

07

Agriculture and Forestry

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Food and Agriculture

Pocket Statistics 2016



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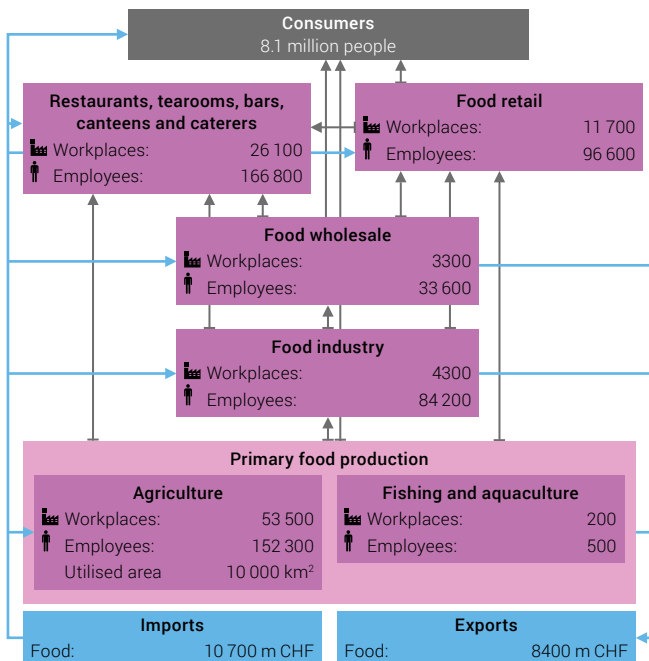
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These Pocket Statistics provide concise data, facts and useful information about Switzerland's food supply chain, with a focus on agriculture. The key figures give an overview of the status and changes in individual areas.

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1 Overview

The food supply chain in Switzerland, 2013

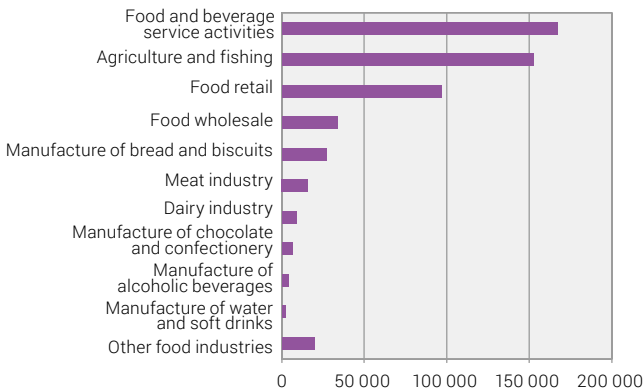


Sources: FCA – Foreign trade statistics;
FSO – STATENT, STATPOP, Farm structure survey

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Employees in the food supply chain, 2013

Number of employees



Source: FSO – STATENT

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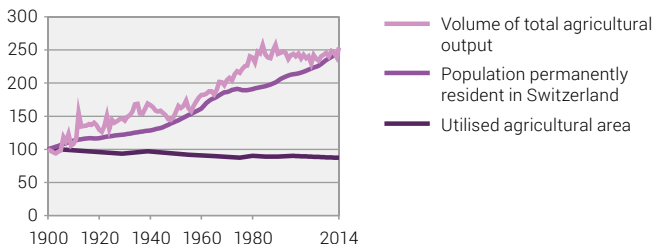
The food supply chain covers the journey food makes from its raw material state in agriculture and fishing, to processing and trade right to consumers' dinner plates. It has key economic significance for Switzerland.

In 2013, some 100,000 businesses operated in the food supply chain. Of Switzerland's total workforce of some 5 million, approximately 530,000 people, representing 11% of jobs, worked within the food supply chain in 2013. Most people were employed in food and beverage service establishments, primary production (agriculture and fishing) and retail.

2 Context

Population and agriculture

Index 1900 = 100

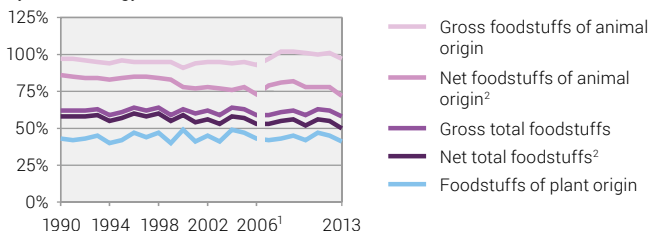


Sources: FSO – EAA, STATPOP, Farm structure survey

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Self-sufficiency rate

By usable energy in %



Source: SFU – Food balance sheet

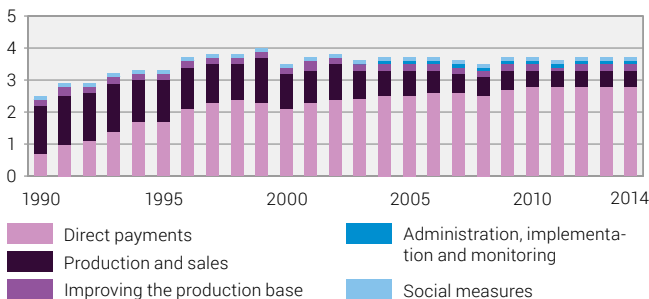
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¹ New calculation method since 2007

² Excluding animal products manufactured from imported feed

Federal expenditure on agriculture and food

In CHF billions



Source: FFA – Federal budget

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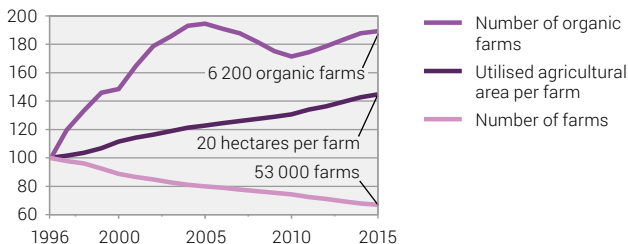
Since the early 20th century, Switzerland's resident population has grown by a factor of 2.5, to over 8 million in 2014. At the same time, breeding and technical progress in agriculture has seen food production increase. This has meant that 60% of food consumption (in terms of usable energy) has been covered by domestic production over the past 20 years.

The Confederation spent some 6% of its total budget on supporting food production in 2014. This is intended to ensure that, through sustainable and market-oriented production, agriculture can make a key contribution to supplying the population with food, conserving natural resources, preserving the countryside, allowing decentralised land settlement and ensuring animal welfare.

3 Agricultural structures

Farms and utilised agricultural area

Index 1996 = 100

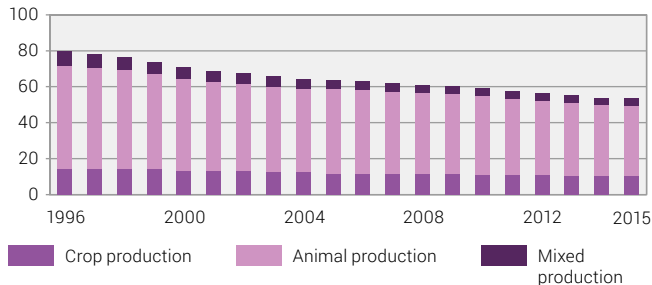


Source: FSO – Farm structure survey

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Farms by type of farming

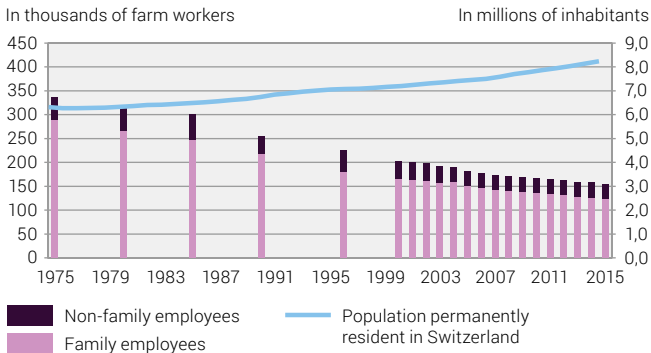
Number of farms (in thousands)



Source: FSO – Farm structure survey

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Farm workers¹ and resident population



Sources: FSO – Farm structure survey, ESPOP and STATPOP

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¹ Pursuant to the definition for farms applicable since 1996

The number of farms declined from 79,500 in 1996 to 53,000 in 2015. The remaining farms now cultivate an area that is almost 45% larger per farm than it was in 1996. Agriculture supplies food to more people with fewer and fewer employees. The number of organic farms fell between 2006 and 2010, before rising again.

The majority of farms are active in livestock farming (livestock and livestock products). Farms with mixed production have been the most affected by the structural change, declining by over 50% since 1996, followed by farms focusing on animal production, which have declined by more than 30%.

Numbers of livestock

In thousands¹

	1996	2005	2010	2015 ²
Cattle	1750	1550	1590	1550
of which cows	760	700	700	700
Horses	40	60	60	60
Sheep	420	450	430	350
Goats	60	80	90	70
Pigs	1380	1610	1590	1500
Poultry	6240	8120	8940	10 750

Source: FSO – Farm structure survey

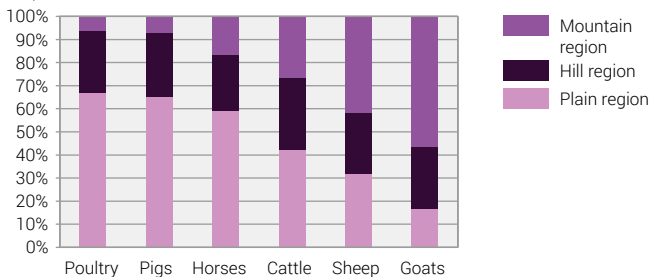
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¹ Rounded

² Reference day has been deferred from early in may to 1st january

Livestock by region, 2015

Proportion of animals

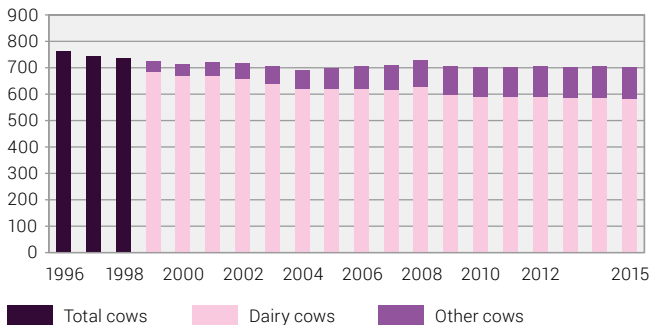


Source: FSO – Farm structure survey

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Cow numbers

In thousands



Source: FSO – Farm structure survey

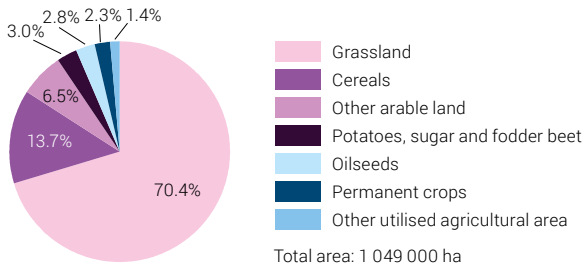
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Cattle numbers fell by 11% between 1996 and 2015. On account of the turmoil on the dairy market, the number of cows has fluctuated in recent years. As fewer dairy cows but more other cows (mainly suckler cows) were farmed, the trend towards meat production using suckler cows continued.

Between 1996 and 2015, the number of poultry in particular saw a sharp increase. The number of sheep rose between 1996 and 2006, but has been in decline ever since, falling to pre-1996 levels. This decline has mainly taken place on part-time farms. Chickens, pigs and horses were mostly reared on lowland farms. Meanwhile, goat and sheep farming is typical of hill and mountain regions.

Use of utilised agricultural area, 2015

Excluding alpine areas



Source: FSO – Farm structure survey

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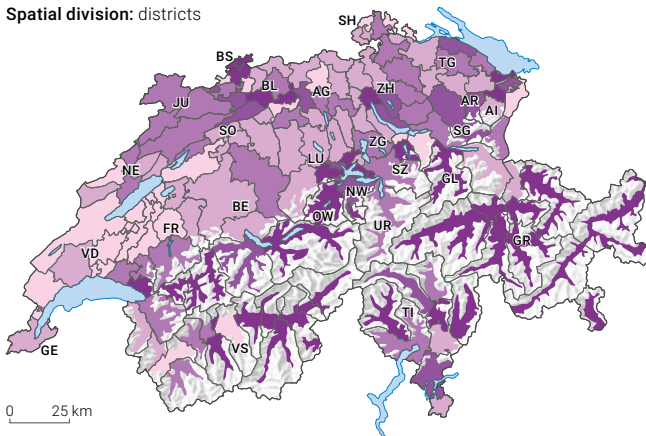
In 2015, grassland accounted for 70% of the utilised agricultural area. This was followed by cereals (14%), the most important arable crop.

In 2015, 12% of farms and 13% of areas were managed organically. The majority of organic farms are located in mountain regions.

The UN has named 2016 the International Year of Pulses as these protein-rich crops are an important foodstuff worldwide. Only 0.9 kg of pulses (peas, chickpeas, lentils, different types of beans and carob seeds) were consumed per person per year in Switzerland in 2013. Pulses are grown on 5,500 hectares in Switzerland (0.5% of the utilised agricultural area). They have a low economic significance and are mainly used as animal fodder.

Organically managed agricultural area, in 2015

Spatial division: districts



Proportion of organically managed utilised agricultural area (UAA), in %



Source: FSO – Farm structure survey

© FSO 2016

4 Primary production

Crop production¹

In thousands of tonnes

	2004	2009	2014 ²
Cereals	1089	1006	964
Potatoes	527	522	503
Sugar beet	1456	1720	1924
Vegetables	330	381	412
Fruit and berries	405	364	301

Source: SFU – Crop production

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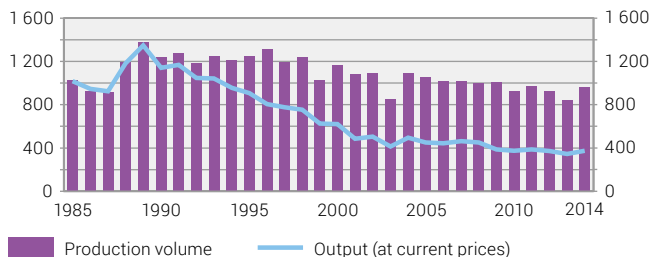
¹ Gross production minus losses in the field and on the farm

² Provisional

Cereals production and output¹

In thousands of tonnes

In CHF million



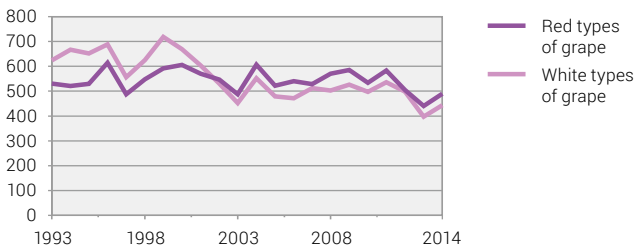
Source: FSÖ – Economic accounts for agriculture

© FSÖ 2016

¹ 2014: provisional

Grape harvest

Must in 1 000 hectolitres



Source: FOAG – Statistics of wine-growing

© FSO 2016

Crop yields are heavily dependent on the weather. Despite the wet summer in 2014 with localised heavy storms, yields were within the normal range. The quality of cereals was poor, however, due to sprouting. Meanwhile, sugar beet flourished, and sugar refineries were able to process a record harvest.

Between 1985 and 2014, the area under cereals fell by 22% and the harvest size shrunk by 6%. The estimated output fell even more sharply due to price erosion and in 2014 made up just a third of the value in 1985.

In the 1990s, significantly more wine must was made using white grape varieties than red ones. This gap has since narrowed, and from 2002 onwards, wine must production from red grape varieties has been slightly higher.

Animal production¹

In thousands of tonnes

	2004	2009	2014 ³
Meat ²			
Cattle	134	142	143
Pigs	227	238	242
Sheep	7	5	5
Poultry	60	65	85
Cow's milk	3870	4069	4067
Chicken's eggs	35	39	49

Source: SFU – Animal production

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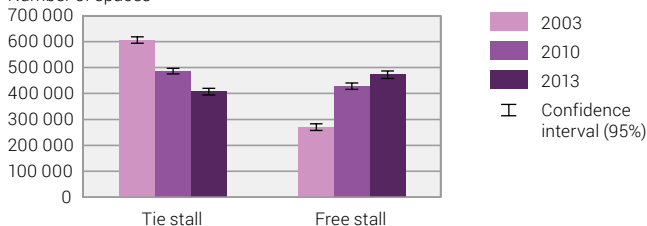
¹ Gross domestic production

² Usable output, carcass weight

³ Provisional

Housing systems cows

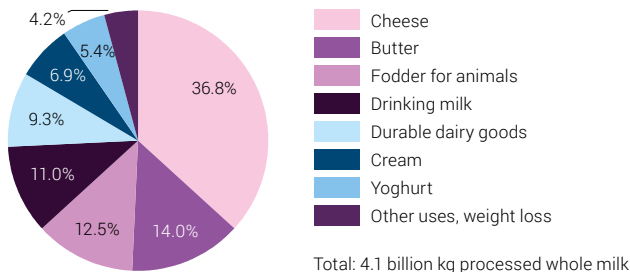
Number of spaces



Source: FSO – Farm structure survey, complementary surveys

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Processing of milked raw milk, 2014



Source: SFU – Milk statistics

© FSQ 2016

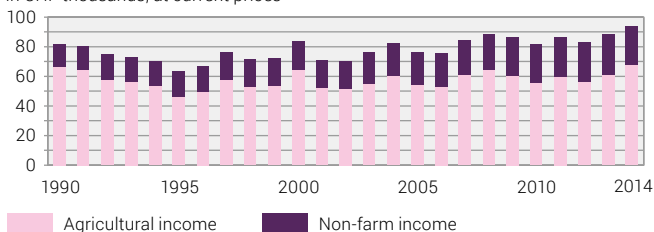
Between 2004 and 2014, meat production rose by 11% as a result of growth in livestock numbers, which was especially marked for poultry.

Traditional cattle breeding in tie stalls is in decline and an increasing number of loose housing have been built. Between 2003 and 2013, there were 202,000 new places for cattle in loose housing, resulting in a total of 472,000 available places in 2013. Loose housing has advantages in terms of animal health and working methods and are therefore specifically supported by the Confederation with direct payments.

Since 2008, Switzerland has produced more than 4 billion kg of milk every year. The milk yield saw a year-on-year increase of 1.6% in 2014. Just over a third of the milk yield was used to make cheese in 2014, followed by butter processing and feeding calves.

Total income per farm

In CHF thousands, at current prices



Source: Agroscope – Farm Accountancy Data Network

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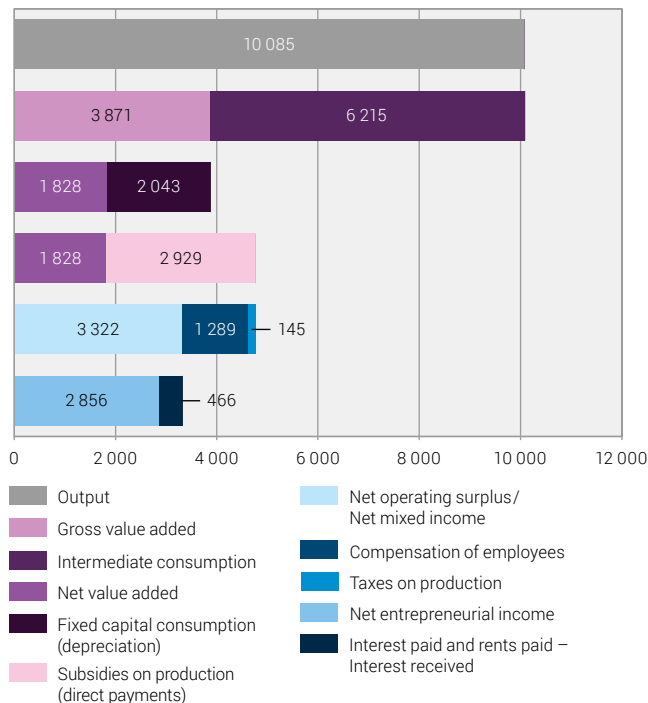
In 2014, the average total income per farm reached a level never observed in the period 1990/2013. Some three quarters of total income relied on their farm income, which saw a year-on-year increase of 10.5%, to an average of CHF 67,800 per farm. The average yearly income per full-time family member was CHF 52,800. A farming household earned around a quarter of its total income from outside agriculture.

The economic accounts for agriculture provide an insight in particular into trends in the sectoral income of Swiss agriculture, output and the split between animal and crop production. In 1985, the total output of agriculture amounted to CHF 13.4 billion. For 2015 it is estimated at CHF 10.1 billion. This general decline is largely price-driven, shaped in particular by the fall in prices of field crops, slaughter cattle, pigs and milk.

Economic accounts for agriculture, 2015¹

At current prices

In CHF millions



Source: FSO – Economic accounts for agriculture

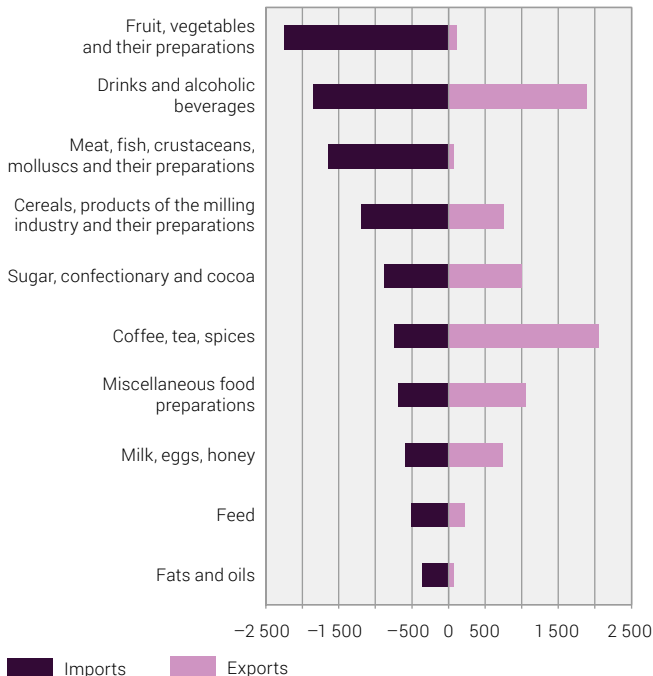
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¹ Estimate

5 Food industry, trade, catering

Imports and exports of the most important foodstuffs, 2014

In CHF millions

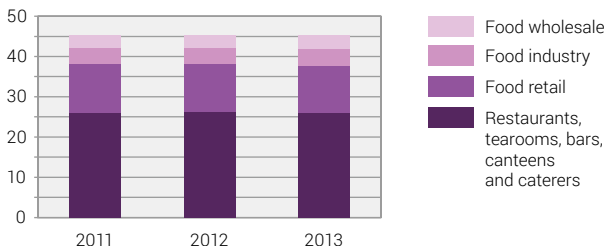


Source: SCA – Swiss foreign trade statistics

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Workplaces in the food industry, trade and catering

No. of businesses (in thousands)



Source: FSO – Structural Business Statistics (STATENT)

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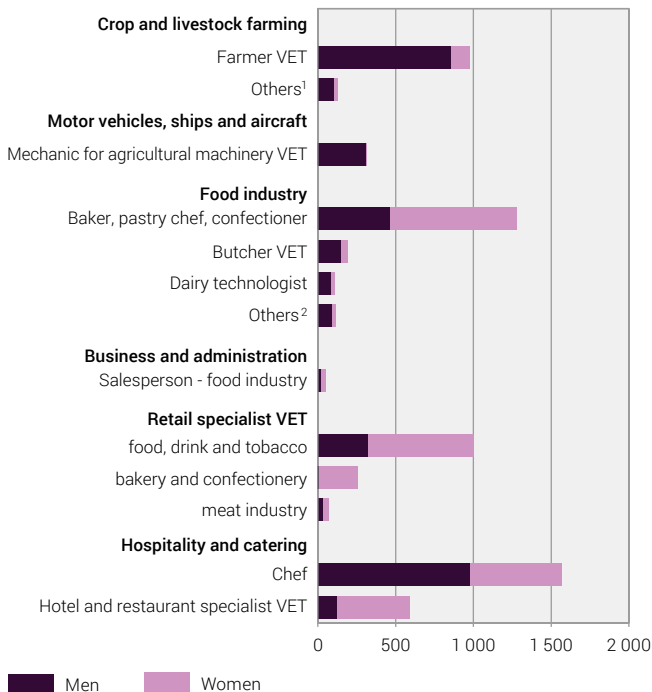
2013: provisional

In 2014, fruit and vegetables were the most commonly imported agricultural products in terms of value. The most common exports were not cheese or chocolate, but beverages containing water, and coffee.

The sectors agriculture and fishing, food production and catering together contributed around 5% of the national economy's gross value added in 1997 and around 4% in 2013. During this period, food production had the highest gross value added. In addition to the approx. 54,000 farms, there were some 45,000 businesses in the downstream food industry, trade and catering sectors.

Education and training in the food supply chain, 2014

Number of vocational qualifications



Source: FSO – Statistics on basic vocational education

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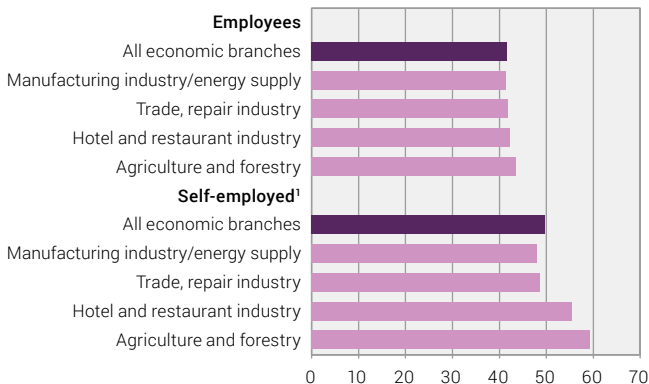
¹ Winegrower, vegetable farmer, fruit farmer, poultry farmer

² Food technologist, miller, wine technician

Federal VET Diploma = Vocational education and training

Normal weekly working hours for full-time employed people, 2014

Hours per week



Source: FSO – Swiss Labour Force Survey

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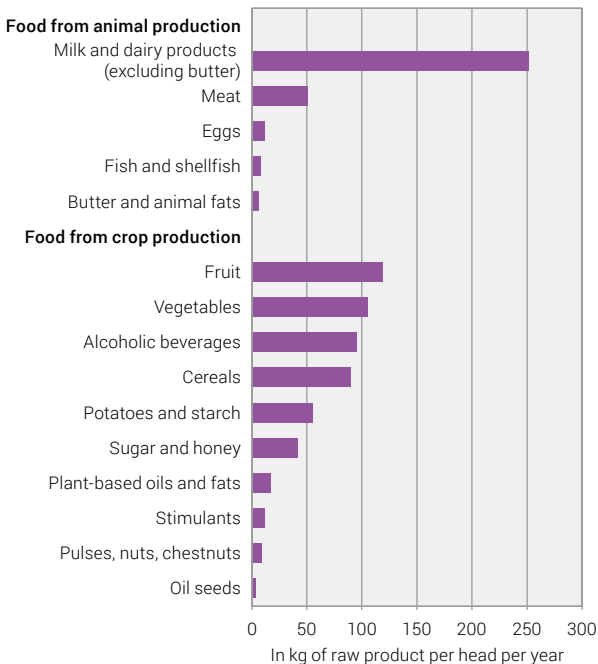
¹ Including self-employed people and employees in their own company (joint stock company and limited-liability company)

The food supply chain comprises many different occupations. In 2014, the largest number of vocational and professional qualifications was awarded to young people trained as chefs, and in the group containing baker, pastry chef and confectioner.

The normal weekly working hours in the restaurant and hotel industry and in agriculture and forestry are amongst the highest of all economic sectors. This applies to both employees and those who are self employed.

6 Consumption and health

Food consumption¹, 2013



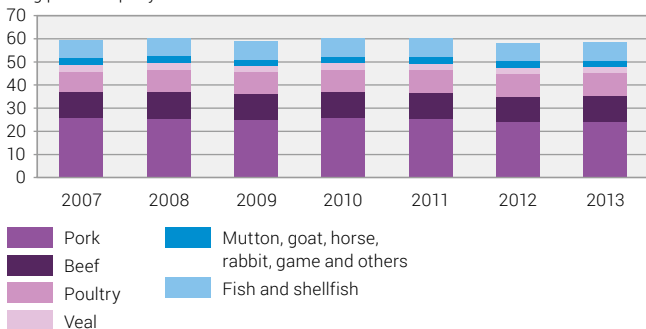
Source: SFU – Food balance sheet

© FSO 2016

¹ Represents food potentially available. Quantities actually consumed are lower because of losses (e.g. unsold or spoiled food).

Consumption of meat and fish

In kg per head per year



Source: SFU – Food balance sheet

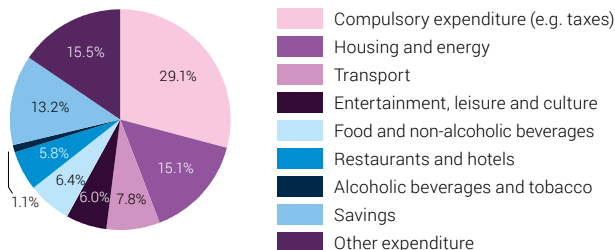
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In 2013, dietary energy supply was over 13,000 kJ per capita per day, taking account of waste (e.g. unsold or spoiled food). The target energy supply for an adult is between 7,500 kJ–10,500 kJ.

In 2013, approximately 880 kg of food was consumed per capita. Of this, 550 kg was of plant origin and 330 kg of animal origin. The overall meat consumption per person and year was 1.3 kg lower in 2013 compared to 2007. However, consumption of poultry grew by 13% fish and shellfish by 9%.

Household expenditure, 2013

Proportion of gross household income

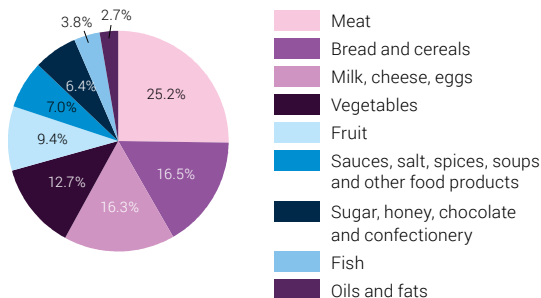


Average number of persons per household: 2.2

Source: FSO – Household Budget Survey

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Household consumption expenditure for food, 2013



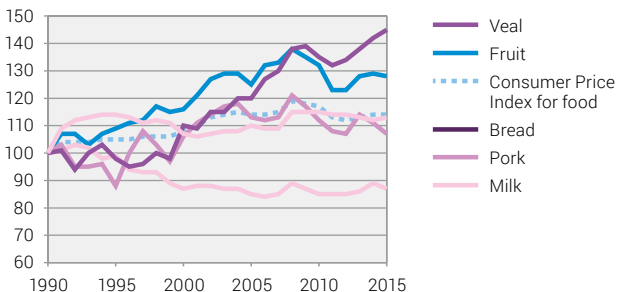
Average number of persons per household: 2.2

Source: FSO – Household Budget Survey

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Consumer Price Index

Index 1990 = 100



Source: FSO – Consumer Price Index (CPI)

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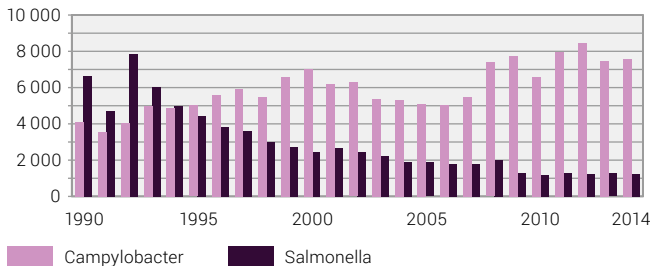
In 2013, households spent roughly an eighth of their budget on food, or an average of CHF 1200 per month, including meals and drinks in restaurants. At approximately CHF 150 a month, meat was the largest food expenditure item, followed by bread and cereal products.

Overall food prices rose by around 14% between 1990 and 2015. Within this product group during the same period, veal and fruit became disproportionately more expensive, while dairy products became cheaper.

Food poisoning

The most common zoonoses reported in humans

Number of cases



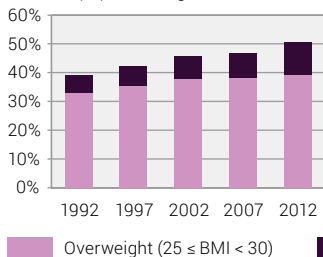
Source: FOPH – Epidemiology

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Overweight or obese persons

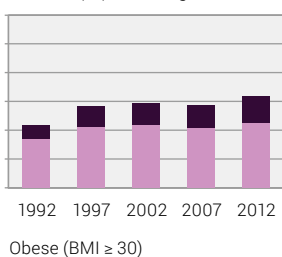
Men

Resident population aged 15 or over



Women

Resident population aged 15 or over

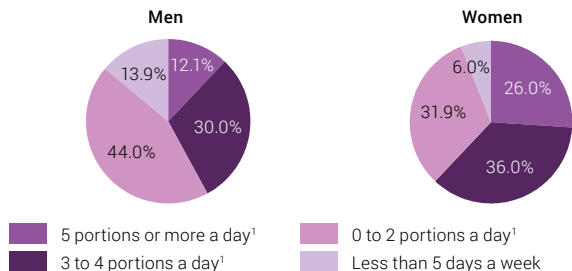


Source: FSO – Swiss Health Survey

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Daily consumption of fruit and vegetables, 2012

Population aged 15 or over living in private households



Source: FSO – Swiss Health Survey

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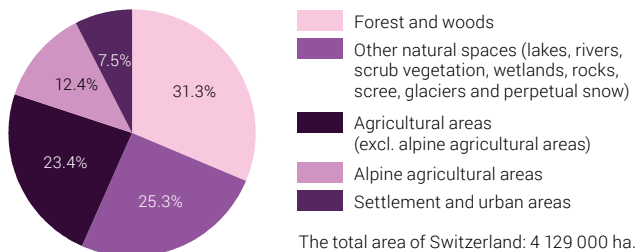
¹ At least 5 days a week

Food poisoning usually occurs when food is not heated properly or if it is spoiled. The diarrhoea pathogen campylobacter has long been the most common zoonosis. The main source of infection is the consumption of raw meat. Salmonella infections are becoming increasingly rare, which can largely be attributed to successful control of infected laying hens.

The proportion of overweight or obese people rose between 1992 and 2012. In 2012, some 51% of men and 32% of women were overweight or obese. Fruit and vegetables are an integral part of a healthy diet. 19% of the Swiss population claim to eat at least five portions of fruit and/or vegetables a day at least 5 days a week, in line with the Swiss food pyramid.

7 The environment

Land use, 2004/2009¹



Source: FSO – Swiss Land Use Statistics (NOAS04)

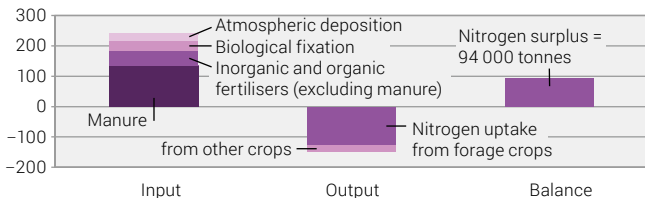
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¹ Areas surveyed between 2004 and 2009

Nitrogen balance of agricultural land, 2013¹

Amounts of nitrogen inputs and uptake from agricultural soil

In thousands of tonnes



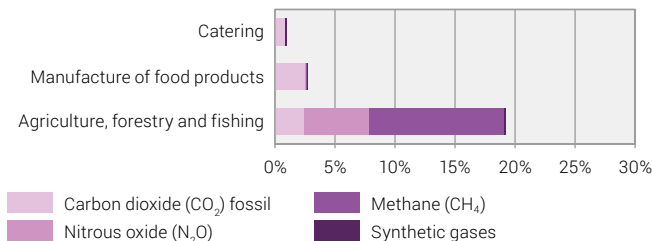
Source: FSO – Nitrogen balance

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¹ According to the Organisation for Economic Co-operation and Development (OECD) method

Greenhouse gas emissions from the food supply chain, 2013

Portion of total greenhouse gas emissions produced by the economy



Source: FSO – Environmental accounting

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The agricultural and alpine agricultural areas together account for more than one third of the total surface area of Switzerland. Between 1985 and 2009, 850 km² of this area was lost, equivalent to the size of the canton of Jura.

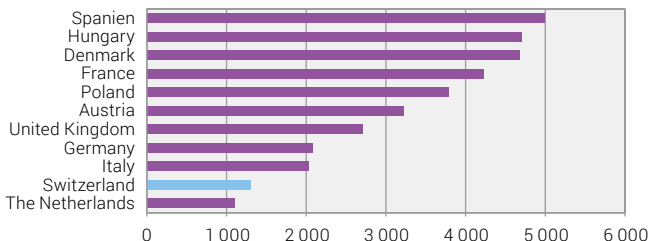
On the long-term, the nitrogen surplus from the agricultural area (including alpine meadows) has been declining. According to the 2013 nitrogen balance, there was a nitrogen surplus of 61 kg/ha. In the 1990s this figure was over 80 kg/ha per year. Nitrogen can become a pollutant in the environment (as ammonia in the air or as nitrate in groundwater).

The sectors of agriculture and forestry, manufacture of food products and the restaurant and hotel industry caused 23% of the greenhouse gas emissions generated by the economy as a whole in 2013. The largest shares of the total methane and nitrous oxide emissions were caused by agriculture, in particular from livestock and fertilisers.

8 International comparisons

Utilised agricultural area per inhabitant, 2013

In m² per inhabitant

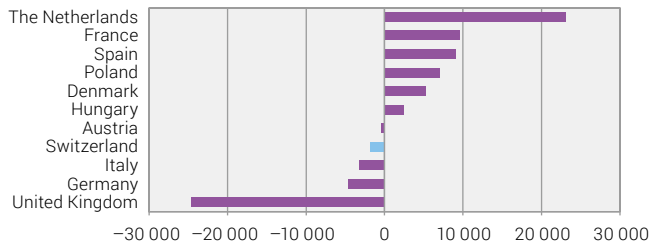


Source: Eurostat – Farm structure survey

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International trade of food, beverages and tobacco, 2014

Balance in EUR millions

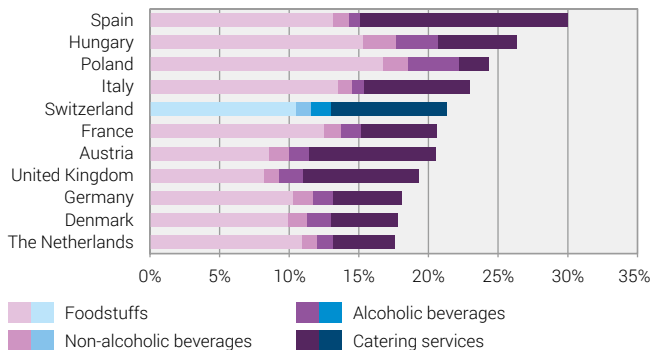


Source: Eurostat

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Income of households spent on food consumption, 2012

In % to total consumption expenditures



Source: Eurostat, FSO – Household Budget Survey

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Switzerland and the Netherlands are among the European countries that use small agricultural area per inhabitant. In 2013, this area was 1300 m² per person.

In Europe (EU27), various countries, including the UK, Germany and Italy, import more food than they export in value terms, while France and the Netherlands are the most important exporters.

Households in the EU27 and in Switzerland spent on average 22% of their budgets on food in 2012.

9 Key Canton figures

Population and businesses, 2013

Cantons	Population in thousands	Farms	Cheese dairies	Bakeries	Large supermarkets (1000–2499m ²)	Restaurants
ZH	1409	3708	21	173	53	2875
BE	993	11 250	141	202	48	2148
LU	386	4833	46	80	17	673
UR	36	608	11	12	0	94
SZ	150	1680	12	32	9	441
OW	36	674	14	9	1	85
NW	42	474	12	8	1	75
GL	39	387	3	10	3	99
ZG	117	583	6	20	5	250
FR	291	2973	109	54	12	582
SO	259	1482	6	46	9	584
BS	187	11	0	29	8	536
BL	277	941	0	27	10	447
SH	78	595	0	11	2	203
AR	53	758	9	8	1	162
AI	16	497	2	8	1	51
SG	487	4268	80	108	20	1253
GR	194	2476	32	47	11	734
AG	627	3493	4	94	28	1089
TG	256	2785	46	45	13	603
TI	342	1134	11	48	6	1111
VD	734	3841	60	113	33	1646
VS	322	3446	27	55	14	1283
NE	175	847	14	30	5	425
GE	463	402	1	49	24	1414
JU	71	1061	6	15	4	177
Switzerland	8039	55 207	673	1333	338	19 040

Sources: FSO – Farm structure survey, STATENT

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- Federal Office
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- Federal Finance Administration FFA (www.efv.admin.ch)
- Swiss Customs Administration (www.ezv.admin.ch)
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