HUNGARY



Source: esri

General

Hungary is located in the Carpathian Basin in Central Europe. It borders Slovakia in the North, Ukraine in the Northeast, Austria in the Northwest, Romania in the East, Serbia in the South, Croatia in the Southwest, and Slovenia in the West. The country has an area of 9.30 Mha (million hectares) with, in 2022, a population of 9.97 million, or 1.07 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

Hungary has a temperate seasonal climate, with generally warm summers with low overall humidity levels but frequent rain showers and cold snowy winters. Average annual temperature is 9.7 °C. Average high temperature in the summer is 23 to 28 °C and average low temperature in the winter is -3 to -7 °C. The average yearly rainfall is approximately 600 mm (source: Wikipedia).

Hungary's geography has traditionally been defined by its two main waterways, the Danube and Tisza rivers. The common tripartite division of the country into three sections: beyond the Danube, beyond the Tisza between the Danube and Tisza, is a reflection of this. The Danube flows North-South right through the centre of Hungary, and the entire country lies within its drainage basin. Lake Balaton and Lake Hévíz are the largest lake in Central Europe and the largest thermal lake in the world, respectively. The Great Hungarian Plain stretches across most of the eastern and south-eastern areas of the country. In the north of the Plain are the foothills of the Carpathians in a wide band near the Slovakian border.

Existing polders

Csekő and Hayde (2004) describe that between 1786 and 1812 9,000 ha has been impoldered at an estate in Magyaróvár. They also mention the draining of the 46,000 ha Sárrét marsh.

The Group Polder Development (1982) states that there are some polders along the Danube River and that some of them are drained with pumping stations.

General characteristics of the polders in Hungary are shown in Table I.

Proposed polders

No proposed polders have been identified.

Location of the polders in Hungary as shown on the World polder map

The location of the polders in Hungary is shown in Figure 1. The pictures by Prof. Adriaan Volker are shown in Table II.

References

- Csekő, G. and L. Hayde, 2004. *Danube Valley. History of irrigation, drainage and flood control.* International Commission on Irrigation and Drainage (ICID). New Delhi, India.
- 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.
- United Nations, Department of Economic and Social Affairs, Population Division. 2022. World population prospects, medium prognosis. The 2022 revision. New York, USA.



Figure 1. Location of the polders in Hungary (source: esri – Batavialand)

Bart Schultz

Lelystad, January 2024

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use	
Estate in Magyaróvár	1786 - 1812	9,000	RLL	47° 53' N	17º 19' E	117	Agriculture	
Sárrét marsh		46,000	RLL	47º 16' N	21º 13' E	86	Agriculture	
Polders along the Danube River			RLL				Agriculture	
Total		55,000						

Table I. General characteristics of existing polders in Hungary

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

Table III. Pictures of polders and lowlands in Hungary by Prof. Adriaan Volker								
A2 001/VII.2.1	A2 002/VII.2.2	A2 003/VII.2.3	A2 004/VII.2.4					
Prof. Adriaan Volker in a meeting,	Prof. Adriaan Volker in a meeting,	Prof. Adriaan Volker at excursion,	Prof. Adriaan Volker at excursion,					
1986	1986	1986	1986					
A2 005/VII.2.5	A2 006/VII.2.6							
Prof. Adriaan Volker at excursion	Prof. Adriaan Volker in discussion							
and behind a microphone, 1986	with, among others,							
	Ir. Meulenkamp (middle, sitting)							

Table III. Pictures of polders and lowlands in Hungary by Prof. Adriaan Volker