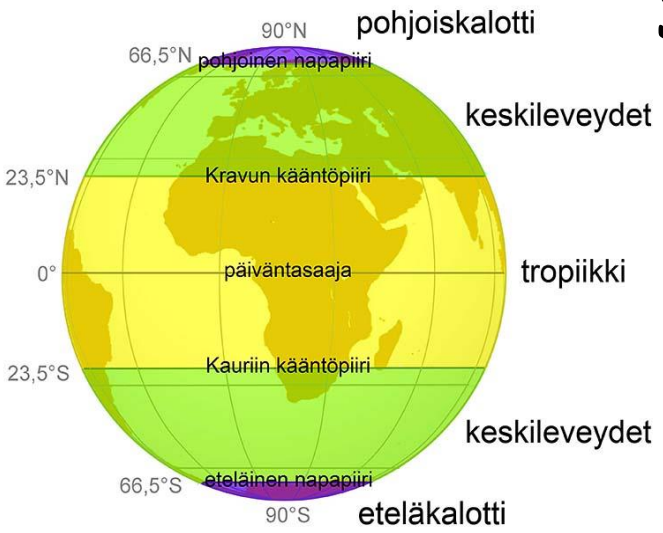
Map of Finland and most important geographical places

Landscape

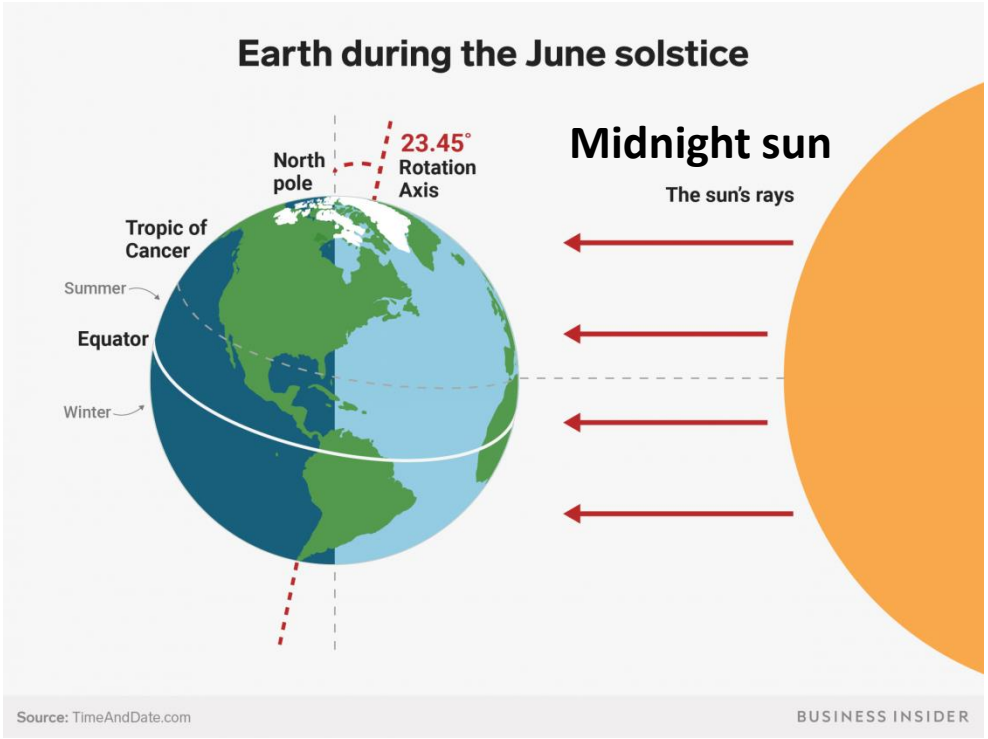
A Precambrian granite surface eroted by glaciation of late Weichelian. Erosional landforms result from abrasion and plucking of the underlying bedrock. Abrasion is caused by the rock debris carried by a glacier, wearing away the bedrock. The action is similar to that of sandpaper attached to a block of wood.

The movement of the continental ice on this area was from northwest to southeast. Today this scenery is very beautiful and attractive. There are lot of summer cottages in Lake Pyhäjärvi area

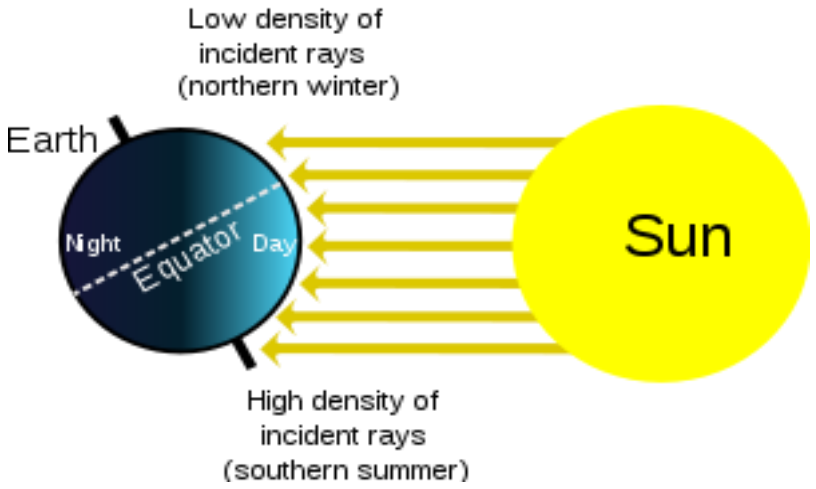
Seasons



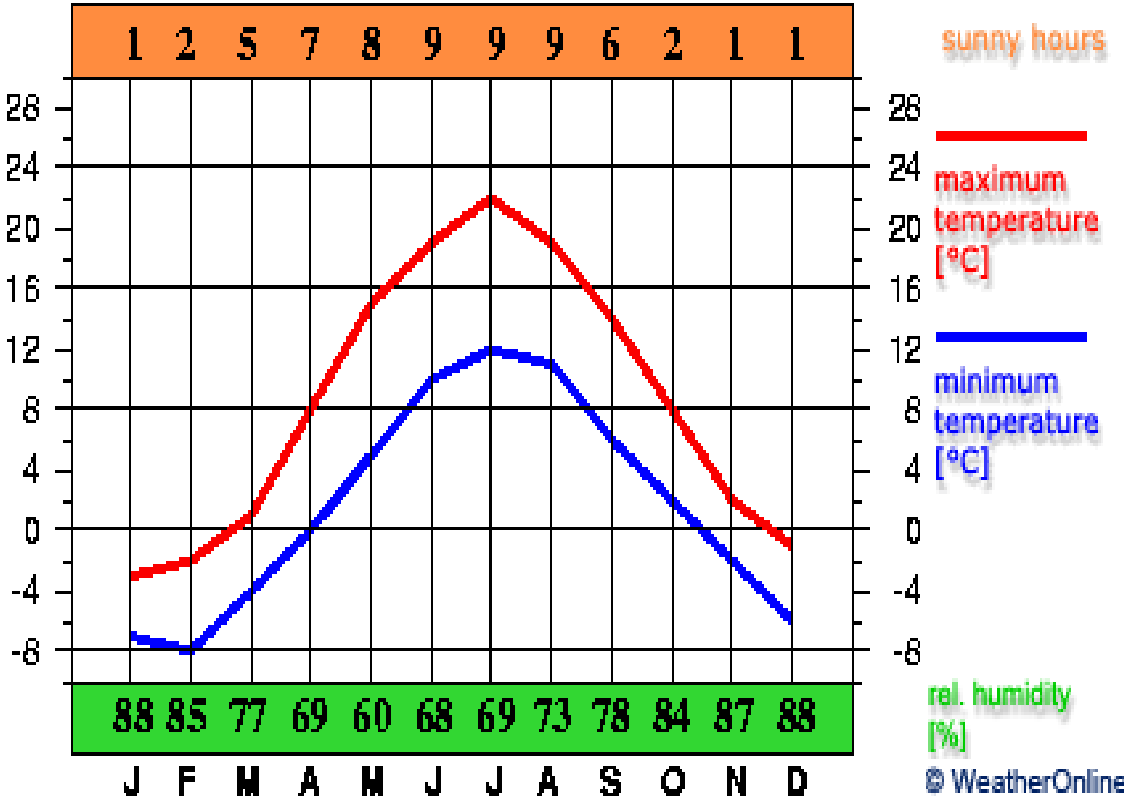
Four season:
Summer:June, July, August
Autum: September, October, November
Winter: December, January, Febryary, Marc
Spring: April, May



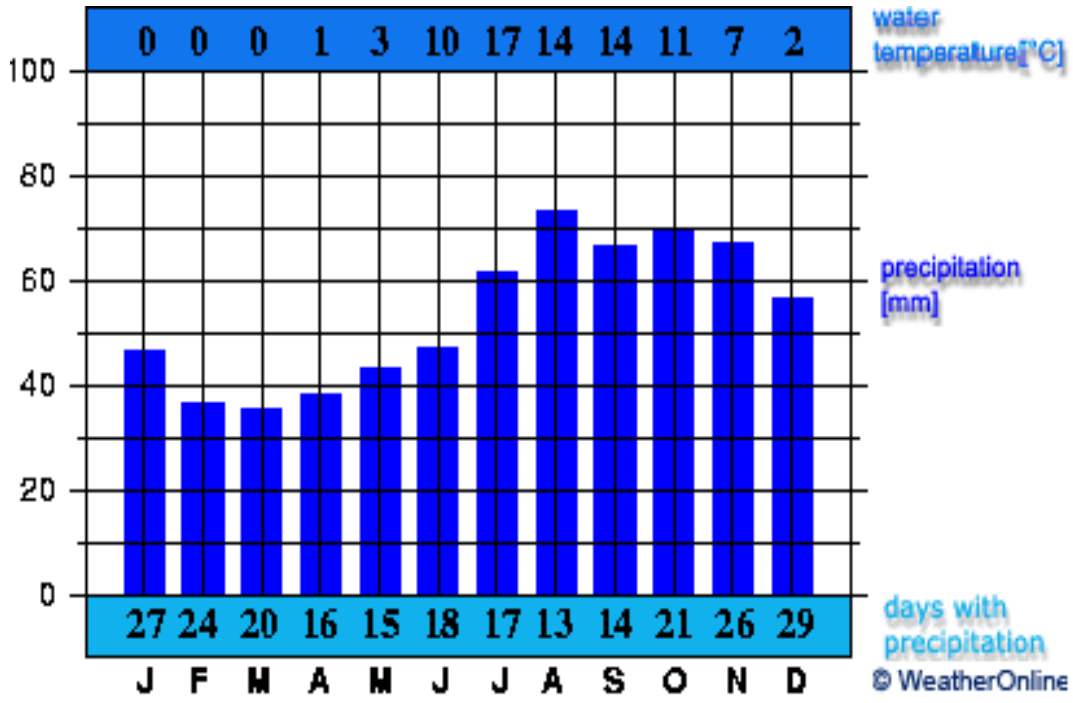
Winter darkness **Kaamos**



Temperature



Precipitation



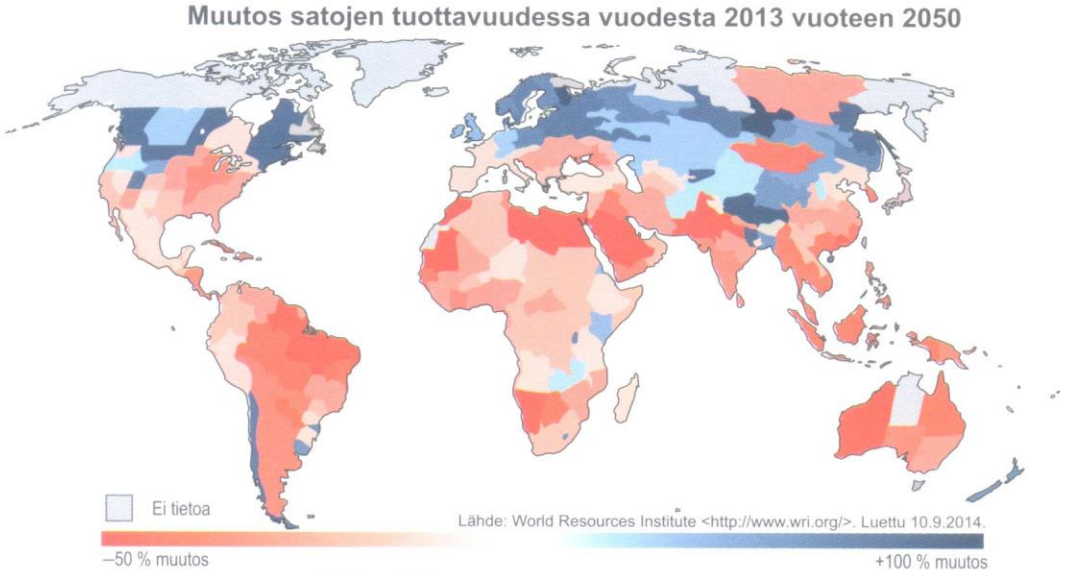
Projected climate change in Finland

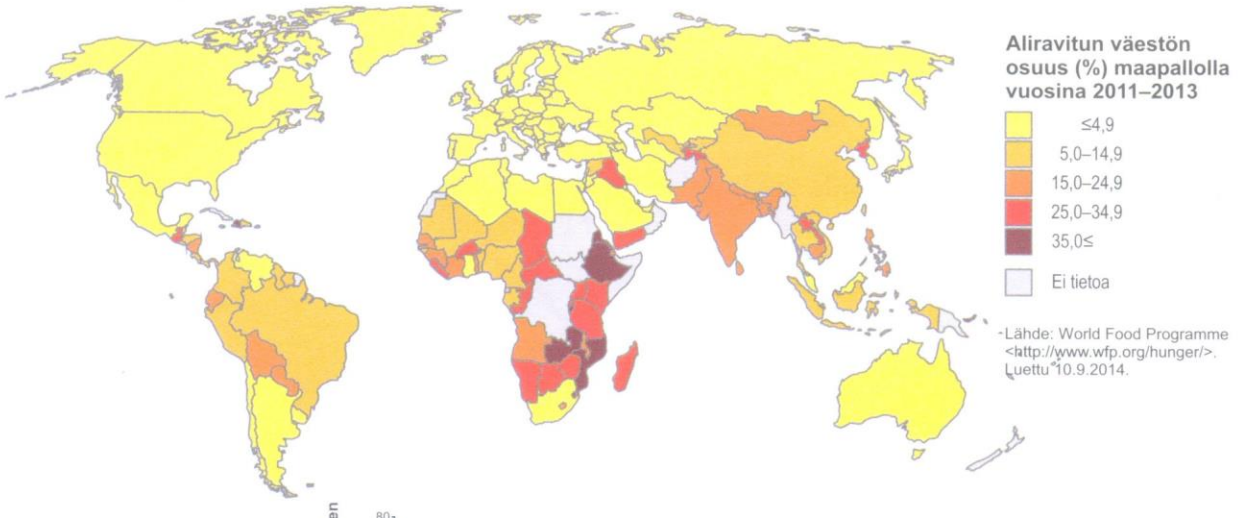
- Due to climate change, the temperatures in Finland will rise, precipitation will increase, snow cover season will become shorter, and the amount of soil frost will decrease. Also, the sea level in the Baltic Sea will rise and the winter ice cover will reduce. Projections indicate that Finland's climate would change more in winter than in summer.

Agriculture

Finland's climate and soils make growing crops a particular challenge. The country lies between 60° and 70° north latitude-- as far north as Alaska--and has severe winters and relatively short growing seasons that are sometimes interrupted by frosts. However, because the Gulf Stream and the North Atlantic Drift Current moderate the climate, Finland contains half of the world's arable land north of 60° north latitude. Annual precipitation is usually sufficient, but it occurs almost exclusively during the winter months, making summer droughts a constant threat. **In response to the climate, farmers have relied on quick-ripening and frost-resistant varieties of crops,** and they have cultivated south-facing slopes as well as richer bottomlands to ensure production even in years with summer frosts. Most farmland had originally been either forest or swamp, and the soil had usually required treatment with lime and years of cultivation to neutralize excess acid and to develop fertility

Climate change and productivity of grop





Forests in Finland

Much of Finland is dominated by conifers, but in the extreme south there is a zone of deciduous trees comprising mainly birch, hazel, aspen, maple, elm, linden, and alder. **The conifers are mainly pine and spruce.** Pine extends to the extreme north, where it can be found among the dwarf arctic birch and pygmy willow

Evergreen coniferous forest is typical in Finland, occurring between 60 and 70 degrees north latitudes. This forests are dominated by few species, such as spruce, pine, birch and aspen.

Temperatures are in winter about – 5 to -20 degrees Celcius

The length of the growing season in boreal forest in Iitti is 180 days

Precipitation is about 500 mm/year, half form of snow

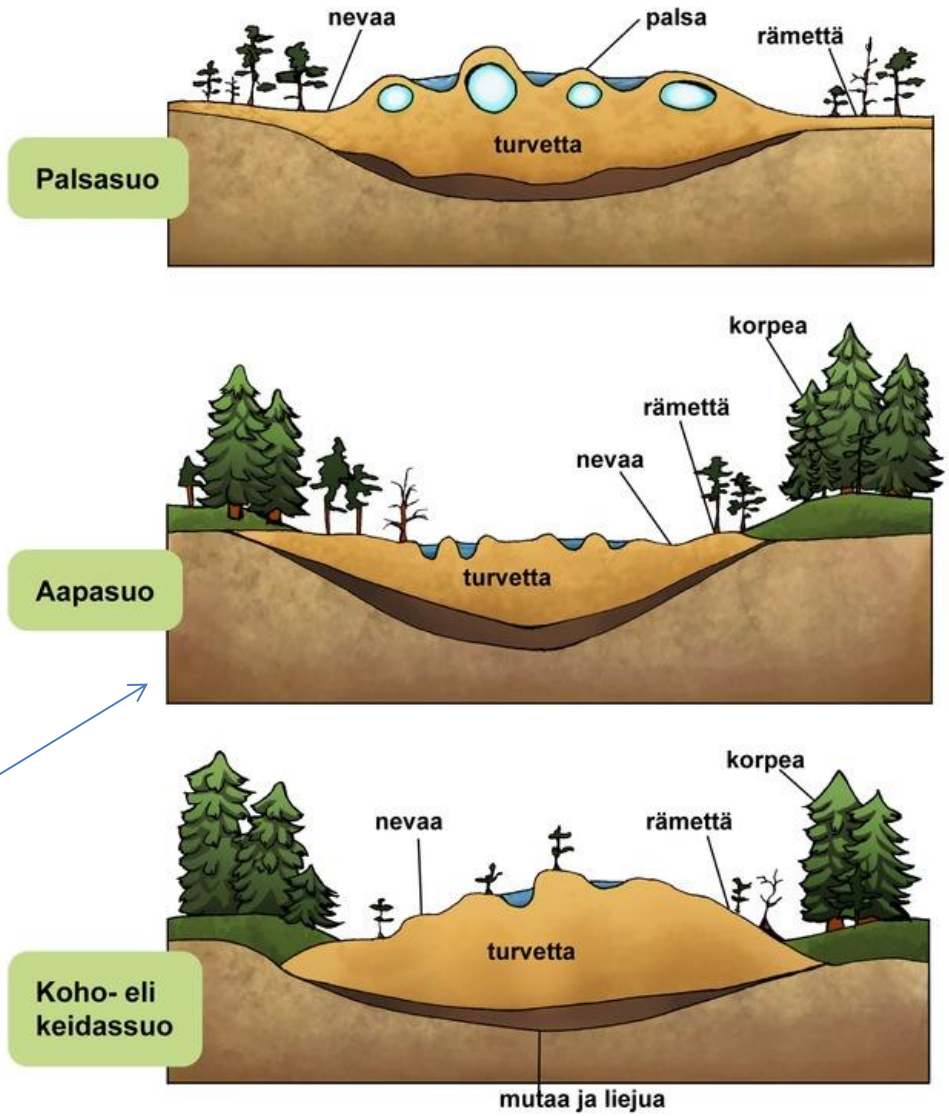
Soil is thin, nutrient-poor and acidic podzol

Flora consist mostly of cold-tolerant evergreen conifers with needle-like leaves, such as A) spruce (Picea abies) 50%, B) pine 35% (Pinus silvestris)
and broadleaves like C) birch 10% (Betula pubescens) and D) aspen (Tremula tremula) and other 5% (Alnus)

Fauna include woodpeckers, hawks, hare, fox, elk, bear and wolf

Bogs in Finland

As much as a third of Finland originally consisted of bogs and marshy woodlands, and it has even been suggested that the country's name in Finnish, *Suomi,* is derived from the Finnish word for bog - *suo.* Many place-names include the word *suo* or words for different kinds of marshes or bogs such as *korpi* - marshy spruce forest, *neva* - open bog, and *räme* - pine bog.

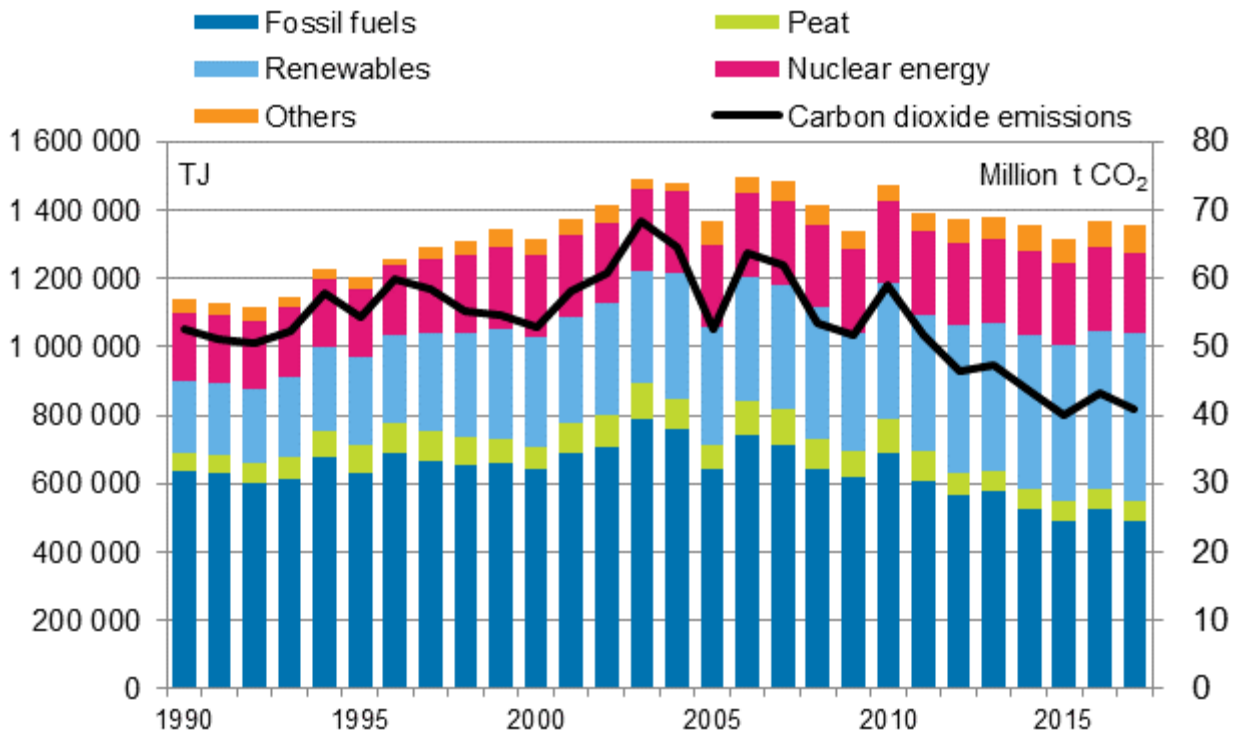


Forest industry in Finland consists of mechanical (timber) and chemical (paper and pulp) forest industry. Finland is one of the world's largest producer of pulp, paper and cardboard and one of Europe's largest producers of sawn timber. The forest industry directly and indirectly employs approximately 160,000 people in Finland. The industry's multiplier effects extend broadly into surrounding society**.**

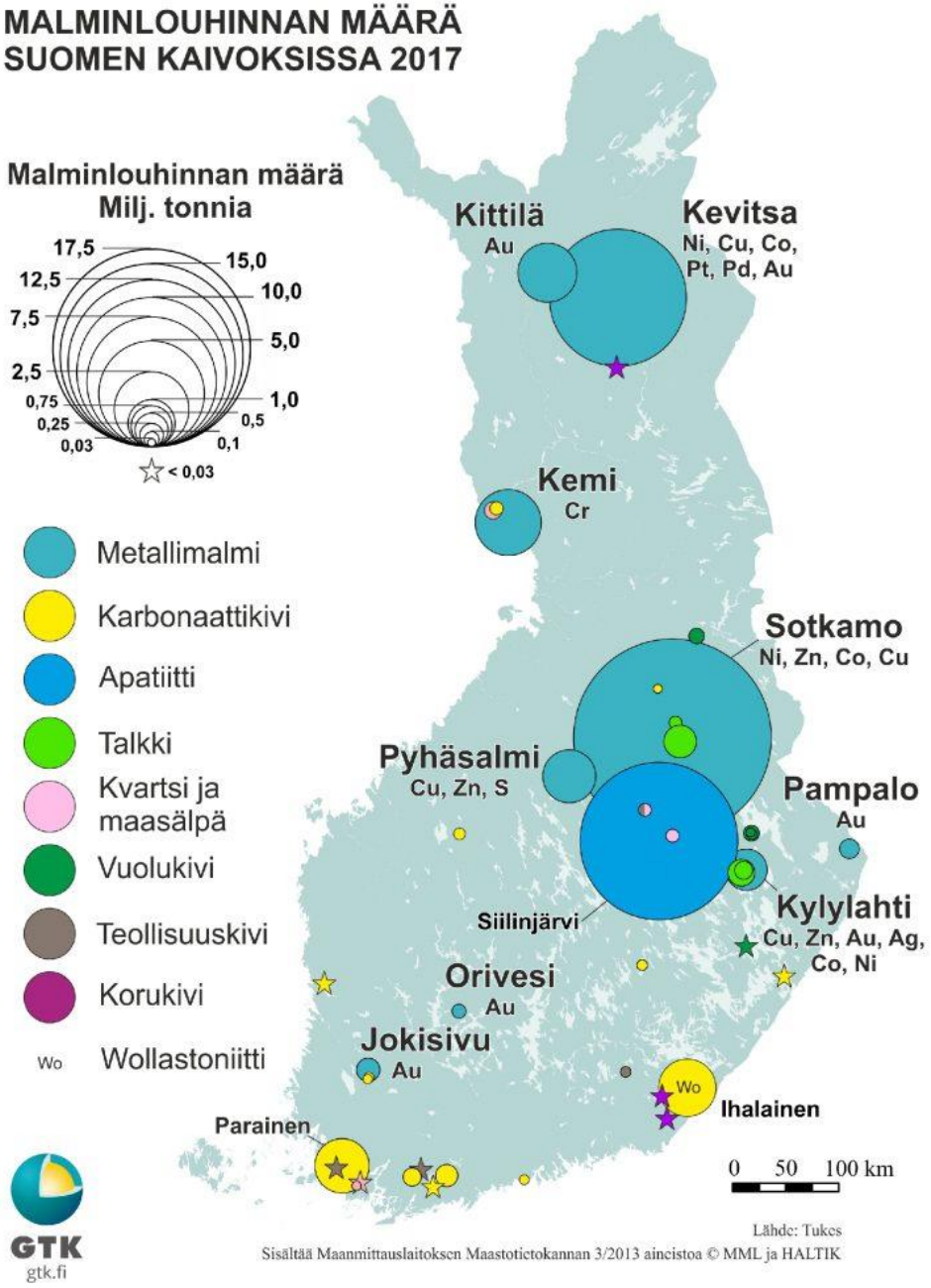
Chemical forest industry (also known as paper and pulp industry) produces paper, cardboard and pulp. Finland has 25 paper mills, 14 cardboard mills and 15 pulp mills.

Mechanical forest industry produces wooden items mechanically: sawing, turning and glueing. Sawmills are the largest employer of the sector. Sawmills and board production are highly automatised.

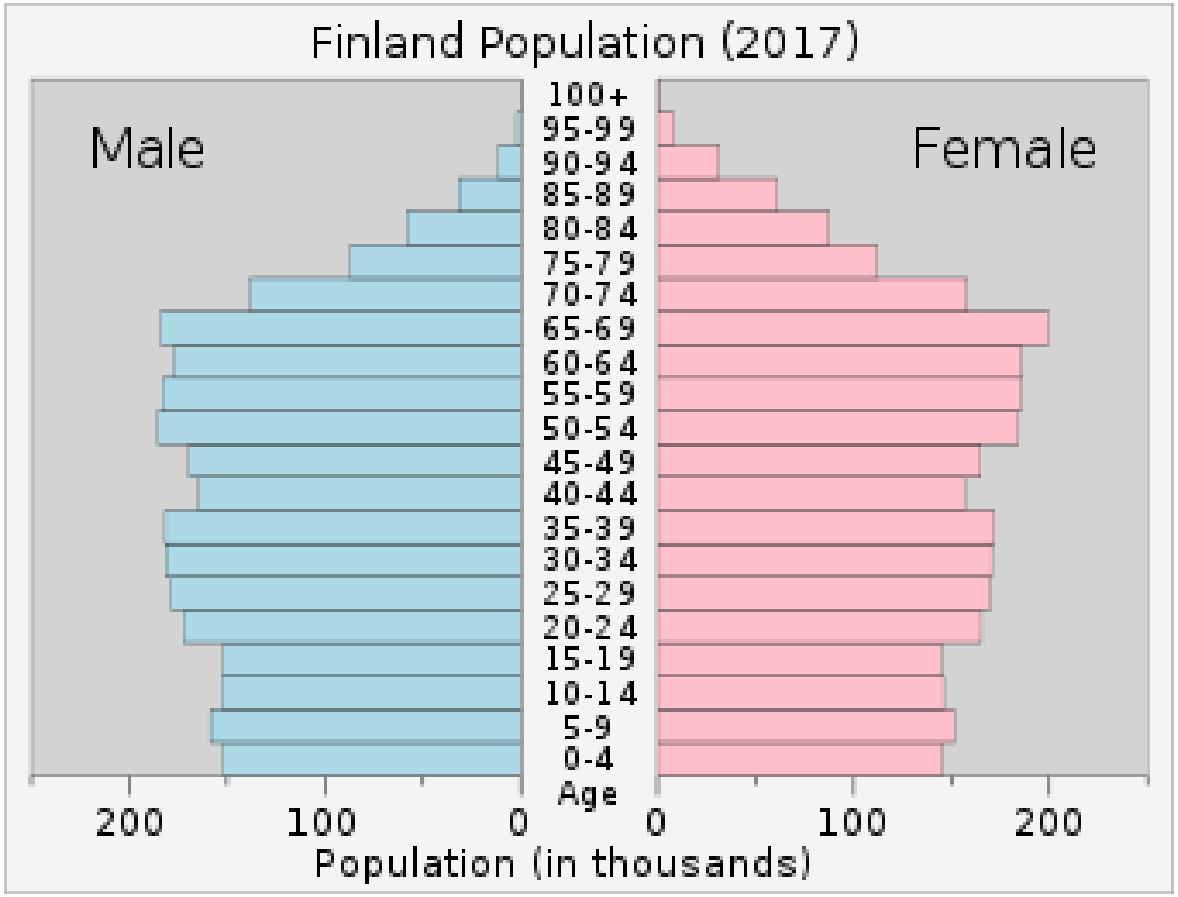
Energy in Finland



Mining and underground excavation



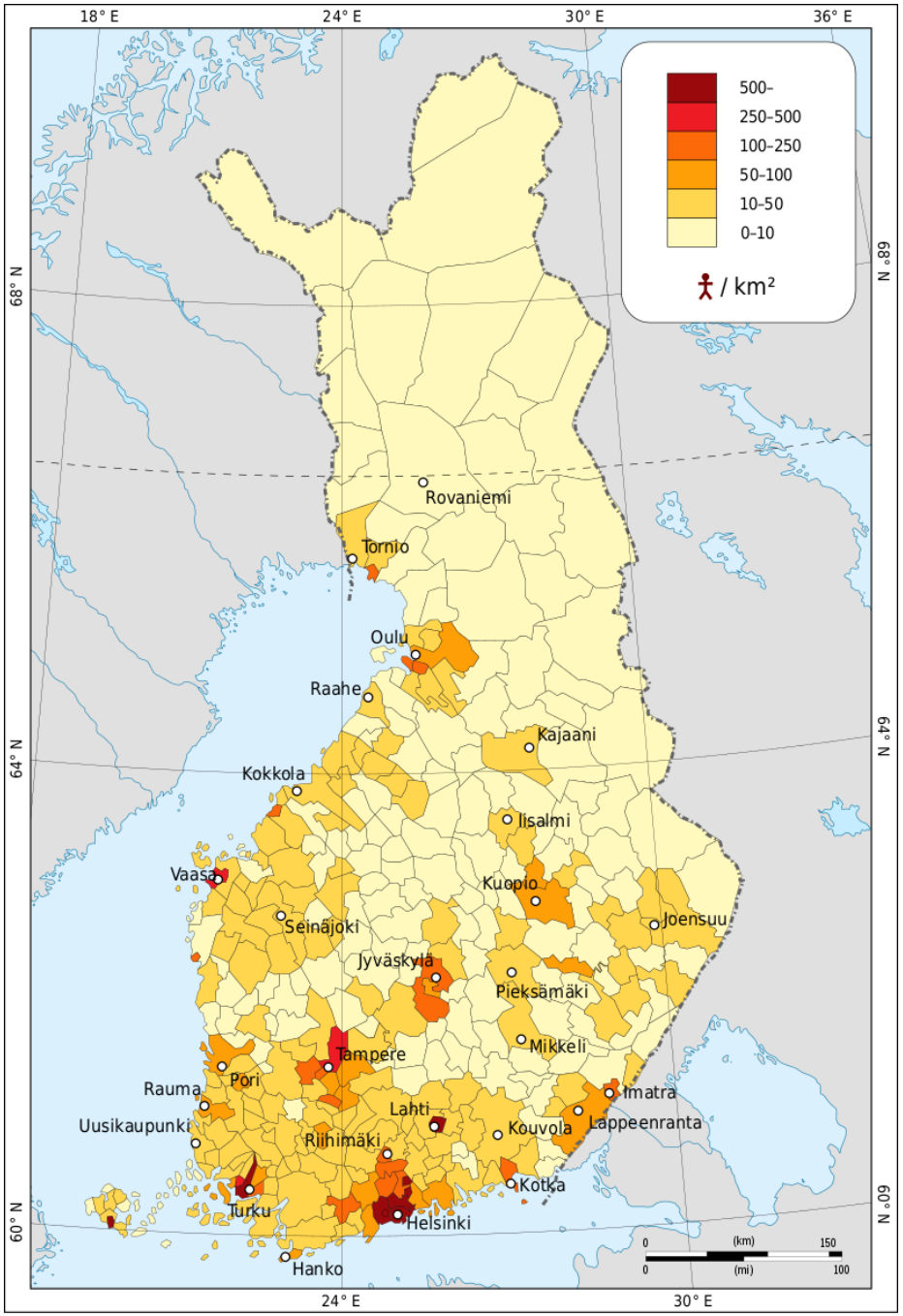
Population


Finland Population (2017)
Male
Female
100+
95-99
90-94
85-89
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
Age
200
100
0
0
100
200
Population (in thousands)

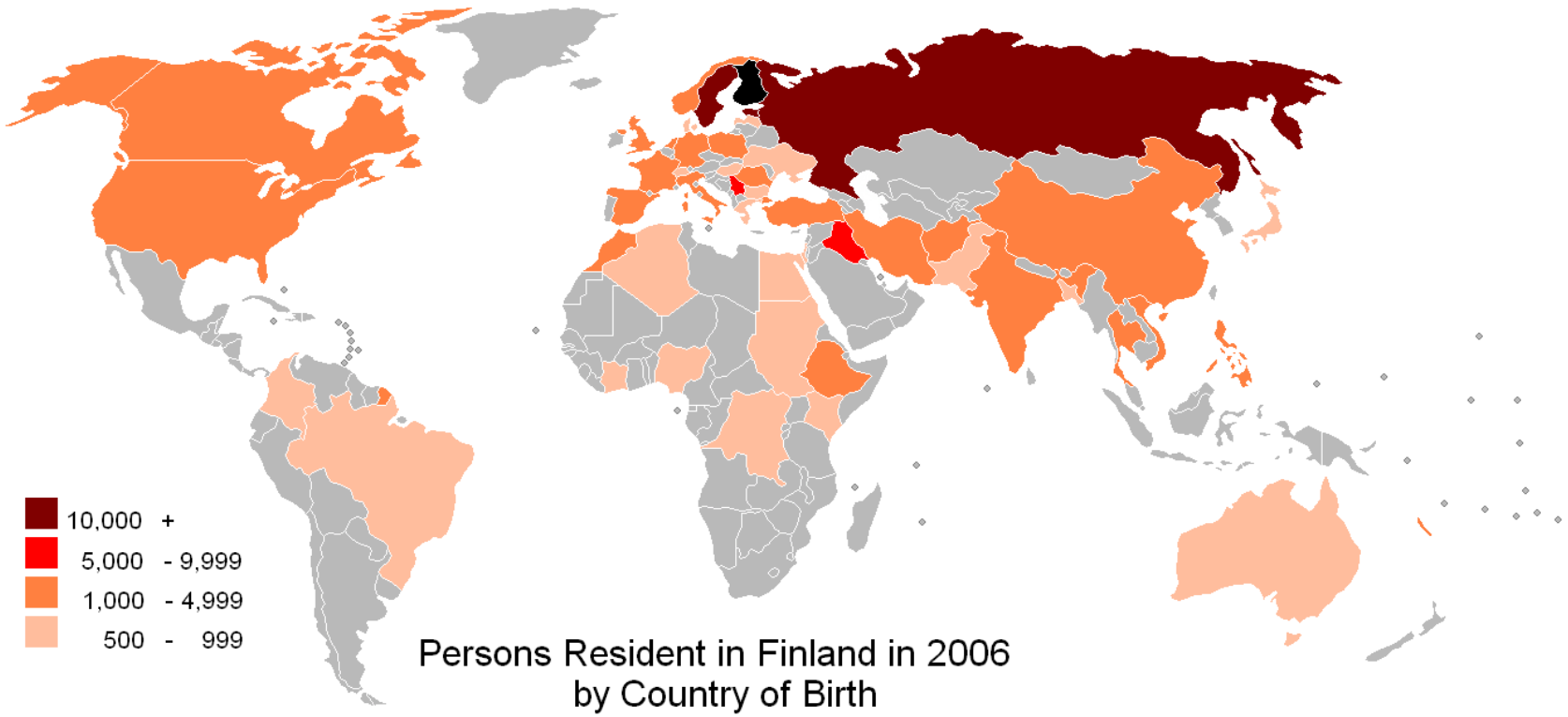
Demographic features of the population of Finland,.

Finland numbers some 5.5 million people and has an average population density of 17 inhabitants per square kilometre. The population is concentrated on the small southwestern coastal plain. About 85% live in towns and cities, with one million living in the Helsinki Metropolitan Area alone.

Finland is an relatively ethnically homogeneous country. The dominant ethnicity is the Finnish people but there are also notable historic minorities of Swedes, Sami and Roma people. As a result of recent immigration there are now also considerable groups of ethnic Russians, Estonians and Somalis in the country. The official languages are Finnish and Swedish, the latter being the native language of about five per cent of the Finnish population. From the 13th to the early 19th century Finland was a part of Sweden. With 73 percent of Finns in its congregation, the Lutheran Church is the largest religious group in the country.

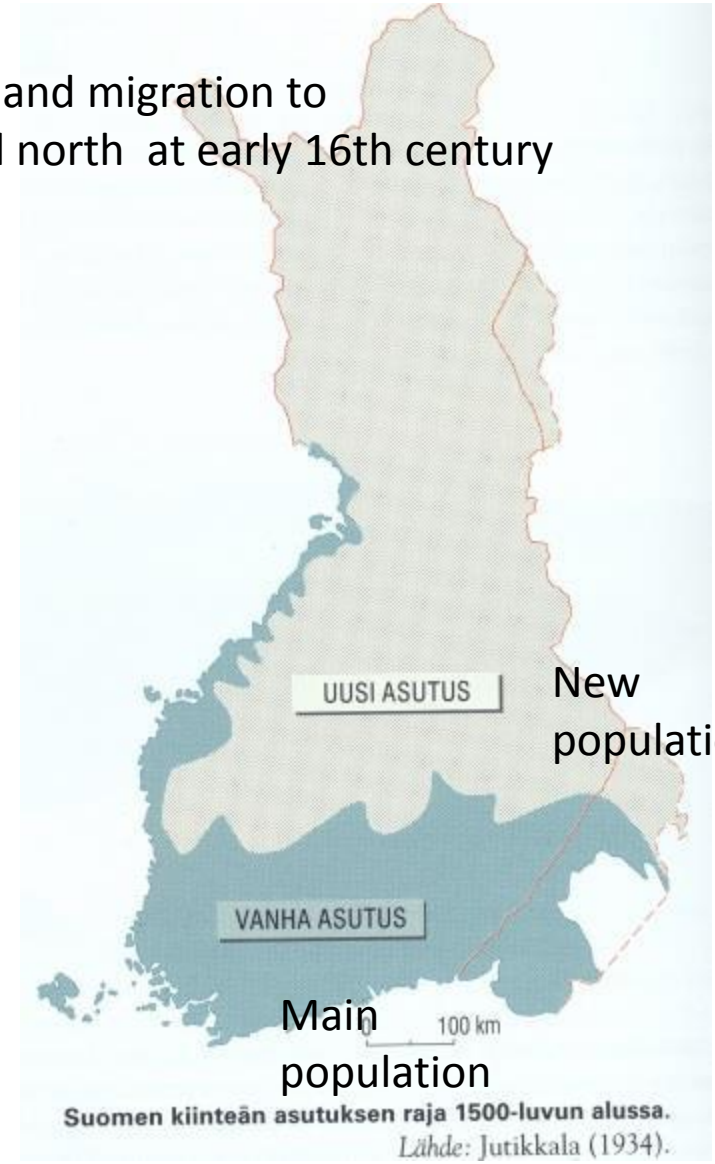


Immigration to Findand



Medieval Finland was not west or east, only forest and very few people. There was some small villages in southwest coastal area and primitive agriculture

Finnish population and migration to
new areas east and north at early 16th century

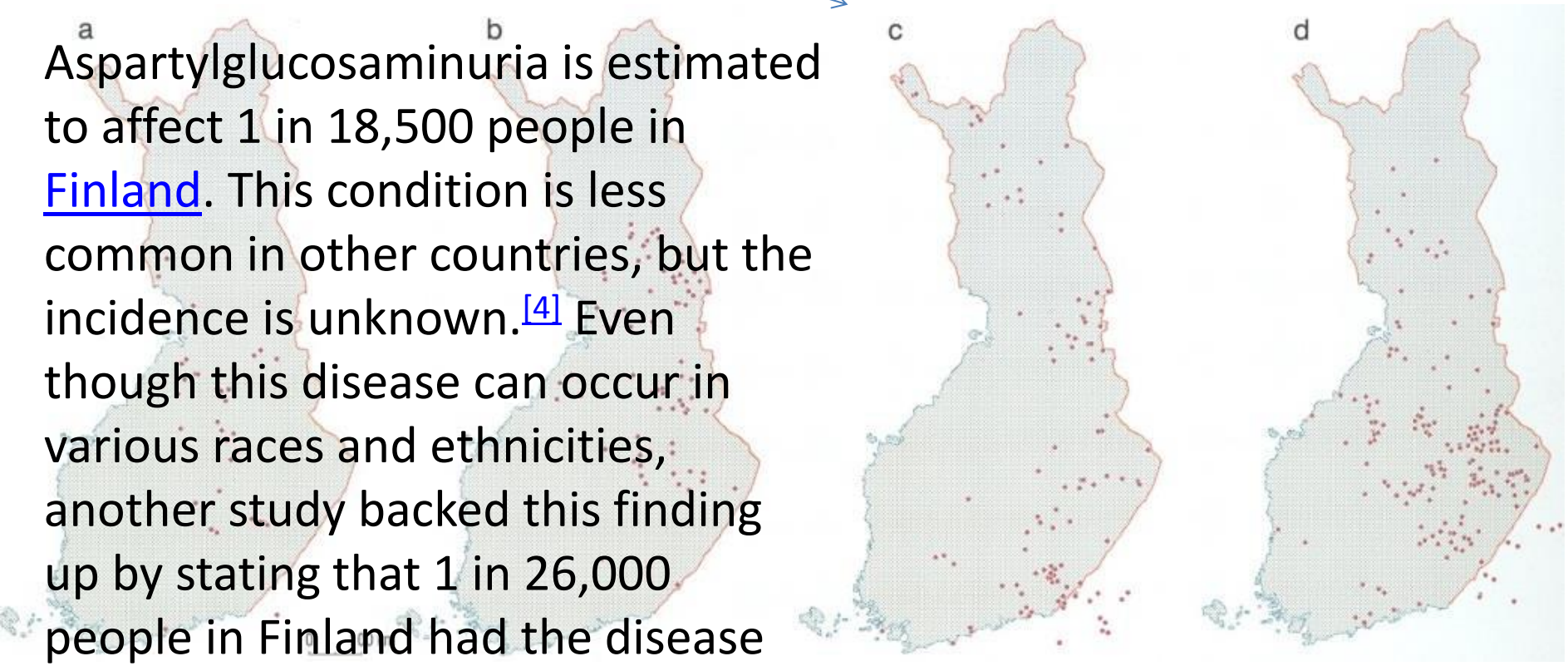


New population

Main population

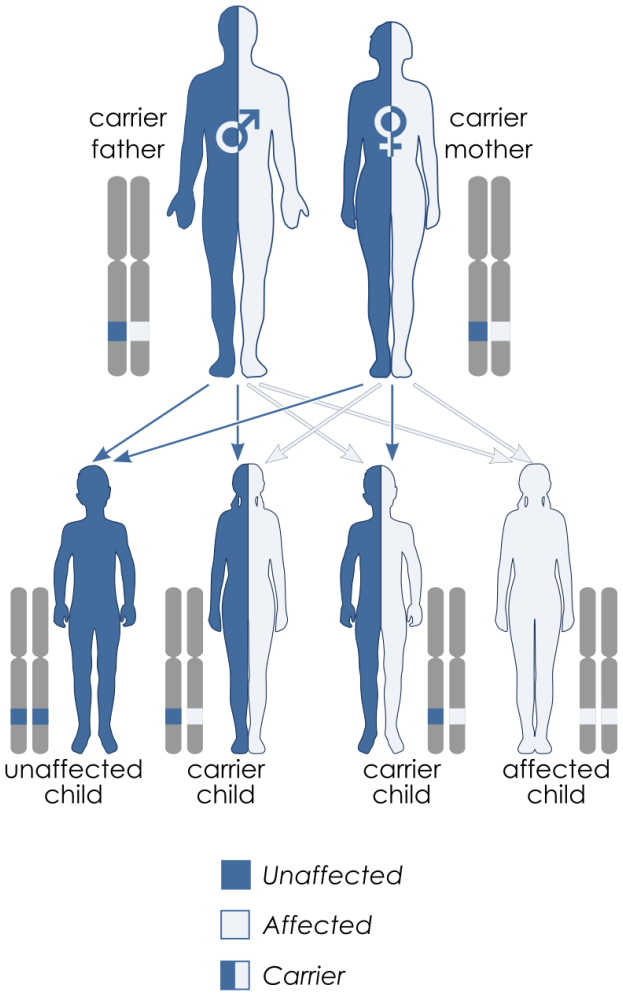
Suomen kiinteän asutuksen raja 1500-luvun alussa.
Lähde: Jutikkala (1934).

Aspartylglucosaminuria
(**AGU**) Map **C**

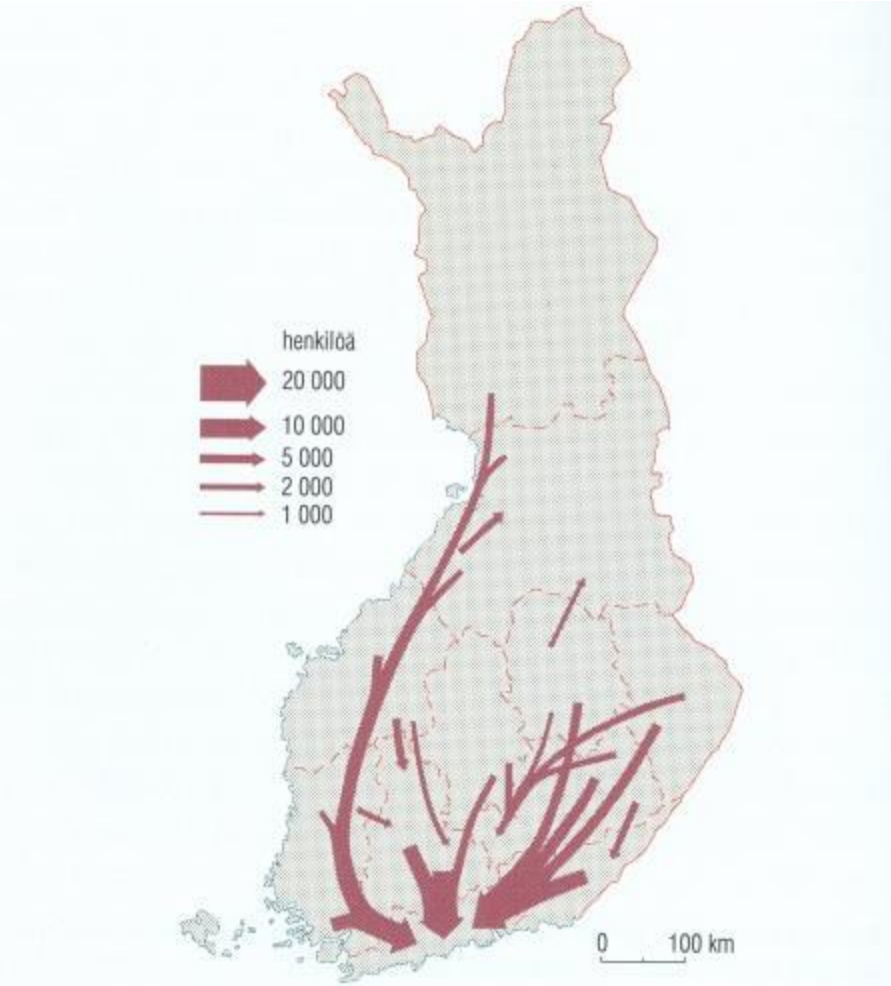


Aspartylglucosaminuria is estimated to affect 1 in 18,500 people in Finland. This condition is less common in other countries, but the incidence is unknown.[4] Even though this disease can occur in various races and ethnicities, another study backed this finding up by stating that 1 in 26,000 people in Finland had the disease and that 1 in 18,000 were carriers.[

Autosomal recessive inheritance

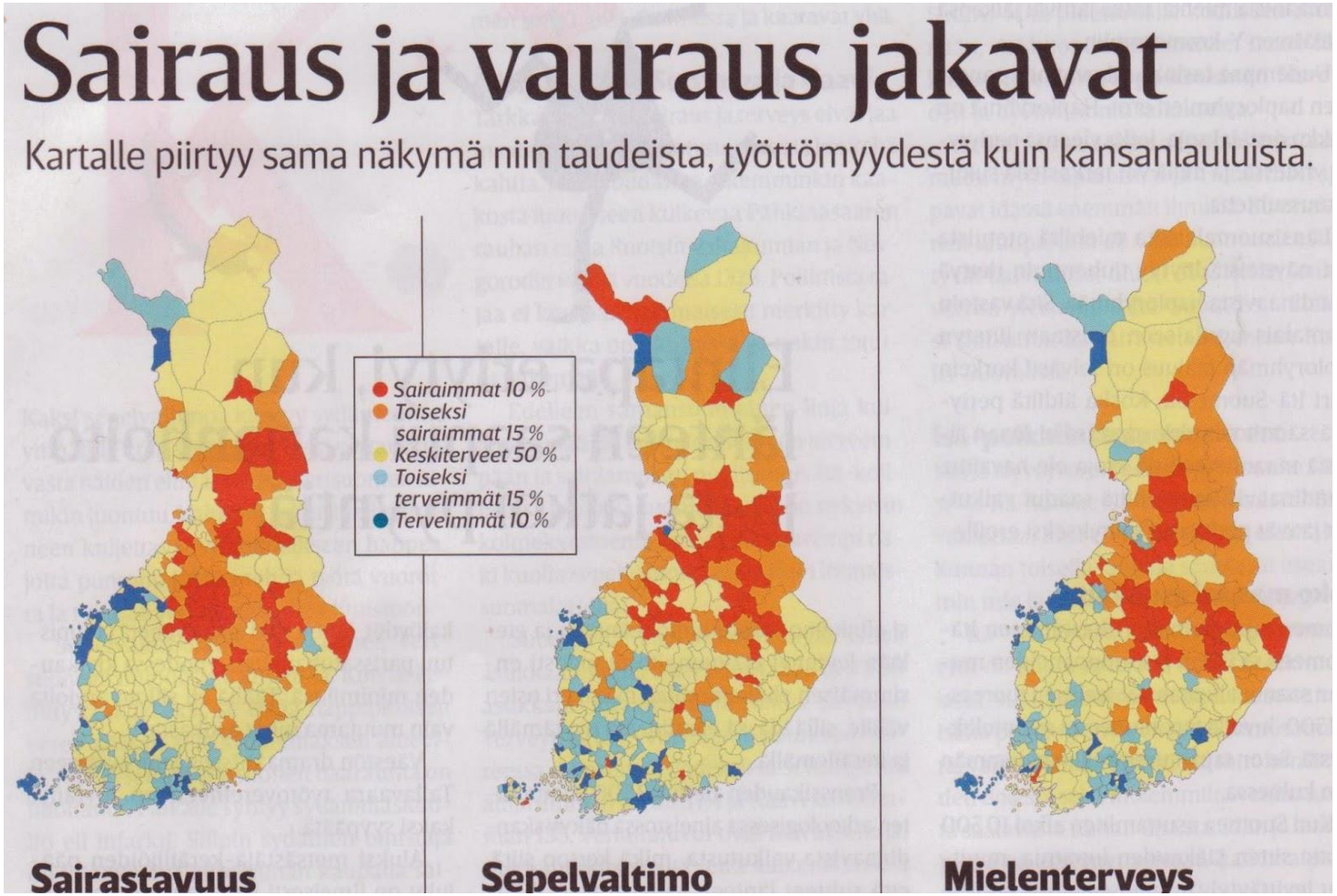


Aspartylglucosaminuria (**AGU**) is an inherited disease that is characterized by a decline in mental functioning, accompanied by an increase in skin, bone and joint issues.
The disease is caused by a defect in an enzyme known as aspartylglucosaminidase. This enzyme plays a significant role in our bodies because it aids in breaking down certain sugars (for example, oligosaccharides) that are attached to specific proteins (for example, glycoproteins). Aspartylglucosaminuria itself is characterized as a lysosomal disease because it does deal with inadequate activity in an enzyme's function.[1] Aspartylglucosaminidase functions to break down glycoproteins. These proteins are most abundant in the tissues of the body and in the surfaces of major organs, such as the liver, spleen, thyroid and nerves. When glycoproteins are not broken down, aspartylglucosaminidase backs up in the lysosomes along with other substances. This backup causes progressive damage to the tissues and organs.[2]



Maassamuuton virrat 1951–55: geenit sekoittuvat. 1950-luvulla voimistunut ja vilkkaana jatkunut maassamuutto on vähentänyt tautigeenien kohtaamisen todennäköisyyttä.

Lähde: Rikkinen (1980).

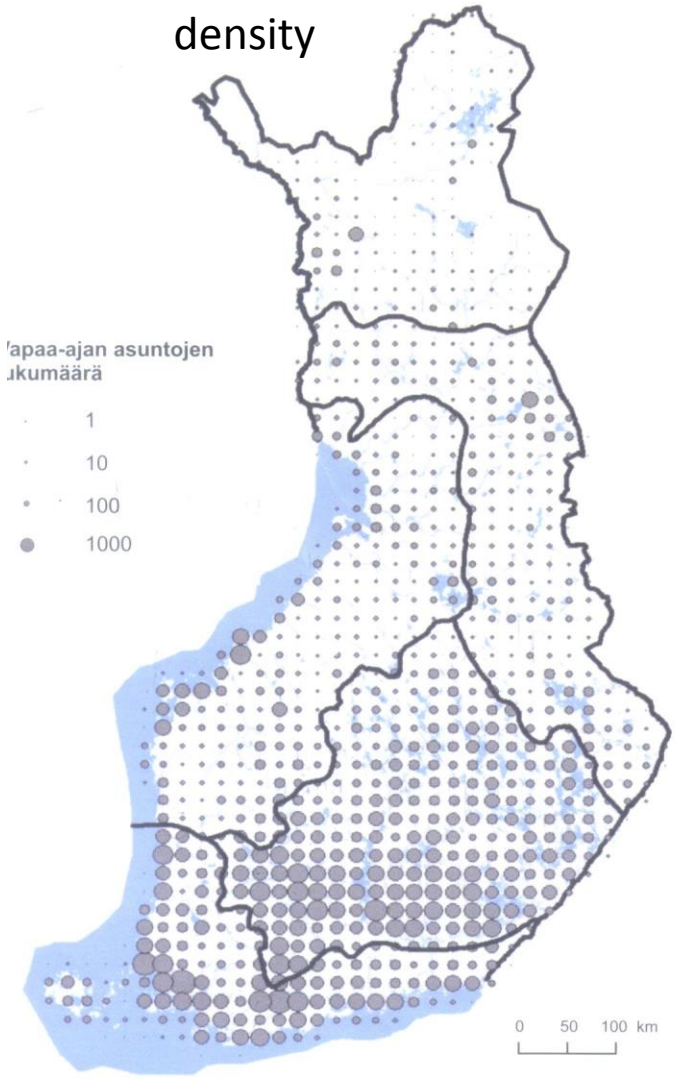


Healt proplems

Heart desease

Debression proplems

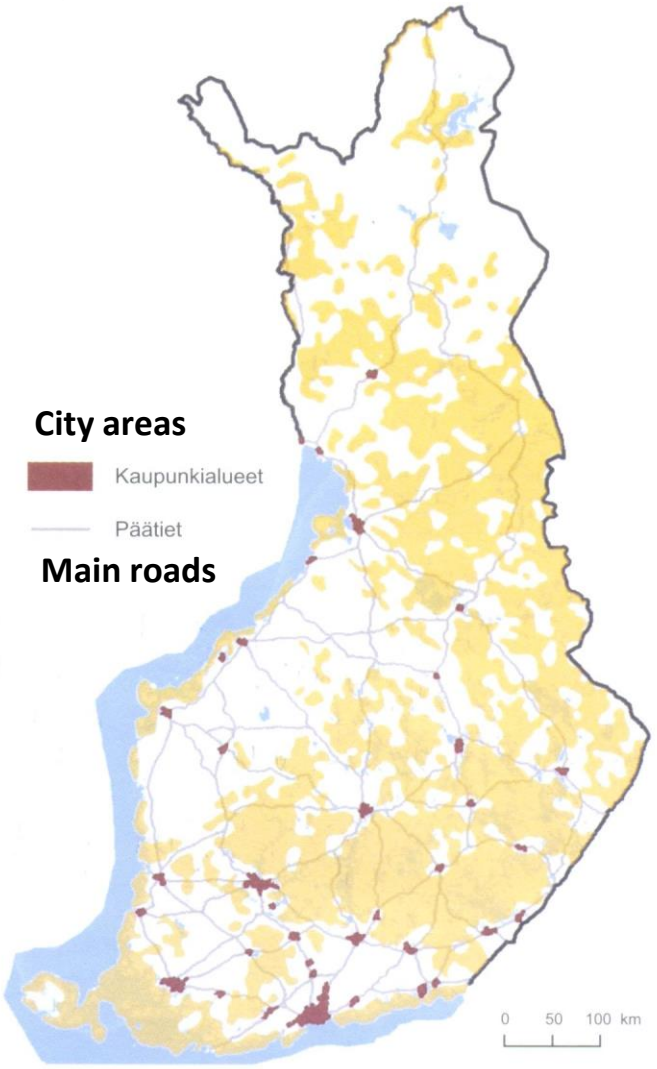
Summer time and Summer gottages ”mökki” and population density



Vapaa-ajan asuntojen lukumäärä 20 x 20 km ruuduissa vuonna 2011.

Lähde: Hiltunen & Rehunen 2014, Fennia.

Summer gottages



Maaseutualueet, joilla vapaa-ajan asunnot ovat vakinaisia asuntoja yleisempiä (keltaiset alueet).

de: Hiltunen & Rehunen 2014, Fennia.

Rular areas

Studends´
Mental Map
od Finland
2014

Studends´ Mental Map of the World 2014