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Agricultural Report 2012

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Summary

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Agricultural Report 2012

Summary

The thirteenth Agricultural Report of the Federal Office for Agriculture provides information on the economic, social and ecological aspects of farming in 2011 and on the developments over the last 10 to 20 years. Some of the findings are summarized below.

Situation and developments from the economic point of view

Incomes higher than in the previous year

In 2011, entrepreneurial income for the whole sector amounted to CHF 2.734 billion. This represents an increase of CHF 48 million compared to 2010 (+1.8 %). At the same time, output (CHF +85 million or +0.8 %) and other subsidies (CHF +36 million or +1.2 %) increased more than costs (including intermediate consumption CHF +76 million or +1.2 %, fixed capital consumption –CHF 13 million or –0.6 %, compensation of employees CHF +14 million or +1.1 %, interest paid CHF –14 million or –5.4 %).

Economic accounts for agriculture in Switzerland
Figures are at current prices, in CHF million

	2008	2009	2010 [1]	2011 [2]
Output of the agricultural sector	11 161	10 401	10 081	10 166
Crop output	4 579	4 418	4 309	4 333
Animal production	5 600	4 979	4 775	4 815
Agricultural services output	648	650	655	663
Miscellaneous	334	354	342	355
– Intermediate consumption	6 568	6 366	6 255	6 331
Gross value added at basic prices	4 593	4 035	3 827	3 835
– fixed capital consumption	2 185	2 196	2 142	2 129
Net value added at basic prices	2 408	1 839	1 685	1 706
– other taxes on production	139	149	150	158
+ other subsidies (not product-dependent)	2 655	2 837	2 876	2 912
Factor income	4 924	4 527	4 411	4 460
– Compensation of employees	1 276	1 239	1 246	1 260
Operating surplus / mixed income	3 648	3 289	3 166	3 200
– rents and other real estate rental charges to be paid	229	233	234	234
– interest paid	296	268	257	243
+ interest received	16	12	11	11
Entrepreneurial income	3 139	2 800	2 686	2 734

Due to the partial revision of the national accounts in June 2012, all time periods relating to the aggregates in this table have been changed.

1 semi-definitive, as at 10.9.2012
2 provisional, as at 10.9.2012

Source: FSO

The assessment of the economic situation of individual farms is based on the evaluation of financial statements from around 3,000 sample farms. The results obtained from the sample farms are representative of a population of around 50,000 farms.

In 2011, incomes in the agricultural sector at the level of individual farms were 7.8 % above the figure for the previous year. Income from other sources only rose slightly (+1.6 %) compared to the previous year.

Trend in income from farming: mean for all regions

Secondary source of income
Income from farming

Source: Agroscope Reckenholz-Tänikon ART

Increased international trade in agriculture products

International trade in agricultural products generally showed a positive trend in the year under review. In comparison with 2010, the value of imports dropped slightly whilst exports remained at the same level as the previous year. In 2011, the balance of trade in agricultural products again showed an excess of imports over exports at the end of the year, although the corresponding figure had dropped again compared to the previous year and at CHF 3.6 billion, was lower than ever before.

In 2011, around 74 % of agricultural imports originated from the EU, while 61 % of exports went to EU countries. The balance of trade in agricultural products with the EU showed an excess of imports over exports of CHF 3.7 billion at the end of 2011.

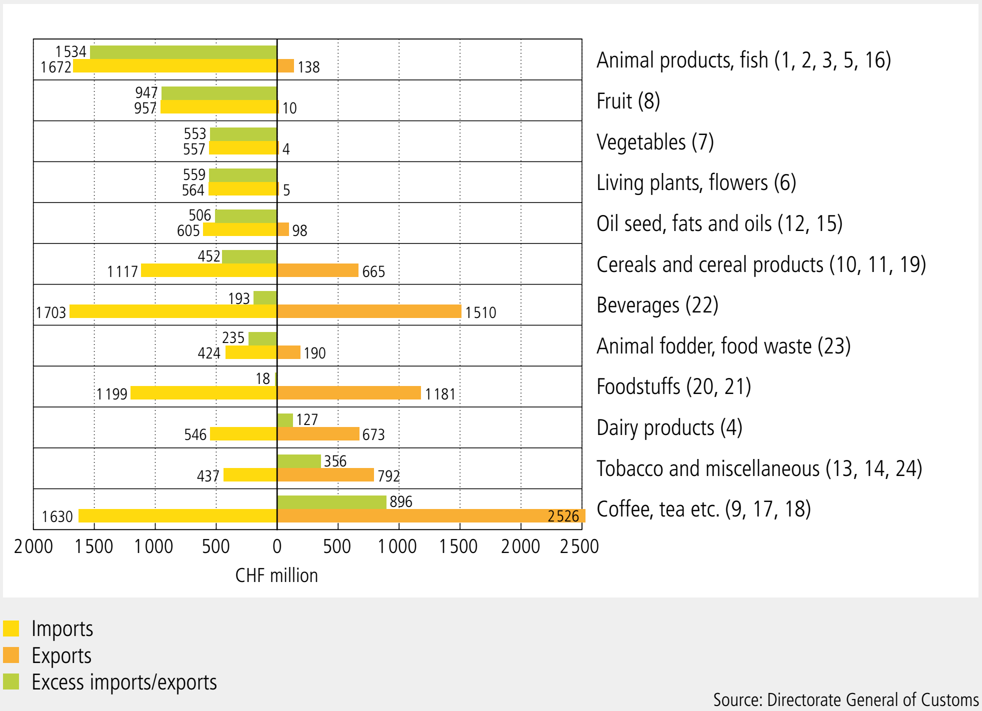
Trend in international trade

	2000/02	2009	2010	2011	2000/02–11
	billion CHF				%
Imports					
Total agricultural products	8.5	11.5	11.5	11.4	34.1
of which from the 27 EU countries	6.4	8.9	8.8	8.5	32.8
Exports					
Total agricultural products	3.5	7.5	7.8	7.8	122.9
of which to the 27 EU countries	2.5	4.8	4.8	4.8	92.0
Excess imports over exports					
Total agricultural products	5.0	4.0	3.7	3.6	–28.0
of which from the 27 EU countries	3.9	4.1	4.0	3.7	–5.1

Source: DGC

As far as foodstuffs are concerned, Switzerland is a major importer. Considerable quantities of products are imported in every category of foodstuffs. As for exports, processed food products are dominant; only small quantities of fresh vegetables and fruit, meat and meat products are sold to other countries. In these categories, the excess of imports over exports is high. The balance of trade in beverages, processed foodstuffs and dairy products is more or less in equilibrium.

Imports and exports of agricultural products and processed products by category: 2011



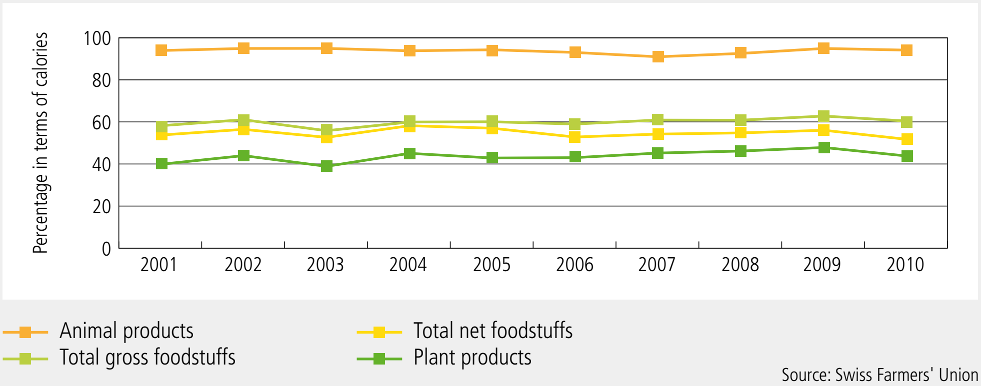
Source: Directorate General of Customs

Level of self-sufficiency in 2010 lower than in 2009

As far as the level of self-sufficiency is concerned, a distinction is made between the gross and the net level of self-sufficiency, where the latter takes into account that a part of domestic production relies on imported feedingstuffs.

Animal production dominates the Swiss agricultural sector, which also helps to explain the relatively high level of self-sufficiency in this area. In 2010, the proportion of self-sufficiency guaranteed by the domestic production of animal products was 94.0 %, which was more than one percentage point lower than in 2009 (95.2 %). The corresponding proportion for plant products also decreased in 2010 by around four percentage points compared with 2009, namely to 43.7 %. Overall in 2010, the gross level of self-sufficiency was 60.4 %, which was three percentage points lower than in 2009 (63.3 %). The net level of self-sufficiency was 52.5 % in 2010, which was 3.5 percentage points lower than in the previous year.

Trend in level of self-sufficiency



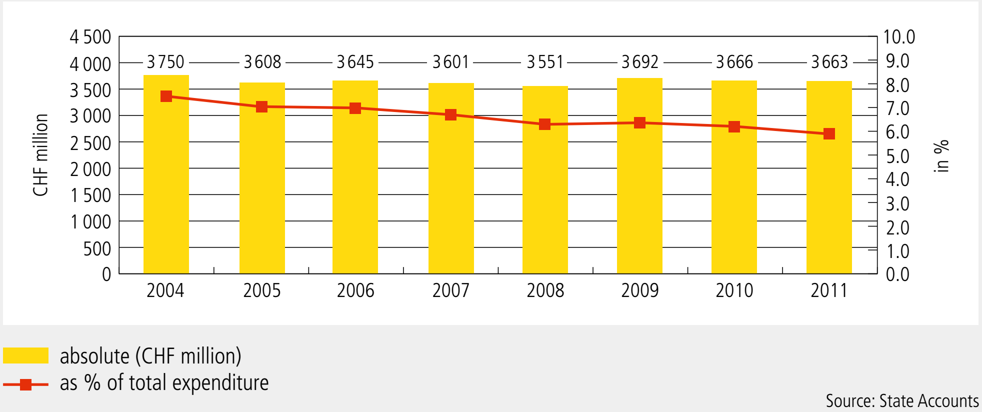
Source: Swiss Farmers' Union

Expenditure on agriculture and food remains unchanged

Total federal expenditure in the year under review amounted to CHF 62,333 million, which represented an increase of CHF 3 billion over 2010. A total of CHF 3,663 million was spent on agriculture and food, which was virtually the same amount spent in 2010. This category ranked sixth after social services (CHF 20,557 million), finance and taxes (CHF 9,954 million), transport (CHF 8,062 million), education and research (CHF 6,509 million) and national defence (CHF 4,533 million).

The proportion of total federal expenditure allotted to agriculture and food has fallen from 7.5 % in 2004 to 5.9 % in 2011.

Development of federal expenditure on agriculture and food



Source: State Accounts

Expenditure on production and marketing increased by around CHF 13 million in 2011 compared with the figure for 2010. Between 2005 and 2011, the total decrease has been CHF 236 million, while direct payments have risen by CHF 331 million over the same period.

Trend in federal expenditure on agriculture and food

Area of expenditure	2005	2006	2007	2008	2009	2010	2011
	in million CHF						
Production and marketing	677	606	548	536	471	428	441
Direct payments	2 464	2 553	2 596	2 546	2 742	2 769	2 795
Basic improvements	178	201	175	184	170	172	135
Miscellaneous	289	285	282	285	308	297	293
Total expenditure on agriculture and food	3 608	3 645	3 601	3 551	3 692	3 666	3 663

NB: The introduction of the new accounting system in 2007 entailed a change in the accounting system used by the Confederation.
It is consequently no longer possible to compare figures for the previous years.

Sources: Federal financial statements, FOAG

Structure of the agricultural sector continues to change

During the first eleven years of the present century, the total number of farms fell by around 12,920, giving an average annual decrease of 1.8 %.

Trend in the number of farms and people employed in agriculture

Category	No. of farms		Change per year in %
	2000	2011	2000–2011
Farms	70 537	57 617	–1.8
Lowland areas	31 612	25 575	–1.9
Upland areas	18 957	15 872	–1.6
Mountain areas	19 968	16 170	–1.9
Main source of income	49 239	40 613	–1.7
Secondary source of income	21 298	17 004	–2.0
No. of people employed	203 793	164 067	–2,0

Source: FSO

The drop in the number of farms in different areas shows that the annual rate of change was similar between 2000 and 2011. The same applies to the trend for farms as principal and secondary sources of income.

The number of people employed in the agricultural sector has fallen by 40,000 since 2000. The percentage drop in this respect was slightly higher than that for the number of farms.

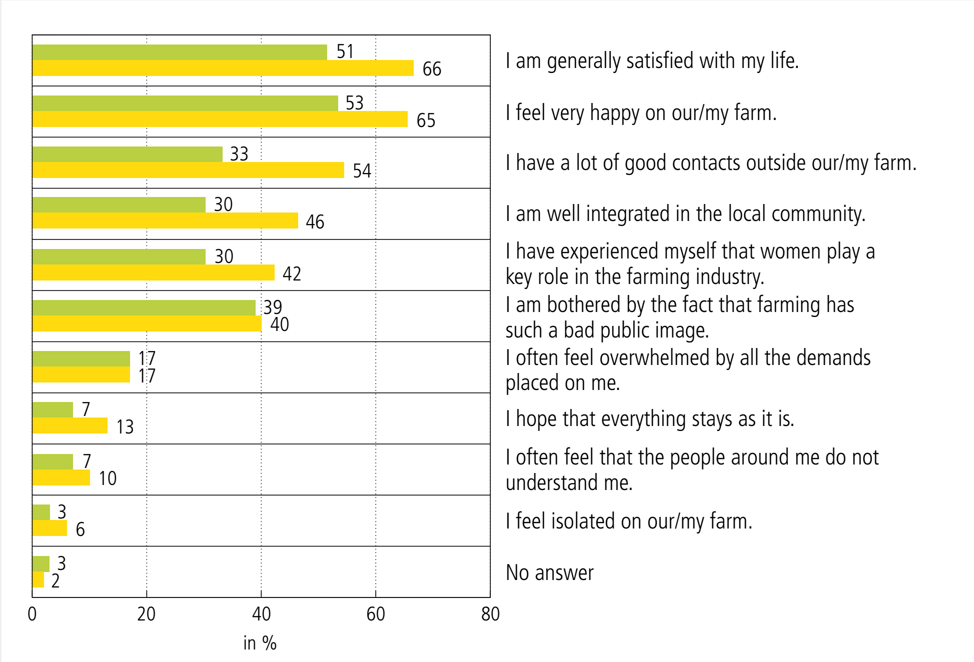
Situation and trends from the social point of view

Women are content despite heavy workload

Ten years after the first broad-based study on the situation of women in the Swiss farming industry, a new representative study was carried out in 2012 to update the findings. This included a written survey and four group discussions in different geographical and linguistic regions of Switzerland.

The findings showed that the majority of women in the Swiss farming industry were very satisfied, rated their health as good and felt happy to be working in this sector. The positive statements received much greater approval than the negative ones and than those recorded ten years ago. A farm offers a great deal of creative scope and has the advantage of a combined working and living unit. These advantages are highly valued by women in the farming industry.

Emotional state 2002 vs. 2012 (Multiple answers possible)



2002 [N=883]
2012 [N=820]

Source: Isopublic 2012

However, women in farming also say they suffer from stress. This is especially due to political and macro-economic conditions which are outside the control of individual farming families when carrying out their daily work on the farm, but is also due to time pressures and the heavy daily workload.

More and more women are in employment

The number of women employed on farms has increased over the last ten years. Women are increasingly employed in a variety of salaried positions but there are also self-employed women, e.g. responsible for a branch of the industry such as direct marketing. Women therefore make an important contribution to total income, a quarter of them contributing between 10 and 25 % of total income. The younger the women, the larger the contribution they make. However, the majority of women still work on farms for free as working family members and are therefore not considered employees of the farm.

Almost half the women have jobs in non-farm related work mainly because the family is reliant on the additional income. Younger women, in particular, benefit from sound vocational training these days and work mostly part-time in the profession they were trained in to keep pace with developments in the world of work outside the farming industry. According to the survey, the proportion of women contributing more than a quarter of the family's total income with their non-farm related work was 28 %.

Women are not sufficiently aware of their legal status on the farm

The written survey shows that a large majority of women working on farms have married into the situation and two-thirds live under the ordinary matrimonial property regime of participation in accrued gains. Only a few women run a farm independently. Although most women in the survey claimed to be the co-owner and co-manager of the farm, group discussions showed that they were referring to their financial commitment to the farm and their many years of service. There was seldom a land registry entry identifying them as co-owners.

Women's low level of social security is little cause for concern

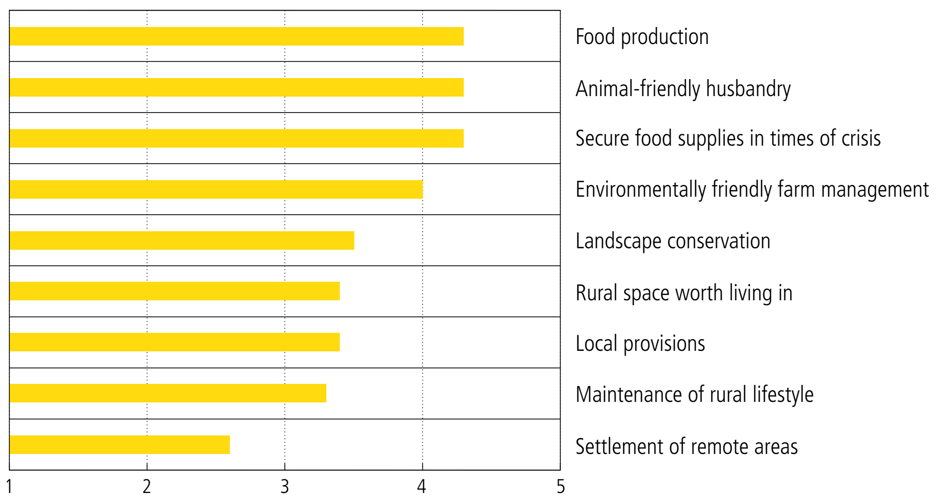
Around 80 % of the women build up their own social security through non-farm related employment, independent management of an industry-related branch or paid work at the farm. However, this often turns out to be a modest level of provision. As a working family member, they work on the farm for free and are therefore not considered employees of the farm with the corresponding consequences for their social security. Despite everything, most married women show relatively little concern about their social security. The survey suggests that there is a great need for education about both their legal position and social security.

Swiss population favour local farming industry and its financial support

The Univox research programme is a comprehensive long-term observation of society which the research institute gfs-zürich has been carrying out in cooperation with around 20 specialist, mostly university, institutes since 1986. The Agriculture Module is one of over 20 subject areas handled and this survey has been commissioned by the Federal Office for Agriculture (FOAG) since 2009. The most recent representative survey was carried out at the beginning of 2012.

Results show that Swiss citizens favour the domestic farming industry. They regard three areas as particularly important: food production, animal-friendly husbandry and secure food supplies in times of crisis. Compared to 2009, the importance of food supplies in times of crisis has particularly risen. The significance of food production and animal-friendly husbandry has remained the same.

Importance of agricultural areas of responsibility 2012



Mean values: scale from 1 = not important at all to 5 = very important

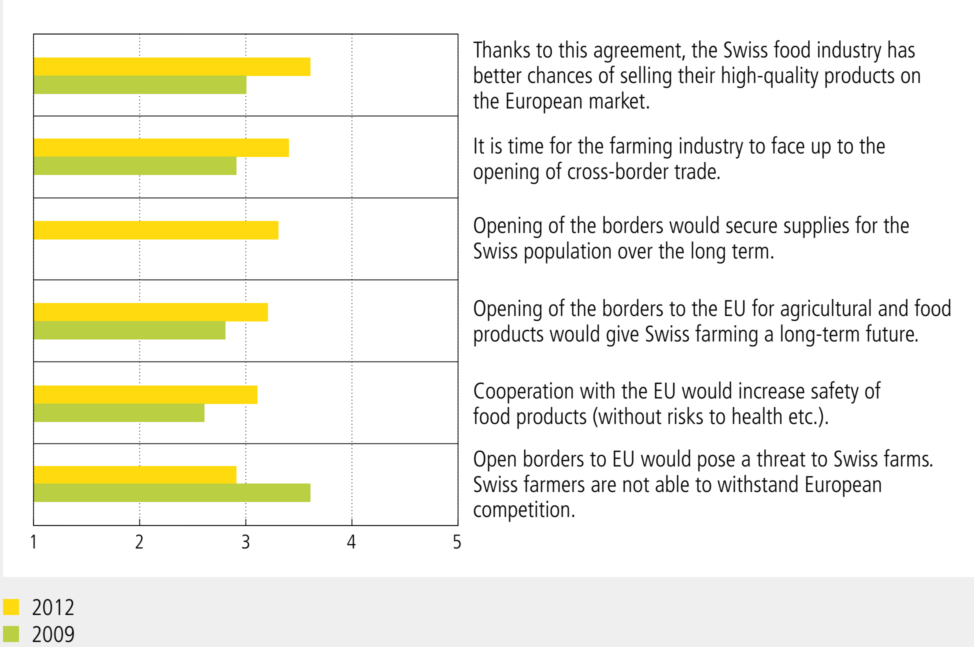
Source: gfs-zürich

There is a high level of approval for the financial support of farming. Two-thirds of Swiss citizens are of the opinion that the Swiss farming industry should receive financial support from the state, mountain farming in particular. The willingness to see state aid correlates strongly with the importance of the farming activity. Support is particularly advocated for food production, animal-friendly husbandry, secure food supplies in times of crisis and environmentally friendly farm management.

Increased support for EU free trade in agricultural produce

The Swiss population is now adopting a more favourable attitude towards a free-trade agreement with the EU for agricultural products compared to the last survey in 2009. 53 % of those questioned believe that such an agreement would make it easier for the Swiss food industry to sell high-quality Swiss products on the European market. 41 % of those questioned thought it was time for the farming industry to face up to the opening of cross-border trade. Only 31 % now believe that European competition would pose a threat to Swiss farms if the borders were opened (2009: 57 %).

Attitude to a possible free-trade agreement CH/EU for agricultural and food products



Mean values: scale from 1 = does not apply at all to 5 = fully applies

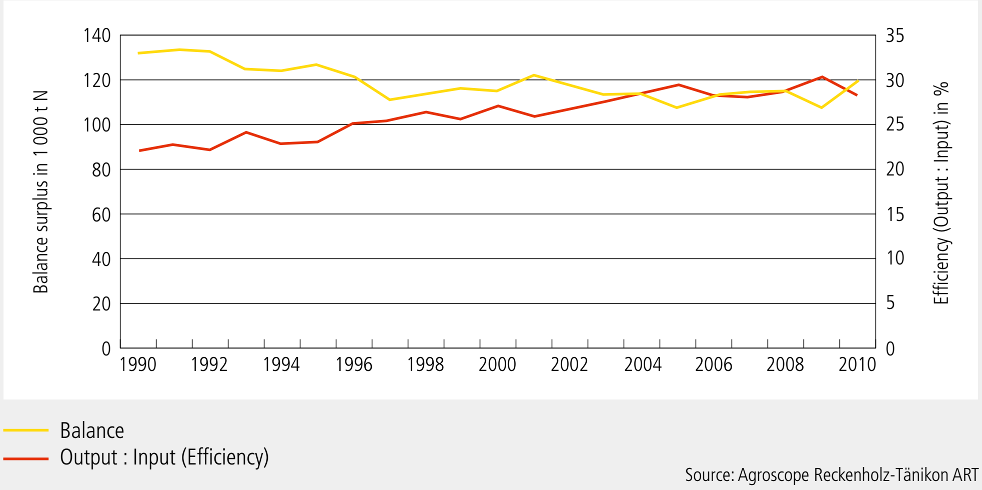
Source: gfs-zürich

Situation and trends from the ecological point of view

Nitrogen use efficiency continues to increase

Nitrogen-Use Efficiency (NUE) expresses the ratio between output and input of nitrogen in agricultural production. In crop production, the maximum possible NUE (calculated on the basis of the OSPAR balance) is significantly higher than in livestock production due to natural processes. When considering the current proportion of livestock production as a percentage of total food production in the farming industry, the maximum possible NUE should be approx. 35–40 % for Switzerland, according to estimates from the Federal Office for Agriculture (FOAG). The nitrogen use efficiency was increased from a good 22 % to 29 % between 1990/92 and 2008/10. In absolute figures, the nitrogen surplus reduced by around 134,000 t to around 114,000 t from 1990/92 to 2008/10. The value in 2010 was somewhat higher again (120,000 t).

Development of N balance surplus and N use efficiency



Source: Agroscope Reckenholz-Tänikon ART

Nitrate concentration in groundwater can increase in dry periods

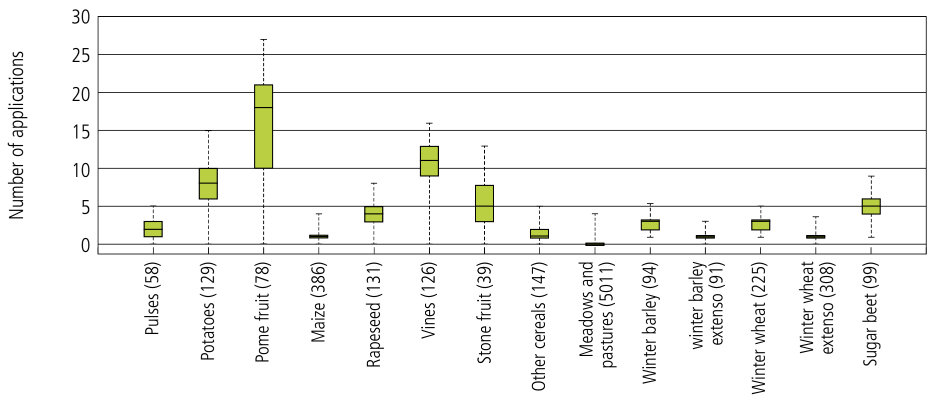
Nitrate concentration in groundwater is influenced on the one hand by agricultural factors such as the use of fertilizers and soil cultivation. On the other hand, it is also influenced by the seasonal distribution of precipitation and the amount of precipitation due both to the difference in absorption of nitrogen by the crops and to the timing and the rate of groundwater recharge. Nitrate concentrations tended to sink accordingly in the relatively wet years before 2002 and after 2006, and rose, to some extent, significantly during the drier than average periods from 2003 to 2005.

Use of plant protection products

The crop-specific use of PPPs (plant protection products) in Switzerland has been recorded since 2009 as part of the Central Evaluation of Agri-Environmental Indicators (ZA-AUI). The surveys for 2009 cover a total of 2,246 applications for arable farming and special crops with a total surface area of 2,875 ha and 5,011 applications for meadows and pastures with a total surface area of 5,118 ha. These sample areas are approximately consistent with the total Swiss distribution of crop groups and the surface covers almost 1 % of the entire agriculture area of Switzerland taken up by arable farming and special crops.

Various key performance indicators can be calculated from this data which allow conclusions to be drawn on the practice of plant protection, for example the "frequency of treatment" and the "average amount of active substances". The results for the indicator "frequency of treatment" show that in 2009, pesticides were most frequently used on fruit and vines.

Frequency of treatment of the individual groups of crops, 2009



Comments: The number of evaluated applications is given in brackets.
The box corresponds to the area where the middle 50 % of the data lies. The continuous line in the box divides the diagram into two halves, each containing 50 % of the data. The demarcation bars indicate the minimum and the maximum.

Source: ACW

The higher frequency of applications for fruit and vines compared to arable farming is in line with expectations as these crops are exposed to disproportionately higher pressure from disease and pests. Various studies indicate that plant protection in cereal cultivation in Switzerland is less intensive than in other European countries, not only on areas cultivated under extenso conditions (that is cultivation without using PPPs apart from herbicides), which make up for about 50 % of the total area but also on the remaining area under cultivation. Detailed evaluations of the frequency of treatment in Great Britain (Garthwaite et al., 2011) are available for even-numbered years and at irregular intervals from Germany. The number of applications for winter wheat was 5.9 (ZA-AUI: 3.0) for Great Britain and 4.4. for winter barley (ZA-AUI: 2.9) in 2010. In Switzerland however, yields are also somewhat lower than in Great Britain. For other field crops, fruit and vines, the number of applications in Great Britain was comparable with Swiss surveys in 2009 and 2010.

The highest total amount of active substance used per ha and per year is for pome fruit, vines and potatoes. The large amounts are each attributable to a few active substances which require high application rates of several kilograms per hectare. For example, the three substances kaolin, sulphur and paraffin oil themselves account for 56 % of the amount used for pome fruit. These substances have comparatively low to very low adverse effects. Their use is also allowed in organic farming. For the other crops, the amounts are considerably lower.

When discussing potential environmental damage, the qualities of the individual active substances must also be taken into account which is why in future a risk indicator will be calculated as well as the key performance indicators of agronomic practice.

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