

CROATIA



Source: esri

General

Croatia - officially the Republic of Croatia - is located on the Adriatic Sea at the crossroads of Central and Southeast Europe. It is bordering Hungary in the Northeast, Serbia in the East, Bosnia and Herzegovina in the Southeast, Montenegro in the Southeast, the Adriatic Sea in the Southwest and Slovenia in the Northwest. Part of the territory in the extreme south surrounding Dubrovnik is a practical exclave connected to the rest of the mainland by territorial waters, but separated on land by a short coastline strip belonging to Bosnia and Herzegovina around Neum. The country has an area of 5.66 Mha (million hectares) with, in 2022, a population of 4.03 million, or 0.71 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

Mean annual precipitation ranges between 600 mm and 3,500 mm depending on geographic region and prevailing climate type. The least precipitation occurs in the outer islands (Biševo, Lastovo, Svetac, Vis) and in the eastern parts of Slavonia. However, in the latter case, it occurs mostly during the growing season. The maximum precipitation occurs on the Dinaric Mountain range and in Gorski Kotar. Prevailing winds in the interior are light to moderate Northeast or Southwest, and in the coastal area, prevailing winds are determined by local area features. Higher wind velocities occur more often in cooler months along the coast, generally as Bura or less frequent as Sirocco. The sunniest parts of the country are the outer islands, Hvar and Korčula, where are more than 2,700 hours of sunshine per year, followed by the middle and southern Adriatic Sea area in general and northern Adriatic coast, all with more than 2,000 hours of sunshine per year (source: Wikipedia).

Elevation ranges from the mountains of the Dinaric Alps near the border with Bosnia and Herzegovina in the South to the shore of the Adriatic Sea, which makes up its entire southwest border. Insular Croatia consists of over a thousand islands and islets. The hilly northern parts of Hrvatsko Zagorje and the flat plains of Slavonia in the East, which is part of the Pannonian Basin are traversed by major rivers such as Danube, Drava, Kupa, and Sava. The Danube runs through the city of Vukovar in the extreme East and forms part of the border with Serbia (source: Wikipedia).

Existing polders

The Group Polder Development (1982) mentions that in the Sava River area in 1970 a pilot polder of 520 ha has been constructed to gain experience with field drainage (Figure 1).

There are also polders in the downstream part of Neretva River.

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

Proposed polders

No proposed polders have been identified.

Location of the polders in Croatia as shown in the World polder map

The location of the polders in Croatia is shown in Figure 2.

References

- Alphen, J. van and Q. Lodder, 2006. Integrated flood management: experiences of 13 countries with their implementation and day-to-day management. *Irrigation and Drainage*. 55.S1. 159-171.
- 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.

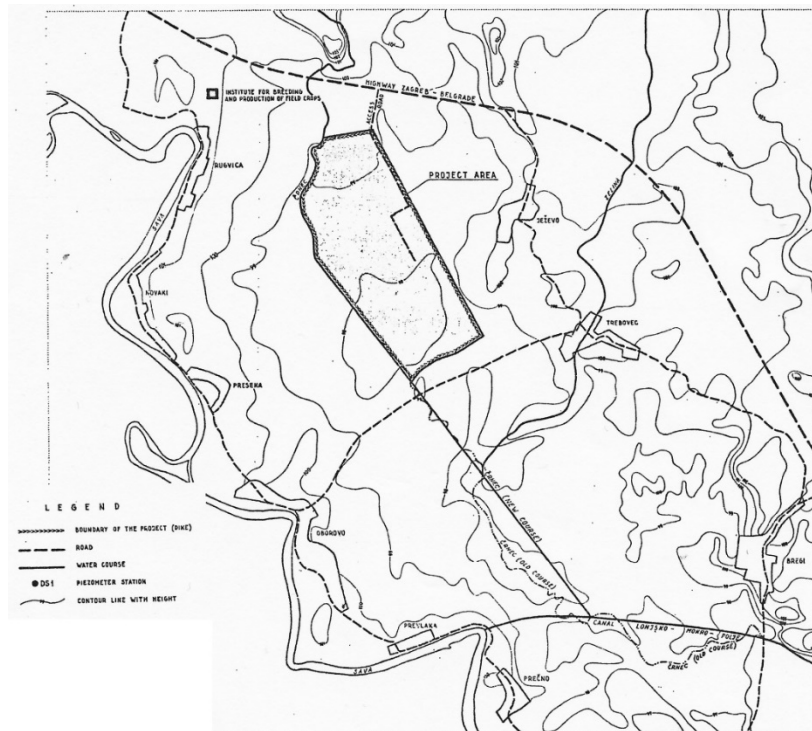


Figure 1. Polder area in the Sava River Valley (Group Polder Development, 1982)



Figure 2. Location of the polders in Croatia (source: esri – Batavialand)

Bart Schultz

Lelystad, November 2023

Table I. General characteristics of existing polders in Croatia

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Pilot polder in Sava River Valley		520	RLL	45° 43' N	16° 16' E	96	Agriculture
Polders in the downstream part of Neretva River			RLL	43° 2' N	17° 31' E	0	Agriculture
Total		520					

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