

LATVIA



General

Latvia - officially the Republic of Latvia - is one of the Baltic States of Northern Europe. It is bordered by Estonia in the North, Lithuania in the South, in the East is Russia, and Belarus in the Southeast, as well as sharing a maritime border with Sweden in the West. The country has an area of 6.46 Mha (million hectares) with in 2020 a population of 1.9 million, or 0.29 persons per ha (Wikipedia and United Nations, 2019).

Climate and geography

Source: esri

The country has a temperate seasonal climate. Coastal regions, especially the western coast of Courland Peninsula, has a more maritime climate with cooler summers and milder winters, while eastern parts have a more continental climate with warmer summers and harsher winters. Latvia has four pronounced seasons of near-equal length. Winter starts in mid-December and lasts until mid-March. Winters have average temperatures of -6 °C and are characterized by a stable snow cover, bright sunshine, and short days. Severe spells of winter weather with cold winds, extreme temperatures of around -30 °C and heavy snowfalls are common. Summer starts in June and lasts until August. Summers are usually warm and sunny, with cool evenings and nights. Summers have average temperatures of around 19 °C, with extremes of 35 °C. Spring and autumn bring fairly mild weather.

Most of Latvia's territory is below 100 m+MSL (mean sea level). The largest lake, Lubāns, has an area of 80,700 Mha.

A large part of the agricultural land requires drainage. There have been many land reclamation projects involving the installation of subsurface drain pipes, the straightening and deepening of natural streams, the digging of open drains, and the construction of dikes. During the 1960s and 1970s, drainage work absorbed about one-third of all agricultural investments in Latvia. Although accounting for drained land in 0.3% of the territory, Latvia was responsible for 11% of all artificially drained land in the former Soviet Union.

Existing polders

Based on a Cabinet Order by the Minister of the Environment (2007) there are 58 polders with a total area of 40,000 ha. This represents approximately 1.6% of total utilised agricultural area. The largest areas of polders are in the region of Rīga around Lake Babītes Ezers, in the Carnikava and Ādaži neighbourhood, in the Liepāja Region around the lakes Liepājas Ezers and Papes Ezers, in the Jelgava Region in the neighbourhood of Lielupe and Vecbērze, in the Valmiera Region near Lake Burtnieku Ezers and in the rural territories (or *pagasti*) in the neighbourhood of Lake Lubānas Ezers. In accordance with Cabinet Regulation No.142 of 17 February 2006, Regulations Regarding Agricultural Territories of National Significance, 37 polders have been determined as agricultural territories of national significance (Table I).

General characteristics of the polders in Latvia are shown in Table II.

Table I. Polders in the River Basin Perspective (Minister of the Environment, 2007)

River Basin	Number of polders	Total area (ha)	Number of polders determined as agricultural territories of national significance
Venta	12	13,922	11
Lielupe	21	24,355	13
Daugava	18	15,185	9
Gauja	7	8766	4
Total	58	62,228	37

Zariņa and Vinogradovs (2018) present a map of the polders in Latvia and their year of impoldering (Figure 1).



Figure 1. Polders in Latvia with their year of impoldering (Zariņa and Vinogradovs, 2018).

Proposed polders

No proposed polders have been identified.

References

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- Zariņa, A., I. Vinogradovs and P. Šķiņķis, 2018. Towards (dis)continuity of agricultural wetlands: Latvia's polder landscapes after Soviet productivism. *Landscape Research*. Volume 43: Number 3(2018); 2018; 455-469.

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Table II. General characteristics of existing polders in Latvia

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Ādaži-Centre Polder							
Babīte Polder			RLL	56° 57' N	23° 57' E	-1	Agriculture
Bernāti Polder			RLL	56° 22' N	21° 1' E	-2	Agriculture
Biteslejas Polder							
Bļodnieki Polder			RLL	56° 54' N	23° 42' E	-1	Agriculture
Ciemupe Polder			RLL	56° 47' N	24° 38' E	20	Agriculture
Dziļāune Polder			RLL	56° 50' N	27° 3' E	90	Agriculture
Dzilnupe Polder			RLL	56° 57' N	23° 52' E	-1	Agriculture
Eimurs-Mangaļi Polder			RLL	57° 5' N	24° 12' E	-1	Agriculture
Garoze Polder			RLL	56° 38' N	23° 55' E	1	Agriculture
Gate Polder			RLL	56° 54' N	23° 38' E	-1	Agriculture
Gātupe Polder							
Ikšķile I Polder							
Ikšķile II Polder							
Jāņupīte Polder			RLL	56° 43' N	22° 11' E	56	Agriculture
Jelgava Airfield Polder			RLL	56° 40' N	23° 41' E	2	Airport
Jugla polder							
Kapūne Polder			RLL	56° 59' N	27° 2' E	91	Agriculture
Kreiči Polder			RLL	56° 39' N	27° 51' E	106	Agriculture
Krēslīte Polder							
Ķūlciems Polder			RLL	57° 17' N	23° 2' E	2	Agriculture
Laveri Polder			RLL	57° 6' N	24° 16' E	0	Agriculture
Namiķi Polder			RLL	56° 43' N	22° 22' E	87	Agriculture
Odiņi – Pavasari Polder			RLL	56° 54' N	23° 37' E	-1	Agriculture
Ogre I Polder			RLL	56° 47' N	24° 36' E	20	Rural area
Ogre II Polder							
Ogre III Polder							
Ogre IV Polder							
Ošas I Polder			RLL	56° 35' N	23° 53' E	4	Agriculture
Ošas II Polder							
Ozolnieki Polder			RLL	56° 42' N	23° 45' E	2	Agriculture
Pape Polder			RLL	56° 9' N	21° 3' E	-1	Agriculture
Ratnieki Polder			RLL	57° 13' N	25° 0' E	71	Rural area

Silzemnieki Polder			RLL	57° 4' N	24° 44' E	50	Agriculture
Spilve Polder			RLL	56° 58' N	23° 57' E	2	Agriculture
Straupciems Polder			RLL	56° 55' N	23° 39' E	-1	Agriculture
Strimina Polder							
Tosele Polder			RLL	56° 18' N	21° 3' E	-1	Agriculture
Trenči Polder			RLL	56° 54' N	23° 46' E	1	Agriculture
Vecbērze Polder			RLL	56° 48' N	23° 34' E	-3	Agriculture
Zvidziene Polder							
Total		62,228					

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