

SWEDEN



Source: esri

General

Sweden - officially the Kingdom of Sweden - is a Scandinavian Nordic country. It borders Norway in the West and North and Finland in the East, and is connected to Denmark in the Southwest by a bridge-tunnel across the Öresund. The country has an area of 45.0 Mha (million hectares) with, in 2022, a population of 10.6 million, or 0.24 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

Most of Sweden has a temperate climate, with largely four distinct seasons and mild temperatures throughout the year. The winter in the far South is usually weak and is only manifested through some shorter periods with snow and sub-zero temperatures, autumn may well turn into spring there, without a distinct period of winter. The country can be divided into three types of climate: the southernmost part has an oceanic climate, the central part has a humid continental climate and the northernmost part has a subarctic climate. With the exception of in the mountains, the whole country has a July-average temperature within the range of 15.0 to 17.5 °C, while the January-average temperatures vary from freezing point down to below -15 °C along the border with Finland. On average, most of Sweden receives between 500 and 800 mm of precipitation per year. The south-western part of the country receives more precipitation, between 1000 and 1200 mm per year. Most of Sweden is located in the rain shadow of the Scandinavian Mountains through Norway and North-west Sweden. The blocking of cool and wet air in summer as well as the greater landmass leads to warm and dry summers far North in the country (source: Wikipedia).

About 15% of Sweden lies north of the Arctic Circle. Southern Sweden is predominantly agricultural, with increasing forest coverage northward. Vänern and Vättern are its largest lakes. Sweden's extensive waterway availability throughout the South was exploited with the building of the Göta Canal in the 19th century, shortening the potential distance between the Baltic Sea south of Norrköping and Gothenburg by using the lake and river network to facilitate the canal (source: Wikipedia).

Existing polders

In Kristianstad is Sweden's lowest point of 2.41 m-MSL (mean sea level). Because of this, parts of the city have to be protected from flooding by a system of dikes and pumping stations. To expand the city, large lowland areas have had to be protected, especially in the East. To prevent future flooding of the city centre, the existing dikes have been reinforced and new dikes against both Helge å and Hammarsjön have been made. An extensive system of ponds and dams has also been made. The threat of flooding became substantial during late winter 2002, when the greater part of the public park Tivoliparken was under water. However, the lowlands around the city are starting to be regarded more as an asset, not least thanks to the creation of Kristianstads Vattenrike Biosphere Reserve (source: Wikipedia).

There may also be polders in the surrounding of Gothenburg, reclaimed in the period 1610-1620. General characteristics of the polders in Sweden are shown in Table I.

Proposed polders

No proposed polders have been identified.

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

The location of the polders in Sweden is shown in Figure 1.



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

References

United Nations, Department of Economic and Social Affairs, Population Division. 2022. *World population prospects, medium prognosis. The 2022 revision*. New York, USA.

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Table I. General characteristics of existing polders in Sweden

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Kristianstad			RLL	56° 2' N	14° 9' E	0	Urban
Polders near Gothenburg			RLL				Agriculture
Total							

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