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**Austria's Agriculture Suffered a Slump
in Income in 2023 and is Subject to
Continuous Structural Change**

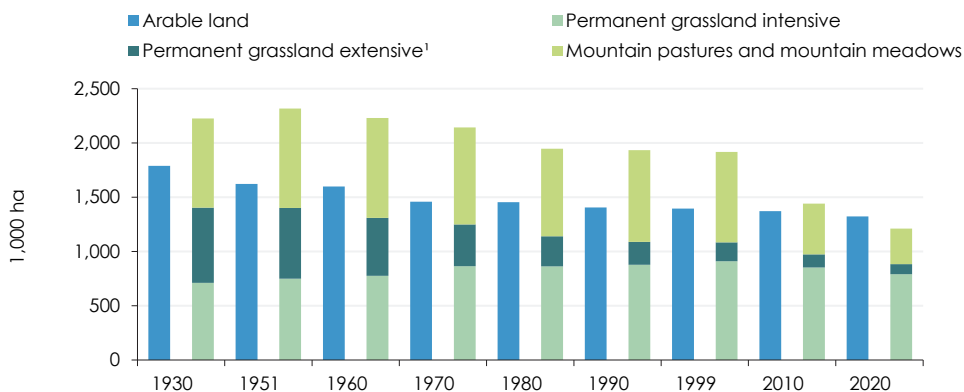
Franz Sinabell

Austria's Agriculture Suffered a Slump in Income in 2023 and is Subject to Continuous Structural Change

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- While 2022 was an exceptionally good year for Austria's agricultural sector, falling prices for agricultural goods and relatively high costs put a damper on value added and income in 2023.
- Factor income per annual work unit and corporate profits fell to the level of the ten-year average after adjustment for prices.
- Slightly less timber was harvested in the forestry sector. As the value of inputs decreased considerably, a slight increase in value added was nevertheless achieved.
- Imports of agricultural goods and food grew more strongly than exports again in 2023, after the balance of trade had been almost balanced for three years.
- A long-term comparison of the number of farms shows a continuing decline, which has slowed significantly according to the most recent farm census.
- For almost a century, the agricultural area in Austria has been continuously decreasing. A trend reversal is not in sight.

Development of land use



"2023 is one of those years in which there was a strong correction after a phase of upswing. The long-term consequence is ongoing structural change in agriculture."

Based on agricultural structure surveys and farm censuses, it is possible to track the development of agricultural land use over almost a century. Over this period, only intensively used permanent grassland has increased. There have been significant declines in all other land use categories. The most pronounced decline was in extensively used permanent grassland (source: Federal Ministry of Agriculture, Economy, Regions and Water Management (2024); Statistics Austria (2001, 2013, 2024a); Austrian Central Statistical Office (1964, 1973/74, 1983, 1992). – ¹ Mountain pastures and mountain meadows are not included).

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October 2024

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The increase in prices of many agricultural goods due to market turbulence following Russia's invasion of Ukraine led to high increases in the production value of Austrian agriculture in 2022. Despite the significantly more expensive operating resources, revenues clearly outweighed costs. In 2023, the price of numerous agricultural goods fell so sharply that factor income and profits collapsed despite falling production costs. Forestry, on the other hand, continued to develop robustly. As a long-term comparison shows, the agricultural area in Austria is continuously decreasing, while forests and other areas are gaining in relative importance. The number of farms has also steadily decreased in recent decades, although the decline has slowed considerably according to the latest farm census.

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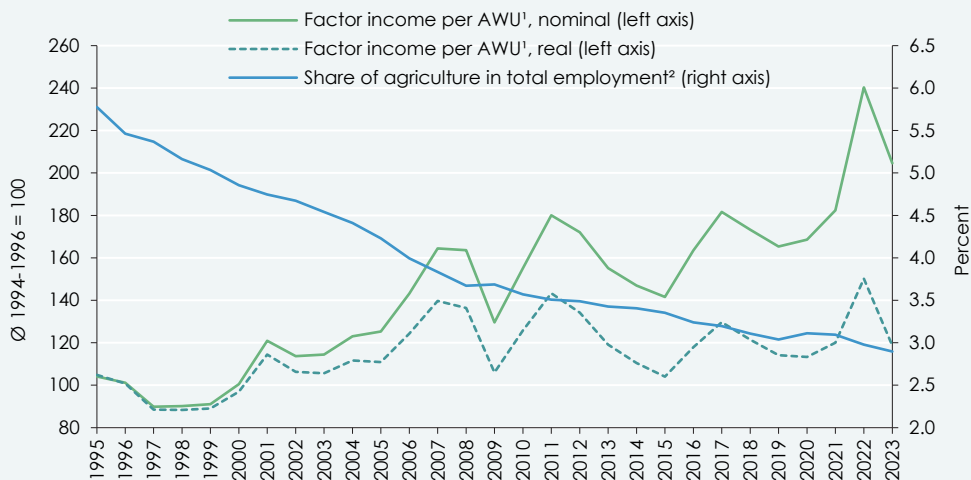
1. Factor income per annual work unit in the domestic agricultural sector slumped after a significant increase in the previous year

After agricultural income in Austria had risen for three years in a row, there was an unexpectedly sharp decline in 2023.

After income in the domestic agricultural sector (factor income per annual work unit) had already risen in the two previous years, it increased again by a strong 25.2 percent in volume in 2022. However, this was followed by a slump in 2023, as can be seen from Statistics Austria's Economic Accounts for Agriculture (2024b). Factor income per annual work unit (paid and unpaid) fell by 21.1 percent in 2023 after adjustment for prices (Figure 1). This was mainly due to price changes and a decline in subsidies. Factor income measures remuneration based on the production factors land, capital and labour used in agriculture. Net corporate income per non-wage-earning annual work unit fell by 29.8 percent in volume terms (after +29.5 percent in 2022). This figure is particularly important in Austria, where most farms are family businesses.

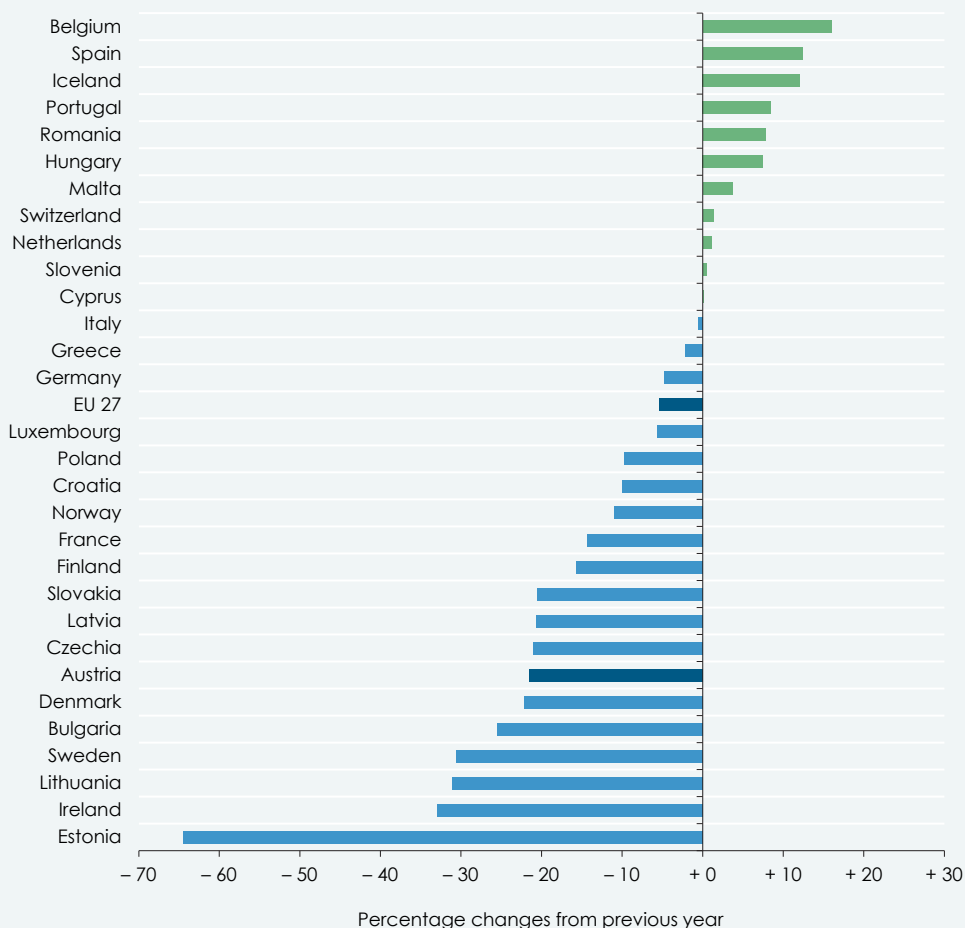
At sector level, Statistics Austria (2024b) only shows nominal values. In value terms, factor income in agriculture shrank by 16.3 percent and net corporate profits by 25.7 percent compared to the previous year. Employment in the Austrian agricultural sector fell slightly again in 2023. In 1995, there were just under 12,000 paid employees (in annual work units, AWU). Their number increased steadily to around 21,500 by 2021, shrank slightly to around 20,400 in 2022 and remained at this level in 2023. The number of non-salaried workers fell just below 100,000 AWU for the first time in 2019, stagnated at a similar level until 2022 and fell by just under 2,000 in 2023. Total employment in agriculture reached its lowest level to date in 2019 at 120,300 AWU and was almost unchanged in 2022. In 2023, it decreased to 118,500 AWU.

Figure 1: Factor income in agriculture and share of agriculture in the labour force



Source: Statistics Austria (2024b), WIFO calculations. – ¹ AWU: agricultural labour input (paid and unpaid) measured in annual work units or full-time equivalents (number of jobs converted to normal working hours). – ² Measured in full-time equivalents.

Figure 2: Indicator A – Index of the real factor income per annual work unit in agriculture 2023



Source: Eurostat, Economic Accounts for Agriculture – Income of the agricultural sector (indicators A, B, C; online data code: AACT_EAA06), data as at May 2024; WIFO calculations. AWU: agricultural labour input (paid and unpaid) measured in annual work units or full-time equivalents.

Not only in Austria, but also in almost all other member countries of the European Union, agricultural incomes – measured by indicator A, the index of the real factor income per annual work unit – shrank significantly in 2023¹. On average across the EU 27, income fell by 5.4 percent (Figure 2). Belgium and Spain recorded increases of over 10 percent. In Germany, the fall in income was roughly in line with the EU average. Even

sharper declines than in Austria were observed in Denmark, Bulgaria, Sweden, Lithuania, Ireland and Estonia. Such heterogeneous developments within the EU can be observed almost every year. The national agricultural sectors differ considerably in their structure and are influenced differently by the same trends in globally networked markets.

The production value of domestic agriculture in 2023 was 2.9 percent lower than in the previous year (in value terms). Producer prices fell by 0.5 percent and production volume by 2.4 percent.

2. Agricultural production slightly lower in 2023 than in previous years

At 10.2 billion €, the production value of Austrian agriculture once again exceeded the 10 billion € mark in 2023, but was 2.9 percent lower than in the previous year (in value terms). Livestock production accounted for the highest share of total production value at 46 percent (2022: 42 percent), ahead of crop production at 43 percent (2022: 48 percent). The remaining 11 percent was accounted for by the production of agricultural services and ancillary agricultural activities (Table 1).

While the production volume fell by 2.4 percent, the decline in producer prices was 0.5 percent. In crop production, the production volume in 2023 remained significantly below the previous year's level (-2.4 percent). As prices fell even more sharply (-9.9 percent), the production value decreased by almost 12.0 percent to 4.5 billion €, which is mainly due to the declines in cereals (production value -37.6 percent), oilseeds and oil crops (-31.7 percent) and protein crops (-24.6 percent). The quantity of sugar beet production in 2023 was slightly lower than in the previous year (-1.2 percent). However, as sugar beet prices rose by 6.3 percent, there was a renewed increase in value of 5.4 percent compared to 2022. The production volume of potatoes fell again in 2023 (-15.6 percent), having already shrunk in 2022. As in sugar beet cultivation, pest pressure resulted in high losses. However, as potato prices rose sharply by

44.9 percent, the production value increased by 22.4 percent compared to 2022. In vegetable cultivation, the harvest volume remained almost unchanged (-0.8 percent), while prices rose by 15.3 percent and the production value increased to 507 million € (+14.4 percent). In fruit growing and viticulture, yields and prices have fluctuated considerably for several years. This is mainly due to changing weather conditions. In 2023, prices for wine rose by 11.3 percent and those for fruit by 9.4 percent. As the production volume in fruit growing fell by a fifth, the production value decreased by 11.8 percent to 366 million €. Winegrowing, on the other hand, increased its production value by 5.3 percent to 717 million €.

In livestock production, the production value developed significantly more favourably than in crop production. In 2022, the high feed costs resulted in a reduction in production volumes almost across the board. While slightly less beef was produced in 2023 than in the previous year (-1.5 percent), the amount of milk produced increased slightly (+1 percent). As the production volume of pigs decreased (-4.5 percent), the total production volume of animal production fell by 1.1 percent. Due to the significant increase in the price of animal products (+6.9 percent), the production value nevertheless increased by 5.7 percent to 4.7 billion € in 2023.

3. Slight decline in gross value added, but significant decrease in factor income and Entrepreneurial income

As mentioned, the production value of the domestic agricultural sector fell by just over 300 million € to 10.2 billion € (-2.9 percent) in 2023. Of the 5.9 billion € in expenditure on inputs, which fell by 3.1 percent compared to the previous year, 38 percent was spent on animal feed. The majority of this is produced by the farms themselves and valued at production cost. In 2023, 11 percent less was spent on animal feed than in the previous year. Energy costs accounted for 9 percent of expenditure on inputs and were 6.8 percent lower than in 2022. All other expendi-

ture increased noticeably, with seed up 9.1 percent and fertilisers up 5.9 percent. Expenditure on veterinary services and medicines also increased significantly (+9.4 percent). Expenditure on crop protection also increased, but at a slower rate (+3.4 percent). Virtually the same amount was spent on agricultural services as in 2022, but expenditure on the maintenance of machinery (+10 percent) and buildings (+4.6 percent) increased.

¹ For the method of calculating income in agriculture, see Regulation (EC) No 138/2004 on the Economic Accounts for Agriculture in the EU ([https://eur-](https://eur-lex.europa.eu/DE/legal-content/summary/economic-accounts-for-agriculture.html)

[lex.europa.eu/DE/legal-content/summary/economic-accounts-for-agriculture.html](https://eur-lex.europa.eu/DE/legal-content/summary/economic-accounts-for-agriculture.html), accessed on 2 September 2024).

As expenditure on intermediate inputs (–3.1 percent) fell at almost the same rate as production value (–2.9 percent), gross value added in agriculture also shrank by a similar amount (–2.5 percent compared to 2022). As fixed capital consumption increased again (+9.6 percent to 2.6 billion €), net value added at basic prices fell disproportionately (–16 percent) to 1.8 billion €.

The year 2023 fell within the period of the new Multiannual Financial Framework 2023 to 2027. While the subsidy volume of the Common Agricultural Policy (Table 2) usually changes only slightly within a planning period, the transition to a new period implies adjustments to the structure. The year 2023 is also differed from previous years in that ad hoc transfers that had been granted to mitigate the COVID-19 crisis and the rise in energy prices as a result of the war in Ukraine were reduced.

The subsidies paid out to domestic agriculture decreased by 11.5 percent to 1.5 billion € in 2023. The "other subsidies" item includes payments under the Common Agricultural Policy. In 2023, direct payments

were reduced compared to the previous year and payments under the agri-environmental programme were expanded. This takes account of the increased endeavours to link subsidies to environmental protection measures. The balance of other taxes on production and subsidies totalled 1.25 billion € in 2023 (Table 1) and was therefore significantly lower than the net value added at basic prices of 1.8 billion €.

This also contributed to factor income (also known as net value added at basic prices) falling by one-sixth year-on-year to 3.0 billion € in 2023 (see chapter 1). The decline in the value of factor income per annual work unit was somewhat weaker due to the slight decrease in the volume of employment (–14.9 percent).

To summarise, 2023 was an exceptionally bad year for Austria's agricultural sector. It joins the ranks of years in which phases of upswing were followed by a severe correction. The long-term consequence of this is ongoing structural change in agriculture (see chapter 6 for more details).

The agricultural sector was unable to maintain the production value achieved in 2022. Expenditure on intermediate inputs fell by 3.1 percent. Gross value added also decreased (–2.5 percent). As fixed capital consumption rose by almost 10 percent, net value added at basic prices fell by 16 percent. Subsidies fell by almost 14 percent, which also contributed to a 16 percent drop in factor income.

Table 1: **Production, value added and income in Austrian agriculture**

	2021	2022	2023	2023	Volume	Prices
		Value		Percentage	2023	2023
		million €		changes	2022 = 100	
				from previous		
				year		
Production value at producer prices						
Crop output ¹	4,039	5,066	4,458	–12.0	97.6	90.1
+ Animal output	3,722	4,478	4,733	+ 5.7	98.9	106.9
= Agricultural goods output	7,761	9,544	9,191	– 3.7	98.2	98.0
+ Agricultural services output	348	415	417	+ 0.5	83.3	120.6
= Agricultural output	8,109	9,960	9,608	– 3.5	97.6	98.8
+ Secondary activities (inseparable)	498	580	628	+ 8.2	98.0	110.4
= Output of the agricultural "industry"	8,607	10,540	10,236	– 2.9	97.6	99.5
Production value at basic price						
Crop output	4,032	5,058	4,451	–12.0	97.6	90.1
+ Animal output	3,727	4,484	4,739	+ 5.7	98.9	106.9
= Agricultural goods output	7,759	9,542	9,190	– 3.7	98.2	98.0
+ Agricultural services output	348	415	417	+ 0.5	83.3	120.6
= Agricultural output	8,107	9,957	9,607	– 3.5	97.6	98.8
+ Secondary activities (inseparable)	498	580	628	+ 8.2	98.0	110.4
= Output of the agricultural "industry"	8,606	10,538	10,235	– 2.9	97.6	99.5
– Total intermediate consumption ¹	4,938	6,057	5,868	– 3.1	101.3	95.7
= Gross value added at basic prices	3,668	4,481	4,367	– 2.5	92.7	105.1
– Fixed capital consumption	2,075	2,354	2,580	+ 9.6	101.7	107.8
= Net value added at basic prices	1,592	2,127	1,787	–16.0	82.8	101.5
± Balance of other taxes, other subsidies on production	1,200	1,500	1,250	–16.7		
= Factor income	2,793	3,627	3,037	–16.3		
Factor income per annual work unit²	1,000 €	22.84	30.11	25.62	–14.9	

Source: Statistics Austria (2024b), WIFO calculations. – ¹ Including feed produced and consumed on the farm. – ² AWU: agricultural labour input (paid and unpaid) measured in annual work units or full-time equivalents (number of jobs converted to normal working hours).

Table 2: **Subsidies and taxes in Austrian agriculture**

	2021	2022	2023	
	Million €		Million €	Percentage changes from previous year
Total subsidies	1,514	1,744	1,544	- 11.5
Subsidies on products	7	7	8	+ 18.0
Other subsidies	1,507	1,718	1,483	- 13.7
Direct payments	667	671	563	- 16.1
Agri-environmental measures (ÖPUL) ¹	436	477	527	+ 10.3
Compensatory allowance for permanent natural handicaps	255	252	264	+ 4.6
COVID-19 Aid	72	17	-	- 100.0
Relief measures ²	-	208	18	- 91.4
Miscellaneous	76	93	111	+ 20.5
Reduction intermediate consumption ³	-	19	53	+178.9
Capital transfers ⁴	300	380	382	+ 0.5
Taxes and duties	315	227	242	+ 6.6
Taxes on products	8	9	9	+ 4.3
Other taxes on production	307	219	233	+ 6.7

Source: Statistics Austria (2024b, <https://www.statistik.at/statistiken/land-und-forstwirtschaft/land-und-forstwirtschaftliche-oekonomie-und-preise/landwirtschaftliche-gesamtrechnung/landwirtschaftliche-gesamtrechnung-auf-nationaler-ebene>); Federal Ministry of Agriculture, Forestry, Regions and Water Management, Grüner Bericht 2024, Tables 5.1.2 to 5.1.4; WIFO calculations. – ¹ According to the Austrian Programme for Environmentally Sound Agriculture (ÖPUL), from 2023 including eco-scheme. – ² Inflation compensation, electricity cost subsidy (federal funds) and payments for protected cultivation (EU funds) to cushion the high input prices (especially for energy). – ³ Temporary agricultural diesel reimbursement, reimbursement of CO₂ pricing. – ⁴ Payments not included in the income statement (e.g., support for young farmers).

4. Foreign trade balance for agricultural goods and food less favourable than in previous years

As in previous years, both the export and import value of agricultural goods and food increased in 2023. However, imports clearly outweighed exports in the foreign trade balance.

Austrian foreign trade in agricultural goods and food increased again in 2023 (imports +7.1 percent, exports +3.1 percent; in value terms). However, the increase in value was weaker than in the previous year and primarily reflects the rise in the price of agricultural goods. In addition to agricultural commodities according to the Combined Nomenclature (CN), this also includes highly processed foods such as beverages and preparations of edible fruits and nuts, citrus fruit or melons. In 16 of the 24 items, more goods were imported than exported in 2023 (Table 3). There were again notable export surpluses in the areas of meat and edible meat offal, milk and dairy products, products of the milling industry; malt; and, above all, beverages. In 2020, the foreign trade

balance was almost balanced for the first time. In 2023, however, the value of imports significantly exceeded that of exports (by around 710 million €; 2022: 57 million €).

As the long-term development of the agricultural trade balance shows (Figure 3), integration into the common market generated a lively dynamic from which both exporters and importers benefitted. In 2006, the export value was still almost as high as the import value. Since then, imports have generally risen somewhat faster than exports. Between 2015 and 2021, the value of exports converged again with that of imports. However, the gap between imports and exports has widened again since 2022.

5. Relatively favourable market environment for the forestry industry

2023, the boom in the domestic forestry sector triggered by high energy prices did not continue.

In Austria, forestry is the sector with the largest amount of land utilisation. Most forest areas are used intensively in several ways: for timber extraction, for hunting, as a recreational area and for the provision of ecosystem services, e.g., for carbon storage. All of these uses are influenced and increasingly diminished by climate change. Factors detrimental to forests include high pressure from pests, drought in certain locations and the associated risk of forest fires, as well as the

more frequent occurrence of severe storms and ice breaks.

One consequence of the decades-long expansion of forest areas and the progressive automation of timber harvesting is the increase in the production of raw wood. The actual harvest volume depends not only on the economic conditions but also on the annual fluctuations in timber production due to weather and damage events.

Table 3: Austria's foreign trade in agricultural goods and food 2023

Combined nomenclature – CN

Product section	Export	Import	Balance	
	Total		Total	EU 27
	Percentage shares		Million €	
I Live animals; animal products	21.4	19.1	+ 249.4	+ 144.4
01 Live Animals	1.0	1.6	- 120.9	- 156.6
02 Meat and edible meat offal	8.8	7.2	+ 213.5	+ 70.6
03 Fish, crustaceans, molluscs and other aquatic invertebrates	0.5	2.5	- 359.7	- 150.7
04 Dairy produce, birds' eggs, honey	10.7	7.1	+ 543.9	+ 368.8
05 Products of animal origin not elsewhere specified or included	0.4	0.6	- 27.3	+ 12.4
II Vegetable products	14.3	28.7	-2,603.9	-1,656.5
06 Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	0.3	2.7	- 409.6	- 393.0
07 Edible vegetables, roots and tubers	1.4	4.6	- 567.5	- 449.4
08 Edible fruits and nuts, peel of citrus fruit or melons	1.9	8.1	-1,099.9	- 492.7
09 Coffee, tea, mate and spices	1.4	3.5	- 377.2	- 250.9
10 Cereals	3.8	4.3	- 122.3	- 57.5
11 Products of the milling industry; malt; starches; inulin; wheat gluten	2.7	1.2	+ 229.4	+ 184.4
12 Oil seeds and oleaginous fruits	2.7	3.7	- 193.8	- 160.9
13 Lacs, gums, resins and other vegetable saps and extracts	0.1	0.4	- 61.4	- 36.5
14 Vegetable products not elsewhere specified or included	0.0	0.0	- 1.6	- 0.0
III Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	2.4	4.6	- 389.4	- 358.6
15 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	2.4	4.6	- 389.4	- 358.6
IV Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	62.0	47.7	+2,033.9	+ 503.4
16 Preparations of meat, fish or crustaceans, molluscs or other aquatic invertebrates	4.4	3.4	+ 151.1	+ 170.9
17 Sugars and sugar confectionery	2.7	3.2	- 102.1	- 188.2
18 Cocoa and cocoa preparations	3.8	4.2	- 90.7	- 111.1
19 Preparations of cereals, flour, starch or milk; pastrycooks' products	9.6	9.2	- 3.2	- 114.0
20 Preparations of vegetables, fruit, nuts or other parts of plants	6.0	6.7	- 170.2	- 55.5
21 Miscellaneous edible preparations	7.6	6.5	+ 136.6	- 83.4
22 Beverages, spirits and vinegar	20.8	6.6	+2,315.1	+1,199.3
"Energydrinks"	2.2	0.4	+ 296.9	+ 263.4
23 Residues and waste from food industry; prepared animal fodder	7.0	5.7	+ 179.0	+ 29.8
24 Tobacco and manufactured tobacco substitutes	0.1	2.3	- 381.7	- 344.4
Million €				
Total agricultural goods and food trade				
According to Combined Nomenclature (CN)	16,657.62	17,367.50	- 709.9	-1,367.3
According to International Trade Classification (SITC) ¹	16,310.03	17,283.16	- 973.1	-1,614.5
Percentage changes from previous year Absolut changes from previous year				
Total agricultural goods and food trade				
According to Combined Nomenclature (CN)	+ 3.1	+ 7.1	- 652.8	- 125.4
According to International Trade Classification (SITC) ¹	+ 3.4	+ 6.7	- 559.2	- 45.2

Source: WDS – WIFO Data System, Macrobond. 2023: final values. A positive sign of balance changes is to be interpreted as a decline in the import surplus. SITC . . . Standard International Trade Classification, Rev. 4. – ¹ The totals according to CN and SITC nomenclature differ due to the respective aggregation method (SITC 0, 1, 21, 22, 29, 4) and the increasing number of items that are subject to confidentiality in the CN foreign trade database.

For a decade now, the most important reasons for harvesting decisions have not been economic considerations, but damage events, which often force early harvesting and thus increase the volume of timber (Table 5 and Figure 4). This explains why the harvest volume was increased even though prices fell from 2013 to 2020 (Figure 5). In many cases, very low timber prices did not cover the costs of the unplanned harvest

and presented companies with major economic challenges. Due to the long production cycles, rapid adaptation to the changed climate conditions is only possible to a limited extent. At the same time, it is becoming increasingly difficult to achieve climate targets if the ability of forests to remove carbon dioxide from the atmosphere decreases due to damaging events.

Figure 3: Austria's foreign trade in agricultural goods and food by commodity section of the Combined Nomenclature (CN)

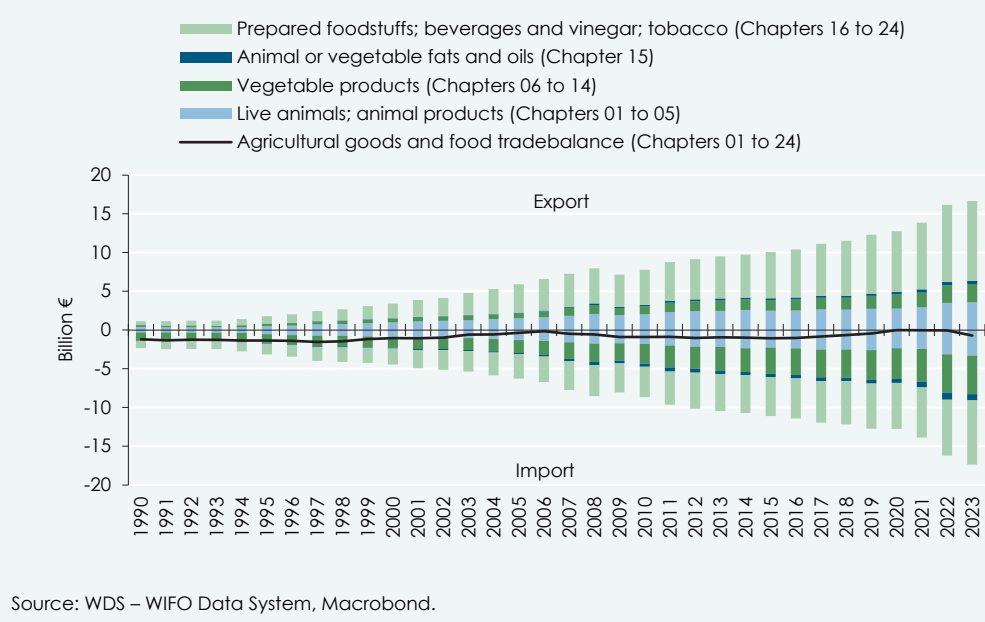


Table 4: Production, value added and income in Austrian forestry

	1995	2000	2005	2010	2015	2020	2021	2022	2023	2023
	Million €									Percent- age change from previous year
Production value at basic price										
Production of forestry goods	1,339.09	1,332.18	1,439.33	1,746.25	1,851.23	1,394.30	2,032.23	2,559.55	2,533.70	- 1.0
Forest trees and forest tree plants	536.53	558.34	528.61	617.59	633.91	451.31	700.64	877.55	861.62	- 1.8
Forest trees ¹	521.30	544.67	518.82	605.22	622.19	441.83	689.23	865.84	849.01	- 1.9
Forest tree plants	15.23	13.66	9.78	12.37	11.72	9.47	11.40	11.71	12.61	+ 7.7
Raw wood	802.57	773.84	910.72	1,128.66	1,217.31	942.99	1,331.59	1,682.00	1,672.08	- 0.6
Raw wood for material use	650.82	621.78	705.61	873.82	924.77	643.92	1,055.48	1,261.19	1,118.00	-11.4
Round sawn timber	562.96	552.13	623.68	766.59	803.88	545.78	955.21	1,116.22	946.77	-15.2
Industrial roundwood	87.86	69.66	81.93	107.23	120.89	98.15	100.28	144.97	171.24	+18.1
Raw wood for energy utilisation ²	151.74	152.06	205.11	254.84	292.54	299.07	276.11	420.81	554.08	+31.7
+ Production of forestry services	112.62	124.51	168.73	230.08	237.41	252.69	273.62	326.59	328.58	+ 0.6
+ Secondary activities (inseparable)	20.95	28.36	26.40	61.72	60.06	58.76	59.01	73.32	72.86	- 0.6
+ Other products ³	19.27	18.07	15.54	17.23	15.68	10.16	13.08	12.14	11.05	- 9.0
= Production of the forestry "industry"	1,491.93	1,503.12	1,650.00	2,055.29	2,164.38	1,715.91	2,377.94	2,971.61	2,946.18	- 0.9
- Total intermediate consumption	712.90	721.00	854.45	1,082.46	1,200.37	980.71	1,390.51	1,657.61	1,596.59	- 3.7
= Gross value added at basic prices	779.04	782.11	795.55	972.83	964.01	735.20	987.43	1,313.99	1,349.59	+ 2.7
- Fixed capital consumption	78.90	100.70	130.74	174.35	192.66	193.87	198.90	217.19	229.90	+ 5.9
= Net value added at basic prices	700.14	681.41	664.81	798.47	771.34	541.33	788.53	1,096.80	1,119.69	+ 2.1
± Balance of other taxes or other subsidies on production	- 4.76	- 4.84	- 7.11	+ 9.91	- 7.26	+ 4.39	+ 38.30	+ 38.25	+ 28.25	-26.1
= Factor income	695.38	676.57	657.70	808.39	764.08	545.72	826.83	1,135.05	1,147.94	+ 1.1

Source: Statistics Austria (2024c). - ¹ Net increase in timber in commercially utilised productive forest. - ² Woodfuel and wood chips. - ³ Secondary uses, other forestry products.

The long-term downward trend in timber prices came to an end in 2021, when the strong construction sector in the USA led to brisk demand on the international timber markets. As a result, prices for sawn timber rose sharply. In contrast, sanded timber was

even cheaper in 2021 than in the previous year. It was not until the beginning of 2022 that prices for pulp wood also rose. In 2023, prices for round sawn timber fell by 10 percent compared to 2022, while those for softwood rose by the same amount.

Table 5: Logging in Austria

	2021	2022	2023	2021	2022	2023
	1,000 solid cubic meters under bark			Percentage changes from previous year		
Timber (raw wood, material use)	13,521	13,934	13,347	+ 18.0	+ 3.1	- 4.2
Saw timber (round sawn timber)	10,420	10,711	10,037	+ 22.5	+ 2.8	- 6.3
Industrial wood (industrial roundwood)	3,101	3,223	3,310	+ 4.8	+ 3.9	+ 2.7
Woodfuel (raw wood for energy use)	4,900	5,424	5,671	- 8.0	+ 10.7	+ 4.6
Total logging (raw wood)	18,420	19,358	19,018	+ 9.7	+ 5.1	- 1.8

	Percentage shares		
Damaged wood	32.8	37.5	47.4

Source: Federal Ministry of Agriculture, Forestry, Regions and Water Management, logging reports (<https://info.bml.gv.at/themen/wald/wald-in-oesterreich/wald-und-zahlen/Holzeinschlag.html>).

Figure 4: Logging prompted by Damages

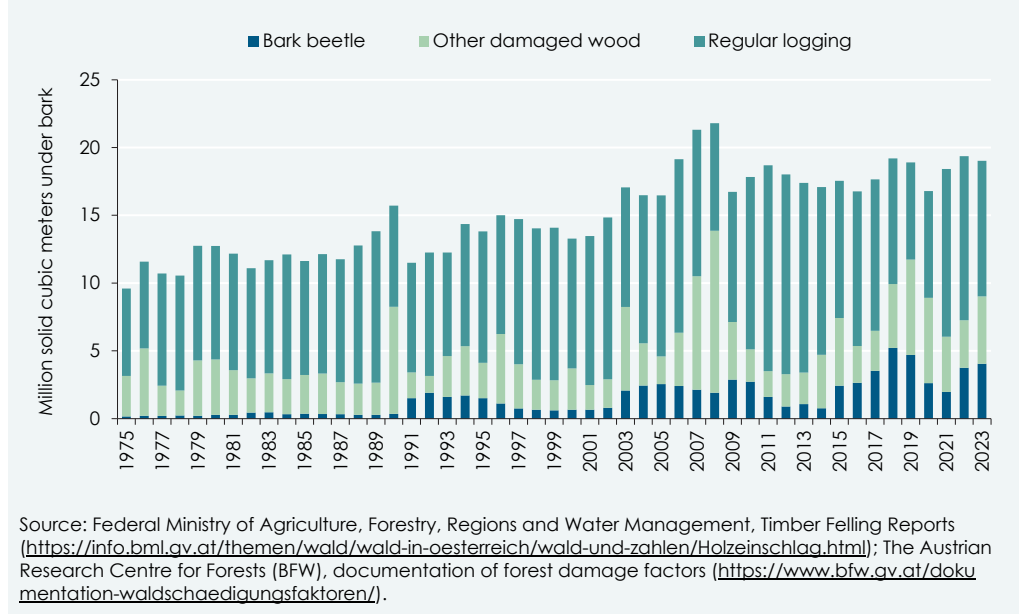
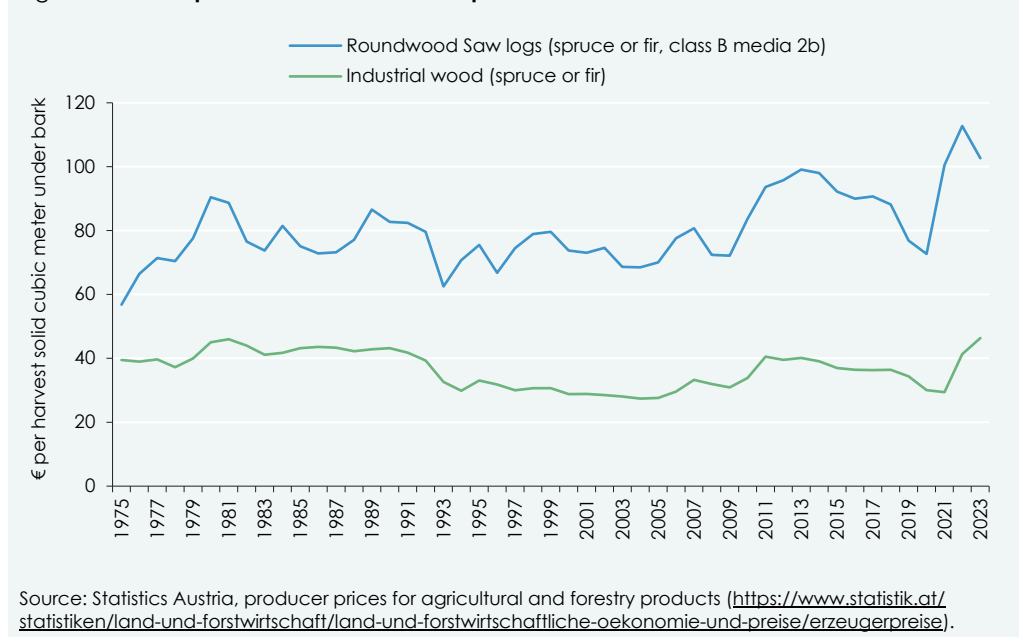


Figure 5: Development of nominal timber prices in Austria



The marked increase in production value in the forestry sector observed in 2022 (+25 per cent compared to the previous year) did not continue in 2023. The production value remained virtually unchanged at

2.9 billion €. Factor income rose slightly by 1.1 percent to 1.15 billion €. Net corporate profit in the forestry sector totalled 795 million € in 2023, 3.9 percent lower than in the previous year (Statistics Austria, 2024c).

6. Elements of long-term structural change in Austrian agriculture

In the domestic agricultural sector, value added has been growing at a slower rate than in the total economy for decades. One consequence of this is structural change, which can be seen in the development of the number of farms and land utilisation, for example.

Value added in the domestic agricultural sector has been growing more slowly than in the total economy for decades. If gross value added in Austrian agriculture had increased at the same rate as the economy as a whole since 1995, it would have totalled 7.6 billion € in value in 2023. In reality, it only totalled 4.4 billion €. The decoupling of agriculture from the development of the total economy could already be observed over long periods of time. Over the decades, the agricultural sector has undergone a structural adjustment, which is reflected in a reduction in the number of farms, a change in land use and a decline in employment. This chapter examines the first two dimensions of long-term structural change.

The analyses of the number of agricultural and forestry holdings are based on the agricultural structure surveys of Statistics Austria and the agricultural and forestry business censuses of the Austrian Central Statistical Office. Table 6 shows how the number of farms in the federal provinces and in Austria as a whole developed between 1930 and 2020. The respective survey thresholds were not adjusted, i.e., the published figures were reproduced directly. It would be inadmissible to derive rates of change from this, as the survey thresholds have been significantly adjusted over time.

Table 6: Agricultural and forestry holdings in Austria

	Full census based on the applicable survey thresholds ¹⁾									
	1930	1951	1960	1970	1980	1990	1999	2010	2020	
	Number of holdings									
Vienna	1,172	3,228	2,605	2,083	1,309	1,281	898	558	707	
Lower Austria	145,744	138,494	120,905	101,262	79,865	70,011	54,551	41,570	37,453	
Burgenland	43,477	44,263	41,478	38,306	30,613	26,421	16,081	9,793	7,973	
Styria	77,393	79,207	75,406	72,708	64,487	59,363	48,582	39,388	33,605	
Carinthia	30,663	33,462	31,292	30,449	26,134	24,658	21,202	18,174	18,228	
Upper Austria	80,215	78,360	75,246	71,459	59,848	53,558	41,804	33,341	29,173	
Salzburg	13,999	14,602	13,797	13,208	12,056	11,628	10,751	9,785	9,320	
Tyrol	26,472	27,903	25,365	23,600	20,912	19,738	18,238	16,215	14,215	
Vorarlberg	14,225	13,329	10,436	9,141	7,355	6,552	5,401	4,493	4,279	
Austria	433,360	432,848	396,530	362,216	302,579	273,210	217,508	173,317	154,953	

Source: Federal Ministry of Agriculture, Regions and Water Management (2024); Statistics Austria (2001, 2013, 2024a); Statistics Austria; Austrian Central Statistical Office (1964, 1973-74, 1983, 1992). – ¹⁾ The results are only comparable to a limited extent in the long term due to different coverage thresholds and definitions.

In 2020, only farms with at least 3 ha of utilised agricultural land or 1.5 ha of arable land or 0.5 ha of potato fields or 3 ha of woodland were counted, in addition to other criteria (Statistics Austria, 2022). In previous surveys, on the other hand, lower area thresholds applied, which meant that smaller farms were also included. In most cases, a total area of at least 1 ha, which was used wholly or partly for agriculture and forestry, was sufficient for the survey. Other criteria included the number of certain livestock and varying degrees of commercial fruit growing, commercial viticulture or commercial horticulture. Over time, however, smaller farms were excluded from the survey. This means that a long-term comparison of the number of farms based on the

published tables (Table 6) is only meaningful to a limited extent.

Under certain assumptions, however, it is possible to establish comparability between the surveys. For the period from 1930 to 1990, farms with less than 2 ha of self-produced land can be deducted from the total number of farms. A similar correction is possible for the years from 1990 onwards by using the survey thresholds from 2020 and adjusting the published values accordingly. Table 7 shows the results of this procedure. As it is not possible to apply all criteria to correct the data, the results have been rounded to the nearest hundred to indicate that these are estimates.

If one compares the corrected values with the observed values, it is particularly noticeable that between 1930 and 1951 the number of farms increased by 0.2 percent p.a. if an area of at least 2 ha is used as a criterion. Thereafter, their number decreased from survey to survey, by 0.5 percent p.a. between 1951 and 1960, by 0.8 percent p.a. between 1960 and 1970, by 1.2 percent p.a. between 1970 and 1980 and by 0.9 percent p.a. between 1980 and 1990. Applying the survey thresholds of the 2020 agricultural structure

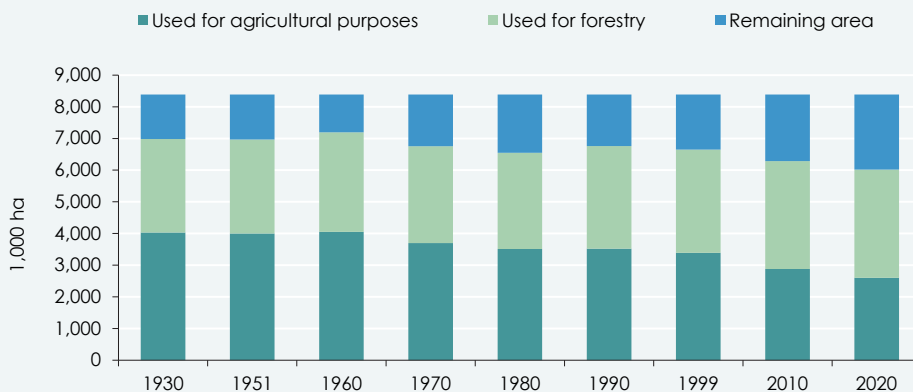
survey to the censuses from 1990 onwards results in rates of change of -1.8 percent p.a. for the period 1990 to 1999, -2.0 percent p.a. for 1999-2010 and -0.5 percent p.a. for 2010-2020. The first decade of the 21st century is therefore the one in which the number of farms has decreased the most. As the underlying data originates from surveys in which different criteria were applied, the rates of change shown are not fully comparable despite the correction.

Table 7: **Agricultural and forestry holdings without micro-enterprises and with adjustment of the census thresholds**

	Based on the respective valid thresholds but excluding farms with less than 2 ha of self-managed total area					Based on the thresholds according to the 2020 agricultural census				
	1930	1951	1960	1970	1980	1990	1990	1999	2010	2020
	Number of holdings									
Vienna	–	1,000	700	600	500	600	700	900	500	700
Lower Austria	–	98,200	89,900	77,600	65,700	57,900	63,800	52,700	40,400	37,500
Burgenland	–	30,400	29,000	26,600	22,300	18,800	21,700	15,100	9,300	8,000
Styria	–	64,900	62,900	60,300	56,700	52,800	49,100	43,100	35,300	33,600
Carinthia	–	26,800	25,700	25,100	23,100	22,200	21,500	19,800	17,300	18,200
Upper Austria	–	60,200	59,600	57,200	52,200	47,600	46,100	38,900	31,100	29,200
Salzburg	–	12,800	12,700	12,200	11,300	11,000	11,400	10,400	9,500	9,300
Tyrol	–	23,200	23,500	21,900	18,800	18,000	19,800	17,200	15,400	14,200
Vorarlberg	–	10,100	8,600	7,700	6,200	6,000	5,700	5,100	4,200	4,300
Austria	314,600	327,600	312,600	289,200	256,800	234,900	239,800	203,000	162,900	155,000

Source: WIFO calculations based on Statistics Austria (2001, 2013, 2024a), Austrian Central Statistical Office (1964, 1973-74, 1983, 1992).

Figure 6: **Land use in Austria**



Source: Federal Ministry of Agriculture, Regions and Water Management (2024), Statistics Austria (2001, 2013, 2024a), Austrian Central Statistical Office (1964, 1973-74, 1983, 1992). The results are only comparable to a limited extent in the long term due to different coverage thresholds and definitions.

Over the long term, not only has the number of agricultural and forestry holdings in Austria decreased significantly, but also the area of land used for agriculture. If the agricultural structure surveys or farm censuses are used to illustrate changes in land use, the problem of different survey thresholds is also encountered. In this case, however, it is much less significant, as small farms only cultivate a small amount of land in total despite their high numbers. A direct comparison of the

published values therefore provides a revealing picture.

Within just under a century (1930-2020), the area used for agriculture in Austria decreased from 4 to 2.6 million ha (-0.48 percent p.a.; Figure 6), while the area used for forestry increased from 2.9 to 3.4 million ha (+0.16 percent p.a.). Other land not used for agriculture or forestry increased from 1.4 to 2.4 million ha (+0.58 percent p.a.).

Figure 7: Development of arable land, grassland and arable land per capita



Source: Federal Ministry of Agriculture, Regions and Water Management (2024), Statistics Austria (2001, 2013, 2024a), Austrian Central Statistical Office (1964, 1973-74, 1983, 1992). The results are only comparable to a limited extent in the long term due to different coverage thresholds and definitions. – ¹ Excluding mountain pastures and mountain meadows.

Within the utilised agricultural area, there was a shift between the types of use (Figure 7). Arable land, extensively utilised grassland as well as mountain pastures and mountain meadows lost importance from survey to survey. The intensively utilised grassland area (two or more cuts per year) grew continuously until 1999, but has also been shrinking since then. Arable land has decreased from 1.79 million ha in 1930 to 1.32 million ha in 2020, mountain pastures and mountain meadows from 0.82 to 0.33 million ha and extensively utilised grassland from 0.69 to 0.09 million ha. Only the intensively utilised grassland area was slightly larger in 2020 (0.79 million ha) than in 1930 (0.71 million ha).

The change in land use to the detriment of agriculture can be explained by the differences in the dynamics of economic development. As the value added by agriculture has fallen behind that of other sectors over the decades, the most important production factor, land, has been opened up to other economic sectors. Forestry benefits from this by increasing the area of forest. While the value added in the domestic forestry sector increased by 73 percent between 1995 and 2023, it only grew by 56 percent in agriculture. Especially as agricultural productivity has not increased significantly for around a decade, this development is not unproblematic from a food security perspective in view of a growing population (Arnold et al., 2024).

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