

SLOVAKIA



Source: esri

General

Slovakia - officially the Slovak Republic - is a landlocked country in Central Europe. It is bordered by Poland in the North, Ukraine in the East, Hungary in the South, Austria in the West, and the Czech Republic in the Northwest. The country has an area of 4.90 Mha (million hectares) with in 2020 a population of 5.4 million, or 1.10 persons per ha (Wikipedia and United Nations, 2019).

Climate and geography

The Slovak climate lies between the temperate and continental climate zones with relatively warm summers and cold, cloudy and humid winters. The weather differs from the mountainous North to the plains in the South. In Slovakia, there are four seasons, each season (Spring, Summer, Autumn and Winter) lasts three months. The dry continental air brings in the summer heat and winter frosts. In contrast, oceanic air brings rainfall and reduces summer temperatures. In the lowlands and valleys there is often fog, especially in winter (source: Wikipedia).

The Slovak landscape is noted primarily for its mountainous nature, with the Carpathian Mountains extending across most of the northern half of the country. The largest lowland is the fertile Danubian Lowland in the Southwest, followed by the Eastern Slovak Lowland in the Southeast. Most of the rivers stem in the Slovak mountains. Some only pass through and the others make a natural border with surrounding countries. The biggest volume of discharge in Slovak rivers is during spring, when the snow melts from the mountains. The only exception is the Danube, whose discharge is the greatest during summer when the snow melts in the Alps. It is the largest river that flows through Slovakia (source: Wikipedia).

Existing polders

The Group Polder Development (1982) states that there are polders along the Danube River.

Semancová *et al.* (2014) describe research in the Dry Polder of Besa (Bešiansky polder). This is a non-regularly flooded area, which is said to be the largest dry polder in Central Europe.

Some characteristics of the polders in Slovakia are shown in Table I.

Proposed polders

No proposed polders have been identified.

References

Group Polder Development, Department of Civil Engineering, Delft University of Technology, 1982.

Polders of the World. Compendium of polder projects. Delft, the Netherlands

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Semancová P., D. Fazekašová, D. Kotorová, E. Michaeli and S. Torma, 2014. The spatial variability of soil conditions in the dry polder of Besa (Slovakia). *Journal of International Scientific Publications: Ecology and Safety.* Volume 8, ISSN 1314-7234, <http://www.scientific-publications.net>.

United Nations, Department of Economic and Social Affairs, Population Division. 2019. *World Population Prospects, medium prognosis. The 2019 revision.* New York, USA.

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Table I. General characteristics of existing polders in Slovakia

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Komarno Polders		5,000	RLL	47° 45' N	18° 10' E	103	Agriculture
Dry Polder of Besa		3	RLL	48° 32' N	21° 57' E	98	Agriculture
Total		5,003					

*) RLL = reclaimed low-lying land; LGS = land gained on the sea; DL = drained lake