

SMP•PSL

Schweizer Milchproduzenten
Producteurs Suisses de Lait
Produttori Svizzeri di Latte
Producers Svizzers da Latg

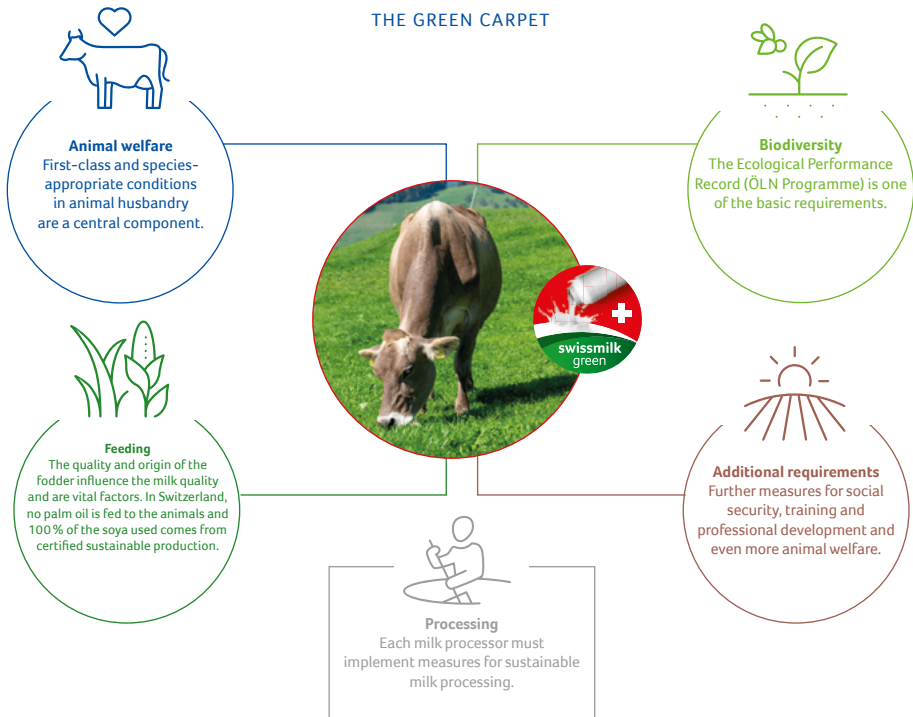


The added value of sustainable

Swiss Milk

swissmilk

THE GREEN CARPET



About **84%** of Swiss dairy milk is produced in accordance with the “Sustainable Swiss Milk” industry standard.
93 % of Swiss dairy cows benefit from stricter animal welfare requirements.

Swiss milk is produced sustainably



The industry standard “Sustainable Swiss Milk” has been in force since September 2019. These specifications have helped Swiss milk producers strengthen their leading role in animal welfare, natural feeding, organic production and social benefits. Applied sustainability in all three dimensions! Certification requires meeting 10 basic requirements and 2 out of 8 additional requirements.

Milk-based products that meet all the necessary requirements can be labelled with the swissmilk green brand.

You can find the detailed description for the “Sustainable Swiss Milk” industry standard at [swissmilkgreen.com](https://www.swissmilkgreen.com)

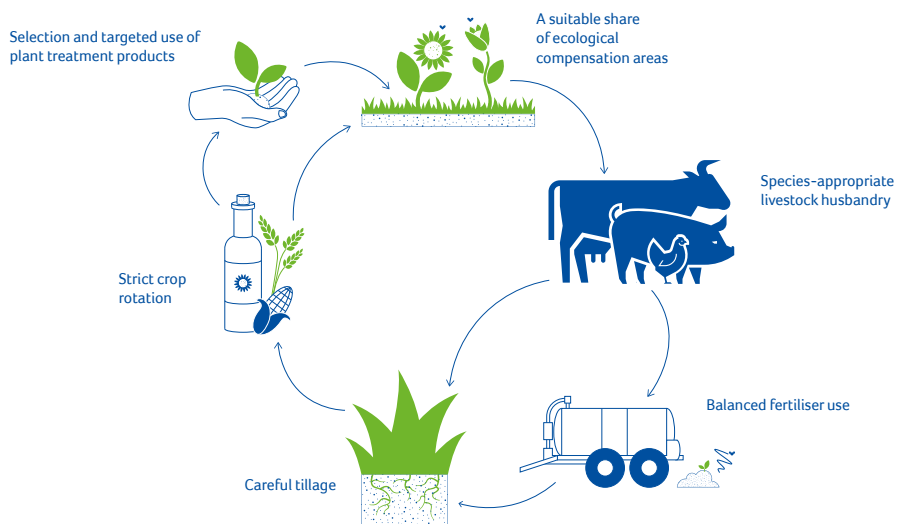
8 %

We use only 8 % of the available water in Switzerland (compared to some 70 % worldwide).

Dairy farming is particularly well-suited to local conditions in a water country such as Switzerland

In Switzerland, Europe's water tower, we have enough water. Only 8 % of the blue water (surface and groundwater) is used for agriculture, compared to nearly 70 % worldwide.

With average rainfall of 1200 mm per year (green water), 98 % of the total agricultural area is irrigated exclusively with rainwater. This water is part of the natural cycle and is absorbed through grass and plants. These natural conditions, lots of grass and ample water, are ideal for dairy farming.



98 % of milk producers adhere to environmental guidelines and promote valuable biodiversity in a circular economy.

Milk producers care about the environment and respect ecological guidelines

The diverse, small-scale home farming of grassland and arable land in Switzerland is ecologically beneficial. 98 % of dairy farms in Switzerland produce in accordance with the principles of the ecological performance certificate (ÖLN). These farms maintain a minimum share of 7 % of ecological, non-intensively farmed compensation areas. In addition, they apply species-appropriate rearing of livestock, balanced use of fertilisers, strict crop rotation and careful tillage.

Such comprehensive consideration of the whole operating cycle is a prerequisite for environmentally sound agriculture.

81 % of utilised agricultural area is grassland, which constitutes the staple diet for our cows. Without grazing, this area would shrink, reducing biodiversity.

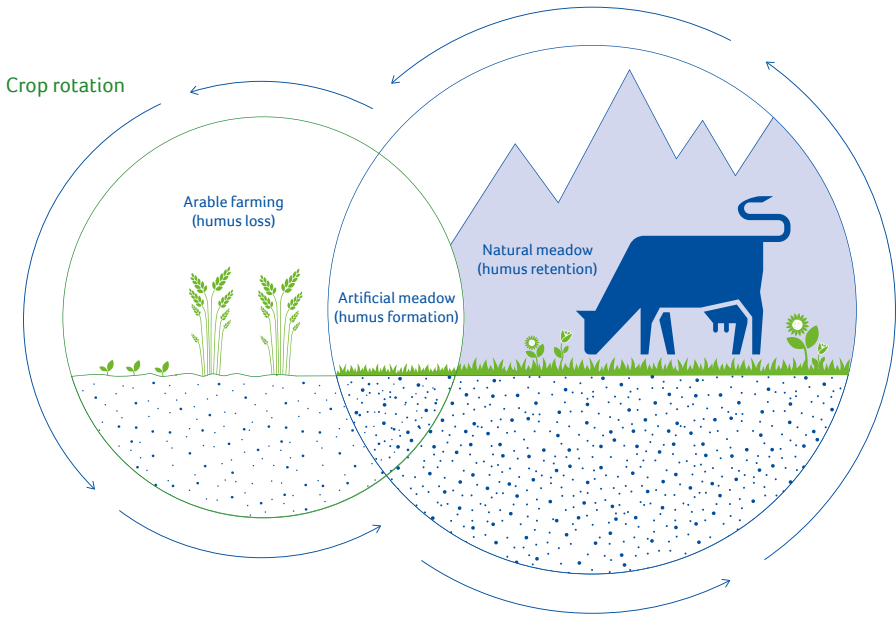


Switzerland offers optimal conditions for grassland. Including the summer grazing areas, grassland accounts for over 81 % of land used for farming. This provides an ideal basis for animal husbandry and also for the processing of roughage (grass, hay, silage) into milk and meat.

When ruminants graze on grassland, this boosts the diversity of the grass cover, enhancing biodiversity for flora and fauna in the meadows. In addition, meadows act as major infiltration areas for rain and surface water, and offer protection against soil erosion through their strong roots. Artificial meadows promote humus formation, thus binding CO₂ and helping to maintain soil fertility.

Without grazing, these open grassland areas would become overgrown and biodiversity would decline.

**Without cows,
no grass and
no biodiversity**



Thanks to crop rotation in arable farming, there is little competition between milk and food production in Switzerland.

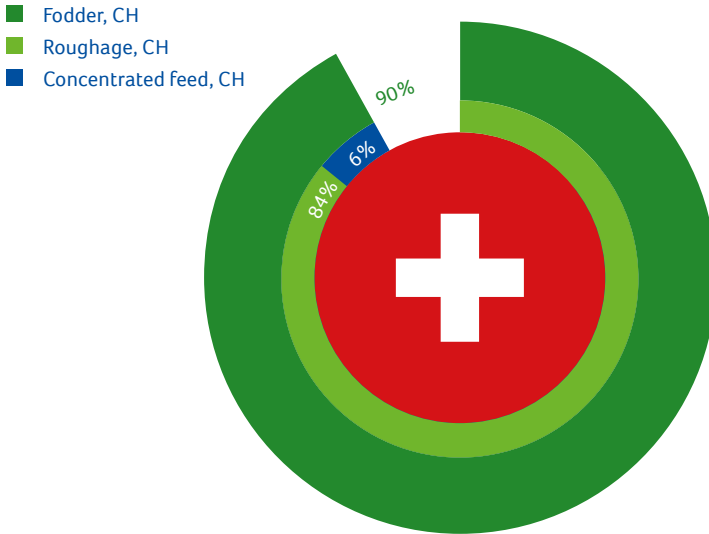
Little food-feed competition thanks to green areas in crop rotation

Dairy cows benefit not only from the high proportion of grassland but also from the large crop rotation areas in Swiss arable farming and vegetable cultivation.

To promote soil fertility, consistent crop rotation must be practised in arable farming and vegetable cultivation. Grassland is an essential part of this.

Accordingly, grassland is always available in arable farming. Added to this are the many alpine areas, which make up 11 % of Switzerland's total territory.

Consequently, there is little competition between the production of fodder for milk production and the production of foodstuffs for direct human consumption.



Around 90% of the fodder for cows comes from Switzerland and 84% of this is roughage.
The rest is primarily by-products from food production.

**Swiss cows
primarily feed on
Swiss roughage,
which we have in
abundance**

Our dairy cows are fed 90% domestic fodder. The main component is natural roughage like grass, hay, silage and maize, which are abundantly available in Switzerland.

We rely on domestic, high-quality roughage to meet a good four-fifths of our cows' daily fodder needs. A cow can eat approximately 70-80 kg of domestic meadow forage per day, and 15-25 kg of hay in winter.

In Switzerland cows only eat fodder that is free of genetically modified plants, palm oil and also animal feed. Compared to other countries, Switzerland uses very little concentrated feed - just 100 grams per kg of milk (versus well over 200 grams in Germany and Holland).

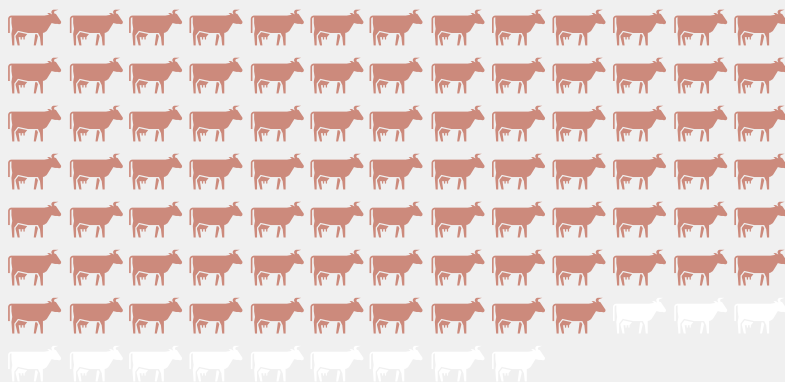


In Switzerland, very little concentrated feed is used. Over **54%** of the concentrated feed given to the animals are **by-products** from foodstuff production.

**Foodstuff
production waste
provides
concentrated feed
for dairy cows**

By-products that are inedible for humans still contain plenty of valuable energy and nutrients. As they cannot be used directly for human consumption they are fed to cattle in the form of concentrated feed. Cattle utilise $\frac{1}{4}$ of the resulting oil cakes (soy and rapeseed extraction meal), $\frac{2}{3}$ of the molasses, $\frac{1}{2}$ of the sugar beet pulp, 100 % of the spent grain and about $\frac{1}{2}$ of the mill by-products.

In this way, 170 000 tonnes of waste become usable for human beings and nutrient cycles are closed. This not only gives rise to tasty and nutritious milk and dairy products, but also makes a significant contribution to the reduction of food waste.



Between May and October, **88 %** of our cows spend at least **26 days per month outdoors**.

**Swiss cows
enjoy species-
appropriate
rearing on
family-run farms**

The close-to-nature, animal-friendly rearing of our dairy cows is typical for Switzerland. Our farms, most of which are family-run, keep an average of 27 animals, to which they develop a strong bond. So every Swiss cow is given its own name by its owner.

Switzerland has some of the world's strictest animal welfare legislation. Over 86 % of Swiss dairy farms participate in the government's RAUS support programme, which guarantees regular open-air exercise for the animals. 88 % of our cows benefit from this programme. Accordingly, they can spend at least 26 days per month outdoors from the beginning of May to the end of October, and at least 13 days per month from the beginning of November to the end of April.



A rigorous control system, based on close collaboration between the cantons and the federal government, guarantees the implementation of the Swiss Animal Welfare Act.

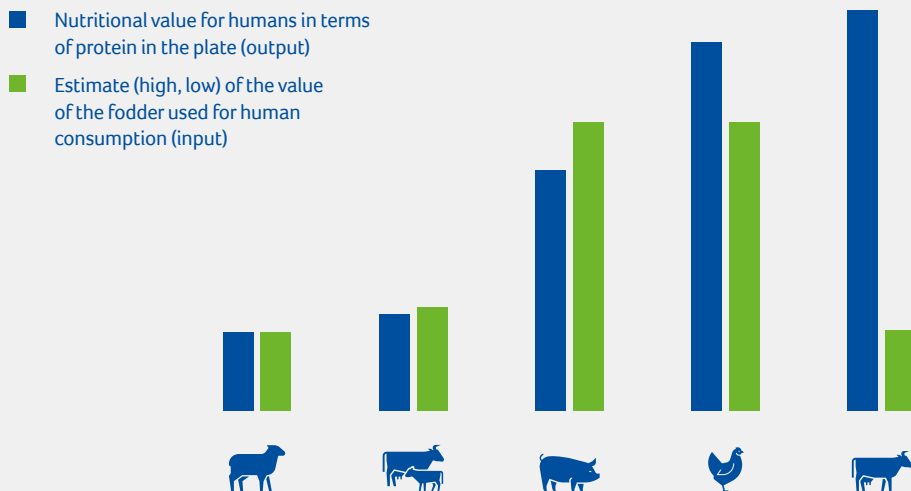
In Switzerland, one of the world's strictest animal welfare laws is applied and implemented

Swiss animal welfare legislation sets particularly stringent requirements to ensure the well-being of animals. In order to assess animal welfare standards of different countries, state legislations, voluntary participation in government programmes promoting animal welfare, and participation in private-law labelling programmes are compared.

In a comparative study, Swiss animal welfare legislation stood out. Most animal welfare criteria are stricter than in neighbouring countries.

Two major differences are the government animal welfare programmes RAUS and BTS, affording Swiss cows much more exercise than others. The pasture grazing of dairy cows is unique in Europe. A European comparative study showed that Swiss cows enjoy from 2 to 8 times more pasture grazing.

In Switzerland, the average number of dairy cows per farm is only 27. In neighbouring countries, herd sizes are on average twice as large. In Denmark, they average as much as 180.



No other animal turns low-quality resources into valuable protein for humans as efficiently as the cow.

**Thanks to cows,
humans can
subsist efficiently
on grass**

81 % of agricultural land is grassland and cannot be used for food production. In arable farming, artificial pastures are an important component of crop rotation. Grassland is indispensable for the maintenance of biodiversity and soil fertility. This grass, indigestible for humans, is transformed by ruminants into high-quality protein and high-energy foodstuffs such as milk and meat.

Furthermore, with a protein efficiency rate of 25 %, the cow is one of the few animals that can turn grass into a valuable foodstuff with very little input. No other animal converts resources that cannot be used humans into valuable foodstuffs so efficiently and in such a resource-efficient way.

* CO₂ emissions
per kg of nutrients



In terms of nutrition, milk is up to **8 times more climate-friendly** than an oat drink.

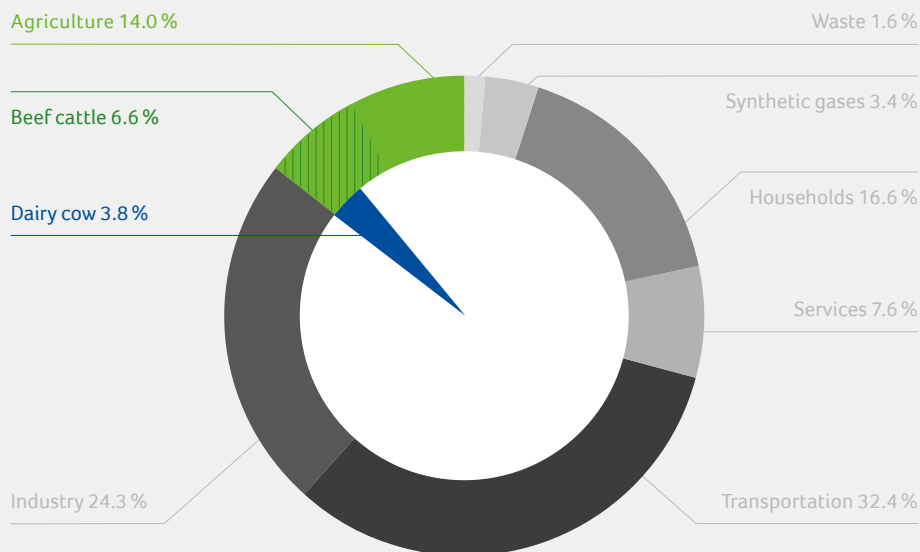
Milk and dairy products are part of a healthy and environmentally friendly diet

Foodstuffs are always associated with emissions. Our nutrition contributes 30 % to our ecological footprint. A normally active woman needs to consume 2 150 calories per day, and a man up to 2 750 calories, to be able to live a healthy and balanced life. Valuable proteins, vitamins and minerals are important elements in this respect. So how do I eat as healthily as possible while also protecting the planet?

In order to assess how climate-effective the production of foodstuffs is, statements on a product's emissions per kilogram are incomplete and misleading. It is vital to make the connection to foodstuffs.

Production and consumption must become climate- and resource-friendly so that the world's population, expected to grow rapidly up to 2050, can be fed. Accordingly, the evaluation of a product's emissions only makes sense when considered in relation to its nutritional value.

CLIMATE-FRIENDLY MILK PRODUCTION

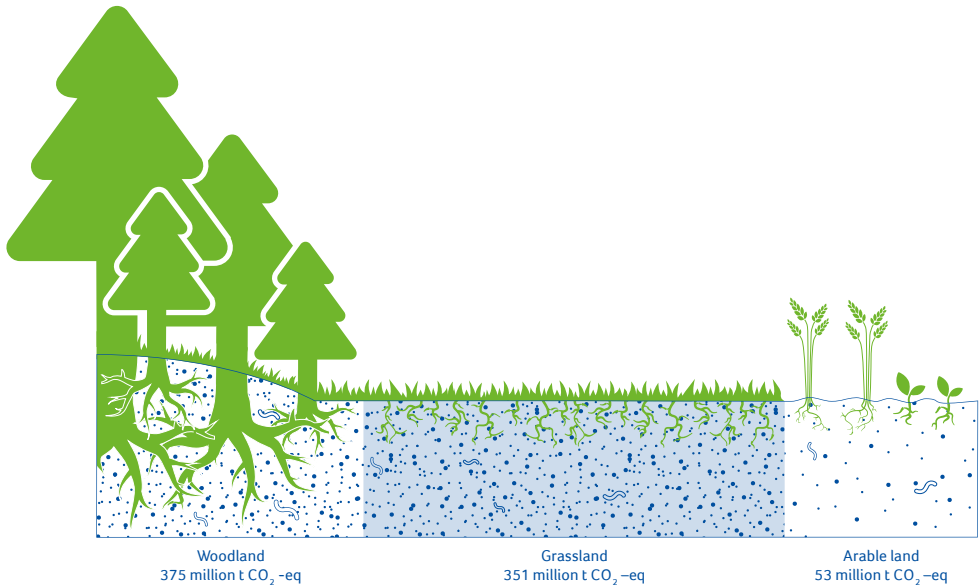


Swiss dairy cows are responsible for **3.8 %** of our CO₂ equivalents. These emissions are part of an ecological cycle

Cows are not climate killers

All life on earth is fundamentally linked to the production of carbon dioxide. In Switzerland, CO₂ emissions total 47 million tonnes per year. Transportation accounts for the largest share with 32 %, followed by industry with 24 % and households with 17 %. Swiss agriculture is responsible for 14 % (6 million tonnes of CO₂ equiv.) of CO₂ equivalents in Switzerland.

However, dairy cows account for only 3.8 % of gross emissions in Switzerland. These emissions form part of a continuous ecological cycle. Net emissions are therefore even smaller.



Grassland Switzerland stores
over **350 million tonnes of CO₂-eq.**

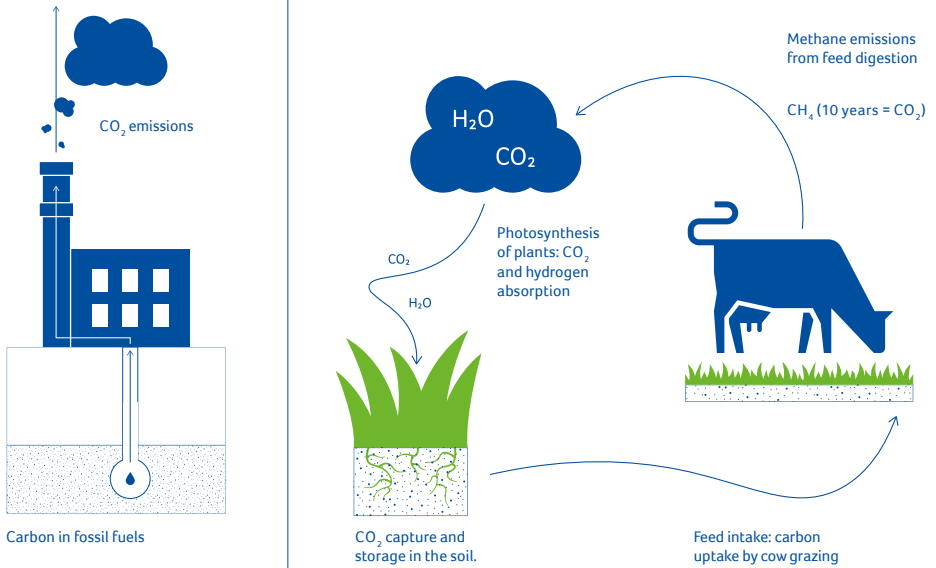
**Grassland has
a particularly
high CO₂
sequestration
potential**

Over 1/3 of Switzerland's total surface area is grassland. Swiss meadows and pastures can store a total of 351 million tonnes of CO₂-eq (storage capacity of 183–293 t CO₂/ha). This corresponds to the annual emissions of over 6.5 million people. For this amount of carbon to remain stored, the humus content must be maintained.

If humus is built up, agricultural soils even contribute to a reduction in the CO₂ in circulation.

Other native soils also have a carbon storage capacity: woodland (293 t CO₂/ha), arable land (183 t CO₂/ha).

Soil is a valuable commodity. Dairy producers are committed to optimised, resource-saving and climate-friendly farming on a daily basis. The right balance is needed for a dairy industry that is both food-secure and climate- and resource-friendly.

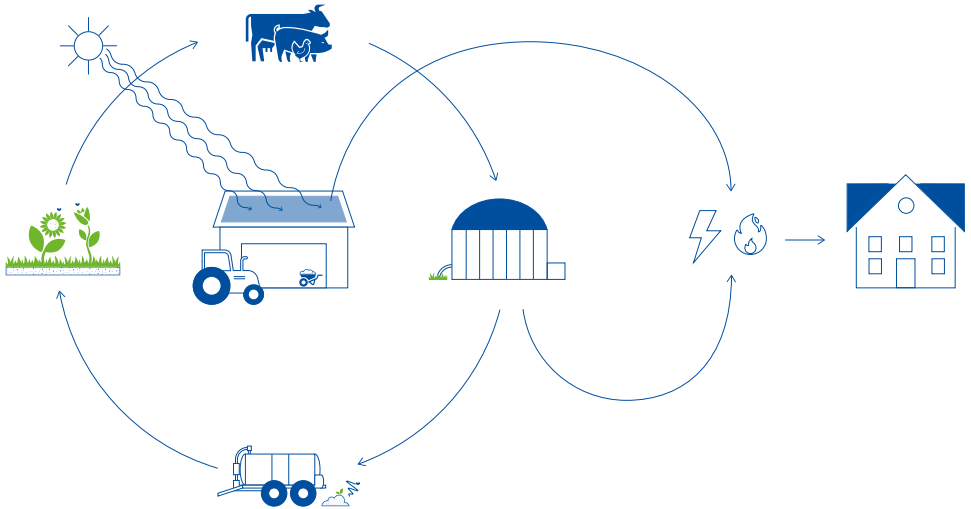


Unlike automobiles and industry, cow emissions are part of an ecological cycle

Cows produce not only milk but also carbon dioxide alongside methane, another greenhouse gas. The methane expelled by cows breaks down into CO_2 after 10 years, thereby re-entering the cycle.

Plants use photosynthesis to bind CO_2 from the air and store carbon in the soil. Humus accumulates in mineral-rich farmland. When plants wither, are eaten or harvested, part of the carbon is returned to the atmosphere in the form of CO_2 , while the rest remains bound to the soil as humus. CO_2 absorption in the soil is an ongoing process, and is heavily dependent on soil binding capacity and management.

It is estimated that worldwide, 1.4 billion tonnes of CO_2 -eq can be stored in grassland and arable land. The figure for Switzerland is some 404 million tonnes. Humus-building agriculture can maintain or even expand this storage effect.



When combined with a biogas plant, agriculture offers an enormous additional lever against climate change.

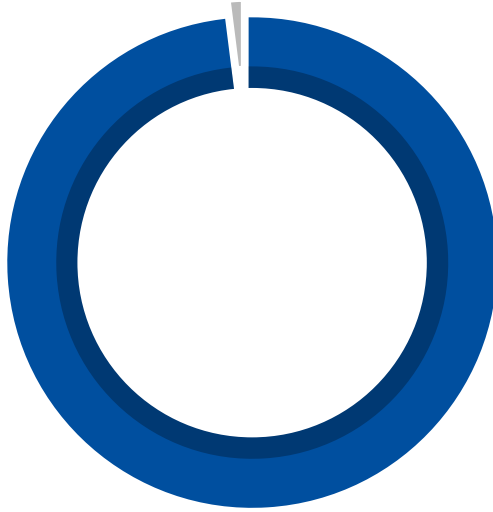
Agriculture is a pioneer in the efficient reduction of greenhouse gas emissions

With the traditional circular economy, farmers are forerunners in the efficient use of resources.

New technologies enable farms to become energy self-sufficient and climate-neutral, even becoming an emissions reduction platform for entire neighbourhoods.

Farms with a biogas plant have additional potential for a reduction of 1 million tonnes of CO₂ per year.

Farms have large roof areas that are suitable for the production of electricity with photovoltaics and heat production from solar thermal systems. By 2030, ¼ of the heating demand of all farms and an additional 1 200 GWh of electricity could be produced, which corresponds to an average electricity demand of 340 000 households.

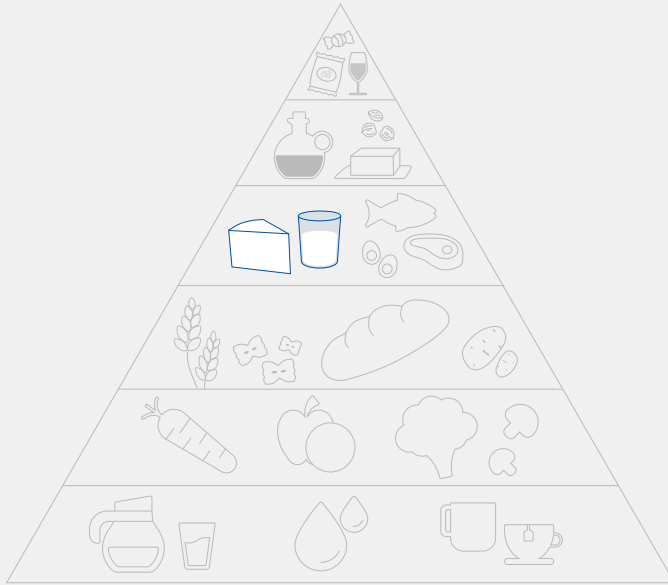


In 2020 out of over 400 000 samples **99.29 %** were found to be free of germs. This represents the top value by international comparison.

**Strict controls
guarantee
high-quality and
safe milk and
dairy products**

Our Swiss milk contains no residues or additives. If sick animals are treated with medication, weaning and blocking periods apply, during which the milk may not be used for consumption. In addition, in our country neither hormones nor antibiotics may be administered to boost performance.

We are renowned worldwide for the quality and safety of our foodstuffs. In terms of integrated process control, from animal husbandry through milk testing to hygiene in processing plants, the relevant requirements are monitored and controlled by the responsible agencies.



3 portions of milk and dairy products complement the vegetable base of the food pyramid and are also suitable and important in climate-friendly nutrition.

Milk and dairy products are also important in a plant-based diet

How do I eat in a healthy and sustainable way? To master this balancing act between sustainability and health, vegetable foods must account for the lion's share of our diet

This is also the basis of the recommendations of the Swiss Society for Nutrition. Animal foods, such as three portions of milk and dairy products daily, complement these and are important for our health.

We are making a great contribution to sustainability when the products consumed come from local and seasonal production

Facts

#1

To get enough calcium, nobody eats 300 g of broccoli per meal, but 180 g yoghurt meets calcium needs.

#2

If I am lactose-intolerant, I don't have to give up dairy products

#3

Milk is a natural foodstuff without additives

#4

Science shows that increased consumption of milk and dairy products can reduce the rate of heart attacks.

#5

Milk is important for bone formation and bone strength.

#6

Milk consumption can reduce the risk of colon cancer.



You can find more milk myths and their rebuttals here.



The value creation chain around Swiss milk production is a key pillar of the domestic economy. Upstream and downstream sectors provide a livelihood for many families all over Switzerland.



1. Jobs upstream of milk production

Knowledge is processed in research and then put into practice. This enhances the professionalism of Swiss milk producers and creates the conditions for mastering the challenges of the future

Jobs in companies upstream of milk production

	in %	Jobs
ETH, Agricultural sciences	30	14
Seed trade	35	3 348
Fenaco	35	3 568
Agroscope Milk sector	100	162
Agroscope Meat sector	85	126
Agroscope Rest incl. AGFF	35	322
Consulting Agridea	35	41
Agricultural schools	35	714
Total upstream jobs		8 295

Source: SMP 2018

Key figure

8 295

Persons committed to the production environment of Swiss milk producers.

2. Jobs and farms involved in the milk production industry

Milk production on Swiss farms provides income for various suppliers who also generate costs, making it a profitability factor for individual farms and the entire value creation chain

Suppliers, feed and adjuvants

	in %	Jobs	Companies
Contractors	35	86	256
Machinery and equipment suppliers	80	51	25
Federal offices	35	198	3
Cantonal agricultural offices	35	466	26
SMP and its member associations	100	178	13
Feed producers / importers	35 / 85	441	1 444
Adjuvant suppliers Fertiliser	35	2 380	50
Total suppliers; feed and adjuvants		3 800	1 817

NB: Building and installation firms are not taken into consideration.

Source: SMP 2018

Reading aid: explanation of the number of jobs in the tables.

X per cent of total jobs are attributed to the dairy sector.

3. Jobs and businesses related to dairy cows

	in %	Jobs	Businesses
Livestock breeding ¹	85	76	3
Livestock vets ²	100	552	
Vets mixed ²	50	336	888
Inseminators ³	85	113	1
Inspections and labs (w/o cantonal offices) ¹	100	402	6
Stock movement data base TVD, Identitas ¹	85	79	1
TSM Treuhand GmbH ¹	100	24	1
Dairy farm staff (producers / employees / apprentices) ⁴	100	75 802	25 792*
Total		77 384	26 692

Sources: 1 SMP 2018 2 GST 2018 3 Data situation: Swissgenetics 4 BFS 2018

* of which 20 372 operations with commercial milk production

Key figure

75 802

People find work on Swiss dairy farms.

The transport of milk and meat from production sites to processing plants generates a large amount of jobs and income.

4. Jobs and companies in milk transportation and trade

	in %	Jobs	Companies
Slaughterhouses/ Meat trade and processing ¹	85	15 966	834
Milk marketing organisations ²	100	492	11
Raw milk transportation ²	100	208	7
Total		16 666	852

Source: 1 BFS 2018 2 SMP 2018 Livestock trading companies are not taken into consideration

5. Jobs and companies in milk processing

	in %	Jobs	Companies
Cheese dairies ¹ and creameries ²	100	12 674	2 043
Processing step ³	60	52 080	2 940
Switzerland Cheese Marketing AG SCM ⁴	100	36	8
Total		64 790	4 991

Sources: 1 TSM (Cheese dairies incl. Alpine cheese dairies) 2 TSM (dairies) 3 BFS 2019 4 SCM

The Swiss dairy industry relies on successful processing operations, involving many jobs and much added value.

6. Jobs and businesses in retail trade, catering and tourism

	in %	Jobs	Companies
Retail trade with foodstuffs	13	13 002	1 509
Wholesale trade with foodstuffs	13	4 624	462
Catering in Switzerland	50	86 750	13 300
Total		104 376	15 271

Source: BFS 2019

Thanks to the positive image of Swiss milk producers, retailers and caterers have good sales arguments.

Key figure

13 002

Thanks to the positive image of Swiss dairy products, people also find jobs in the retail trade

Number of jobs and businesses in the dairy industry

	Jobs	Businesses
Upstream milk production jobs	8 295	1 250
Jobs and businesses related to milk production	3 800	1 817
Jobs and businesses in direct contact with dairy cows	77 384	26 692
Jobs and businesses in milk transport and trade	16 666	852
Jobs and businesses in milk processing	64 790	4 991
Jobs and businesses in retail trade, catering and tourism	104 376	15 271

Overview of value creation elements in the dairy industry

Sales in Swiss francs	Total	in %	Dairy industry
Upstream services in agriculture / dairy industry ¹	6 821 540 000	35	2 387 539 000
Output agriculture /dairy industry ¹	10 980 065 000	35	3 843 022 750
Output dairy milk processing ²	5 559 000 000	100	5 559 000 000
Output cheese-making milk: commercial cheese dairies w/o industrial cheese production ³	900 000 000	100	900 000 000
Output retail trade with foodstuffs ⁴	25 499 000 000	13	3 467 864 000

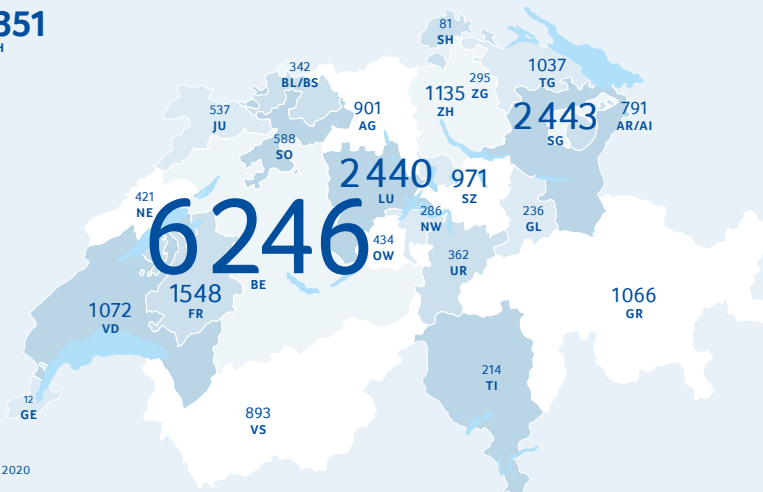
Source: ¹ Basis national accounts 2019 ² Milk statistics 2018

³ Fromarte annual report 2018 ⁴ Nielsen Retail-Scan + Off-Scan 2019

The number of milk producers is steadily declining. This is a problematic trend especially in grassland areas.

Total number of farms with dairy cows, with and without commercial milk production

24351
CH



Source: BFS 2020

The number of organic dairy farms is increasing from year to year throughout Switzerland.

Share of organic farms per canton as a percentage

9.8%
Average CH



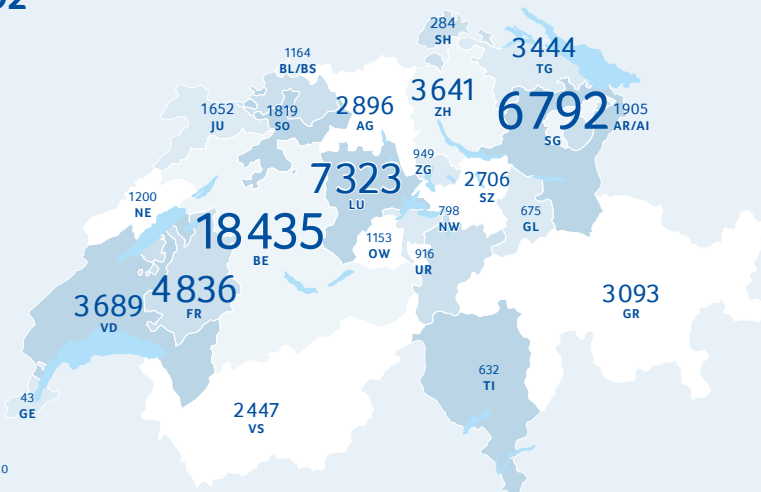
Sources: BLW 2020, BFS 2020

Even in the most remote areas, dairy farms provide work for many.

Number of people working in dairy farms with or without market milk

72 492

CH



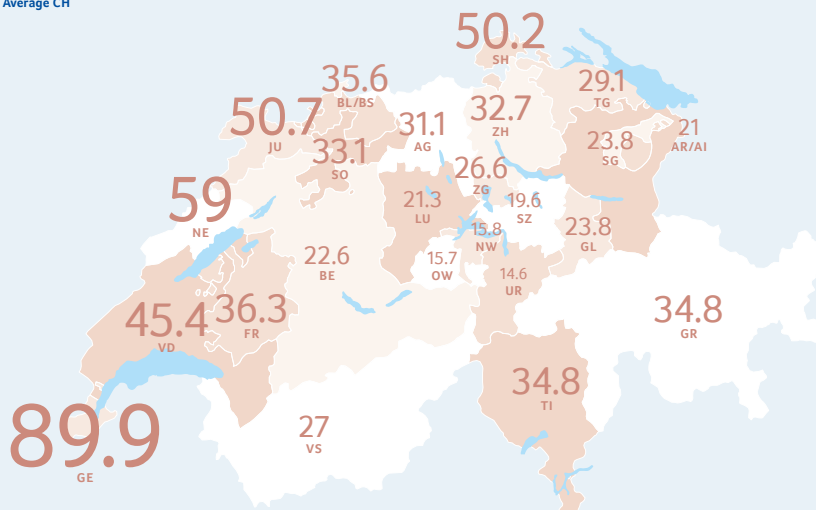
Source: BFS 2020

Milk is produced in all cantons.**Smaller farms are found in the mountains, larger ones on the plateau**

Average utilised agricultural area (LN) of all dairy farms in hectares

32.6 ha

Average CH

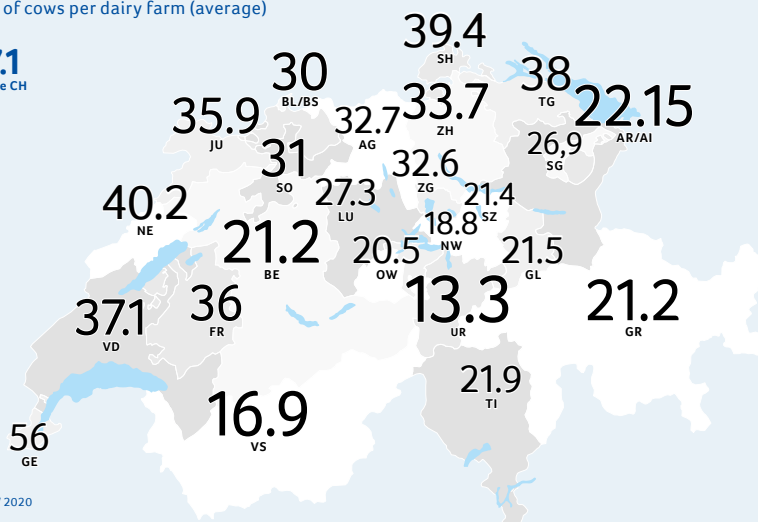


Source: BLW 2020

Small family-run dairy farms are characteristic of Switzerland and guarantee optimum care for dairy cows.

Number of cows per dairy farm (average)

27.1
Average CH

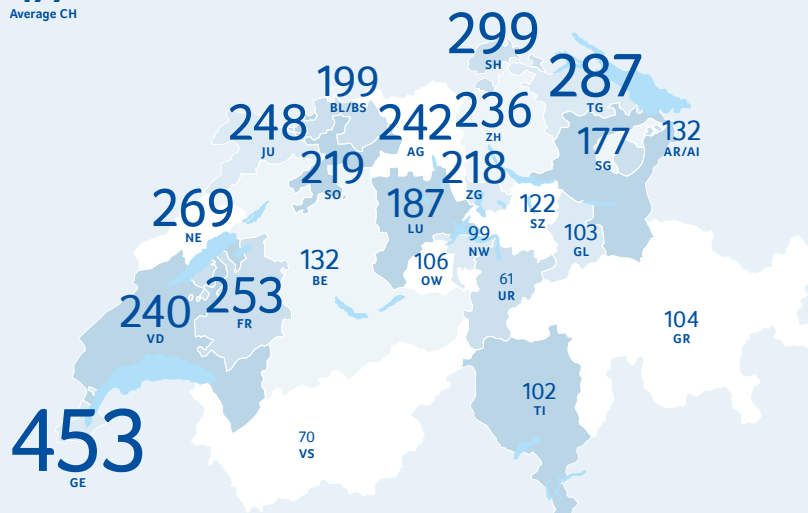


Source: BLW 2020

The quantities produced are small compared to other European countries, but farm managers are extremely professional.

Market milk per dairy farm and year in thousands of kg

177
Average CH



Source: BLW 2020

Cow calves 2020

- 1 Bella
- 2 Sina
- 3 Fiona
- 4 Tina
- 5 Nora
- 6 Mia
- 7 Nina

Cow calves 2021

- 1 Bella
- 2 Fiona
- 3 Nina
- 4 Sina
- 5 Anna
- 6 Bianca
- 7 Nora

Bull calves 2020

- 1 Max
- 2 Leo
- 3 Bruno
- 4 Emil
- 5 Anton
- 6 Sepp
- 7 Sämi und Fritz

Bull calves 2021

- 1 Leo
- 2 Max
- 3 Bruno
- 4 Anton
- 5 Sämi
- 6 Sepp
- 7 Peter

All content can be found online:

swissmilk.ch/produzenten
swissmilkgreen.ch
bfs.admin.ch
bfh.ch/hafl
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Further publications:

Swiss Dairy Industry in Figures 2020/21, 3rd revised edition.

Is milk harmful or is it all just myths?

Market situation report

Milk price monitoring

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