



SWISS ENVIRONMENTAL STATISTICS

A BRIEF GUIDE 2009



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REMARKS

Index

Trends in totally different variables can be directly compared using indices, on condition that the same year is chosen as a basis (e.g. 1990=100).

Rounded figures

Figures are rounded up or down, which may mean that their sum differs from the total given.

Glossary

Terms in *italics* are explained in the glossary (page 37).

OUR ONLINE SERVICE

Do you need data relating to the graphs in this publication?

'Swiss Environmental Statistics: A Brief Guide' on the internet:
www.environment-stat.admin.ch → Umweltindikatoren

Would you like more information regarding the environment?

Visit any of the following websites:
Federal Statistical Office (FSO):
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The corresponding sections in this publication include internet links to specific environmental topics.

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11 Landscape and spatial development

Between 1979 and 1992, 0.9 square meters of new settlement area was created per second.

Over the last 70 years the degree of landscape fragmentation has risen by 88%, the degree of urban sprawl by 155%.

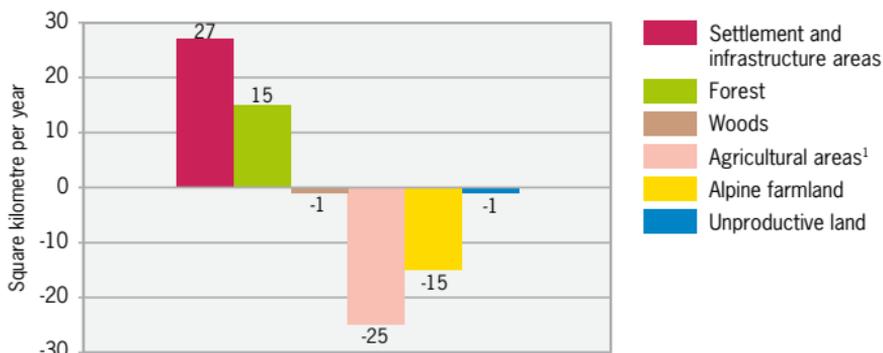
In 2008, nearly 3.5% of the total surface area of Switzerland was strictly protected. (e.g. national park, swamp and moorland).

Switzerland is rich in natural and rural landscapes, which play an important role in maintaining the standard of living and are a major resource for tourism.

The intensive use of the land exerts considerable strain on the landscape, however. The increase in the expansion of built-up areas and of transport infrastructure is often achieved at the expense of agricultural land. At the same time, the tendency to fragment the landscape more and more prevents wild animals from moving freely in their natural habitats. It is exactly this freedom of movement, however, which is an important prerequisite for reproduction and thus for maintaining the species.

Annual change in land use in Switzerland

Between the periods 1979/85 and 1992/97



¹ Except alpine farmland.

Source: Federal Statistical Office

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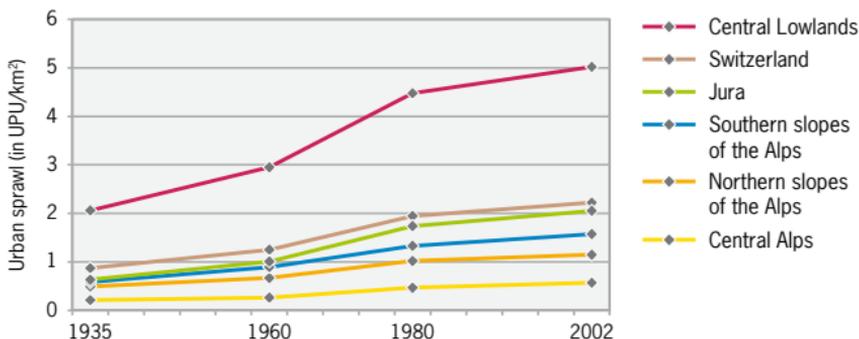
More about this topic:

www.environment-stat.admin.ch

www.landuse-stat.admin.ch

www.environment-switzerland.ch → Topics → Landscape

Urban sprawl¹

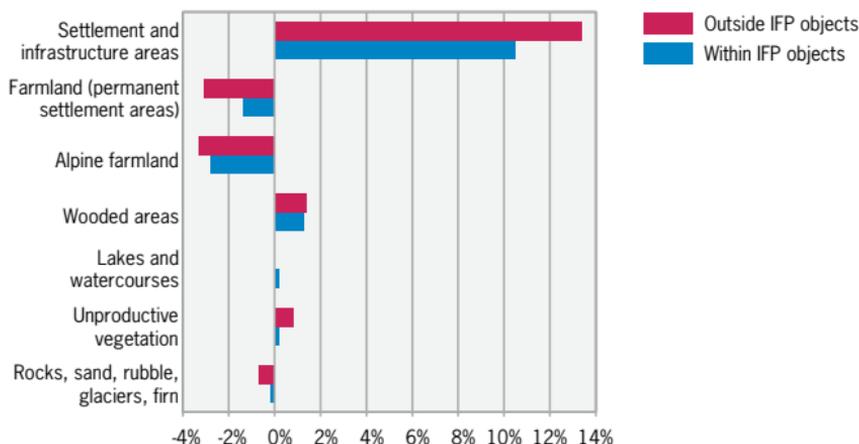


¹ The degree of urban sprawl, measured in 'urban permeation units (UPM) per km²' indicates the extent to which land is occupied by buildings. In addition to this, the utilisation density (number of inhabitants and jobs) of the built up areas is now taken into account. The more areas that are built upon, the further apart the buildings are and the lower their utilisation density, the higher the degree of urban sprawl.

Source: 'Landschaftszersiedelung Schweiz', NRP 54 (J. Jaeger, C. Schwick, R. Bertiller), 2008.

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National protected areas: Changes in land use between 1983 and 1995, outside and within the limits of the IFP² objects (variation in %)



² Unlike biotopes and wetlands of national importance and the national park, IFP objects (Federal Inventory of Landscapes and Natural Monuments of National Importance) are not under strict protection.

Sources: Federal Statistical Office; Federal Office for the Environment

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GLOSSARY

CO₂-efficiency

= $GDP \div CO_2 \text{ emissions}$

DMC (Domestic Material Consumption)

A country's domestic consumption of materials, i.e. the extraction of materials domestically used plus imports minus exports.

Emissions

The release of pollutants, noise or radiation from natural sources or by man into the environment.

Energy efficiency

= $GDP \div \text{final energy consumption}$

GDP (Gross Domestic Product)

GDP is used for measuring a country's economic performance over a period of one year.

Hazardous waste

Waste which due to its composition and its physiochemical or biological characteristics requires special technical and organisational measures for its environmentally acceptable disposal.

Immissions

Levels of air pollutants, noise, vibration or radiation at their point of impact.

Material efficiency

= $GDP \div DMC$

NM VOC (Non Methane Volatile Organic Compounds)

These exclude methane and FCKW and are precursors for the formation of ozone, summer smog and *PM10*.

PM10 (Particulate Matter <10 µm)

Dust particles with a diameter of less than 10 microns.

TMR (Total Material Requirement)

The total material requirement of a country measures the total volume of materials obtained from natural sources (with the exception of water and air).

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Lac Ter in the Vallée de Joux (VD)

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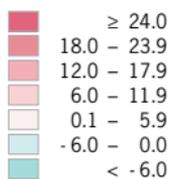
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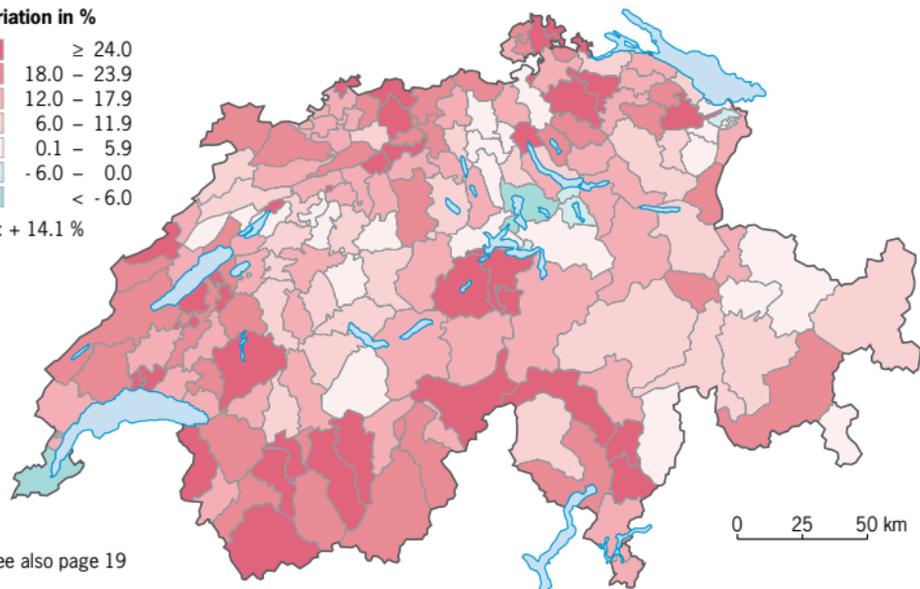
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Urban sprawl* 1980–2002, by district

Variation in %



CH: + 14.1 %



*See also page 19

Source: «Landschaftszersiedelung Schweiz», NFP 54 (J. Jaeger, C. Schwick, R. Bertiller), 2008

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