

CROATIA



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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 2020 a population of 3.85 million, or 0.68 persons per ha (Wikipedia and United Nations, 2019).

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 is recorded 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 levels are observed 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 are more often recorded in cooler months along the coast, generally as bura or less frequently as sirocco. The sunniest parts of the country are the outer islands, Hvar and Korčula, where more than 2700 hours of sunshine are recorded per year, followed by the middle and southern Adriatic Sea area in general and northern Adriatic coast, all with more than 2000 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.

Existing polders

The Group Polder Development mentions that in the area of Marava River there is a polder of 3000 ha. In addition they mention 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) (Group Polder Development, 1982).

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

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

Proposed polders

No proposed polders have been identified.

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.

Table I. General characteristics of existing polders in Croatia

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Polder in Marava River Valley		3000	RLL	43° 39' N	25° 03' E	0	Agriculture
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				
Total		3520					

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