LATVIA

Source: esri

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, Russia in the East 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 2022, a population of 1.85 million, or 0.29 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

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 the total agricultural area. The largest areas of polders are in the region of Riga 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).

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

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

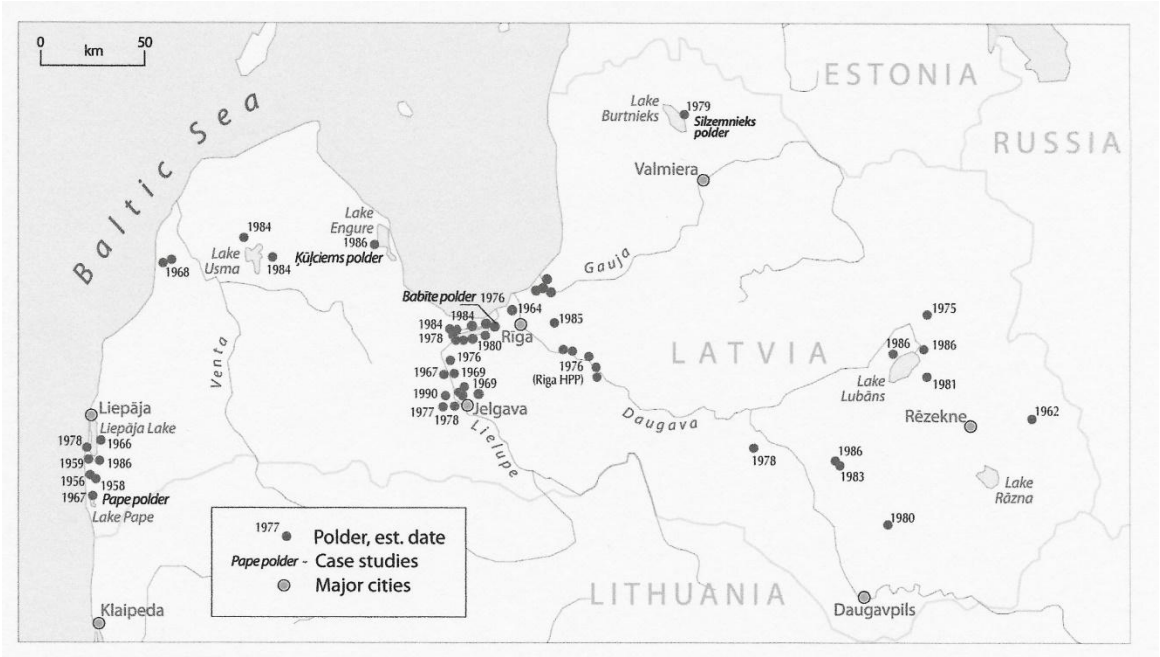

Figure 1. Polders in Latvia with their year of impoldering (Zarina and Vinogradovs, 2018).

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

Proposed polders

No proposed polders have been identified.

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

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

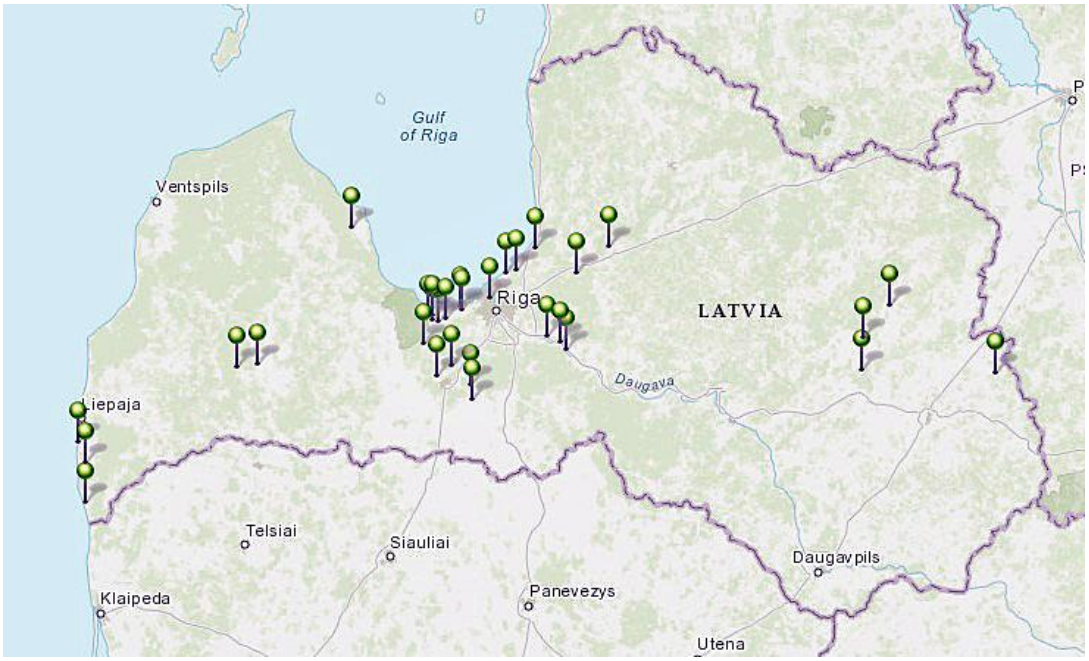

Figure 2. Location of the polders in Latvia (source: esri – Batavialand)

References

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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
Kreiči Polder	1962		RLL	56º 39' N	27º 51' E	106	Agriculture
Spilve Polder	1964		RLL	56º 58' N	23º 57' E	2	Agriculture
Kapūne Polder	1975		RLL	56º 59' N	27º 2' E	91	Agriculture
Babīte Polder	1976		RLL	56º 57' N	23º 57' E	-1	Agriculture
Bernāti Polder	1978		RLL	56º 22' N	21º 1' E	-2	Agriculture
Silzemnieks Polder	1979		RLL	57º 4' N	24º 44' E	50	Agriculture
Dziļaune Polder	1981		RLL	56º 50' N	27º 3' E	90	Agriculture
Ķūļciems Polder	1986		RLL	57º 17' N	23º 2' E	2	Agriculture
Tosele Polder	1986		RLL	56º 18' N	21º 3' E	-1	Agriculture
Zvidziena Polder	1986		RLL	56º 51' N	26º 49' E	91	Agriculture
Ādaži-Centre Polder							
Biteslejas Polder							
Bļodnieki Polder			RLL	56º 54' N	23º 42' E	-1	Agriculture
Ciemupe Polder			RLL	56º 47' N	24º 38' E	20	Agriculture
Dzilnupe Polder			RLL	56º 57' N	23º 52' E	-1	Agriculture
Eimurs-Mangaļi Polder			RLL	57º 5' N	24º 12' E	-1	Agriculture
Garoze Polder			RLL	56º 38' N	23º 55' E	1	Agriculture
Gate Polder			RLL	56º 54' N	23º 38' E	-1	Agriculture
Gātupe Polder							
Ikšķile I Polder							
Ikšķile II Polder							
Jāņupīte Polder			RLL	56º 43' N	22º 11' E	56	Agriculture
Jelgava Airfield Polder			RLL	56º 40' N	23º 41' E	2	Airport
Jugla polder							
Krēslīte Polder							
Laveri Polder			RLL	57º 6' N	24º 16' E	0	Agriculture
Namiķi Polder			RLL	56º 43' N	22º 22' E	87	Agriculture
Odiņi – Pavasari Polder			RLL	56º 54' N	23º 37' E	-1	Agriculture
Ogre I Polder			RLL	56º 47' N	24º 36' E	20	Rural area
Ogre II Polder							
Ogre III Polder							
Ogre IV Polder							
Ošas I Polder			RLL	56º 35' N	23º 53' E	4	Agriculture

Ošas II Polder							
Ozolnieki Polder			RLL	56º 42' N	23º 45' E	2	Agriculture
Pape Polder			RLL	56º 9' N	21º 3' E	-1	Agriculture
Ratnieki Polder			RLL	57º 13' N	25º 0' E	71	Rural area
Straupciems Polder			RLL	56º 55' N	23º 39' E	-1	Agriculture
Strimina Polder							
Trenči Polder			RLL	56º 54' N	23º 46' E	1	Agriculture
Vecbērze Polder			RLL	56º 48' N	23º 34' E	-3	Agriculture
Total		62,228					

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