

## BULGARIA



Source: esri

### General

Bulgaria - officially the Republic of Bulgaria - is bordered by Romania in the North, Serbia and Macedonia in the West, Greece and Turkey in the South, and the Black Sea in the East. The country has an area of 11,1 Mha (million hectares) with in 2020 a population of 6.95 million, or 0.63 persons per ha (Wikipedia and United Nations, 2020).

### Climate and geography

Bulgaria has a changeable climate, which results from being positioned at the meeting point of the Mediterranean and Continental air masses combined with the barrier effect of the mountains. Northern Bulgaria averages 1 °C cooler, and registers 200 mm more precipitation, than the regions south of the Balkan mountains. Temperature amplitudes vary significantly in different areas. The lowest recorded temperature is -38.3 °C, while the highest is 45.2 °C. Precipitation averages about 630 mm per year, and varies from 500 mm in Dobrudzha to more than 2,500 mm in the mountains. Continental air masses bring significant amounts of snowfall during winter (Source: Wikipedia).

The most notable topographical features are the Danube Plain, the Balkan Mountains, the Thracian Plain, and the Rhodope Mountains. The southern edge of the Danube Plain slopes upward into the foothills of the Balkans, while the Danube River defines the border with Romania. The Thracian Plain is roughly triangular, beginning southeast of Sofia and broadening as it reaches the Black Sea coast.

Plains occupy about one-third of the territory. Most rivers are short, with low water levels. The longest river located solely at the Bulgarian territory, the Iskar, has a length of 368 km. Other major rivers include the Struma and the Maritsa in the South.

### Existing polders

The Group Polder Development (1982) states that there is a chain of small and larger polders along the Danube River with a total area of about 75,000 ha.

Characteristic data of the polders in Bulgaria are shown in Table I.

### Proposed polders

No proposed polders have been identified.

### References

- Diankov, Z.I., 1983. *Groundwater flow dynamics in Bulgarian riverside polders - A numerical model investigation*. In: Proceedings International Symposium 'Polders of the World'. International Institute for Land Reclamation and Improvement, Wageningen, the Netherlands.
- Group Polder Development, Department of Civil Engineering, Delft University of Technology, 1982. *Polders of the World. Compendium of polder projects*. Delft, the Netherlands
- International Commission for the Protection of the Danube River, 2018. *A shared river. Managing the Danube River Basin*. Vienna, Austria.
- Kochev, K. and B. Yovkov, 1983. *Some methods for selecting and designing of a proper drainage system in a river polder*. In: Proceedings International Symposium 'Polders of the World'. International Institute for Land Reclamation and Improvement, Wageningen, the Netherlands.
- United Nations, Department of Economic and Social Affairs, Population Division. 2019. *World Population Prospects, medium prognosis. The 2019 revision*. New York, USA.

Table I. General characteristics of existing polders in Bulgaria

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Polders along Danube River		75,000	RLL	43° 39' N	25° 03' E		Agriculture
Total		75,000					

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

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*Lelystad, March 2022*