



MINISTRY OF AGRICULTURE AND FOOD

SOFIA 1040, bul. "Hristo Botev" № 55

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FARM ACCOUNTANCY DATE NETWORK



2020

Source: EC, FADN

RESULTS AND ANALYSIS

ABBREVIATIONS AND SIGNS

FADN	Farm accountancy data network
MAF	Ministry of Agriculture, and Food
ES	European Union
EC	European Commission
CAP	Common Agricultural Policy
TO	Total output
NAV	Net added value
NI	Net income
AWU	Annual work unit
UAA	Utilized Agricultural Area
SO	Standard Output
NW	North-West Region
NC	North-Central Region
NE	North-East Region
SW	South-West Region
SC	South-Central Region
SE	South-East Region
OGA	Other Gainful Activities
SAPS	Single Area Payment Scheme
VAT	Value added tax
ha	hectare
levs	levs
No.	number
LU	Livestock unit

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Table 1 Average results of the holdings, distributed by region - FADN'2020

Variables	Measure	Bulgaria	Region					
			NW	NC	NE	SW	SC	SE
Holding represented	number	56 964	7 502	8 244	6 932	9 888	9 426	14 972
Utilised agricultural area	ha	77.7	108.99	109	134.16	89.28	39.84	34.82
<i>of which rented</i>	ha	67.10	92	95.66	112.63	77.77	37.3	29.52
Area with:								
cereals	ha	39.43	68.47	66.88	79.35	36.38	9.93	11.85
other field crops	ha	20.92	25.58	31.97	36.94	30.97	5.27	8.30
vegetables and flowers	ha	0.49	0.27	0.44	0.81	0.37	0.16	0.77
permanent crops	ha	1.70	1.74	1.37	1.08	3.20	1.07	1.57
forage crops	ha	11.66	9.76	6.42	13.05	13.05	15.94	11.23
Livestock								
total livestock units	LU	24.2	26.4	30.1	25.2	33.9	15.3	18.6
cattle and buffalo	LU	9.7	9.9	8.9	8.2	13.1	7.8	9.7
of which dairy cows	LU	4.7	5.2	5.4	4.7	5.9	3.2	4.2
sheep and goats	LU	4.1	3.0	3.4	4.1	5.6	4.8	3.7
pigs	LU	4.5	6.9	8.0	0.1	12.5	0.1	1.0
poultry	LU	5.7	6.5	9.7	12.8	2.7	1.9	4.2
Labour input								
labour input	AWU	2.9	3.4	3.5	3.3	3.0	2.3	2.5
<i>of which unpaid labour</i>	AWU	1.2	1.2	0.9	1.3	1.0	1.5	1.3
Economic results								
+ Total output	levs	155 449	215 920	221 841	267 479	160 262	75 275	84 017
from crops&crop production	levs	111 557	172 132	147 935	231 478	96 585	47 678	55 752
from livestock&livestock products	levs	40 962	40 119	68 078	32 930	58 809	26 656	27 397
other output	levs	2 930	3 669	5 828	3 071	4 868	941	868
- Total intermediate consumption	levs	89 063	120 532	131 745	128 095	107 014	39 384	51 146
specific crop cost	levs	34 548	53 720	49 931	63 626	36 393	12 196	15 851
specific livestock cost	levs	23 829	25 867	39 953	18 676	36 206	11 622	15 830
specific costs for other gainful activities	levs	1 179	1 819	2 464	342	1 119	1 457	403
other cost	levs	29 507	39 126	39 397	45 451	33 296	14 109	19 062
+ Balance of current subsidies & taxes	levs	48 279	58 848	56 114	64 960	58 418	31 103	35 066
subsidies	levs	46 810	55 641	56 190	62 846	57 988	30 951	32 399
VAT balance excluding on investments	levs	2 154	4 154	937	3 139	997	577	3 127
taxes and fares	levs	685	947	1 013	1 025	567	425	460
= Gross farm income	levs	114 665	154 236	146 210	204 344	111 666	66 994	67 937
- Depreciation	levs	20 812	29 080	27 413	32 871	23 184	10 638	12 285
= Net value added	levs	93 853	125 156	118 797	171 473	88 482	56 356	55 652
- Total external factors	levs	52 758	83 890	90 569	90 909	52 889	16 380	21 486
wages & social security	levs	21 702	32 343	36 536	27 549	25 226	7 718	11 969
rent	levs	28 946	49 272	51 506	59 443	24 827	7 168	8 652
interest	levs	2 110	2 275	2 527	3 917	2 836	1 494	865
+ Balance subsidies&taxes on investment	levs	866	1 134	260	436	315	2 177	804
subsidies on investments	levs	671	868	260	252	293	2 083	354
VAT balance on investments	levs	195	266	0	184	22	94	450
= Net income	levs	41 961	42 400	28 488	81 000	35 908	42 153	34 970
Balance sheet (closing valuation)								
Total fixed assets	levs	226 482	322 204	304 358	391 268	257 469	93 505	122 593
land & permanent crops	levs	88 895	139 067	115 427	179 822	110 323	21 684	35 212
buildings	levs	42 173	48 535	64 610	63 511	40 096	26 501	27 991
machinery	levs	69 840	104 532	91 410	123 098	76 587	26 929	38 476
Total current assets	levs	129 992	173 495	167 086	204 653	127 442	32 834	116 053
Liabilities	levs	84 729	100 008	106 020	182 106	97 420	25 328	49 282
long term loans	levs	40 047	43 558	58 203	78 521	51 250	8 122	23 174
short term loans	levs	44 682	56 450	47 817	103 585	46 170	17 206	26 108
Indicators								
Net value added / AWU	levs/AWU	32 295	36 489	33 973	52 402	29 150	24 554	22 731
Net income of AWU	levs/AWU	14 420	12 362	8 139	24 771	11 812	18 327	14 273
Total direct payments	levs	36 988	45 533	46 137	53 695	45 279	20 698	24 717
Single area payment	levs	17 639	22 683	23 186	27 909	19 996	7 686	12 013
Environmental subsidies	levs	3 831	4 185	4 946	3 446	5 615	2 564	2 842
LFA subsidies	levs	1 666	387	243	837	1 561	5 128	1 365

Source: EU, Farm Accountancy Data Network '2020 - May 2024

Table 2. Average results of holding, distributed by 6 groups of economic size - FADN'2020

Variables	Measure	Bulgaria	Economic size (in euros)					
			from 4 to 8 thousand euros	from 8 to 25 thousand euros	from 25 to 50 thousand euros	from 50 to 100 thousand euros	from 100 to 500 thousand euros	over 500 thousand euros
Holding represented	number	56 964	15 768	21 618	7 629	5 495	4 820	1 634
Utilised agricultural area	ha	77.70	5.74	14.90	37.18	69.87	262.23	1 273.97
<i>of which rented</i>	ha	67.10	4.24	12.20	34.17	62.09	240.15	1 060.08
Area with:								
cereals	ha	39.43	0.81	3.50	8.89	24.07	140.26	784.25
other field crops	ha	20.92	0.51	2.47	5.22	14.67	76.79	391.48
vegetables and flowers	ha	0.49	0.19	0.25	0.44	0.31	1.63	3.96
permanent crops	ha	1.70	0.58	0.93	1.11	3.06	4.78	11.90
forage crops	ha	11.66	2.14	6.95	17.17	21.22	29.97	53.80
Livestock								
total livestock units	LU	24.2	3.2	8.1	19.8	29.5	52.0	360.3
cattle and buffalo	LU	9.7	1.4	3.6	12.0	23.3	30.2	54.3
<i>of which dairy cows</i>	LU	4.7	0.4	1.0	4.3	10.9	20.0	32.3
sheep and goats	LU	4.1	1.6	4.4	7.2	5.3	5.4	3.2
pigs	LU	4.5	0.0	0.0	0.2	0.0	3.5	145.5
poultry	LU	5.7	0.1	0.1	0.2	0.8	12.6	157.3
Labour input								
labour input	AWU	2.9	1.4	1.7	2.4	3.2	6.6	24.2
<i>of which unpaid labour</i>	AWU	1.2	1.2	1.3	1.4	1.0	0.7	0.3
Economic results								
+ Total output	levs	155 449	15 034	27 352	62 942	127 903	483 574	2 761 811
from crops&crop production	levs	111 557	10 110	16 734	38 830	83 174	379 312	1 990 206
from livestock&livestock products	levs	40 962	4 625	10 528	24 059	43 241	91 764	715 667
other output	levs	2 930	299	90	53	1 488	12 498	55 938
- Total intermediate consumption	levs	89 063	7 227	14 023	33 290	74 451	288 064	1 594 090
specific crop cost	levs	34 548	1 643	3 484	9 159	22 492	124 076	658 004
specific livestock cost	levs	23 829	2 222	4 687	12 322	21 779	58 363	444 336
specific costs for other gainful activities	levs	1 179	155	86	106	1 655	7 806	9 400
other cost	levs	29 507	3 207	5 766	11 703	28 525	97 819	482 350
+ Balance of current subsidies & taxes	levs	48 279	7 346	17 430	41 150	63 266	136 145	575 121
subsidies	levs	46 810	5 867	14 968	37 982	61 659	137 872	585 856
VAT balance excluding on investments	levs	2 155	1 561	2 621	3 695	2 210	248	0
taxes and fares	levs	686	82	159	527	603	1 975	10 735
= Gross farm income	levs	114 665	15 153	30 759	70 802	116 718	331 655	1 742 842
- Depreciation	levs	20 812	1 304	3 161	6 994	16 855	73 836	363 972
= Net value added	levs	93 853	13 849	27 598	63 808	99 863	257 819	1 378 870
- Total external factors	levs	52 758	2 400	6 527	16 673	44 807	182 249	963 562
wages & social security	levs	21 702	1 582	3 080	8 064	21 660	72 601	375 885
rent	levs	28 948	806	3 299	8 146	19 875	102 015	551 905
interest	levs	2 108	12	148	463	3 272	7 633	35 772
+ Balance subsidies&taxes on investment	levs	866	189	1 023	319	729	1 574	6 237
subsidies on investments	levs	670	8	765	0	690	1 574	6 237
VAT balance on investments	levs	196	181	258	319	39	0	0
= Net income	levs	41 961	11 638	22 094	47 454	55 785	77 144	421 545
Balance sheet (closing valuation)								
Total fixed assets	levs	226 482	23 020	48 713	99 382	235 046	616 187	3 956 855
land & permanent crops	levs	88 895	11 463	20 528	28 733	93 724	194 448	1 693 916
buildings	levs	42 173	3 225	6 775	21 588	55 486	110 108	737 286
machinery	levs	69 840	3 921	9 773	23 970	46 648	252 799	1 253 060
Total current assets	levs	129 992	14 131	20 909	89 298	141 692	340 430	2 221 118
Liabilities	levs	84 729	620	5 662	12 922	76 974	272 633	1 749 557
long term loans	levs	40 047	475	4 348	7 905	30 776	128 283	815 168
short term loans	levs	44 682	145	1 314	5 017	46 198	144 350	934 389
Indicators								
Net value added / AWU	levs/AWU	32 295	9 654	16 661	26 635	31 338	39 166	56 892
Net income of AWU	levs/AWU	14 420	8 138	13 310	19 773	17 487	11 724	17 390
Total direct payments	levs	36 988	4 043	10 501	28 742	47 722	115 275	476 840
Single area payment	levs	17 639	1 344	3 118	11 907	20 714	57 538	265 754
Environmental subsidies	levs	3 831	207	1 250	3 149	4 899	7 819	60 816
LFA subsidies	levs	1 666	737	1 330	2 546	3 141	2 947	2 235

Source: EU, Farm Accountancy Data Network '2020 - May 2024

FUNCTIONING OF THE FADN

About 80 000 agricultural holdings from the EU participate in the FADN.

The Farm Accountancy Data Network was established in EU in 1965 by the Regulation 79/65/EC which was repealed by the Regulation (EC) № 1217/2009 of the Council and subsequent amendments.

Each country designates a liaison body with the EC

The Agrostatics Department at MAF was appointed as a Liaison Agency with the EC and is responsible for the establishment and functioning of FADN in Bulgaria. The Department defines the way of data collection, data control and individual data processing and publishes the final results in accordance with the requirements of the EU and the national needs..

The individual data of the holdings are confidential

The individual data of the agricultural holdings, included in FADN, are protected under the Statistics Law. They cannot be disclosed or used for tax or other purposes.

Additional information on FADN can be obtained at the following address of the European Commission: <https://agridata.ec.europa.eu/>

FIELD OF THE FADN SURVEY

56 964 holdings with an economic size of more than 4 000 euros form the field of observation of the FADN in 2020

When determining the scope of monitoring of the FADN, the Commission follows the guidelines set out in Regulation (EC) No. 1217/2009 of 30 November 2009 and subsequent amendments and adopts a pragmatic approach, including only those holdings that are considered market-oriented agricultural holdings. In view of the practice, to be qualified as market-oriented, the holding should exceed a minimum economic size. Due to the different economic structures on the territory of the European Union, a different threshold is set for each country. For Bulgaria, it is set to be over 4 000 euros. Thus, the field of observation of the FADN is a subset of the units surveyed in a census of agricultural holdings.

The results of the 2020 sample census of agricultural holdings in Bulgaria show that there are about 132 000 agricultural holdings in the country with an average area of 34.4 ha. The field of observation of FADN covers about 45% of holdings, but they form about 98% of the standard production and represent approximately 97% of the UAA and about 94% of the livestock units.

FADN SAMPLE

2 235 holdings participate in the FADN in 2020

To ensure that the sample adequately reflects holding differences, the field of observation is stratified. Stratification is a statistical technique used to increase sampling efficiency (i.e. to reduce the number of holdings needed to represent the diversity of agricultural holdings in the observation field). Three criteria for stratification are used in the FADN: FADN area, type of agriculture and economic size.

The representative sample of FADN for 2020 includes 2 235 agricultural holdings. Two months before the start of each reporting period, liaison bodies are required to draw up a selection plan in accordance with Commission Implementing Regulation (EU) No. 2015/220.

The participation of agricultural holdings in the system is voluntary. They are recruited until the number fixed in the sample is filled, observing the principles of stratification.

WEIGHING OF FADN DATA

FADN data are published as average results.

When calculating the results, a special weighting system is used. It is based on the principle of "free expansion": a weight (extrapolation factor) calculated for the holding applies to all holdings in the stratum. The individual weight is equal to the ratio between the number of farms of the same stratum (FADN region x type of agriculture x economic size) in the field of observation and in the sample.

PUBLIC DATE OF FADN

FADN has a public database for all EU member states

FADN is an important monitoring instrument of the EU Common Agriculture Policy. The demand for data and specialized analysis for FADN increases constantly. The basic FADN analyses play an important role in the whole reform process of the CAP i.e. the evaluation of the CAP measures and the impact assessments of the policy proposals.

The standard results are weighted average statistics calculated on the basis of the submitted agricultural accounting reports, which are periodically published by the Commission. They are available in the public database and describe in detail the economic situation of holdings from different groups across the European Union. Through regular presentation of the standard results, the Commission realizes one of the two main objectives of the FADN - assessment of the income of agricultural holdings.

DEFINITIONS

Utilized agricultural area (UAA)

The UAA is the land, utilized by the holding, regardless of the owner. The UAA includes arable land, permanent crops, permanently grassland (pastures and meadows) and kitchen gardens, utilized by the observed holding only.

Standard Output (SO)

Standard output is a criterion that aims to reflect the trends in the economy so that the typology of holding can be applied in an adequate way.

It is calculated by products in accordance with the studied characteristics of the structure of agricultural holdings. Correspondence has been established between the above-mentioned characteristics and the positions of the agricultural statistical report.

SO reflects the average monetary value of agricultural production at producer price. SO does not include direct payments, value added tax and other taxes.

The typology of holdings is established in accordance with the requirements of Commission Implementing Regulation (EU) No. 2015/220. The typology of holdings allows to determine the type of agriculture and their economic size, using a unified method for classifying farms depending on the absolute and relative share of crops and animals grown by them, calculated in standard output.

When determining the typology of holdings, the following steps are taken:

Typology of the farms

1. Individual SO are calculated for all agricultural products (crop and livestock) as an average value of several years.
2. The individual SO are applied to each holding's data (the area of each type of crop and the number of each category of animal reared on the holding), multiplied by their respective SO and summed to obtain the total SO of the holding in euros.

To determine the typology of farms participating in the FADN in 2020, coefficient of standard output'2017, calculated as weighted average values for the period 2015-2019, were used.

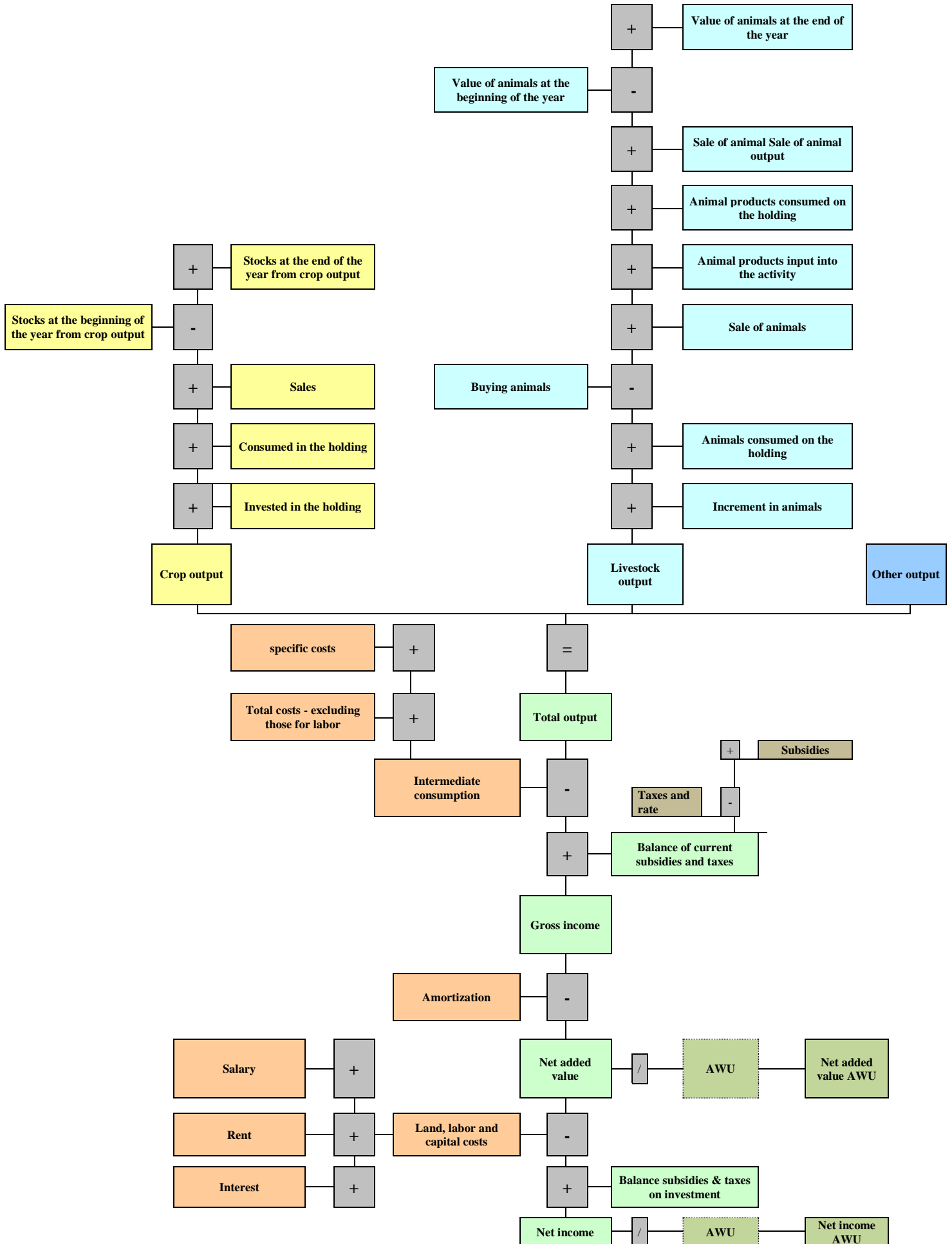
Type of agriculture

The farming type of the holding has 3 levels of detail - general, basic, specific. Holdings are grouped into eight general types: field crops, horticulture, wine, permanent crops, milk, grazing livestock, granivores, mixed.

The type of agriculture of the farm is determined by the relative share of the standard output of the different products of the farm in its total SO according to the classification scheme laid down in the Implementing Regulation (EU) No. 2015/220 and subsequent amendments.

<i>The economic size</i>	<p>The economic size of a holding is defined as the sum of SO of each product produced on the holding. Holdings are grouped into size classes (from I to XIV).</p> <p>The economic size of the holding is measured in euros and represents the total standard output (SO). It shows the potential of the holding, but not its financial results. The economic size allows the comparison of holdings with different specializations, because the physical size (average area, number of animals, etc.) does not carry enough information.</p>
<i>Distribution of regions by statistical regions</i>	<p>In accordance with the Implementing Regulation (EU) No. 2015/220 of the Commission, Bulgaria is divided into 6 regions under the FADN:</p> <ul style="list-style-type: none"> - Severozapaden (North-West Region) – Vidin, Vratsa, Montana, Lovech and Pleven; - Severen tsentralen (North-Central Region) – Veliko Tarnovo, Gabrovo, Razgrad, Rousse and Silistra; - Severoiztochen (North-East Region) – Varna, Dobrich, Targovishte and Shumen; - Yugoiztochen (South-East Region) – Bourgas, Sliven, Yambol and Stara Zagora; - Yugozapaden (South-West Region) – Blagoevgrad, Kyustendil, Pernik, Sofia (capital) and Sofia; - Yuzhen tsentralen (South-Central Region) – Kardzhali, Pazardzhik, Plovdiv, Smolyan and Haskovo.
<i>Annual Work Unit (AWU)</i>	<p>One annual work unit is equal to the worked hours by one worker in full working time for one year. In Bulgaria it is accepted that 1 AWU equals 1 856 worked hours in the year or 232 man days.</p>
<i>Total output</i>	<p>crop output + livestock output+ other output.</p>
<i>Crop output</i>	<p>sales + farm use +farmhouse consumption and payments in kind + closing valuation – opening valuation.</p>
<i>Livestock output</i>	<p>sales of livestock production and animal products + farm use + farmhouse consumption and payments in kind + closing valuation – opening valuation + value of the animals at closing valuation – value of the animals at opening valuation –value of the purchased animals.</p>
<i>Other output</i>	<p>income of performed services + income of hiring out equipment + interest of bank accounts of the farm + income of agro-tourism + income of animal breeding under contract + income of sell of long term fix assets, stocks and materials + income of non-agricultural area + other income.</p>
<i>Intermediate consumption</i>	<p>crop specific costs + livestock specific costs + other general costs.</p>
<i>Crop specific costs</i>	<p>costs for seeds (own op specific costs – costs for seeds (own and purchased) + costs for fertilizers + costs for crop protection products + other specific costs.</p>
<i>Livestock specific cost</i>	<p>costs for fodder (own and purchased) + other specific costs.</p>
<i>Other general costs</i>	<p>costs for maintenance of the buildings (incl. spear parts and services) + costs for electricity + costs for fuels + costs for water supply + costs for insurance + other costs.</p>
<i>Balance of current subsidies and taxes</i>	<p>Subsidies and taxes received and paid respectively in connection with the current activity.</p>
<i>Gross income</i>	<p>total output – intermediate consumption – costs for taxes and fees + income of subsidies for the current activity</p>
<i>Net added value</i>	<p>gross income – costs for depreciation.</p>
<i>Costs for land, work and capital</i>	<p>costs for salaries and social insurance + costs for rent of land + costs for interests.</p>
<i>Net income</i>	<p>net added value – costs for land, work and capital + income of subsidies for investments.</p>

ECONOMIC INDICATORS ACCORDING TO THE EU METHODOLOGY FOR FADN





*The publication is based on final data as
of 2024*

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