



MINISTRY OF AGRICULTURE AND FOOD

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FARM ACCOUNTANCY DATE NETWORK



2018

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'2018

Variables	Measure	Bulgaria	Region					
			NW	NC	NE	SW	SC	SE
Holding represented	number	57 053	7 516	8 250	6 982	9 888	9 427	14 990
Utilised agricultural area	ha	77.06	110.16	110.18	131.8	89.06	37.79	33.53
<i>of which rented</i>	ha	67.05	95.3	95.67	112.33	78.59	34.33	29.02
Area with:								
cereals	ha	36.48	59.3	64.41	69.58	35.7	9.35	11.82
other field crops	ha	23.67	36.19	35.67	43.60	31.61	4.84	8.11
vegetables and flowers	ha	0.54	0.27	0.51	0.76	0.48	0.19	0.84
permanent crops	ha	1.47	1.36	1.19	1.04	2.96	0.71	1.39
forage crops	ha	10.9	10.4	5.52	11.98	13.4	14.85	9.49
Livestock								
total livestock units	LU	23.8	31.6	30.1	20.3	30.1	17.3	18.0
cattle and buffalo	LU	9.0	8.5	7.4	9.2	11.7	6.6	9.9
of which dairy cows	LU	4.6	4.6	4.7	5.6	5.6	2.6	4.8
sheep and goats	LU	4.7	3.6	3.6	5.1	6.4	6.1	3.8
pigs	LU	5.2	13.2	10.5	0.3	9.8	0.2	0.6
poultry	LU	4.7	6.3	8.6	5.8	2.4	3.6	3.6
Labour input								
labour input	AWU	3.1	3.8	3.7	3.4	3.3	2.5	2.4
of which unpaid labour	AWU	1.2	1.2	0.9	1.4	1.0	1.5	1.3
Economic results								
+ Total output	levs	157 334	231 737	271 936	236 896	159 709	68 676	74 086
from crops&crop production	levs	113 137	179 001	199 053	193 722	105 766	39 441	46 507
from livestock&livestock products	levs	41 085	48 592	68 709	32 429	51 463	28 633	27 133
other output	levs	3 112	4 144	4 174	10 745	2 480	602	446
- Total intermediate consumption	levs	87 334	129 222	133 190	126 229	96 605	38 216	47 753
specific crop cost	levs	32 353	50 776	51 293	57 843	32 989	10 309	14 262
specific livestock cost	levs	24 136	33 450	39 938	19 809	29 439	13 902	15 720
specific costs for other gainful activities	levs	1 705	1 754	1 917	6 075	831	1 281	376
other cost	levs	29 140	43 242	40 042	42 502	33 346	12 724	17 395
+ Balance of current subsidies & taxes	levs	43 358	55 490	52 834	58 811	51 960	27 440	29 198
subsidies	levs	42 208	52 596	53 018	57 227	51 256	27 277	27 477
VAT balance excluding on investments	levs	1 854	3 966	1 099	2 419	1 236	540	2 181
taxes and fares	levs	704	1 072	1 283	835	532	377	460
= Gross farm income	levs	113 358	158 005	191 580	169 478	115 064	57 900	55 531
- Depreciation	levs	19 624	28 036	28 951	31 846	20 456	10 073	10 037
= Net value added	levs	93 734	129 969	162 629	137 632	94 608	47 827	45 494
- Total external factors	levs	52 095	82 075	98 791	83 908	52 897	15 257	19 181
wages & social security	levs	19 955	29 227	33 335	24 706	23 957	8 099	10 542
rent	levs	29 763	49 705	62 845	53 622	26 040	6 296	7 657
interest	levs	2 377	3 143	2 611	5 580	2 900	862	982
+ Balance subsidies&taxes on investment	levs	597	831	401	1 471	1 025	235	123
subsidies on investments	levs	372	55	178	937	996	219	55
VAT balance on investments	levs	225	776	223	534	29	16	68
= Net income	levs	42 236	48 725	64 239	55 195	42 736	32 805	26 436
Balance sheet (closing valuation)								
Total fixed assets	levs	205 682	313 374	283 892	348 500	219 173	99 656	99 894
land & permanent crops	levs	78 060	124 195	105 085	156 771	92 136	19 398	30 997
buildings	levs	34 931	51 799	58 588	53 166	28 463	20 119	18 539
machinery	levs	68 179	109 001	90 823	111 651	66 871	42 660	31 911
Total current assets	levs	114 451	158 029	158 465	166 816	113 364	27 389	99 456
Liabilities	levs	74 426	100 323	89 228	168 731	83 646	25 445	34 090
long term loans	levs	30 882	40 632	44 983	60 474	40 160	8 402	12 464
short term loans	levs	43 544	59 691	44 245	108 257	43 486	17 043	21 626
Indicators								
Net value added / AWU	levs/AWU	30 428	34 466	44 275	39 979	28 425	19 014	18 711
Net income of AWU	levs/AWU	13 713	12 924	17 504	16 045	12 834	13 018	10 879
Total direct payments	levs	32 990	42 292	41 827	48 676	39 366	17 755	21 533
Single area payment	levs	16 272	21 837	21 715	25 384	18 498	6 816	10 720
Environmental subsidies	levs	4 426	5 705	7 055	3 489	6 384	3 065	2 339
LFA subsidies	levs	1 610	391	260	722	1 539	4 893	1 355

Source: EU, Farm Accountancy Data Network '2018 - Uni 2024

Table 2. Average results of holding, distributed by 6 groups of economic size - FADN'2018

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	57 053	15 818	21 618	6 962	6 162	4 846	1 647
Utilised agricultural area	ha	77.06	5.73	14.25	31.91	69.94	254.90	1 280.81
<i>of which rented</i>	ha	67.05	3.83	11.80	28.34	62.59	237.27	1 078.92
Area with:								
cereals	ha	36.48	0.97	3.09	8.79	21.32	127.91	720.54
other field crops	ha	23.67	0.60	2.53	5.69	14.77	83.95	454.63
vegetables and flowers	ha	0.54	0.13	0.31	0.46	0.62	1.53	4.38
permanent crops	ha	1.47	0.60	0.69	0.94	2.46	4.71	9.19
forage crops	ha	10.90	1.89	5.78	12.89	26.85	26.28	51.46
Livestock								
total livestock units	LU	23.8	3.0	8.4	18.4	31.5	52.0	336.7
cattle and buffalo	LU	9.0	0.9	3.8	10.0	21.1	29.7	45.9
of which dairy cows	LU	4.6	0.4	1.0	4.3	11.3	19.2	26.8
sheep and goats	LU	4.7	2.0	4.4	7.7	9.0	6.1	3.6
pigs	LU	5.2	0.0	0.0	0.1	0.2	4.5	163.6
poultry	LU	4.7	0.0	0.1	0.3	0.7	11.7	123.6
Labour input								
labour input	AWU	3.1	1.5	1.8	2.3	3.4	7.0	25.9
<i>of which unpaid labour</i>	AWU	1.2	1.3	1.3	1.4	1.2	0.6	0.3
Economic results								
+ Total output	levs	157 334	14 706	30 999	54 095	121 520	480 063	2 806 199
from crops&crop production	levs	113 137	9 630	17 711	33 656	76 216	369 658	2 079 144
from livestock&livestock products	levs	41 085	4 800	10 530	20 022	42 599	104 819	686 460
other output	levs	3 112	276	2 758	417	2 705	5 586	40 595
- Total intermediate consumption	levs	87 334	7 383	16 671	31 690	70 264	271 635	1 539 498
specific crop cost	levs	32 353	1 810	3 807	9 294	20 983	111 383	607 930
specific livestock cost	levs	24 136	2 177	4 994	11 410	22 579	63 499	430 075
specific costs for other gainful activities	levs	1 705	182	2 136	133	1 146	4 273	11 895
other cost	levs	29 140	3 214	5 734	10 853	25 556	92 480	489 598
+ Balance of current subsidies & taxes	levs	43 358	6 214	15 171	30 868	55 525	121 412	547 653
subsidies	levs	42 208	4 805	13 344	28 298	53 491	122 987	559 179
VAT balance excluding on investments	levs	1 854	1 486	1 999	2 955	2 859	186	0
taxes and fares	levs	704	77	172	385	825	1 761	11 526
= Gross farm income	levs	113 358	13 537	29 499	53 273	106 781	329 840	1 814 354
- Depreciation	levs	19 624	1 280	2 877	5 720	17 481	65 555	347 279
= Net value added	levs	93 734	12 257	26 622	47 553	89 300	264 285	1 467 075
- Total external factors	levs	52 095	2 466	6 251	15 067	39 818	177 626	963 546
wages & social security	levs	19 955	1 563	3 155	6 849	19 114	69 537	329 746
rent	levs	29 763	821	3 004	7 575	18 230	99 570	590 472
interest	levs	2 377	82	92	643	2 474	8 519	43 328
+ Balance subsidies&taxes on investment	levs	597	176	276	237	1 512	1 561	4 101
subsidies on investments	levs	372	0	6	55	1 146	1 406	4 101
VAT balance on investments	levs	225	176	270	182	366	155	0
= Net income	levs	42 236	9 967	20 647	32 723	50 994	88 220	507 630
Balance sheet (closing valuation)								
Total fixed assets	levs	205 682	22 996	45 588	90 851	189 112	560 839	3 563 912
land & permanent crops	levs	78 060	12 728	16 714	27 946	61 707	183 718	1 472 827
buildings	levs	34 931	3 188	5 564	16 716	36 045	93 170	626 707
machinery	levs	68 179	3 677	12 922	17 757	53 812	225 600	1 216 691
Total current assets	levs	114 451	11 432	21 281	66 317	133 069	280 024	1 973 398
Liabilities	levs	74 426	1 549	4 039	17 962	63 984	235 723	1 501 376
long term loans	levs	30 882	724	1 817	11 172	18 410	112 627	591 493
short term loans	levs	43 544	825	2 222	6 790	45 574	123 096	909 883
Indicators								
Net value added / AWU	levs/AWU	30 428	8 131	15 154	20 492	26 131	37 544	56 718
Net income of AWU	levs/AWU	13 713	6 601	11 731	14 105	14 911	12 531	19 622
Total direct payments	levs	32 990	3 331	8 942	21 197	42 191	103 800	440 601
Single area payment	levs	16 272	1 097	2 942	9 018	18 872	52 363	251 711
Environmental subsidies	levs	4 426	270	1 220	2 734	5 132	8 607	78 615
LFA subsidies	levs	1 610	634	1 289	2 507	3 149	2 781	2 155

Source: EU, Farm Accountancy Data Network '2018 - Uni 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

61 436 holdings with an economic size of more than 4 000 euros form the field of observation of the FADN in 2018

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 2016 sample census of agricultural holdings in Bulgaria show that there are about 201 000 agricultural holdings in the country with an average area of 20.58 ha. The field of observation of FADN covers about 31% of holdings, but they form about 95% of the standard production and represent approximately 97% of the UAA and about 88% of the livestock units.

FADN SAMPLE

2 241 holdings participate in the FADN in 2018

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 2018 includes 2 241 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:

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 2018, coefficient of standard output'2017, calculated as weighted average values for the period 2015-2019, were used.

Typology of the farms

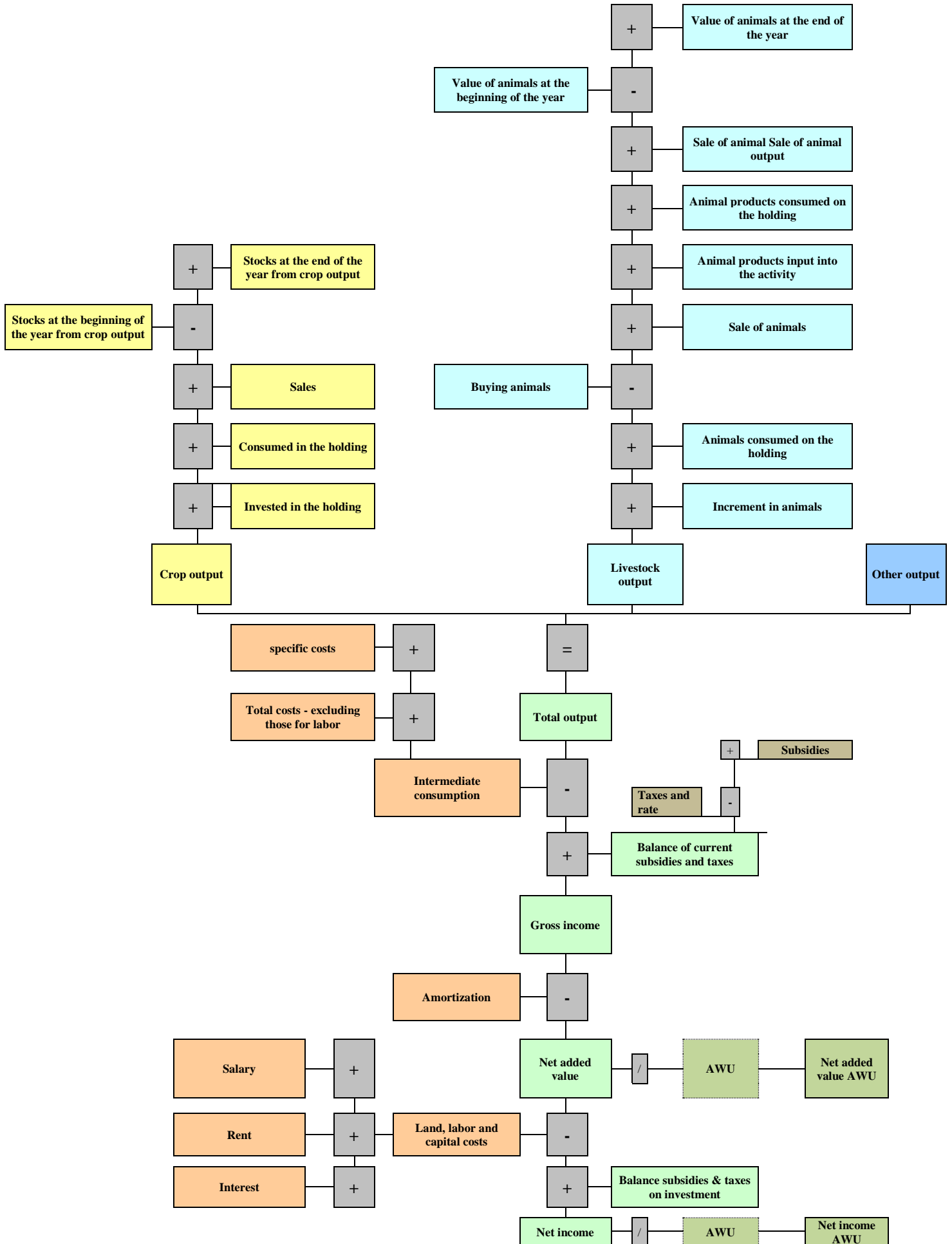
The farming type of the holding has 3 levels of detail - general, basic, specific. Holdings are grouped into eight general types: field crops, horticulture, wine, permanent crops, milk, grazing livestock, granivores, mixed.

Type of agriculture

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 consummation 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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