

Appendix 1: Natural Endowments

The territory of Latvia is 64 589 km² and the population is slightly about 2 million. Thus, by both territory and population Latvia is one of the smallest countries in Europe.

A.2.1 Geography and climate

Latvia is located on the eastern coast of the Baltic Sea and on the western fringes of the Eastern European Plain, bordering with Estonia to the North, Russia to the East, Belarus to the South-East, and Lithuania to the South. The Gulf of Riga stretches deep into the country's territory, and all of its rivers belong to the Baltic Sea Basin. Two of Latvia's three main ports (Ventspils and Liepaja, with Riga being the third) are normally ice free in the winter.

Latvia is located in the temperate deciduous climate zone. A relatively flat terrain with an absence of major topographical features (the tallest hill is only a little over 316 metres above sea level) allows different air currents to rapidly cross the country's territory, resulting in rapidly changing weather conditions; the coastal parts of the country have a more oceanic climate (with cooler summers and warmer winters), whereas the inland regions have more of a continental climate (with a greater difference between winter and summer temperatures).

Latvia's position between Russia and Western Europe has historically allowed it to function as a transit hub for East-West trade. At the same time, the country's place between major European superpowers (particularly Germany and Russia) has meant that its development has been subject to geopolitical turmoil, and the territory of modern-day Latvia has been the battleground in devastating military conflicts: from the Great Northern War to both World Wars.

A.2.2 Resources: forests, land

Latvia is poorly endowed with mineral resources. While certain assets, such as partially renewable peat, and minerals like dolomites, clay, sand, and limestone, are extracted, they are common to the entire region and are not very valuable and are used mostly in construction.

However, Latvia is relatively rich in other natural resources, such as land, water and forest. Forests cover 3.47ha, or 54% of the territory of Latvia. The growing stock of wood in forests and on other wooded land is 633.4 million cubic meters, and the stock is increasing (as compared to, for example, 570.1 million m³ in 2005), in line with trends in other EU countries. Despite the relative abundance of salt and fresh waters, the total fishery catch in Latvia in 2010 was very modest at not more than 164 thousand tons. The water and especially sea resources contain potential for obtaining renewable energy, but apart from the hydro power generated on the river Daugava remain underdeveloped.

Forests

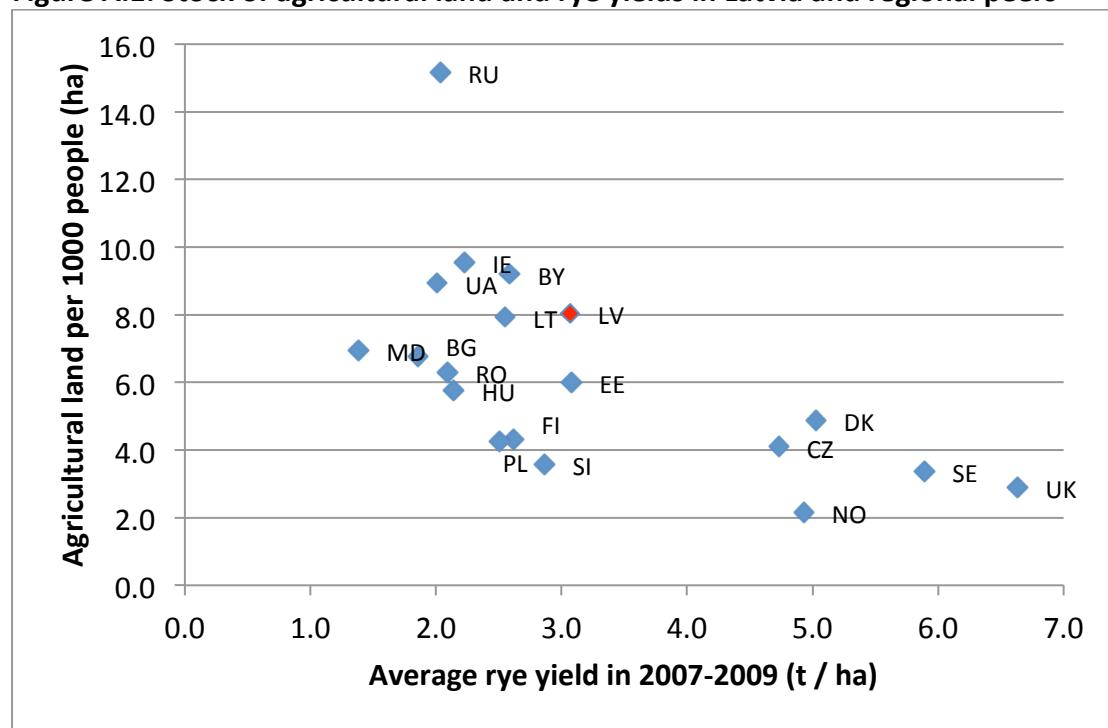
Latvia has vast forest resources relative to its size and compared with neighbours. The total area of forests is about 50% larger in Latvia than in Estonia or Lithuania, and there is more forestland in Latvia than in several larger

countries, such as Hungary or the United Kingdom. The total volume of wood in Latvian forests has increased by 40% since 1990, partly through an increase in the total area of forestland (growth of 20% over the period, some of it on account of unused agricultural lands), and partly through measures to increase the yields of forestlands/

Agricultural land

Relative to its population, Latvia has a large stock of cultivable agricultural land, which means that it has the capacity to provide itself with agricultural goods and have enough left for export. Figure A.1 shows that the per capita stock of arable land in Latvia is higher than in most countries of eastern and northern European countries and is just below that of the Ukraine. In the same figure, we include the average rye yield as a proxy for the fertility of the soil, and it can be seen that in this Latvia is slightly above average relative to regional peers. However, the agricultural soil in Latvia is poor in mineral nutrients, and, after a ten-fold drop in the use of mineral fertiliser since 1990, there has been a marked decrease in soil fertility; this indicates that there is large potential for increasing yields.

Figure A.1: Stock of agricultural land and rye yields in Latvia and regional peers



Source: UN Statistics Division; UN Food and Agriculture Organization.

Peat deposits

The Latvian climate is favourable for the formation and renewal of peat (accumulated remains of plants), which can be used as a fuel. Latvia has large peat deposits of relative to the size of its territory but these deposits are considerably smaller than those of Finland and Sweden. The extraction of peat has declined from the high levels observed before 1990, but it has been estimated by the European Soil Data Centre that at 1999 extraction levels deposits would be sufficient for a thousand years.

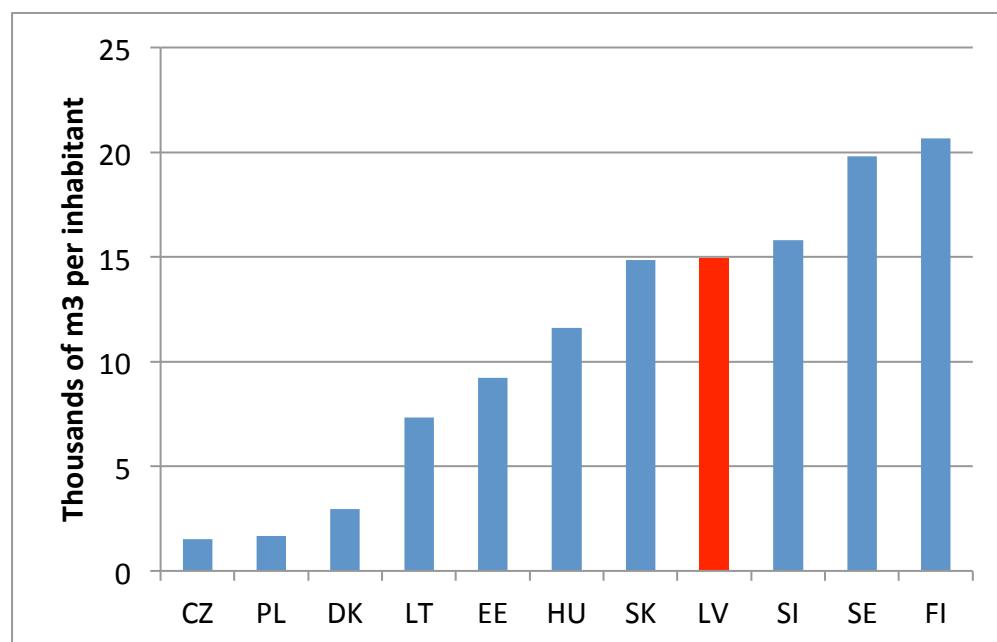
Raw building materials

Latvia has substantial deposits of dolomite, gypsum and gravel, all of which can be used to make construction materials, particularly concrete and asphalt. These resources are extracted in open-air quarries and gravel pits all over the country. It has been estimated by the Latvian Environment, Geology and Meteorology Centre that at 2000 usage levels deposits would be sufficient for six thousand years.

Freshwater

Freshwater, while not traditionally seen as an important natural resource in Latvia, is growing more scarce and more important with the increase in global population and mounting concerns over global warming. The temperate climate and abundance of lowlands has made Latvia rich in rivers and lakes. Latvia's geology is also favourable to the formation of groundwater, and UNESCO has classified the territory of Latvia as part of a major groundwater basin with a high annual groundwater recharge rate. Figure A.2 shows that Latvia has a large volume of freshwater per inhabitant relative to European comparator countries.

Figure A.2: Total freshwater selected countries



Source: Eurostat