

Analysis of the economic situation of organic farms in the 2023/24 accounting year

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Economic situation of organic farming

Incomes decreased slightly

The income situation of organic farms worsened slightly in the 2023/24 accounting year¹, compared to the previous year. In the 2023/24 accounting year the average income (profit plus paid labour costs per Annual Work Unit) is EUR 43,241. Compared to the previous year, the income decreased by 4.4 percent. This is the result of the annual income analysis of the Thünen Institute of Farm Economics based on a sample of organic farms from the German Farm Accountancy Data Network (FADN).²

Methodological approach of the income analysis

- The Thünen Institute of Farm Economics analyses the economic situation of organic farms every year since the 1995/96 accounting year. The analysis is based on a sample of the German Farm Accountancy Data Network (FADN): Certified organic farms of all legal forms and forms of income (full- and part-time) are taken into account. Besides the farms must be classified as farm type fieldcrops, dairy, other grazing livestock or mixed farms. The results are representative of all organic farms in Germany to a limited extent.³
- The key indicator used to assess profitability is "profit plus paid labour costs per annual work unit (AWU)". This indicator makes it possible to compare the incomes of different legal forms of agricultural enterprises.
- The incomes of organic farms are compared with the incomes of comparable conventional farms with similar site-specific factors and resource endowments. In the accounting year 2023/24, the data from 398 organic farms were compared with the data from 1,588 conventional farms (conventional comparison group) from the German FADN.

Development of income varies among the different farm types

In the 2023/24 accounting year the average income (profit plus paid labour costs per annual work unit) of the organic farms is EUR 43,241. This corresponds to a decrease of EUR 1,999 or 4.4 percent per AWU, compared to the previous year.

Despite a once again slightly reduced income, organic farms with the farm type fieldcrops had — as in previous years — the highest income among the four farm types at EUR 56,804 per AWU. Dairy farms recorded the highest loss of income compared to the previous year at minus 10.2 percent. The decline to EUR 41,637 profit plus paid labour costs per annual work unit is primarily due to the significantly lower producer prices for milk (minus 8 percent) compared to the accounting year 2022/23 and the associated decline in revenue (minus 7 percent). The cost increases for heating material, electricity and water of 40 percent compared to the previous year are strikingly high for organic dairy farms. The organic mixed farms were able to maintain the profit level, which had risen sharply in the accounting year 2022/23, and even increase it slightly by 1.4 percent to EUR 40,305 profit plus paid labour costs per annual work unit (see Figure 1 and Table 2).

¹ The accounting year in Germany depends on farm type and legal form. Most farms in the sample used 01.07.22 to 30.06.23 as the accounting year.

For more information on the purpose, methodology and results of the German Farm Accountancy Network (FADN) of the Federal Ministry of Food and Agriculture, see Thünen: Farm income (thuenen.de)

For more information on the annual analysis of income development in organic farming by the Thünen Institute of Farm Economics, see <u>Thünen: Income development in organic farming (thuenen.de)</u>

Profit plus paid labour costs per annual work unit 70 000 ■ AY 2021/22 ■ AY 2022/23 ■ AY 2023/24 60 000 50 000 ₩ 40 000 30 000 20 000 10 000 0 All farms **Fieldcrops** Dairy Other grazing Mixed farms livestock Type of farming

Figure 1: Income (profit plus paid labour costs per annual work unit) of organic farms in the German FADN differentiated by type of farming, accounting years 2021/22 to 2023/24^{a)}

a) AY 2021/22: n = 446 organic farms; AY 2022/23: n = 437 organic farms; AY 2023/24: 398 organic farms.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics, based on German FADN Data (2025).

There was a leap in profits for organic farms of the type other grazing livestock: they were able to increase their average profit plus paid labour costs per annual work unit from EUR 24,519 to EUR 36,008. This corresponds to an increase of 46.9 percent. This is partly due to the fact that the average farm size (measured in standard output) and the average area of the farms in this group increased significantly (plus 27 and 28 per cent respectively) with only a slight increase in the average number of employees (plus 8 percent) on the farm.

Profit gap between organic and conventional farms significantly smaller again

For the past 29 years the Thünen Institute of Farm Economics has analysed the economic situation of organic FADN farms and compared them with a conventional comparison group. The long-term analysis shows (see Figure 2):

- In seven out of 29 accounting years, the income (profit plus paid labour costs per annual work unit) of the conventional comparison group was higher than that of the organic farms; in 22 accounting years, the organic farms achieved higher incomes.
- The income gap in favour of conventional farms was historically high in the 2022/23 accounting year at EUR 11,374 per AWU. As in the 2021/22 accounting year, the main reason for the difference in income development was that producer prices for organic produce rose significantly less than for conventional produce during the period under review, particularly for milk and cereals. Increased prices for operating resources were more than compensated for on the conventional farms in the comparison group, which led to comparatively very strong profit increases there.
- Over the past ten years, the average income of organic farms has fluctuated less in some cases significantly

 than that of the conventional comparison group.

In the accounting year 2023/24, the average incomes of organic farms and the conventional comparison group converged again to a gap of EUR 2,040 per AWU. The convergence is mainly due to the decline in income on conventional farms amounting to minus EUR 11,333 profit plus paid labour costs per annual work unit (minus 20 percent compared to 2022/23).

Figure 2: Income development (profit plus paid labour costs per annual work unit) of organic and comparable conventional farms^{a)} of the German FADN since the 1995/96 accounting year



a) Changed comparison criteria since the accounting year 2020/21.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics, based on German FADN Data (2025).

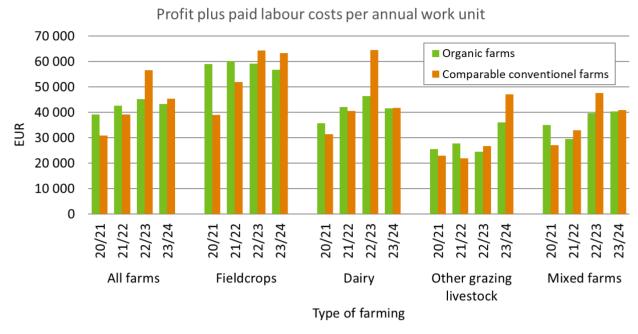
A differentiated analysis by farm type shows different developments of income

A differentiated analysis by farm type – field crops, dairy, other grazing livestock and mixed farms – shows that, as in the previous year, the profit plus paid labour costs per annual work unit for farms in the conventional comparison group is higher than that of organic farms, both overall and for most farm types. Only organic dairy farms and conventional milk producers are on a par in the accounting year 2023/24 (see Figure 3 and Table 1).

According to the results, the economic advantage of organic farming over comparable conventional farms has deteriorated in the last two accounting years. This result is also reflected in the fact that the conversion to organic farming in Germany has largely stagnated in 2023 and 2024 and, according to the Rentenbank's Agricultural Barometer Spring 2025, only two percent of the farms surveyed are currently planning to convert to organic farming (DBV 2025)⁴.

Deutscher Bauernverband (2025) DBV-Öko-Report Nr. 06/2025.

Figure 3: Income (profit plus paid labour costs per annual work unit) of organic and comparable conventional farms of the German FADN^{a), b)} differentiated by type of farming for the accounting years 2020/22 to 2023/24



a) Changed comparison criteria since the accounting year 2020/21.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics, based on German FADN Data (2025).

Importance of area-based support payments for organic farming for the farm income

In Germany, organic farming has been supported by area-based support payments since 1989 in West Germany and since 1991 in East Germany. The area-based payments are intended to compensate for the income disadvantage of organic farming. In particular, the phase of conversion to organic farming is a time-consuming and risky period for farm managers, which usually entails yield losses – for example, through changes in crop rotation and the abandonment of common inputs such as mineral nitrogen fertilizers or pesticides that are not permitted in organic farming. The accounting success of organic farms depends, among other things, on whether and to what extent lower natural yields can be (over)compensated for by higher producer prices.

The share of the area-based support payments for organic farming in the income of organic farms averaged 31 percent in the 2023/24 accounting year (absolute = EUR 14,023 per AWU). The support payments for organic farming are therefore at average very important for the profitability of the organic farms in the German FADN (see Figure 4). With one exception in the accounting year 2015/16, the profits of the organic farms without the area-based support payments for organic farming were below the profits of the conventional comparison group.

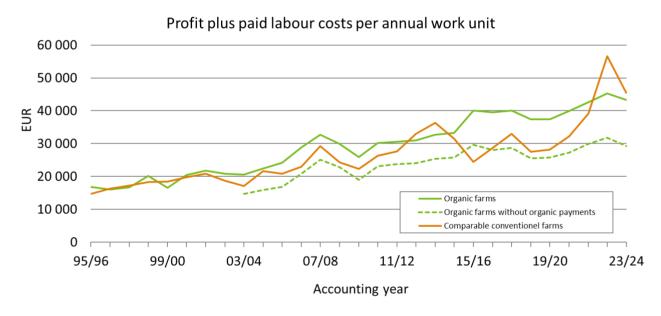
Against this background, it is repeatedly criticised that for years organic farms have been in a better position or 'over-supported' by the area-based support payments for organic farming. From a scientific point of view, this is not the case; the following facts must be taken into account:

• There are very large income differences in the FADN farm network both within the group of organic farms and within the group of conventional farms. There are large differences in location and, as everywhere in the economy, there are good and less good managed farms. For some of the organic farms, the premium is almost

b) AY 2020/21: n = 492 organic farms/2.140 farms conventional comparison group, AY 2021/22: n = 446 organic farms/1.862 farms conventional comparison group, AY 2022/23: n = 437 organic farms/1.739 farms conventional comparison group, AY 2023/24: n = 398 organic farm/1.588 farms conventional comparison group.

- a 'perfect fit', while depending on the accounting year different proportions of organic farms have achieved a lower or higher income than the farms in the conventional comparison group. This picture has been evident since the beginning of the Thünen Institute's analyses and also in the actual results for the 2023/24 accounting year (see Figure 5).
- Due to the differences in the initial situation of farms, it is generally not possible to calculate the premiums for agri-environmental and climate measures which also include area-based support for organic farming (conversion and maintenance) in such a way that only the specific additional costs are offset in each individual case. Even if such a case-by-case calculation procedure were technically possible, it would lead to extremely high costs for the public administration.
- In addition, short-term and unforeseeable events in the market can lead to significant changes in the pricecost ratios of organic and conventional farms. In the last two accounting years, Russia's war of aggression in
 Ukraine has led to unpredictable developments on the international agricultural markets. Some key factors
 are, for example, the development of grain and mineral fertiliser prices or the development of milk prices.

Figure 4: Income development (profit plus paid labour costs per annual work unit) of organic farms with and without area-based payments for organic farming and comparable conventional farms^{a)} of the German FADN since the 1995/96 accounting year



a) Changed comparison criteria since the accounting year 2020/21.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics, based on German FADN Data (2025).

More information about area-based support payments for organic farming in Germany and the EU see <u>Thünen:</u> Area-based support payments for organic farming (thuenen.de).

Large company-specific differences in relative performance

In the 2023/24 accounting year, a total of just under 21 percent of organic farms achieved a profit at least twice as high (legend: greater than 100%) as their conventional comparison group; in the 2022/23 accounting year, this proportion was significantly lower at just under 12 percent of organic farms. The proportion of relatively less successful organic farms with a profit that was at most half as high (legend: less than -50%) was still 28 percent in the accounting year 2022/23, falling to 23 percent in 2023/24 (see Figure 5).

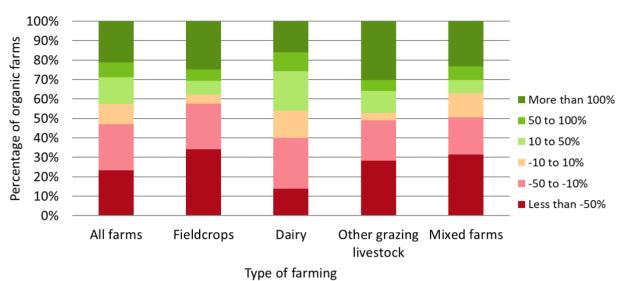


Figure 5: Income difference between organic and comparable conventional farms^{a), b)} differentiated by type of farming in the 2023/24 accounting year

a) Changed comparison criteria since the accounting year 2020/21. b) Total number of farms included in the sample in the accounting year 2023/24: 398 organic farms and 1.588 comparable conventional farms.

Aid to interpretation: The green areas show the proportion of organic farms whose profit is higher than that of the conventional comparison farms; more than 100% means that the profit is more than twice as high. The red areas show the proportion of organic farms whose profit is lower than the profit of the comparable conventional farms.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics, based on German FADN Data (2025).

Conclusions

According to the analysis of the FADN farm data, the economic situation of organic farms has been relatively stable in recent years. After three accounting years with growth of around 6 percent compared to the previous year, the organic test farms recorded a profit loss of 4.4 per cent (profit plus paid labour costs per annual work unit) in the accounting year 2023/24.

The result of the income comparison between organic farms and comparable conventional farms in the accounting year 2022/23 was exceptional over time: Due to a very favourable income situation, the average income in the conventional comparison group was significantly higher than that of organic farms in all farm types, especially for dairy cattle and arable farms. Market-related changes in price-cost ratios led to a significantly higher decline in profits for the conventional comparison farms in the 2023/24 accounting year than for the organic farms, at minus 20 percent compared to the previous year. As a result, the average incomes of the comparison groups have converged significantly again, with the income of the conventional comparison group still exceeding that of the organic farms EUR 2,040.

Reference

Kuhnert H, Offermann F (2025) Analysis of the economic situation of organic farms in the 2023/24 accounting year.

Braunschweig: Thünen Institute of Farm Economics. Download <u>Thünen: Analysis of the economic situation of organic farming (thuenen.de)</u>

Table 1: Selected key figures of organic and comparable conventional farms of the German FADN differentiated by farm type in the 2023/24 accounting year^{a), b), c)}

	Unit	All farms		Fieldcrops		Dairy		Other grazing livestock		Mixed	
		Organic	Comparable	Organic	Comparable	Organic	Comparable	Organic	Comparable	Organic	Comparable
		farms	conventionel	farms	conventionel	farms	conventionel	farms	conventionel	farms	conventionel
			farms		farms		farms		farms		farms
Farms	Number	398	1,588	85	572	187	644	53	113	73	259
Agricultural Area (UAA)	ha	145	140	181	175	100	96	114	112	239	230
of which cropland	ha	88	94	157	158	45	52	24	25	161	176
of which permanent grassland	ha	57	45	24	16	54	43	89	87	77	54
Agricultural workers	AWU	1.7	2.0	1.0	1.0	3.0	3.0	1.0	2.0	1.0	2.0
Farm business output	€/ha UAA	1,811	2,577	1,199	1,722	3,084	3,851	707	1,377	1,372	2,406
of which crop production	€/ha UAA	393	728	995	1,500	108	367	74	130	278	639
of which livestock production	€/ha UAA	1,235	1,499	85	72	2,736	3,148	517	1,030	894	1,178
Other income	€/ha UAA	824	586	677	425	902	524	810	1	875	640
of which support payments and subsidies	€/ha UAA	680	411	582	297	743	372	721	728	685	440
of wich decoupled basic payment	€/ha UAA	189	181	182	177	196	172	184	194	189	190
of which agri-environmental payments	€/ha UAA	296	51	290	27	317	29	319	177	272	51
Variable costs	€/ha UAA	924	1,357	586	779	1,388	1,922	458	780	888	1,472
of which for crop production	€/ha UAA	143	340	240	471	138	308	32	103	102	340
of which for livestock production	€/ha UAA	394	592	36	38	714	1,015	187	411	441	699
Labour costs	€/ha UAA	286	300	166	108	423	360	149	304	292	406
Depreciation	€/ha UAA	347	331	261	241	545	494	208	251	262	265
Other farm costs	€/ha UAA	598	664	472	502	884	919	418	548	465	578
Farm labour income (profit plus paid labour costs)	€/AWU	43,241	45,281	56,804	63,316	41,637	41,652	36,008	47,039	40,305	40,907
Farm net income (profit plus taxes ^d)	€/farm	65,495	69,111	72,231	91,040	72,196	64,020	34,432	56,202	63,040	65,921

a) Changed comparison criteria since the accounting year 2020/21.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics based on German FADN Data (2025).

b) Not extrapolated average values without horticultural, permanent crop and granivore farms.

c) Conventional comparison groups are formed of conventionally managed individual farms that have similar location and resource endowments as the organic farms.

d) Trade income tax, corporate income tax, capital gains tax.

Table 2: Selected key figures of organic and comparable conventional farms of the German FADN, accounting years 2021/22 to 2023/24^{a), b), c)}

	Unit Organic farms					Comparable conventionel farms				
		Accounting year			%-change	Accounting year			%-change	
				2023/24			2023/24			
		2021/22	2022/23	2023/24	cf. previous year	2021/22	2022/23	2023/24	cf. previous year	
Farms	Number	446	437	398	-8,9	1,862	1,739	1,588	-8,7	
Agricultural Area (UAA)	ha	125	135	145	7,4	122	132	140	5,9	
of which cropland	ha	74	81	88	8,6	80	91	94	3,0	
of which permanent grassland	ha	51	54	57	5,9	42	41	45	11,1	
Agricultural workers	AWU	2.3	2.3	1.7	0,3	2.0	2.2	1.8	10,0	
Farm business output	€/ha UAA	1,940	1,946	1,811	-6,9	2,226	2,792	2,577	-7,7	
of which crop production	€/ha UAA	520	456	393	-13,9	679	915	728	-20,4	
of which livestock production	€/ha UAA	1,175	1,261	1,235	-2,1	1,295	1,536	1,499	-2,4	
Other income	€/ha UAA	740	751	824	9,8	540	515	586	13,7	
of which support payments and subsidies	€/ha UAA	613	604	680	12,6	428	393	411	4,7	
of wich decoupled basic payment	€/ha UAA	175	170	189	11,3	175	172	181	5,4	
of which agri-environmental payments	€/ha UAA	263	263	296	12,8	52	50	51	1,4	
Variable costs	€/ha UAA	875	896	924	3,2	1,142	1,339	1,357	1,3	
of which for crop production	€/ha UAA	156	136	143	5,3	329	408	340	-16,7	
of which for livestock production	€/ha UAA	348	386	394	2,0	468	529	592	12,0	
Labour costs	€/ha UAA	251	251	286	14,0	192	231	300	29,8	
Depreciation	€/ha UAA	354	363	347	-4,3	310	332	331	-0,4	
Other farm costs	€/ha UAA	645	625	598	-4,3	619	665	664	-0,2	
Farm labour income (profit plus paid labour costs)	€/AWU	42,607	45,240	43,241	-4,4	39,147	56,614	45,281	-20,0	
Farm net income (profit plus taxes ^d)	€/farm	65,861	69,472	65,495	-5,7	56,490	92,856	69,111	-25,6	

a) Changed comparison criteria since the accounting year 2020/21.

Source: Kuhnert and Offermann, Thünen Institute of Farm Economics based on German FADN Data (2025).

b) Not extrapolated average values without horticultural, permanent crop and granivore farms.

c) Conventional comparison groups are formed of conventionally managed individual farms that have similar location and resource endowments as the organic farms.

d) Trade income tax, corporate income tax, capital gains tax.



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