



Factsheet – Statistical activity and published results

Agri-environmental monitoring (indicators for sustainable agriculture)

Description

As mandated by the legislator (see the Ordinance on the Evaluation of Sustainability in Agriculture, SR 919.118), the Federal Office for Agriculture periodically assesses the development of farms' ecological performance and the impact of agriculture on natural resources. It evaluates the quantitative and qualitative effects of agricultural policy using national, regional and farm-based eco-indicators. These indicators are comparable with international standards.

Agri-environmental monitoring is made up of national indicators and the regional and farm-based Monitoring of the Swiss Agri-Environmental System (MAUS).

Methodology

NATIONAL AGRI-ENVIRONMENTAL MONITORING

Methodology used

Selection of statistics from the FOAG, Agroscope, FOEN, Swiss Ornithological Institute, FSO and Agricura

Variables used

Nitrogen and phosphorus balance, greenhouse gas emissions, ammonia emissions, energy demand, biodiversity, land use, production inputs, reference values

Survey date/period

Annual

Frequency of publication

Annual

Degree of regionalisation

National

REGIONAL AND FARM-SPECIFIC MONITORING OF THE SWISS AGRI-ENVIRONMENTAL SYSTEM (MAUS)

Methodology used

- Consideration of year-round farms that meet the FSO's minimum standard for an agricultural holding, as well as summer pasture farms.
- Use of existing data (e.g. from the AGIS and HODUFLU databases), including satellite data.
- Online tools in farm management information systems to collect digital, georeferenced field calendar data (= plot-specific, daily records of field activities); annual target sample size: several hundred farms. Online questionnaire on energy consumption, nutrients (e.g. use of nitrification inhibitors) and additional information on farm management (e.g. farmyard drainage). Sent out annually in winter, alternately to year-round farms (target size: approx. 1,000 farms) and summer pasture farms (target size: approx. 200 farms).

Variables used

Humus balance, heavy metal balance, erosion risk, N balance, P balance, ammonia emissions, use of plant protection products, risks of plant protection products for aquatic organisms, nitrate leaching, potential impact of agricultural activities on biodiversity, feed-food competition, greenhouse gas emissions, energy demand and efficiency.

Survey date/period

The online survey is sent out in winter. The remaining data is collected/supplied continuously.

	Frequency of publication Annual
	Degree of regionalisation Aggregation of results for regions and farm types; publication of maps in compliance with data protection regulations.
	Linkages As per the Ordinance on Information Systems in the Agriculture Sector (SR 919.117.71).
Revision policy	In 2023, a major revision occurred due to a change in methodology following the conversion of the Swiss Agri-Environmental Data Network (SAEDN) to the MAUS system. Within the framework of MAUS, revisions are routinely undertaken (both methodological and data-related) and communicated when the results are published. The time series are adjusted retrospectively as far as possible.
Relevant legislation	Ordinance on the Evaluation of Sustainability in Agriculture (SR 919.118)
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