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BUSINESS reports

AGRICULTURE & BUSINESS

2023
special edition
by KAPITAL

TOP 100 COMPANIES
AGRICULTURE

A Stormy Year

Better financial results due to higher prices — that's the essence of the story of the biggest companies in the agriculture sector last year. Nearly 80% of the 100 largest companies in the sector improved their financial results compared to 2021, with ten companies seeing revenue leapfrog by more than 100%.

The war in a key producer like Ukraine, which Russia invaded last year, has pushed up commodity quotas over fears of potential shortages. In fact, high inflation has left a serious mark on industry. Agricultural output prices have risen by almost a third since 2021 — more than in all of the preceding ten years combined. The sharp rise in the prices of the main inputs used in production — fertilizers, chemicals and energy — contributed to the increase.

As expected, this has significantly increased the turnover and profits of players in the sector, with grain producers again performing best. Moreover, the excellent results come against the backdrop of a weaker grain harvest last year.

However, the business has made some cardinal errors — expectations of continued abundance have led many companies to stockpile significant quantities in warehouses in the hope of big profits as the war raged on Bulgaria's doorstep. However, their prediction did not come true — the market has calmed, which led to visibly lower prices that will, in turn, inevitably affect this year's company results in the agricultural domain.

Despite the difficulties the sector has undergone in recent years, its potential remains great — something that is particularly true for livestock and fruit and vegetable producers.

Kiril Kirchev

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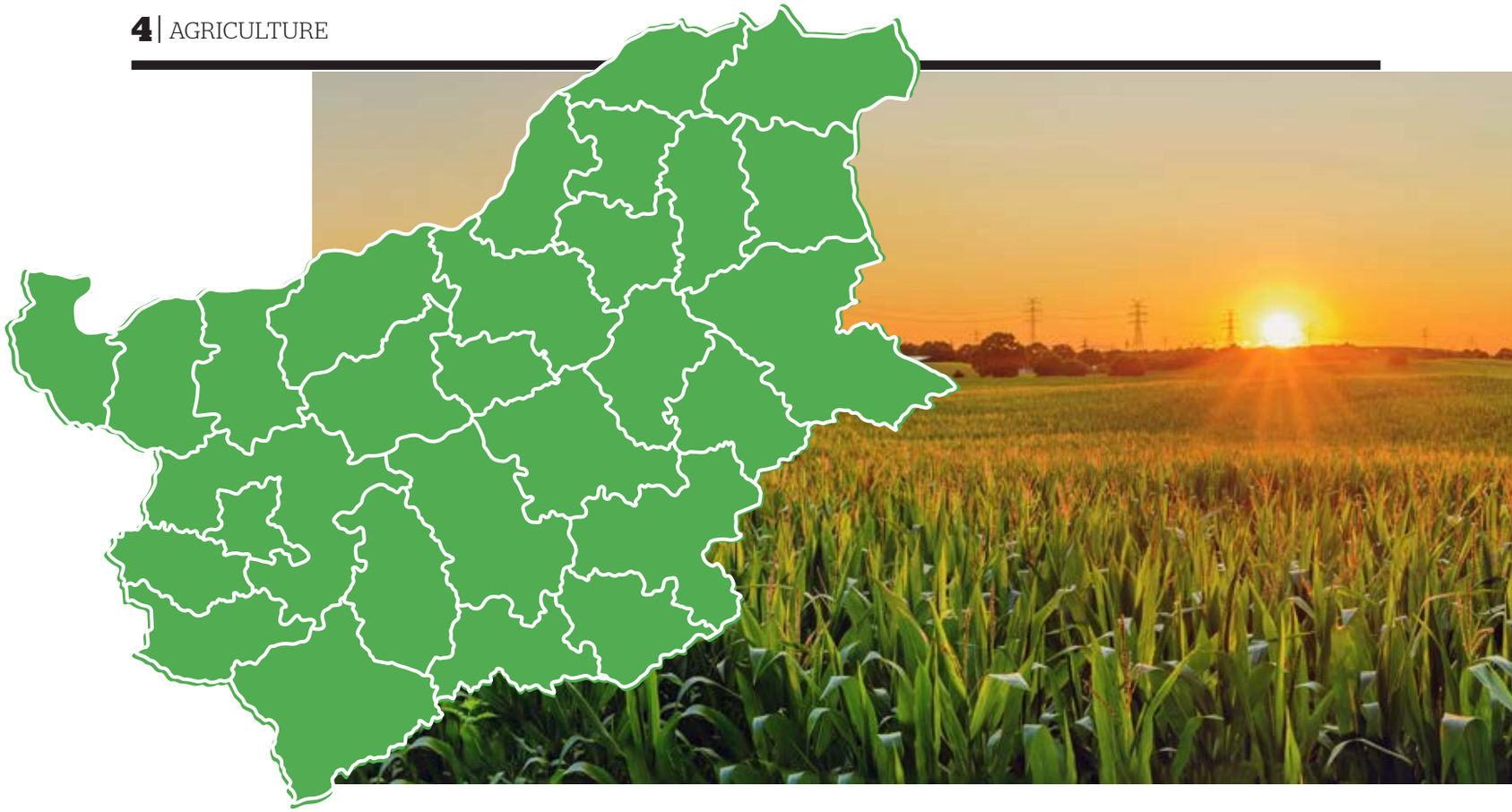

//LEADERS

Bulgarian agriculture sector posts hefty profits in 2022

The war in Ukraine propelled global prices higher and Bulgarian companies benefited from the rise

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A rise of 38% year-on-year, or nearly 16 billion levs (8.1 billion euro) in profits. These numbers show the financial performance in 2022 of the 100 largest companies in Bulgaria's agricultural sector, in which grain traders traditionally have the strongest presence. The war holding sway in a key grain producer such as Ukraine has sent prices skyrocketing on fears of shortages, boosting the turnover of the players in the sector.

More impressive is the combined profit of the agriculture companies which jumped by 70%, leading to improved profitability of 6.2%, compared to 4.8% in the previous year. However, employment in the sector increased only marginally, by less than 550 people in total for all 100 companies.

The grain harvest in Bulgaria was poorer in 2022. According to data from the Ministry of Agriculture, 6.2 million tons of wheat were harvested, which is 12% less than in 2021. Corn used for grain was down 26% to 2.5 million tons, and harvested sunflower increased by 6% up to 2.1 million tons. Generally, increased prices offset the fall in the harvested volumes.

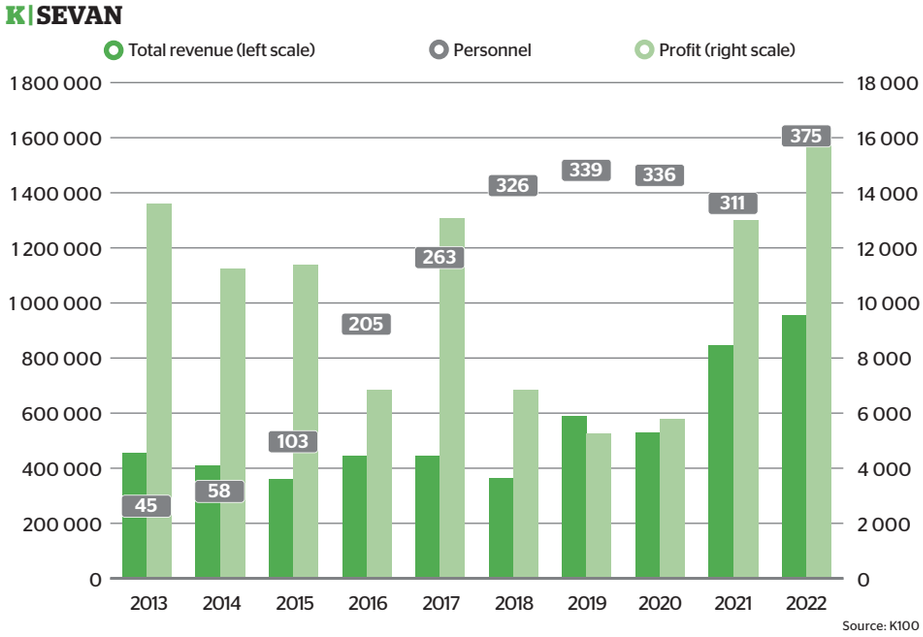
Expectations that the bull market will continue have led many companies to hold grain in stock in the hope of big profits. However, the stabilization of the market has visibly reduced prices, which will affect the companies' performance this year.

The traditional champions

The largest local trader, Burgas-based Sevan, which has been in the market for nearly 30 years, has moved up the ladder to become the leader in the sector. The company is owned by Artur Hakopyan and his family and is part of a group that, in addition to grain trading, also deals with land cultivation (120 thousand decares owned and leased), has huge grain warehouses and a fleet of trucks. With over 25% growth last year, the company's turnover is now approaching 1 billion levs.

Interestingly, the leader of last year's ranking, Agro Bord, saw its revenue drop from over 1 billion levs to 285 million levs, which send the company to 13th position.

The revenues of the 100 largest companies in the sector jumped by 38% in 2022 because of grain prices appreciation.



This is not a surprise, given that the company owned by Tsanko Kolovsky mainly trades in Ukrainian grain transported across the Black Sea.

Two of the top three are companies that are part of large international trading groups. Cargill Bulgaria is owned by the U.S.-based Cargill and trades in grain and oilseed crops, and in 2022 its turnover exceeded 900 million levs. The company is also the largest employer in the sector — employees have increased by more than 10% and already exceed 1500 people. The main reason for this is that the local company has a shared service center that it provides to the group and its customers.

Cofco International Bulgaria is part of the Chinese Cofco, which entered the country in 2019 and quickly rose to top positions in the sector. In 2022, the company's sales remained practically unchanged, edging down by 1% year-on-year.

The next company on the list, Euroconsult, is among the unknown players in the sector and has only one staff member. According to its report in the Commercial Register, it deals in the processing of black oil sunflower seed through foreign subcontractors. This did not prevent it from increasing its turnover by nearly 40% in 2022. The company is owned by Vasil Mihailov Vasilev, who also has a processing company — Oiropak, in Popovo, where nearly 280 people are employed, according to data as of July this year.

In fifth position is for Buildcom, which mainly trades in wheat. The company made over 635 million levs in sales, growing impressively by 68%. Angel Georgiev's group is better known for sunflower oil producer Oliva, and its consolidated revenues exceed 3 billion levs. Earlier this year, the company announced that through its subsidiary Logistic Center — Varna it will build a grain port in Varna worth 100 million euro. Half of the project's cost will be financed through a loan from the European Investment Bank. The grain terminal should be ready in 2026.

Invisible in the ranking remains one of the large producers and traders — Agria Group Holding, which includes over >6

20 related firms. However, its subsidiaries Kristera (8th place), Corn Trade (15th place), Amber (39th place) and Kristera-agro (94th place) are well known. The group cultivates over 150,000 decares of land in northeastern Bulgaria and also plans to build a port, on the shore of Lake Beloslav, for 45 million euro.

Outside the grain business, the largest in the agricultural sector is chicken meat producer Pilko in Razgrad, which occupies 18th place in the ranking. The company is part of Ameta Holding and is owned by Germany's PHW. The group also includes forage plant Rositsa in Pavlikeni. Among the large companies in the sector there are also traders of plant protection preparations. Fruit and vegetable producers are practically absent from the top 100.

Profit growth is even more impressive – 70%, profitability also grows.

Dynamic leaders

More can be said about the business of the most dynamic companies in the agriculture sector. Their ranking is more diverse, with a total of 9 firms reporting three-digit revenue growth last year. At the top is once again a grain producer — Svetoslav Ilchovski, who became known recently for his public revelations about corruption in the sector. The sole-trader company operates in northwestern Bulgaria and is engaged in the production, storage and trade of agricultural produce. In 2022, the company quadrupled its revenues, to over 155 million levs, ranking 25th in the sector.Second in terms of revenue growth is vegetable producer Greens from Parvomai, which increased its turnover by 264%. The company is owned by Yordan Balabanov and Nikolay Valchev. According to information on its website, it has 630 decares of own land, on which 240 decares of greenhouses are located. Greens mainly grows tomatoes, cucumbers and pepper.

KAM 78 — Agro which trades in grain, seeds and forage occupies third position with a 262% growth in revenues to over 100 million levs. The company is based in Montana and is owned by Desislava Damyanova Mladenova. In the general sector ranking, the company is in 50th place.

Livestock company Boni Farm Nikola Kozlevo posted the fourth largest increase in turnover, of 236%. It is part of Boni Holding group — the owner of Svinekompleks Brestak (41st position), which also grew rapidly last year, and Boni Farm Zimen (87th place). The holding also owns meat processing plants in Lovech, Karlovo and Ruse.

The top five is completed by grain trader Agro Life — A from Karnobat, which increased its revenue by over 220% to 117.6 million levs (38th place in the sector ranking). The company was established in 2016 and is owned by Atanas Plamenov Kostadinov.

The most profitable ones

The company Buildcom had the biggest profit in the agriculture sector last year. It increased its financial result by an impressive 4,606%, but the main reason for this was receiving a dividend from Oliva.

Price growth, however, cools down and the accumulation of stocks promise a worse 2023.

The ranking is followed by Svetoslav Ilchovski, which recently commented to Kapital that this is due to the fact that it did not raise rents. The sole trader also has the highest profitability in the sector (close to 46%).

The winner of last year's profit ranking, Zlatia Agro, is now third, with profit decreasing by 6%. However, the company maintains profitability of over 22%, which makes it fifth on this indicator in the sector. The grain producer operates in northwestern Bulgaria and is owned by Kiril Ivanov, who also owns the seed and preparation dealer ASM (11th in terms of revenue in the general ranking).

The manufacturer of foie gras and duck products Elit — 2095 reports a very high rate of return (39%). Nikola Angelov's company is one of the few in animal husbandry that does not grow pigs and chickens. Its revenues rose by 120%, ranking it 52nd in the agricultural sector.

With about 25% profitability are Ruse Svinekompleks Brashlen and Variety Seeds — Vardim of Svetoslav Dichevsky. He is also owner of Octopus Invest Holding and the largest Bulgarian recipient of state agri-subsidies at group level. | K

K | TOP 50 MOST DYNAMIC AGRI COMPANIES

	Company	Revenue			Change	Profit/Loss			Change	Profitability
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %
1	SVETOSLAV ILCHOVSKY	42 321	37 263	155 345	316.89	5 531	7 182	71 148	890.64	45.8
2	GREENS	6 891	5 317	19 342	263.78	735	347	11 033	3 079.54	57.04
3	KAM 78 - AGRO	26 277	27 688	100 169	261.78	175	151	745	393.38	0.74
4	TETRAXIB	6 233	24 288	81 676	236.28	-1325	-2801	7 968	-	9.76
5	AGRO LIFE - A	16 558	36 681	117 624	220.67	98	900	920	2.22	0.78
6	DJENI OVO	21 745	26 014	65 573	152.07	2 829	2 354	7 027	198.51	10.72
7	ELIT - 2095	31 927	42 563	93 562	119.82	1 925	77 00	36 069	368.43	38.55
8	GRAINSTORE BULGARIA	61 166	130 638	284 274	117.60	796	1 226	3 205	161.42	1.13
9	SVINEKOMPLEKS BRESTAK	12 935	55 711	111 858	100.78	1 028	-314	11 69	-	1.05
10	LUDOGORSKO ZARNO	15 975	30 553	60 085	96.66	1 290	1 645	3 741	127.42	6.23
11	FZ PANAYOTOV I SHTEREV	42 690	39 598	74 165	87.29	210	976	-693	-171.00	-
12	TIT DISTRIBUTION	11 299	21 510	40 079	86.33	74	295	35	-88.14	0.09
13	UNION 09	19 931	42 935	79 218	84.51	514	1 025	1 491	45.46	1.88
14	AGROTSAR	75 987	56 271	103 409	83.77	3 300	106	334	215.09	0.32
15	RBL FOOD BULGARIA	29 817	29 212	52 271	78.94	195	367	644	75.48	1.23
16	BREVIS	123 002	151 100	264 832	75.27	12 409	11 935	15 343	28.55	5.79
17	QNK - 100	7 550	14 332	25 118	75.26	1 316	3 203	9 706	203.03	38.64
18	KEHLIBAR	58 957	67 111	117 472	75.0	51 44	3 503	15 032	329.12	12.80
19	SEMPE 2	34 394	47 156	82 097	74.10	399	4 494	6 829	51.96	8.32
20	TOPAZ TRADE	48 703	490 06	84 429	72.28	586	547	1 442	163.62	1.71
21	MOBI PRO	24 028	15 023	25 368	68.86	8	3	5	66.67	0.02
22	BILDCOM	348 453	378 829	635 627	67.79	4 518	1 657	77 991	4 606.76	12.27
23	TOBI AGRO COMPANY	50 529	101 442	168 399	66.01	598	570	1 084	90.18	0.64
24	DEMETRA - 3X	18 774	41 643	68 112	63.56	462	4 345	10 830	149.25	15.90
25	YAYTSA I PTITSI - ZORA	22 849	26 262	417 67	59.04	-881	1 145	8 239	619.56	19.73
26	ECOPRODUCT	15 776	19 831	313 80	58.24	125	2 356	4 275	81.45	13.62
27	MAGIC FLAME	262 526	267 677	422 064	57.68	6 128	19 688	22 789	15.75	5.4
28	DESI - SVETLA SIMEONOVA	35 437	51 547	80 676	56.51	8 954	6 932	17 695	155.27	21.93
29	DUNAV LAND AGRO	3 848	37 47	5 814	55.16	45	348	392	12.64	6.74
30	VITAGRAIN BG	127 554	55 385	85 242	53.91	-3 512	-1 360	1 221	-	1.43
31	KRISTERA	171 365	283 011	434 367	53.48	5 437	5 060	21 227	319.51	4.89
32	SEMPEX	134 939	172 446	260 022	50.78	2 417	3 735	11 109	197.43	4.27
33	AGRO SIP	12 132	19 436	29 269	50.59	-862	-952	2 634	-	9.00
34	HICKS AGRO	27 731	78 812	118 099	49.85	768	1 426	2 003	40.46	1.7
35	AGRIA KLAS	13 490	19 205	28 710	49.49	362	549	773	40.80	2.69
36	SYLVIA 7	129 00	16 361	24 454	49.47	2 574	2 039	2 337	14.62	9.56
37	AGRO MEL 2011	54 783	62 149	92 201	48.35	516	2 126	6 795	219.61	7.37
38	LORA - 2004	13 640	18 829	27 411	45.58	247	826	2 233	170.34	8.15
39	JZYULIV	23 735	25 273	36 781	45.53	-791	-3 227	897	-	2.44
40	PARVI MAI	208 788	23 6791	344 433	45.46	3 583	3 745	10 589	182.75	3.07
41	SORTOVI SEMENA - VARADIM	7 3121	64 898	94 040	44.9	14 731	16 567	23 315	40.73	24.79
42	GIMEL II	9 428	12 460	17 599	41.24	410	2016	1 742	-13.59	9.90
43	PRO-AGRO OOD	15 677	20 103	28 368	41.11	3 535	8311	10 179	22.48	35.88
44	SVINEKOMPLEKS BRASHLEN	11 013	33 675	47 385	40.71	2 062	6 495	12 242	88.48	25.84
45	NEDKO NEDKOV - OVCHAROVO	42 137	41 965	58 664	39.79	2 662	2 037	8 182	301.67	13.95
46	YASMIN 96 RR	36 553	49 555	69 239	39.72	441	878	265	-69.82	0.38
47	ANGELOV - IVAN ANGELOV	12 997	12 296	17 127	39.29	2 686	494	2 505	407.09	14.63
48	EUROCOSNULT	312 580	462 999	644 783	39.26	7 934	14 008	32 006	128.48	4.96
49	AYAX-1	88 826	74 206	102 783	38.51	16 755	379	12 985	3 326.12	12.63
50	FURAJ ROSITSA	74 068	97 694	135 304	38.50	1 981	300	3 447	1 049.00	2.55
	AVERAGE FOR TOP 50	**59 080.70**	**73 969.94**	**123 761.72**	**83.55**	**2422.44**	**2946.74**	**10103.48**	**407.52**	**11.00**

Source: KAPI

The sector in figures

author
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Undoubtedly the most important economic event in recent history — high inflation — has also left its mark on agriculture. Last year, prices per producer in the farming sector rose 31% compared to 2021 — more than the net rise for the preceding ten years. The increase was driven by a sharp spike in prices of the main inputs used in production — fertilizers, chemicals and energy — which, according to Eurostat, have risen by 32%.

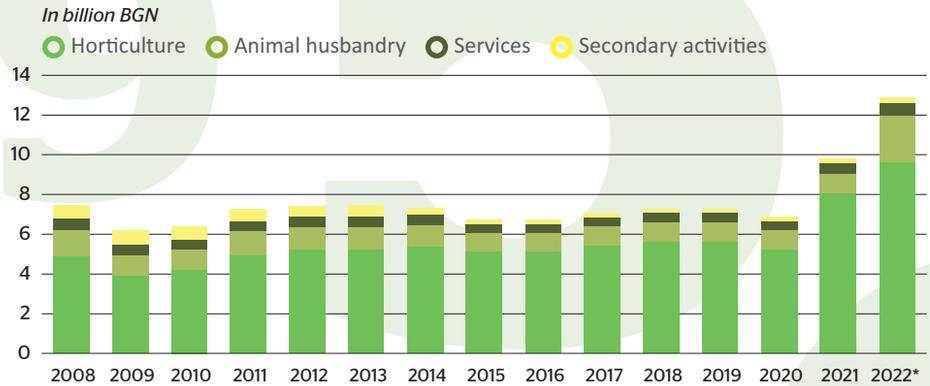
The inflationary wave has also shaken the market for agricultural land. In 2022, the price per hectare reached 1,309 levs, whereas only two years ago it was below 1,000 levs. Rent has also gone up, albeit at a slightly slower pace.

The value of agricultural output in 2022 is estimated at nearly 13 billion levs. The impressive 31% jump, however, is largely nominal and in line with production inflation in the sector. At the same time, agriculture's share of the economy remains almost unchanged at between 4%-5%, the same share it has occupied for over a decade.

As before, about three-quarters of the value produced in the sector comes from crop production. Several arable crops dominate agriculture — these are wheat, sunflower and maize, which account for more than half of the total value and take the largest share of exports.

K | VALUE OF OUTPUT PRODUCED

In billion BGN

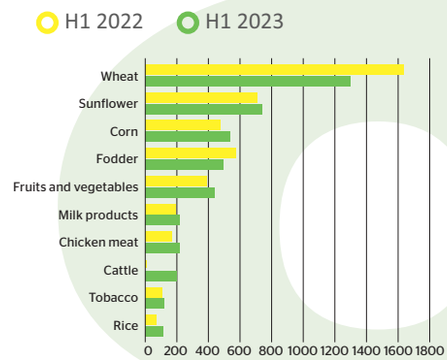


*preliminary data, second estimate

Source: NSI

K | TOP 10 EXPORT PRODUCTS

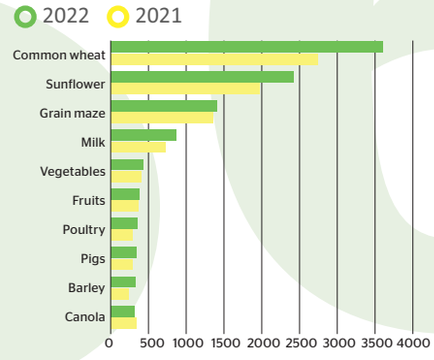
In the first half of 2023, in million BGN



Source: NSI

K | TOP 10 PRODUCTS

current value, million BGN

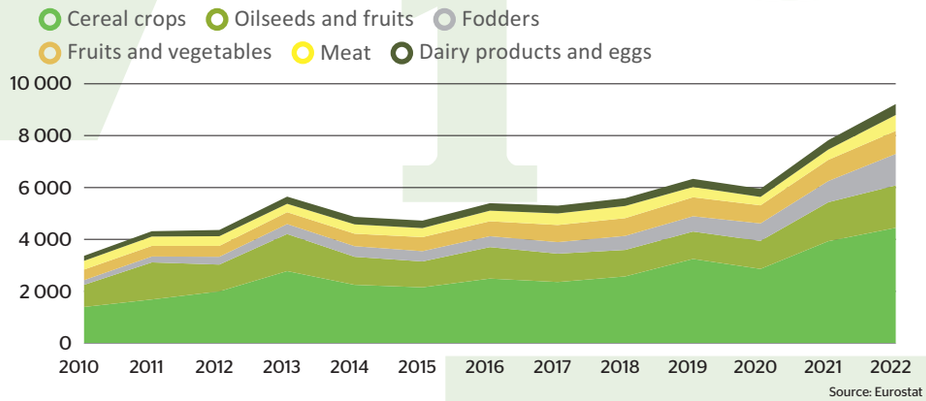


Source: NSI

The number of employees in agriculture declined by more than 100,000 over the past decade, registering about 546,000 by 2022, including seasonal workers. The average gross wage in the sector reaches 1,280 levs and, although it grew by 18% compared to 2021, it remains far below the average for the overall economy. It is therefore no surprise that the sector is suffering from a noticeable labor shortage. The shortfall is somewhat mitigated by rising labor productivity, which in real terms is increasing by an average of around 2.4% a year. | K

K | EXPORTS OF MAIN AGRICULTURAL PRODUCTS

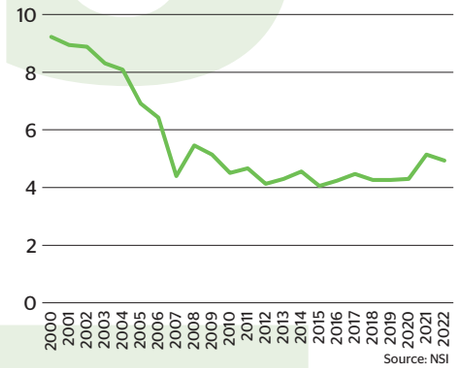
In million BGN



Source: Eurostat

K | SHARE OF AGRICULTURE IN THE ECONOMY

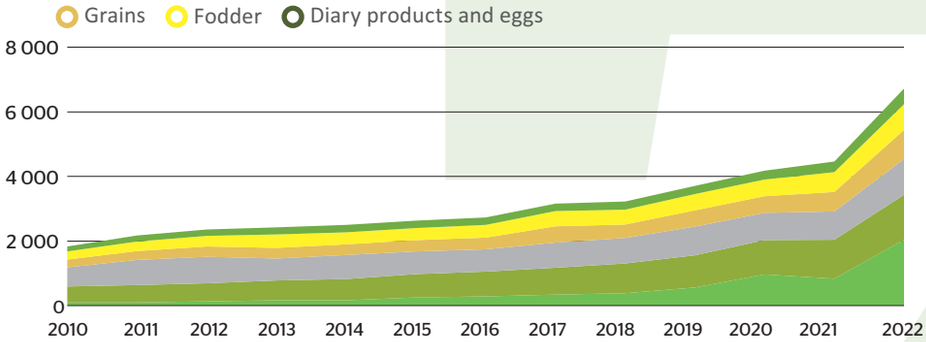
% of GDP



Source: NSI

K | ...AND IMPORTS

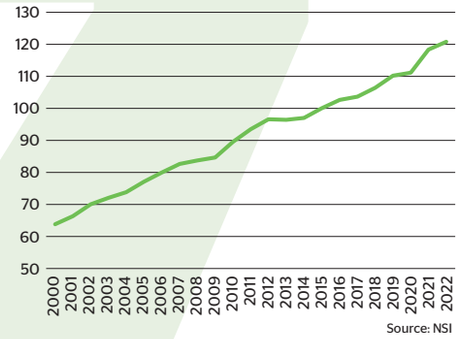
In millions of BGN



Source: Eurostat

K | LABOUR PRODUCTIVITY IN AGRICULTURE

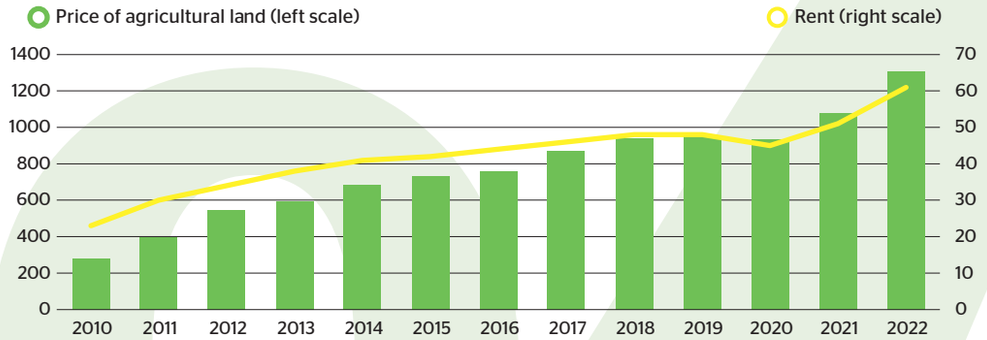
Physical volume index (2015 = 100)



Source: NSI

K | PRICE OF AGRICULTURAL LAND AND RENT

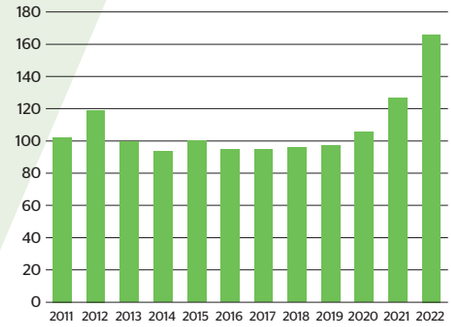
BGN/decare



Source: NSI

K | PRODUCER PRICES IN AGRICULTURE

Index, 2015 = 100



Source: NSI

K | TOP 100 AGRICULTURE

	Company	Revenue			Change	Profit/Loss			Change	Profitability	Personnel	Change
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %	2022	'22/'21, %
1	SEVAN	530 984	848 301	954 470	12.52	5 799	13 009	16 330	25.53	1.71	375	20.58
2	CARGILL BULGARIA	535 214	806 504	902 828	11.94	3 242	9 214	15 210	65.07	1.68	1 569	10.65
3	COFCO INTERNATIONAL BULGARIA	363 155	767 832	760 157	-1	2 698	3 187	2 327	-26.98	0.31	10	11.11
4	OYROKONSULT	312 580	462 999	644 783	39.26	7 934	14 008	32 006	128.48	4.96	1	0.00
5	BILDCOM	348 453	378 829	635 627	67.79	4 518	1 657	77 991	4 606.76	12.27	14	-12.5
6	BALDZHIEVI-91	321 830	495 344	613 485	23.85	9 900	32 476	16 989	-47.69	2.77	121	2.54
7	RISOIL EUROPE	335 827	574 354	454 752	-20.82	-190	2 250	19 951	786.71	4.39	9	12.50
8	KRISTERA	171 365	283 011	434 367	53.48	5 437	5 060	21 227	319.51	4.89	146	9.77
9	MAGIC FLAME	262 526	267 677	422 064	57.68	6 128	19 688	22 789	15.75	5.4	546	12.81
10	PARVY MAI	208 788	236 791	344 433	45.46	3 583	3 745	10 589	182.75	3.07	164	0.61
11	ACM	259 357	275 674	337 036	22.26	8 068	11 986	23 210	93.64	6.89	253	-1.56
12	FARM SENSE	214 345	267 619	303 158	13.28	1 813	4 004	5 145	28.5	1.7	55	25
13	AGRO BORD	526 753	1 031 278	285 085	-72.36	783	3 585	186	-94.81	0.07	13	85.71
14	GRAINSTORE BULGARIA	61 166	130 638	284 274	117.60	796	1 226	3 205	161.42	1.13	82	13.89
15	CORN TRADE	202 595	268 266	274 177	2.20	1 250	1 221	5 132	320.31	1.87	7	40.00
16	BREVIS	123 002	151 100	264 832	75.27	12 409	11 935	15 343	28.55	5.79	156	-4.88
17	SEMPEX	134 939	172 446	260 022	50.78	2 417	3 735	11 109	197.43	4.27	14	0
18	PILKO	163 618	193 053	254 496	31.83	3 812	1 916	12 331	543.58	4.85	831	1.22
19	OKTOPOD-C	174 858	292 207	237 734	-18.64	10 000	40 224	22 907	-43.05	9.64	102	0
20	999 - IV. ASENOV	159 018	184 286	226 670	23.0	4 621	8 167	7 441	-43.05	9.64	84	13.51
21	OKTOPOD INVEST HOLDING	108 365	215 278	206 040	-4.29	8 322	30 692	13 018	-57.59	6.32	161	-9.55
22	ZLATIYA AGRO	88 097	135 381	178 340	31.73	24 493	42 787	40 100	-6.28	22.49	195	2.09
23	ADM BULGARIA TRADING	122 328	270 539	176 163	-34.88	-310	1 491	-856	-157.41	-	10	0
24	TOBI AGRO COMPANY	50 529	101 442	168 399	66.01	598	570	1 084	90.18	0.64	2	-33.33
25	SVETOSLAV ILCHOVSKY	42 321	37 263	155 345	316.89	5 531	7 182	71 148	890.64	45.8	59	-100
26	CORTEVA AGRISCIENCE BULGARIA	93 668	118 086	143 310	21.36	3 640	5 153	5 117	-0.70	3.57	16	60.00
27	FURAZH ROSITSA	74 068	97 694	135 304	38.50	1 981	300	3 447	1 049.00	2.55	94	8.05
28	AGRICS SILISTRA	70 636	114 267	132 444	15.91	862	1 036	1 219	17.66	0.92	5	25.00
29	SYNGENTA	82 199	102 814	131 652	28.05	1 317	948	2 468	160.34	1.87	95	5.56
30	F+S AGRO	91 307	93 350	124 204	33.05	684	703	2 363	236.13	1.90	85	-8.60
31	VIAND	86 115	114 222	123 506	8.13	2 868	2 119	2 908	37.23	2.35	189	-1.05
32	AGRIA	111 350	119 209	123 207	3.35	11 108	16 299	16 009	-1.78	12.99	308	-12.99
33	EUROPACK	57 261	97 526	121 617	24.70	6 371	9 786	14 857	51.82	12.22	270	4.25
34	SILK GAZ BG	42 761	98 930	118 591	19.87	555	94	3 391	3 507.45	2.86	27	68.75
35	FORUM TRANS	70 783	110 470	118 275	7.07	1 375	2 528	4 107	62.46	3.47	28	-9.68
36	HIKS AGRO	27 731	78 812	118 099	49.85	768	1 426	2 003	40.46	1.7	11	0
37	BG AGRO*	109 259	160 392	117 838	-26.53	862	9 621	8 255	-14.2	7.01	245	3.81
38	AGRO LIFE - A	16 558	36 681	117 624	220.67	98	900	920	2.22	0.78	3	-
39	KEHLIBAR	58 957	67 111	117 472	75.0	5 144	3 503	15 032	329.12	12.80	85	4.94
40	DANIGER 04	59 269	107 711	114 150	5.98	414	3 449	2 127	-38.33	1.86	14	55.56
41	SVINEKOMPLEKS BRESTAK	12 935	55 711	111 858	100.78	1 028	-314	1 169	-	1.05	86	2.38
42	AGROBLOK	77 852	112 759	110 649	-1.87	2 710	4 342	4 033	-7.12	3.64	26	18.18
43	GRANEX	66 526	125 807	110 407	-12.24	1 758	1 176	1 011	-14.03	0.92	12	0.00
44	BG AGRO TRADING COMPANY	101 937	150 617	106 885	-29.04	1 408	3 938	1 505	-61.78	1.41	73	14.06
45	PAVLOVI TRADING	43 478	116 800	106 128	-9.14	557	-2 221	862	-	0.81	7	0.00
46	AGROTSAR	75 987	56 271	103 409	83.77	3 300	106	334	215.09	0.32	15	0
47	AYAX-1	88 826	74 206	102 783	38.51	16 755	379	12 985	3 326.12	12.63	230	1.77
48	DUNAV-57	51 089	73 604	101 239	37.55	22	15	6	-60.00	0.01	7	0.00
49	ZARNENI HRANI SILISTRA	165 362	108 501	100 569	-7.31	2 748	6 144	10 345	68.38	10.29	85	3.66
50	KAM 78 - AGRO	26 277	27 688	100 169	261.78	175	151	745	393.38	0.74	7	-12.50

	Company	Revenue			Change	Profit/Loss			Change	Profitability	Personnel	Change
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %	2022	'22/'21, %
51	**SORTOVI SEMENA - VARADIM**	73 121	64 898	94 040	44.9	14 731	16 567	23 315	40.73	24.79	152	-3.8
52	**ELIT - 2095**	31 927	42 563	93 562	119.82	1 925	7 700	36 069	368.43	38.55	365	17.36
53	**AGRO MEL 2011**	54 783	62 149	92 201	48.35	516	2 126	6 795	219.61	7.37	45	7.14
54	**AGRIX BULGARIA**	48 775	75 758	85 761	13.20	512	1 027	1 352	31.65	1.58	16	6.67
55	**VITAGRAIN BG**	127 554	55 385	85 242	53.91	-3 512	-1 360	1 221	-	1.43	39	0.00
56	**TOPAZ TRADE**	48 703	49 006	84 429	72.28	586	547	1 442	163.62	1.71	16	-5.88
57	**PIK-KO DISTRIBUTION**	62 285	70 573	84 252	19.38	171	1 023	579	-43.40	0.69	56	3.70
58	**ELIT GRUP 3**	51 288	68 506	84 199	22.9	1 224	1 766	1 805	2.21	2.14	85	2.41
59	**SEMPE 2**	34 394	47 156	82 097	74.10	399	4 494	6 829	51.96	8.32	87	3.57
60	**TETRAHIB**	6 233	24 288	81 676	236.28	-1 325	-2 801	7 968	-	9.76	46	0.00
61	**SADINA-99**	59 399	73 031	81 043	10.97	963	5 067	3 914	-22.76	4.83	9	12.5
62	**DESI-SVETLA SIMEONOVA**	35 437	51 547	80 676	56.51	8 954	6 932	17 695	155.27	21.93	61	22
63	**UNION 09**	19 931	42 935	79 218	84.51	514	1 025	1 491	45.46	1.88	16	45.45
64	**FZ PANAYOTOV I SHTEREV**	42 690	39 598	74 165	87.29	210	976	-693	-171.00	-	4	0.00
65	**ZARNENI HRANI - DM**	59 660	57 914	73 268	26.5	409	321	543	69.16	0.74	33	-5.71
66	**AGROKOM**	72 117	90 207	73 124	-18.94	5 040	8 232	6 030	-26.75	8.25	81	0.00
67	**TRAKIISKI FURAJ**	49 235	57 456	70 925	23.44	1 626	863	1 143	32.44	1.61	52	-5.45
68	**YASMIN 96 RR**	36 553	49 555	69 239	39.72	441	878	265	-69.82	0.38	28	7.69
69	**AGRARIKA**	48 044	58 327	68 302	17.10	185	2 068	2 253	8.95	3.30	34	-2.86
70	**DEMETRA - 3X**	18 774	41 643	68 112	63.56	462	4 345	10 830	149.25	15.90	17	0.00
71	**GRADUS - 98**	53 230	68 782	67 084	-2.47	6 512	12 232	7 194	-41.19	10.72	229	6.02
72	**KARIMA**	34 965	49 402	66 054	33.71	306	208	458	120.19	0.69	43	22.86
73	**DJENI OVO**	21 745	26 014	65 573	152.07	2 829	2 354	7 027	198.51	10.72	99	6.45
74	**KAMCHIA**	53 789	59 050	65 073	10.20	1 652	-93	3 064	-	4.71	254	-2.68
75	**MILENIUM 2000**	53 143	62 640	62 425	-0.34	-78	5 029	-2 412	-	-	335	0.9
76	**P.L.S.MARKETING FASHION**	52 813	64 148	60 971	-4.95	92	33	140	324.24	0.23	66	3.13
77	**LUDOGORSKO ZARNO**	15 975	30 553	60 085	96.66	1 290	1 645	3 741	127.42	6.23	8	14.29
78	**NEDKO NEDKOV - OVCHAROVO**	42 137	41 965	58 664	39.79	2 662	2 037	8 182	301.67	13.95	384	14.63
79	**CHS BULGARIA**	45 403	67 069	57 598	-14.12	-337	450	589	30.89	1.02	4	0.00
80	**AGRO - SVELTLOZAR DICHEVSKI**	47 761	43 106	56 955	32.13	6 199	2 104	1 651	-21.53	2.9	90	4.65
81	**AGROTIME**	46 519	53 736	55 915	4.06	1 850	1 001	979	-2.20	1.75	167	-8.74
82	**RBL FOOD BULGARIA**	29 817	29 212	52 271	78.94	195	367	644	75.48	1.23	58	13.73
83	**ARISTA - 2017 M**	11 242	38 811	52 009	34.01	298	456	-3 038	-766.23	-	8	-55.56
84	**DIYAVAL TREYD**	24 239	42 708	50 145	17.41	1 238	1 220	442	-63.77	0.88	16	23.08
85	**OLEO PROTEIN**	32 307	56 707	50 012	-11.81	-2 591	4 403	-5 597	-227.12	-	108	27.06
86	**DENI - TRADE**	29 832	37 736	48 434	28.35	21	150	69	-54.00	0.14	39	0.00
87	**BONI FARM ZIMEN**	35 684	35 273	48 150	36.51	2 734	1 300	7 109	446.85	14.76	28	-12.50
88	**RAVNA AGRO**	44 575	65 109	47 448	-27.13	0	3	4	33.33	0.01	1	0.00
89	**SVINEKOMPLEKS BRASHLEN**	11 013	33 675	47 385	40.71	2 062	6 495	12 242	88.48	25.84	63	5.00
90	**ASBO - AGRO**	23 230	31 690	42 735	34.85	359	477	482	1.05	1.13	49	48.48
91	**YAYTSA I PTITSI - ZORA**	22 849	26 262	41 767	59.04	-881	1 145	8 239	619.56	19.73	202	8.60
92	**DEFKO**	36 288	40 225	41 752	3.80	487	596	692	16.11	1.66	6	-14.29
93	**BULGARIAN COMMODITIES**	27 653	49 221	41 721	-15.24	1 045	2 103	1 951	-7.23	4.68	6	0.00
94	**KRISTERA - AGRO**	31 045	40 395	40 955	1.39	-1 053	4 512	8 732	93.53	21.32	111	6.73
95	**BALDZHIEV**	42 264	43 845	40 446	-7.75	1 118	1 533	1 543	0.65	3.81	26	0.00
96	**DEPAS AGRO**	16 168	29 494	40 252	36.48	185	880	824	-6.36	2.05	3	0.00
97	**TIT DISTRIBUTION**	11 299	21 510	40 079	86.33	74	295	35	-88.14	0.09	2	0.00
98	**BORENI**	27 069	33 603	39 437	17.36	2 403	3 524	4 962	40.81	12.58	31	0.00
99	**KRASSI**	45 368	46 115	38 981	-15.47	1 152	3 295	1 915	-41.88	4.91	108	-2.70
100	**ZHYULIV**	23 735	25 273	36 781	45.53	-791	-3 227	897	-	2.44	116	6.42
	AVERAGE FOR TOP 100	**95 583**	**136 832**	**158 128**	**38**	**2 672**	**4 649**	**7 867**	**210**	**6**	**109**	**6**

//TOP LIVESTOCK PRODUCERS

Riding the Wave of Soaring Prices

Last year brought a surge in output and prices

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Various businesses, including livestock farming, faced significant challenges in 2022. The top 25 companies in the sector generated a combined revenue of 1.3 billion levs (665 million euro), which is a 45% increase on the previous year. However, the sector continues to grapple with uncertainties.

The conflict in Ukraine, which began in February 2022, led to a dramatic rise in feed prices, surges in energy costs, and increased labor expenses. While livestock product prices have risen, their increase can't fully offset the additional production costs, according to industry experts. High production costs have persisted in 2023, denting profitability, diminishing interest and shrinking livestock farming.

Dimitar Mihaylov, CEO of the Bulgarian Pig Breeders Association, noted a 8-10% decrease in EU pig production, with a 26% drop in slaughtered animals in Bulgaria last year. He attributes this decline to the war in Ukraine, inflation, and the Green Deal.

Analyses suggest that Europe is losing its position in pork production, limiting its exports to Asia and other regions. In 2023, the European pork market faced shortages, leading to higher prices. Bulgaria's production covers 40% of local market demand, with the rest being imports.

Inflation in feed prices, a significant cost component, also affected poultry farming in both Europe and Bulgaria. Poultry meat prices rose in early 2022. However, the industry faced unfair competition from countries that halted exports to Russia, resulting in dumping practices that particularly impacted countries with high percentage of frozen meat consumption, such as Bulgaria.

The leader

Bulgaria's livestock industry has three key players who have demonstrated both remarkable growth and resilience in the face of challenges.

First in the ranking is Pilko, which is part of Ameta Holding. It tops the list with impressive 2022 revenues of 254 million levs. The company's integrated operations encompass poultry farming, processing facilities, and feed production in central and northeastern Bulgaria. Pilko's revenue grew by 31% year-on-year while profit surged by an astounding 543%.

In second place, Boni Ferma Brestak generated 111 million levs in revenues. As part of the Boni Holding group, it handles the entire pork production cycle, beating challenges such as African swine fever. The focus is now on restoring normal economic activities in 2023.

Ajax — 1, specializing in pig farming, holds the third spot. With 2022 revenues of 102 million levs and a remarkable 38% growth, they've significantly improved profitability. Ajax-1 aims to expand sales, increase market share, and become a national market leader in 2023.

These industry leaders navigate market dynamics, including price fluctuations and disease prevention, to maintain their competitive edge in Bulgaria's livestock sector.

Cows and ducks

The ranking continues with Elit 2095 led by Nikola Angelov, which specializes in trading goose liver and duck products. Their revenue grew by an impressive 119% last year, reaching 93.5 million levs.

Nikola Angelov and his brother Yanko initially ventured into dairy farming, becoming major dairy product makers. They operate two dairy processing facilities and

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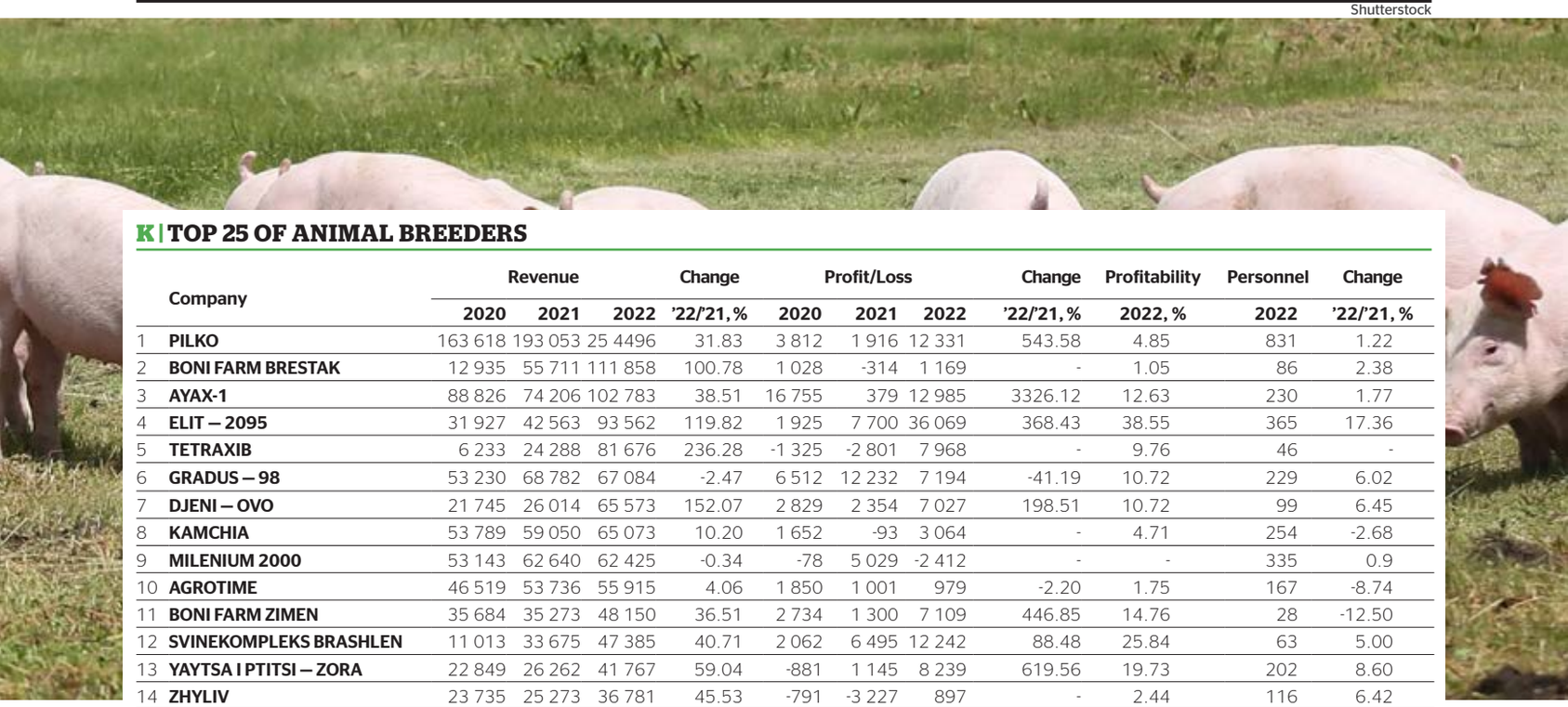

K | TOP 25 OF ANIMAL BREEDERS

	Company	Revenue			Change	Profit/Loss			Change	Profitability	Personnel	Change
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %	2022	'22/'21, %
1	PILKO	163 618	193 053	25 4496	31.83	3 812	1 916	12 331	543.58	4.85	831	1.22
2	BONI FARM BRESTAK	12 935	55 711	111 858	100.78	1 028	-314	1 169	-	1.05	86	2.38
3	AYAX-1	88 826	74 206	102 783	38.51	16 755	379	12 985	3326.12	12.63	230	1.77
4	ELIT – 2095	31 927	42 563	93 562	119.82	1 925	7 700	36 069	368.43	38.55	365	17.36
5	TETRAXIB	6 233	24 288	81 676	236.28	-1 325	-2 801	7 968	-	9.76	46	-
6	GRADUS – 98	53 230	68 782	67 084	-2.47	6 512	12 232	7 194	-41.19	10.72	229	6.02
7	DJENI – OVO	21 745	26 014	65 573	152.07	2 829	2 354	7 027	198.51	10.72	99	6.45
8	KAMCHIA	53 789	59 050	65 073	10.20	1 652	-93	3 064	-	4.71	254	-2.68
9	MILENIUM 2000	53 143	62 640	62 425	-0.34	-78	5 029	-2 412	-	-	335	0.9
10	AGROTIME	46 519	53 736	55 915	4.06	1 850	1 001	979	-2.20	1.75	167	-8.74
11	BONI FARM ZIMEN	35 684	35 273	48 150	36.51	2 734	1 300	7 109	446.85	14.76	28	-12.50
12	SVINEKOMPLEKS BRASHLEN	11 013	33 675	47 385	40.71	2 062	6 495	12 242	88.48	25.84	63	5.00
13	YAYTSA I PTITSI – ZORA	22 849	26 262	41 767	59.04	-881	1 145	8 239	619.56	19.73	202	8.60
14	ZHYLIV	23 735	25 273	36 781	45.53	-791	-3 227	897	-	2.44	116	6.42
15	ECOPRODUCT	15 776	19 831	31 380	58.24	125	2 356	4 275	81.45	13.62	96	4.35
16	AGRO SIP	12 132	19 436	29 269	50.59	-862	-952	2 634	-	9.00	107	12.63
17	SVINECOMPLEX LARGE VRANOVO INVEST	7 351	24 531	29 199	19.03	-1 452	-3 251	552	-	1.89	129	-1.53
18	AVIS	19 860	21 417	28 027	30.86	2 283	1 339	3 407	154.44	12.16	64	-3.03
19	LORA – 2004	13 640	18 829	27 411	45.58	247	826	2 233	170.34	8.15	65	18.18
20	MANEX	49 188	46 784	25 534	-45.42	7 162	2 957	789	-73.32	3.09	65	-23.53
21	BILYANA	7 954	17 370	21 385	23.11	-334	2 456	2 957	20.40	13.83	51	2.00
22	MILKKOM BULGARIA	11 072	14 986	20 520	36.93	558	1 389	2 850	105.18	13.89	84	21.74
23	ANGELOV – IVAN ANGELOV	12 997	12 296	17 127	39.29	2 686	494	2 505	407.09	14.63	38	-2.56
24	ALDAGOT	8 784	7 804	9 627	23.36	-32	-421	-424	-	-	66	-15.38
25	ANDIP 92 – ANDREY PAVLOV – ANDREANA PAVLOVA	10 390	9 660	7 307	-24.36	436	-1 028	-941	-	-	51	-53.64

Source: KAPI

a farm with 5,000 animals, selling dairy products under the Elit brand.

About seven years ago, Nikola Angelov realized the need to diversify and created Elit 2095" to enter foreign markets. In 2016, the company expanded into raising Muscovy ducks and distributing duck products. In 2018, a new, larger complex was established. "For the seven years since the establishment of the duck enterprise, we have not been at a loss. 2022 is shaping up to be the most successful year — in terms of sales revenue and profit," Nikola Angelov told Capital Weekly.

For several years, the duck business faced challenges due to the COVID-19 pandemic causing market closures. However, Elit 2095 continued operations and sold its accumulated inventory in 2022.

Pig farms thrive

In the past year, significant growth was achieved at pig breeding companies. Boni Farm Nikola Kozlevo saw a remarkable 236% increase in revenue to 81.6 million levs. Another company within the same holding, Boni Farm Zimen, also grew its revenue, by 36%.

In 12th position, Svinekomplex Brushlen faced challenges due to a swine fever outbreak, which led to the culling of 40,000 pigs. The company took legal action for compensation for culled animals and noted the indirect effects of the Ukraine war.

Several companies from the Gradus group of the Angelov brothers Ivan and Luka also feature in the ranking. They focus on poultry farming, feed production, and trade, and have expanded their operations to adhere to Western European business practices.

Dzhani Ovo ranks 6th among major poultry farms. It began its operations in the village of Panaretovtsi near Sliven in 2006, focusing on producing fresh eggs. The farm has facilities for raising laying hens, and its eggs are marketed under the Dzhani brand. Last year, the company's revenues increased by nearly 152%, reaching 65.5 million levs.

Prices for most livestock products are rising but cannot compensate for the additional increase in production costs.

At 8th position is Kamchiya, also part of Ameta Holding, with revenues of 65 million levs. Based in the village of Panayot Volovo, this poultry complex primarily engages in the production, purchase, and processing of poultry, poultry meat, eggs, and egg products.

Ranking 13th with a 59% revenue growth is Yaytsa i Ptitsi — Zora. The poultry farm has an annual production capacity of around 140 million eggs, with its main activity being the production and wholesale distribution of commercial eggs. In 2022, the business generated revenues of 41.7 million levs, marking an increase of 15.5 million levs. The rise in expenses, primarily for raw materials and materials, accounted for 7.6 million levs of the increase. | K

//THE CALL OF THE WILD

An academy for shepherds

Due to the great interest in the course, the owner of the Po Todorovi Koshari farm Todor Georgiev will be organizing a second edition in November

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Todor Georgiev (in the middle, standing) and the graduates of his academy

Shepherds are a disappearing breed in modern Bulgaria, and pasture animal husbandry is losing popularity for a number of reasons — it is difficult, not especially viable financially and unattractive to younger generations. If a cattle breeder makes the news, it's unlikely to be for a good reason. The recent case of the brothers Sider and Atila Sedefchevi from the village of Vlahi in Kresna illustrates this all too clearly. The brothers, who breed Karakachan sheep and dogs, were evicted by the municipal council because their animals disrupted the villagers — even though the village has only 4 inhabitants!

Recently, however, another story about shepherds — this time a positive and inspiring one — caught the media's eye. In August, Todor Georgiev's Po Todorovi koshari farm, also near Kresna, organized the first Shepherds' Academy in Bulgaria. Up in the high mountain pastures of Pirin, 20 or so enthusiasts were trained in the ins and outs of high mountain grazing along with several hundred Karakachan sheep and goats for 10 days.

This is not exactly a team building activity: the conditions in the mountains are difficult — heat, insects, dust, and sometimes heavy rain. The work is physically demanding. However, the interest in the initiative is great — so much so that Po Todorovi koshari is preparing a second edition in the second

Todor's sheep pens

half of November, and their plans are to have a course every season.

From yogurt to an academy

Todor is a hereditary cattle breeder from Kresna. The farm belonged to his grandfather, who raised one of the last large highland herds before collectivization at the beginning of socialism. Subsequently, his father, and then he and his brothers, still managed to keep the farm afloat, albeit on a much smaller scale. In recent years, Todor has managed to increase and restore the family herd to nearly 1,000 Karakachan sheep and long-haired kamenarki mountain goats — descendants of the Karakachan goats, which are very well adapted to the rocky terrain of the Pirin Mountains.

He is an ecologist by education, having graduated in Ecology and Environmental Protection at the South-Western University and also works as the chief specialist Control and Security in the Pirin National Park. However, animal husbandry is in his blood. „I grew up with this heritage — the animals, the barns up in the mountains. It is extremely valuable to me and I want to preserve and protect it," says Todor. He adds that he has long considered how to popularize this type of animal husbandry, because he believes that there are people in Bulgaria who „carry sheep breeding in their genes".

The impetus for the creation of the Academy came after he and his wife decided to register as small dairy producers. They had been making milk and cheese for a long time — mainly for home needs and for friends. Over time, however, interest in high-quality dairy products from grazing animals has grown. „Many people started wanting to buy milk and cheese from us, and we were unable to cope with the family production. That's why we decided to make a small dairy," says Todor.

Pure artisanal food as a solution for small farmers

Todor Georgiev's farm, like others, receives European subsidies under some of the schemes of the Common Agricultural Policy of the EU. They are, of course, helpful and over the years have been among the factors that have helped him rebuild the herds. But he believes that the way to upgrade the activity and to have an incentive for small farms to be sustainable and to multiply is to close the cycle with the production of clean, artisanal and traditional products. „There is already a demand for such genuine and quality foods today, especially in Sofia and the bigger cities. People are starting to appreciate them," he says.

The owner of Po Todorovi Koshari (Todor's sheep pens) considers artisan foods a lifeline for small farm holders.

Thus, he sees a future for development in the promotion of high-quality traditional products. „If people start looking for clean and quality food, to think about their health — especially for children, this will help farms like ours a lot", believes Georgiev. He believes that the efforts of farming communities should also be directed there, and the media can also play a role in popularization. But the administration could also help with more targeted financial support for such farmers, as well as some easing of the complex rules, which Georgiev says would enable small producers of traditional foods to survive.

For the establishment of the dairy farm, he turned to business consultant Angel Todorov for expert help, since the work on the farm has become too much for one family. „Angel came up with the idea of putting out a call for helpers in the farm — something like interns. It turned out that there was interest, and like-minded people gathered. From there, the idea evolved into the Shepherds Academy," shares Todor.

The Call of the Wild

The promotion of the initiative takes place through a Facebook page that his wife is preparing. In the beginning, the idea was shared without much noise in a relatively narrow circle, but it turned out that there was more interest and in a short time many people gathered. The group of about twenty filled up quickly. „The goal was to gather people who would both help us and learn the craft and preserve the tradition," says Todor.

The volunteers are mostly young men, some of whom come with their children. According to the owner of the farm, most of them are urban people, young, well-educated, with careers in various spheres of the economy — IT specialists, entrepreneurs, managers. „For some, the motivation must have been to escape from the monotony of city life for a while. For others, the idea of the mountains, the herds, and the wild seemed somewhat romantic — a kind of call from the past. In any case, what united the men was that everyone had the right attitude — attitude to the land, to traditions, to clean food," says Todor.

The August training took place in a summer barn high in the mountains. Work would start at 6:00 a.m. and last until 10:00 p.m. It included turning the animals out to graze, milking, maintaining and building new pens and outbuildings, and any other day-to-day activities that accompany the work of a pastoralist.

Todor has no illusions that all the students will choose this life, but he hopes that at least one of them will someday decide to have their own farm and become an animal breeder, although it is a very difficult profession, he says. However, the interest in the Shepherds' Academy still shows that there is hope that small-scale mountain farming will be an attractive livelihood again one day. And Do Todorovi koshari plans to hold such trainings every season — spring, summer, autumn and winter. | K

//FRUIT AND VEGETABLES

Top firms' incomes rise, yet problems remain

In 2022, the total revenues of the 10 largest companies in the sector exceeded 95 million levs

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Fruit and vegetable sales have huge potential for growth, being even more popular than bread. 76% of adult Bulgarians buy fruit and vegetables at least once a week, some do it daily, and about a quarter could produce them themselves. Those are the results of a nationally representative survey of the Kantar TNS agency from August 2022, presented during the forum InteliFresh 4.0 — From the garden to the stand, organized by the consulting company InteliAgro in partnership with the Embassy of the Netherlands in Bulgaria.

However, the fruit and vegetable sector is still in the sensitive area. Weak domestic supply generally results in low competition, allowing importers and traders to take advantage of business conditions and

inflation.

Unfortunately, only 40% of the fruits and vegetables sold in the country are produced in Bulgaria, said the Minister of Agriculture Kiril Vatev after the advisory council on vegetable growing and vegetable production in August. The goal of the Ministry of Agriculture and the sector for the next year is to bring the import-Bulgarian production ratio to at least 50-50.

The fruits and vegetables sector remains in the "sensitive" category.

Open air production is declining

Over the years, open areas for growing vegetables have been decreasing and in 2021-2022 they were 29.9 thousand ha, according to the statistics of the Ministry of Agriculture. However, greenhouses are expanding and now occupy 1073 ha. The production of vegetables from the 2022 harvest is 629.2 thousand tons, of which 109.7 thousand tons are greenhouse-grown. Among the largest productions are potatoes, tomatoes, watermelons, cucumbers and peppers.

Current estimates of the Center for Economic Analysis of Agriculture (SARA) suggest the production of tomatoes in 2023 may fall to 105 thousand tons, and a drop is also expected for cucumbers (to 49 thousand tons), but pepper production will remain roughly at last year's level.

Last year, areas with fruit, shell and berry plantations also decreased — by 3%, to 63,327 ha. Of the fruit produced, the relative share of plums and gooseberries is the largest, followed by cherries and apples. Compared to 2021, there was an increase in cultivated rose hips, almonds, peaches and nectarines, hazelnuts, apples, cherries, pears and raspberries. The production of walnuts, plums, apricots and sour cherries decreased.

Almost the entire amount — 97% — has been realized. The largest share of production is intended for direct sales in the commercial network — 52%, and 41% went for processing, reports the Ministry of Agriculture and Food.

More fresh fruit processed

Last year, processed fresh fruit also increased — by 15.7% to 116.5 thousand tons, and 109.3 thousand tons of fresh vegetables. 78.2 thousand tons of finished fruit products were produced, compared to 86.5 thousand tons of vegetable products. The largest share of processed fruits includes apples, cherries and peaches, and of processed vegetables — tomatoes, peppers and potatoes.

Of the processed fruits and vegetables, the largest share are those delivered by Bulgarian producers, reports the ministry.

„The production of fruits and vegetables and their processing are closely related, the problems in one sector are reflected in the other," comments Konstantin Lambrev, manager of the Konex-Tiva cannery. He points to statistics according to which the largest quantities of cans were produced back in 1985 — 670 thousand tons. Due to the drastically reduced production of fruits and vegetables in open areas, however, their production is now collapsing.

According to Lambrev, a problem for processors is the lack of large fruit and vegetable producers and the almost complete absence of producer organizations that unite in the name of markets. „This leads to difficulties in the traceability of production and batching of deliveries, in the uniformity of varieties, agrotechnical measures and laboratory analyses, as well as problems in transport. The producers lack handling equipment for sorting, refrigerators, and transport packaging. There are no characteristic and distinctive Bulgarian varieties. As a result, there are difficulties in annual and multi-year contracts and planning obstacles on both sides," he concludes, calling for the unification of producers, regardless of the format — organizations, cooperatives or commercial companies. >18

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K | TOP 10 FRUIT AND VEGETABLE GROWERS

	Company	Revenue			Change	Profit/Loss			Change	Profitability	Personnel		Change
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %	2021	2022	'22/'21, %
1	GREENS	6 891	5 317	19 342	263.78	735	347	11 033	3 079.54	57.04	58	61	5.17
2	GIMEL ORGANINC	9 428	12 460	17 599	41.24	410	2 016	1 742	-13.59	9.90	168	171	1.79
3	JORDAN VELICHKOV – VLADI	14 130	12 937	1 6371	26.54	27 00	2 340	2 381	1.75	14.54	122	112	-8.20
4	BIOFRUTA	4 528	9 151	10 479	14.51	-834	-591	-425	-	-	17	53	211.76
5	ECOTERRA	8 139	7 625	8 214	7.72	-1 850	-2 304	-1 785	-	-	31	29	-6.45
6	EKOPLOD MILEVO	5 029	5 153	5 776	12.09	392	420	362	-13.81	6.27	14	15	7.14
7	BATA-2002	2 983	4 024	5 002	24.30	-997	-48	194	-	3.88	278	189	-32.01
8	EURO PLANTS	2 904	3 649	4 825	32.23	341	858	854	-0.47	17.70	83	103	24.10
9	EUROFIELDS BG	3 466	5 730	3 730	-34.90	499	470	102	-78.30	2.73	34	32	-5.88
10	AGROLOGIC	2 501	2 063	3 705	79.59	-134	-271	1 210	-	32.66	26	21	-19.23

Source: KAPI

photo Nadezhda Chipeva

The top 10

The top 10 largest companies in the sector report total revenues in 2022 have grown by more than 39% (for the same comparable companies) and exceed 95 million levs. Nine companies reported higher revenues of sales compared to the previous year, the most notable being the jump at Greens (263.7%), Agrologic (79.5%) and Greenhouses Gimel II (41.2%). Only one company in the top 10, Eurofields BG, reported a decrease in its annual turnover.

The biggest profit in the top 10 was realized by Greens and Yordan Velichkov — Vladi. On the other hand, Biofruta and Ecoterra worked at a loss, and four companies reported lower financial results in 2022 compared to the previous year. Greens and Agrologic were most profitable, and Bata 2002 was the largest employer, followed by Greenhouses-Gimel II and Yordan Velichkov — Vladi.

The top 3

The ranking is headed by Greens — one of the largest producers of greenhouse vegetables in Bulgaria based in Parvomai. The greenhouses were built in 1966 under the guidance of French and Dutch specialists. A large hailstorm in 1998 destroyed all the glass and a significant part of the heating system and structures. In 2000, the new owner — Greens Ltd. managed to restore, expand and renovate the site.

The most profitable companies in the top 10 are Greens and Agrologic.

According to the company's data, vegetables — cucumbers, tomatoes and peppers — are grown on 630 decares of land housing 240 decares of greenhouses that are fully gasified, with drip irrigation, hydroponics and computer regulation of the production process using Dutch technology. The company has a certificate for good agricultural practices GlobalGAP, its own refrigerated trucks for delivery, and sells both on the domestic market and abroad.

Second in the ranking is Greenhouses-Gimel II with over 41% growth in revenues for 2022, exceeding 17.5 million levs. Greenhouses-Gimel II were established in 1995, after the state sold 100% of the capital of Orangeries — Levski. Today, the main production site of the company is a Dutch-type greenhouse in Levski, located on 120 of 190 decares. Since 2013, a cogeneration plant has also been operating, and the company sells its electricity production.

According to the company's activity report, its main production consists of greenhouse cucumbers. In the winter season, they are grown on 120 decares, and during summer — on 75 decares. The share of produced and sold electrical energy in the total share of the produced output is 43.88%.

Last year's leader ET Yordan Velichkov — Vladi, comes in third place in the top 10 in 2022. The company is registered

in Sofia, beginning its activity in 2010. It produces greenhouse cucumbers and tomatoes, cereals and oil crops, potatoes and onions, and trades in vegetable seeds and mineral fertilizers. Its production is based in Plovdiv, Montana, Vidin and Pazardzhik.

Vegetables are produced in a closed cycle — harvesting, processing, foiling and packaging. Production processes are certified according to the global standard for good agricultural practices GlobalGAP, and good social practices — according to GRASP. The company reports a decrease in both revenue and profit in 2021, but still comes in the top three.

Its activity report states that it operates „in conditions of great competition". In 2022, it realized the harvest of vegetables, but the production of cereals — wheat, sunflower and corn, is „in the warehouses and waiting for a better price". Last year, the company sold agricultural land, buildings and machinery for 3,167 million levs. The big challenge for the company is to maintain its market position in conditions of increasing inflation.

Only 40% of the foods and vegetables sold in Bulgaria are produced in the country.

Foreign investments

Coming fourth and fifth in the ranking are two subsidiaries of the Italian food holding Rigoni di Asiago — Biofruta and Ecoterra. Last year, Biofruta increased its sales by 14.5%, reaching 10.4 million levs, while Ecoterra's turnover reached 8.214 million levs (7.72% growth).

In southern Bulgaria, Biofruta grows peppers, pumpkins and green beans. It owns a large refrigeration base in Pazardzhik and sells frozen products, mainly on the European market. Meanwhile, Ecoterra owns plots near Berkovitsa and Pazardzhik, where it grows organic raspberries, blackberries and strawberries. Some of the produce is sold fresh or frozen, and the rest is used for jams in the Rigoni di Asiago factories. The two Bulgarian subsidiary companies are expanding their production and are already growing blackcurrant, lemon balm, oregano, basil and other herbs. They are also engaged in the purchase of forest fruits. In addition, they produce chicory for the radicchio salad, which is quite popular in Italy.

The two companies continue to operate at a loss, although the rate of loss is decreasing. According to the activity report, in 2022 Biofruta invested 2,772 million levs in agricultural equipment and inventory and construction of a main irrigation pipeline, with the largest part of the amount — 2.5 million levs used for commissioning of perennial crops — orchards with apples and cherries.

Ecoterra has also made investments in fixed assets. The company has invested 701 thousand levs in land, permanent crops, machines, equipment, and means of transport. In 2023 the company plans to increase its production of apple concentrate, as well as its plot with apple plantations, adding another 200 decares.

Eurofields BG, which ranks ninth, is also owned by foreigners. The company belongs to Gurmuk Singh Rupra from Great Britain through Europe Holdings. It began operations in Bulgaria in 2005. It farms about 3,500 decares of land in the area of the Pazardzhik village of Malo Konare, where it grows sweet potatoes, peppers, coriander, as well as flowers and seeds. It also has an R&D center on an area of 20 decares, where it experiments with different varieties. For 2022, it reports a nearly 35% drop in revenues, which reach 3,730 million levs.

Bulgarian-owned

In sixth position with a turnover of more than 5.7 million levs for 2022 comes Ekoplod Milevo, co-owned by Krasimir Vasilev and Georgi Trakov. The company produces fresh fruits and vegetables in the center of the Thracian lowland and has closed the entire cycle of production — from the field, through storage and sorting to the packaging of the products. In 2022, it reported a growth in sales of 12%.

Seventh in the ranking is Burgas-based Bata-2002, which grows wine grape varieties. It is owned by Milena Dimitrova Stefanova.

Ranking eighth is Euro Plants — based in the village of Kostur, Svilengrad, with sole owner Slavey Slavchev, which grows strawberries. The company notes a 32% jump in turnover, which exceeds 4.8 million levs in 2022.

The top 10 is completed by the potato producer and wholesaler Agrologic, located in the village of Popovyane, Samokov. The company is owned by Slavcho Chervenkov and reports a 79.5% growth in revenues exceeding 3.7 million levs. |K

//TOP 25 AGRICULTURAL MACHINERY DEALERS

Revenues increase by a third in 2022

All the importers in the top 25 have registered a profitable year

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K | TOP 25 AGRO MACHINERY RETAILERS

	Company	Revenue			Change	Profit/Loss			Change	Profitability	Personnel		Change
		2020	2021	2022	'22/'21, %	2020	2021	2022	'22/'21, %	2022, %	2021	2022	'22/'21, %
1	MEGATRON	140 350	214 068	257 069	20.1	2 376	14 583	26 748	83.4	10.40	239	250	4.6
2	AGROTRON 2007	801 62	112 631	164 901	46.4	4 937	7 788	15 998	105.4	9.70	104	111	6.7
3	TITAN MACHINERY BULGARIA	72 307	101 222	137 580	35.9	32	3 814	11 510	201.8	8.37	115	117	1.7
4	RAPID KB	53 548	89 866	110 490	22.9	2 162	6 976	11 532	65.3	10.44	97	101	4.1
5	ZLATEX	41 933	54 045	73 108	35.3	1 448	1 387	1 832	32.1	2.51	68	64	-5.9
6	OPTICOM	43 654	52 337	69 151	32.1	598	2 046	4 363	113.2	6.31	119	130	9.2
7	NIK SMART MACHINES	20 814	28 219	53 865	90.9	762	1 656	7 390	346.3	13.72	23	28	21.7
8	ANIMEX	23 897	41 918	50 440	20.3	538	908	1 213	33.6	2.40	48	52	8.3
9	VAREX	30 826	34 176	46 945	37.4	191	87	468	437.9	1.00	61	65	6.6
10	AGROIN	22 331	28 355	43 415	53.1	2 280	2 351	4 603	95.8	10.60	36	37	2.8
11	ANDREAS STIHL	25 811	28 781	37 727	31.1	1 831	2 369	3 075	29.8	8.15	18	19	5.6
12	INTERAGRI BULGARIA	25 302	43 139	35 768	-17.1	40	2 295	2 349	2.4	6.57	79	79	0.0
13	GEC-GI	7 558	22 094	35 589	61.1	942	2 268	3 355	47.9	9.43	5	8	60.0
14	AGROMACHINA GROUP	14 431	20 697	31 429	51.9	574	1 100	3 558	223.5	11.32	45	47	4.4
15	VALINST	11 220	13 142	29 068	121.2	1 056	3 057	3 414	11.7	11.74	1	1	0.0
16	SPASOV AGRI TECH	245	13 599	27 607	103.0	-2	2 017	2 120	5.1	7.68	12	23	91.7
17	UNIVERSAL – NVG	12 807	20 674	27 181	31.5	1 025	2 304	3 167	37.5	11.65	59	60	1.7
18	STOYCHEVI 57-62	9 621	14 635	26 595	81.7	68	306	1 010	230.1	3.80	33	30	-9.1
19	IRI TRADE	13 140	14 344	22 772	58.8	191	205	709	245.9	3.11	62	61	-1.6
20	AGROLAND BULGARIA	15 067	18 304	22 571	23.3	1 321	1 894	2 367	25.0	10.49	18	19	5.6
21	BULGARI MACHINES	10 758	14 239	20 016	40.6	187	566	1 513	167.3	7.56	48	51	6.3
22	AGROLA	10 694	14 407	19 415	34.8	430	909	1 442	58.6	7.43	15	14	-6.7
23	NIKOM LT	12 785	19 622	19 201	-2.1	1 894	2 633	2 246	-14.7	11.70	40	37	-7.5
24	KBBG	10 044	17 508	18 587	6.2	410	819	1112	35.8	5.98	9	10	11.1
25	AGRO BUL SERVICE	9 536	13 112	16 639	26.9	346	928	1 085	16.9	6.52	18	20	11.1
	AVERAGE	**28 754**	**41 805**	**57 003**	**42**	**1 025**	**2 611**	**4 727**	**105**				

Source: KAPI

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All of the companies in the top 25 were profitable last year, with eight of them even posting triple-digit financial growth.

Last year was quite successful for agricultural machinery importers. The total revenue of top 25 dealers in the sector grew by 30% year-on-year, exceeding 1.36 billion levs. Only two companies (Interagri Bulgaria and Nikom LT) reported a drop in sales last year. At the same time, single- digit growth could be seen in only one of the companies (KBBG), while two others reported three-digit sales spikes — Valinst and Spasov Agri Tech. They are also the fastest growing companies, with the revenues of Valinst rising by 121%, and Spasov Agri Tech's by 103% year over year.

All other importers and traders in the top 25 report a double-digit jump in revenue in 2022, with the largest increase being at NIK Smart Machines and Stoychevi 57-62.

Profits

All companies in top 25 operated at a profit, with eight of them reporting growth of more than 100% in 2022. The top 3 companies in terms of profitability were Satnet, NIK Smart Machines and Valinst. The top three sales leaders remain unchanged from 2021: Megatron, Agrotron 2007 and Titan Machinery Bulgaria have the biggest sales turnovers.

The statistical data from the Ministry of Agriculture also shows an upward trend in new agricultural machinery registrations in 2022, with one exception — there is a decrease in telescopic and front-end loaders.

„2022 was a difficult year, but with a positive trend towards its end," said Daniel Minev, chairman of the Bulgarian Association of Agricultural Equipment Dealers — BATA AGRO, and manager of Interagri Bulgaria.

According to Krasimir Minev, commercial director of Zlatex, 2022 was „complex for the agricultural machinery market with factors such as COVID-19, difficult supplies of machines and parts, and technological innovations".

Elisaveta Markova, manager of Varex, also defines 2022 as „very successful". „After the period of lack of machinery due to the pandemic, there was a kind of revival in the market and farmers made the already planned purchases of equipment. The interest rates for financing the purchases were also very favorable," she summarizes.

In general, company managers are optimistic that investments in agricultural machinery will develop steadily and smoothly, although 2023 is full of challenges. | K

K | NEW AGRI MACHINES REGISTERED

	2020	2021	2022	I-VI.2023
Wheeled tractors	801	1302	1418	663
Telescopic wheel loaders	173	223	208	124
Grain harvesters	134	185	219	119
Chain excavators and mini excavators	206	278	324	238
Wheeled excavators and excavator loaders	254	323	380	236

Source: Control and Technical Inspection directorate at the Ministry of Agriculture

Daniel **Minev,**
chairman of the Bulgarian Association of Agricultural Equipment Dealers – BATA AGRO and manager of Interagri Bulgaria

We managed to ensure the continuity of agricultural production

What was the year 2022 for the agricultural machinery market in the country?
Last year was difficult but with a positive trend towards its end. At the beginning 2022, many suppliers experienced severe shortages of equipment stocks, but gradually recovery of supply chains worldwide began, although not everywhere and not in all products.

What were the biggest challenges for the machines suppliers during the years of pandemic, inflation and war?
The difficulties are caused by complex factors, ultimately boiling down to a few sizable and clearly visible effects such as a significant increase and instability of equipment prices, inability to guarantee delivery times, lack of components and spare parts. To work as a supplier in such unpredictable conditions is a huge challenge and it has not been encountered in the past decades when we were facing the opposite — stable prices, market glut and difficult implementation.

What do companies in the sector count as success?
I consider it a success that we managed to ensure the continuity of agricultural production — one of the most important pillars of the Bulgarian economy. Farmers saw representatives of the equipment brands as reliable partners, both from the point of view of satisfying their investment intentions, and in terms of quality after-sales service.

How are sales going this year? What is the trend and what are the targets?
In general, the trend has been quite negative so far this year. The agricultural business is extremely difficult as a result of many factors, among them the severe drought that lasted from the post-sowing period in late 2022 until April this year. The lack of snow and the very warm win- ter, the sudden warming in summer to extremely high temperatures in the span of days literally wiped out the corn fields and created conditions for extremely low sunflower yields. Last but not least — the low purchase prices of produce dictated by the commodity exchange prices and also by the unregulated import of production. Knowing all this, it is unrealistic to expect that sales of equipment will grow. If we look at the statistics for the registration of new machines this year, according to the data of the Ministry of Agriculture and Food, for the first half of the year, there is a drop of over 15% for wheeled tractors and nearly 6% for combine harvesters. Expectations are that this decline will deepen and exceed 20% by the end of the year.

What are your predictions for the development of the agricultural machinery market in the country?
Despite the negative factors, I am optimistic that investments in technology will evolve steadily and smoothly in a positive direction. The vast majority of equipment in the country is still 15-20 years old and heavily depreciated. On this subject, there is a lot of speculation that with European funds the state of the machinery has improved. According to data from the Ministry of Agriculture and Food, over 45,000 tractors and over 8,000 combine harvesters operate in Bulgarian agriculture. Everyone can make a basic calculation for themselves as to how old these machines are, considering that on an annual basis about 1500 tractors and about 200 combine harvesters are registered. The normal service life of a machine is 10 years. This means that in order to talk about a real renewal of the equipment, it is necessary to renew at least 4,500 tractors and 800 combine harvesters on an annual basis. This is clearly not happening, so any baseless statements that, you see, the technique was renewed with European subsidies, is nothing but populism. Agriculture is an integral part of the livelihood of the Bulgarian people and I remain optimistic about the future of the sector.

Krasimir **Minev,**
Commercial Director of Zlatex

There is a growing interest in new technological solutions

What was the year 2022 for the agricultural machinery market in the country?
In 2022, there was a revival of the agricultural machinery market. An increase in sales was reported compared to 2021. A strong reason for the sale of more tractors, combine harvesters, telehandlers and trailed machines was the low cost of agricultural production and higher purchase prices of the crops.
A growing interest in new technological solutions was observed. This includes the widespread use of ISOBUS control systems, precise guidance of machines with GPS navigation, recording and transfer of data from the machine to stationary or mobile devices and other automated systems for managing fuels, detergents, fertilizers, etc. More and more farmers turned to sustainable ecological solutions and energy-saving machines and technologies.

The war in Ukraine, as well as the drought that affected some regions of Bulgaria, had a negative impact on the market for agricultural machinery.

In summary, 2022 was a complex year for the agricultural machinery market with factors such as COVID-19, difficult supplies of machines and parts, and at the same time technological innovations that shaped the trends in the sector.

What were the biggest difficulties for agricultural machinery suppliers hit by lockdowns, inflation and war?
Several serious challenges in recent years invariably tested the skills of suppliers of agricultural machinery in Bulgaria, and not only here. The COVID-19 pandemic had completely disrupted supply chains, slowing and in many cases halting the production of tractors, harvesters, equipment and spare parts. This problem was solved by careful analysis and sales of stocks in warehouses and bases and by intensified correspondence with equipment manufacturers. The latter unfortunately could not help much. Restrictions on movement and in-person meetings further slowed down the normal trading rhythm.

Inflation increased the prices of raw materials and production costs, raising the prices of machinery for farmers. And the stress caused mistrust in the machinery distributor-farmer relationship. High prices and lack of supply led to requests to manufacturers for 2-3 years ahead.

The war in Ukraine brought additional instability both for us and for the whole of Europe. Resource security has been violated. Fertilizer prices rose 5-6 times. Fuels, especially diesel, rose sharply in price. The sale of agricultural produce was done with different degrees of success. Our customers and partners, the farmers, wondered whether to sell or not, and often sold at a loss. The cost of all agricultural crops, animal products, milk, vegetables, fruits and others grew.

How did you overcome these difficulties?
We completed some resource diversification. We also manage prices and costs. In these conditions, we have prepared the lowest possible prices for the farmers. We also have strengthened financial consultations together with banks and leasing companies. We constantly review our costs and pricing models to adjust for inflation.

What do companies in the sector count as success?
Despite the unusually difficult conditions in these few years, new equipment was delivered to Bulgarian farmers. Demand for spare parts and service was also relatively well met. The danger of collapse in sales was overcome. After the initial shock, customers' confidence in their suppliers was restored. New models of tractors, harvesters, implements entered the market and leading technologies and innovations were introduced in Bulgarian agriculture.

Elisaveta **Markova,**
manager of Varex

We offer equipment that meets the needs of modern agriculture

What was 2022 for the agricultural machinery market in the country?
The short answer is: very successful. This is also reflected in the registrations with the Control and Technical Inspectorate at the Ministry of Agriculture. Understandably, after the period of lack of machines due to the pandemic, there was a kind of revival in the market and farmers made the planned purchases of equipment. Purchase finance rates were also very favorable. Practice shows that the most successful are the farmers who apply new technologies, and they require the corresponding new machines — high-performance and economical.

What are the biggest challenges for agricultural machinery suppliers in the years of pandemic, inflation and war and how do you overcome them?
All these circumstances, and to the greatest extent the pandemic, disrupted the rhythm of machine manufacture. Planned deliveries were delayed or cancelled, which reflected on the business in the sector quite negatively. A large number of machine manufacturers postponed deliveries to a year ahead. This has brought confusion and instability to the market, price levels have gone up and when you add the rise in the prices of fuels and fertilizers and inflationary processes in general, our sector has definitely been through quite a tough time. Gradually, the rhythm of deliveries was restored in 2022, and accordingly sales recorded high growth. I have to say that only our Turkish partners kept the delivery dates. The explanation is that they produce all the components and are not dependent on external sub-suppliers.

The war in Ukraine has additional negative effects on the supply of machines, raw materials and components. On the other hand, our customers experience serious difficulties in the sale of their output. I will not go into details, but what is happening shows how vulnerable we are to a change in the market situation caused by external factors. Agriculture is a strategic sector and the long-term sustainable development program must include measures to protect Bulgarian farmers unconditionally.

What do companies in the sector count as success?
We notice a positive trend in increasing farmers' interest in intelligent agriculture. They keep themselves informed and have quite a wealth of knowledge in agronomy and everything to do with increasing efficiency in the work in the field, on the farm, in the garden, in the whole food chain. There are all prerequisites from the point of view of technical and technological security for the farmers' production to be successful, if nature is also favorable. We offer machines that meet the needs of modern agriculture. You understand that our connection with farmers is direct and their successes lead to ours as well. We share all their successes and failures.

How are sales evolving this year? What are the trends?
As I mentioned, the deliveries of machines are already back to normal, but the market of machines is closely related to the sales of the output of agricultural producers. Unfortunately, there is currently stagnation in the market for their produce for various reasons. Another circumstance has also brought great uncertainty to the agricultural machinery market — the admission announced in early spring under the technological modernization program, part of the National Recovery and Resilience Plan. The cabinet changed the date for receiving the documents several times and it is still not clear if this program will work out and when. Equipment prices are changing and next year's deliveries will be made at higher prices. Many manufacturers also change the models of the equipment.

Interviews were conducted by Mara Georgieva

//RISKS

Fertilizers remain vulnerable to the impact of the Ukraine war, trade restrictions

Prices fall from record highs but stay steadily elevated

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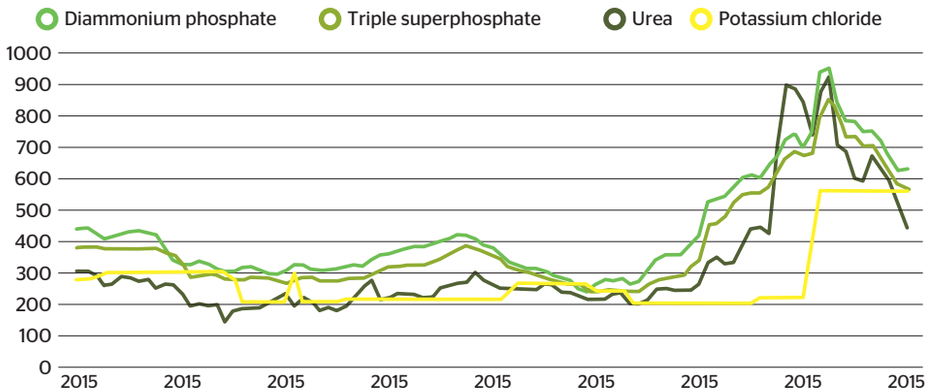
Russia's invasion of Ukraine in 2022 caused a global disruption in key agricultural produce and fertilizer markets, threatening food security worldwide. As the war entered its second year, high international food prices declined, although domestic price levels remained high in many low- and middle-income countries.

The good news is that fertilizer prices, while still high, have fallen significantly from the peak levels of 2022. As with global trade in agricultural commodities and food, this rise and fall is a complex mix of changing supply and trade linkages.

At the start of the Russian invasion, fertilizer prices were already at historically high levels. They have been rising since late 2020 due to several factors. >26

K | PRICES OF FERTILIZERS

(USD per metric ton)



Source: World Bank

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Fertilizer demand, which had declined during the lockdowns prompted by the Covid-19 pandemic, recovered in 2020-2021 when travel restrictions were lifted and commodity prices rose. On the supply side, increases in the prices of natural gas and coal — major raw materials and energy sources in fertilizer production, as well as some reductions in production capacity, also put upward pressure on prices.

Concentration of production

The outbreak of the war on 24 February 2022 then led to a sharp increase in prices. Uncertainty about fertilizer exports from Russia and Belarus increased over new or extended economic sanctions against both countries and the disruption of trade routes in the Black Sea. Russia and Belarus are important producers of all three major fertilizer nutrients: in 2020, Russia accounts for 14% of world urea trade and 11% of phosphate trade, and Russia and Belarus together account for 41% of world potash trade. The fact that a small number of countries produce a large share of internationally traded fertilizers makes the sector vulnerable to trade shocks.

Countries heavily dependent on fertilizer imports from Russia and Belarus feared immediate shortages and many had to scramble to secure alternative sources from a much-shrinking world market. With about three-quarters of all countries importing at least half of their fertilizer consumption, however, trade stalled.

Sanctions imposed by the EU, the United States, Canada and other countries on Russia and Belarus after the invasion formally excluded agricultural products (EU sanctions prohibit potash imports from Belarus and shipments through EU territory to other markets). Despite the exemptions for agricultural products, the sanctions seem to have reduced fertilizer trade in some regions, as importers may choose not to buy from these two countries due to the additional costs of doing business with them, such as more restrictive banking regulations, higher insurance costs, or for fear of falling into the financial sanctions trap.

According to an analysis by the International Food Policy Research Institute (IFPRI), potash exports from Belarus in 2022 were at least 50% lower than in 2021 due to sanctions and restrictions on using EU territory for transit. Although total urea

The impact of reduced nitrogen use on yields may become apparent within the same growing season, while the impact of saving potassium and phosphorus fertilizer on yields, but also on soil health, may become apparent after several years.

and potash exports from Russia declined in January-August 2022 compared to the same period in 2021, they recovered during the rest of the year. The shutdown of the Togliattiazot pipeline carrying ammonia to the Ukrainian Black Sea port of Odessa contributed to a 63% slump in Russian ammonia exports in January-August compared to 2021.

Export restrictions

Disruptions in global markets have also triggered various types of export restrictions imposed by some countries wishing to keep domestically produced fertilizers available for home use. These included total bans or onerous inspection and licensing procedures. In June 2022, IFPRI estimated that about 20% of world fertilizer trade was affected by such restrictions.

In particular, fertilizer exports from China have declined sharply after the country restricted exports from mid-2021. Diammonium phosphate (DAP) exports from China, which typically account for 30% of global DAP trade, fell by 43% in 2022 compared to 2021, while urea exports from China declined by 47% over the same period.

Major fertilizer importers facing shortages of supply from Russia and Belarus have been able to secure deliveries from alternative sources. For example, Brazil, the second largest importer of potash, has increased imports from Canada to offset the decline from Belarus. Morocco, the world's fourth largest importer of ammonia, increased imports from Saudi Arabia and Egypt to make up for shortfalls from Russia. At the same time, production capacity in some regions increased along with exports — notably of potash from Canada and phosphate from Morocco, and urea from Nigeria. Russian fertilizer exports to some markets, such as India, have also increased significantly.

However, some smaller low-income countries in sub-Saharan Africa found it much more difficult to secure fertilizers as they have faced availability problems since the invasion.

Effects on agriculture

Assessing the impact of the fertilizer crisis and the reduced demand on crop yields is a complex process, especially in regions of the world with large numbers of smallholder farmers. The impact on yields varies not only according to the quantities used, but also to changes in fertilizer choices. In times of high prices, farmers tend to prefer nitrogen, which is why there has been a sharper decline in demand for potassium and phosphorus fertilizers worldwide. The impact of reduced nitrogen use on yields can be seen within the same growing season, while the impact of saving potassium and phosphorus fertilizers on yields, but also on soil health, can become apparent after several years, IFPRI notes.

Nor is it easy to assess the impact of reduced fertilizer use on food security. Many factors affect production: events such as droughts and floods or large post-harvest food losses can lead to reduced productivity, even if sufficient fertilizer is used. Fertilizers are also used for the production of non-food crops, especially biofuels. Global biofuel production is still increasing, albeit at a lower rate since 2020, and generally still relies on food crop feedstocks rather than modern non-food crop feedstocks. For example, almost 38% of the US corn crop is used as feedstock for biofuels, and globally vegetable oils are expected to account for around 23% of biofuel feedstocks by 2027.

What follows from high prices

High prices have reduced demand from farms, pushing prices off their peak last year. But after two consecutive years of decline by an overall 7%, the International Fertilizer Association (IFA) forecasts a 3% increase in global fertilizer demand in 2023.

In June, ratings agency Fitch lowered its near-term price forecasts for ammonia, urea and potash due to the depreciation of natural gas, a key raw material for production, and the fall in prices since the start of the year.

Moreover, the addition of 1.3 million tonnes of commercial capacity in the second half of 2023, once the Gulf Coast Ammonia facility in Texas, US comes on stream, will increase short-term price pressure. Uncertainty about the growth in Russian export volumes from 2024 onwards increases potential pressure on prices, Fitch noted. Prices remain high by historical standards and inflation is high in many countries, leaving the fertilizer sector vulnerable to further shocks from the war in Ukraine or other developments in an uncertain global market environment.

Increasing capacity may ease supply concerns, but greenfield projects require large investments and long lead times to implement, experts note. The launch of new ammonia capacities in the US and the easing of export restrictions by China would also have a significant impact on global markets. | K

In the period 2007 – 2019 she held a number of positions in the State Agricultural Fund, including Deputy Executive Director. In May 2019, she was elected as MEP from the MRF/ Renew Europe. In the European Parliament, Ms Veli has been a member of the Committee on Agriculture and Rural Development and the Committee on Employment and Social Affairs, as well as Vice-Chair of the Rural Intergroup. She is also Vice-Chair of the Delegation for Central Asia and a member of the Delegation for N. Macedonia.
In her position as MEP, she is also working on the amendment of the EU Industrial Emissions Directive. The committee's draft proposal is one of the few in the context of the Green Pact that does not cover CO_2 emissions but aims to reduce other harmful emissions and pollutants that pollute air, water and soil and affect human health. In this respect, the directive affects agriculture because of the inclusion of livestock farms that keep more than 150 cattle in the scope of the directive. Under these thresholds, a greater number of farms will be defined as industrial and will have to pay up.

More small farms risk paying for emission permits

Atidzhe **Alieva-Veli,**
Master of Industrial Technology from Sofia University and of Public Administration from the University of National and World Economy

How does the European Commission (EC) draft legislation on industrial emissions affect agriculture in Europe?
The EC has proposed amending Directive 2010/75/EU to reduce emissions of ammonia, methane, nitrates and greenhouse gas emissions from industry, including the agricultural sector. We are working for legislation that is a good basis for ensuring the three cornerstones of the Green Pact — the environmental, economic and social fields. In addition, in the current context of war, it is important for us that the impact assessment of any legislative proposal also includes the aspect of ensuring food security.

Specifically, the texts in the draft revision of the Industrial Emissions Directive, affecting agriculture, include broadening its scope to include livestock farms that keep more than 150 cattle. There is also a proposal in this draft legislation to reduce the thresholds for industrial poultry and pig farming so that a greater number of poultry and pig farms are covered by this regulation. Under these thresholds, a greater number of farms would be defined as industrial and

would have to pay for it.

What percentage of farms in Bulgaria would fall under this proposal?

The issue of the number of farms in these three livestock sectors that were targeted has been very controversial. According to the Commission's preliminary estimate, 18% of pig farms, 15% of poultry farms and 10% of cattle farms would be affected under the proposed thresholds, while the overall EU average of affected farms is 13%. However, a leaked EC presentation showed that these analyses are based on Eurostat data from 2016. Applying Eurostat data from 2020, the proportion of affected farms increases many fold to 61% of pig farms, 58% of poultry farms, and 12.5% of cattle farms. However, it is important to note that the Eurostat figures for the agriculture sector are subject to further scrutiny and are not yet definitive.

Due to the proposed low thresholds for agriculture, there is a risk that not only industrial farms, but also a large number of family farms, could fall under this regulation. In practice, this means that, in order to meet the new requirements, farms have to make investments to buy equipment and incur additional costs of up to 25 000 euro per year. These investments and additional annual costs are not provided for under the CAP and other funds, and they will appear as an additional financial and administrative burden for livestock farmers.

Furthermore, just over a year ago, the requirements that industrial installations already meet were imposed on industrial pig and poultry farms regulations as well. As of yet, there is no assessment of the effect of implementing this legislation and it seems inappropriate to introduce new increased requirements and an extension of the scope of the legislation. Frequent changes in regulation threaten predictability for business, especially in a context of crisis and multiplying production costs.

The European Parliament has proposed amendments to part of the draft directive concerning the three livestock sectors in an attempt to ensure sustainability in its three dimensions (environmental, economic and social) and to ensure food security. They aim to exclude cattle from the scope of the directive on industrial pollutants and to maintain the current thresholds for the poultry and pig sectors. The texts were adopted in the Committee on Agriculture and Rural Development and in the parliament's plenary.

What is the procedure for issuing permits and will it hinder work in the sector?

Stricter controls, a more integrated permitting process and a mandatory environmental management system would be required. In addition, there are proposals for greater stakeholder participation in discussions and increased transparency regarding permits issued. At the same time, the change of the permit regime aims at encouraging the introduction of innovative technologies and at easing and simplifying permit procedures, but in practice it is often the case that the administrative burden on business is not reduced. Any change risks further delaying permitting procedures for industrial installations, creating legal uncertainty for companies.

Any change risks further delaying permitting procedures for industrial installations, creating legal uncertainty for companies.

I am pleased that the majority in plenary has supported the sustainable and environmentally friendly development of farms that rear poultry, pigs and cattle.

What has the European Parliament managed to achieve in order to mitigate the scope of this legislation?

The biggest debates in the European Parliament on this proposal were in the part concerning livestock farming. I am pleased that the majority in plenary has supported the sustainable and environmentally friendly development of farms that rear poultry, pigs and cattle. The greening of livestock farming must go hand in hand with the provision of appropriate funding for the introduction of new requirements, as well as the introduction of new technological solutions, for example, modern equipment, new animal feeding techniques that reduce emissions, etc.

What lies ahead and can the changes made by the MEPs remain in the final version of the regulation?

What comes next are the so-called trialogues — the negotiations between the EC, the European Parliament and the Council. In this case, there are three different positions and the three parties have to reach an agreement. The most restrictive position is that of the EC, which proposes reducing the thresholds for poultry and pig farming and including cattle farms with more than 150 animal units in the category of industrial polluters. The Council's position considers cattle farms as intensive and extensive, depending on the density and the way the animals are kept. In its position, the Council accepted the exclusion of extensive rearing from the scope of the Directive and a threshold of 350 animals for cattle farms. As I mentioned above, the European Parliament adopted a decision to maintain the current thresholds for pigs and poultry and exclude cattle from the scope of the directive.

It remains to be seen what the outcome of the negotiations will be and how the political agreement in the trialogue would transpire.

Interview conducted by Monika Varbanova

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//NEW CONCEPTS

Turning low-carbon farming into a source of income

MEPs call on Brussels to figure out how to monetize the future certification scheme for farmers whose farms absorb carbon dioxide

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For European farmers, the past year and a half has been marked by stress and challenges. On the one hand, the war in Ukraine has disrupted markets, leading to surging prices for fuels, fertilizers and animal feed, as well as high inflation in food prices that reduced consumer spending. On the other hand, there is the Green Deal, the ambitious policy of the European Commission aimed at decarbonization and building a sustainable economy by 2050. It has introduced stringent environmental requirements for farmers without leading to an increase in their incomes.

Against this backdrop, the concept of "low-carbon farming" is seen as a ray of hope — an opportunity to develop a new business niche and increase the incomes of European farmers. This is a green business model in which farmers follow specific agroecological practices, ensuring that their farms not only do not release harmful emissions but also absorb excess carbon dioxide from the atmosphere. The idea is for these farmers to receive certificates from the European Commission, which they can eventually monetize, either through public subsidies from the EU's Common Agricultural Policy or through a new pan-European market for agricultural carbon quotas, similar to the carbon market in energy or industry.

In November last year, Brussels drafted the necessary regulation but left the contentious issue of how farmers can profit from these certificates outside the scope of the legislation. However, in September this year, the regulation was reviewed in the European Parliament's agriculture committee, where members asked the European Commission to expand the legislation in the direction of monetizing the certificates. This brought the issue back to the forefront, and farmers are now one step closer to the possibility of earning from the carbon dioxide they store or capture on their farms.

Double Benefits from the Model

Low-carbon farming is one of the promising new concepts in the agricultural sector. For the first time, it is mentioned in the Farm to Fork strategy, which aims to reduce the use of chemical pesticides by 50% and fertilizers by 20% by 2030. The goal is for low-carbon farming to build upon the package of other

In order to be incentivized to use low-carbon farming, farmers have to see the benefits of doing so.

green initiatives in Brussels embedded in the new Common Agricultural Policy (CAP), which came into effect in 2023.

In its current form, intensive agriculture releases significant emissions and contributes to climate change. However, if farms follow a strict set of agroecological rules, not only can they offset their emissions but also absorb and retain excess carbon dioxide from the atmosphere.

These practices, however, require a significant commitment from landowners, as well as some sacrifices, such as more forested and grassed areas, which mean less arable land, and, consequently, less production and income. Therefore, to motivate farmers to practice low-carbon farming, they need to see benefits in the form of additional income. The question of where these benefits will come from is still a contentious issue.

Different Approaches

While farmers themselves prefer the market option, i.e., creating a pan-European market for trading these stored or captured emissions, environmental activists and some politicians believe that incentives should come from EU public financing, in the form of subsidies. Their concerns are that the market option carries risks — for example, other companies could use agricultural farms for deceptive carbon offsetting and "greenwashing."

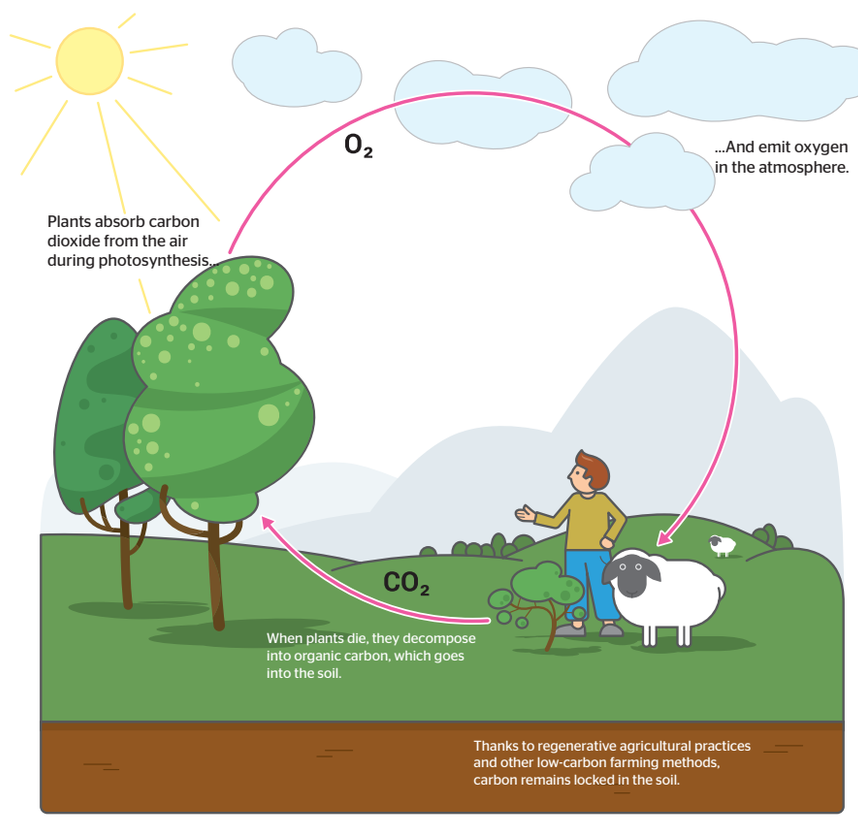
Farmers' organizations, on the other hand, are concerned that the bureaucratization of low-carbon farming through CAP could create additional burdens, increase costs, and potentially reduce the productivity and overall incomes of farmers. The market is a much more powerful mechanism that can develop faster and encompass more farms. While still in its early stages, agricultural carbon emission trading (mostly on a private basis, without regulation) exists in the United States, and the method is being tested in some European countries like Spain, Finland, and Switzerland.

Work on the legislation has not been completed, it will be reviewed by other European Parliament committees before being voted on by the entire parliament. Expectations are that this will happen next autumn, after which discussions will begin between the European Parliament, the European Commission, and the EU Council. Whether the ambitious legislation on low-carbon farming will become a reality within the current European Parliament and Commission, and before next year's EU elections, is still an open question. |K

What Is Low-Carbon Farming?

The primary goal is for agriculture to employ practices in which the land absorbs carbon dioxide from the atmosphere and stores it in the soil. This way, the agricultural sector contributes to the fight against climate change rather than exacerbating it. Various agricultural methods are used:

- Afforestation, reforestation, and carbon sequestration in soils through agroecological or regenerative farming practices. The idea is to have no bare, plowed land, which releases carbon dioxide.
- Soil conservation, reducing soil loss from erosion, and improving organic carbon in the soil on degraded arable land.
- Preserving high-value natural grasslands.
- Agroforestry (trees on agricultural land) and other forms of mixed farming with systems for cultivating crops and/or animals on the same land.
- Restoring degraded peatlands and wetlands reduces the oxidation of existing carbon stocks and increases the potential for carbon capture.
- Restoring and maintaining healthy forests.



//NO MARKET STRATEGY

The redesigning of the 8 billion euros agricultural subsidies plan

The changes are triggered by the low interest shown in certain programs.

T The Ministry of Agriculture is set to make major changes in the so-called A strategic plan for the development of agriculture and rural areas, through which just over 8.06 billion euros of support for the sector should be distributed by 2027. Redistribution of money in direct payment eco-schemes; increasing the requirements for the market sales of livestock production when receiving support; removing the grouping of applicants for investment schemes from the program for rural areas according to the size of the business; new opportunities for start-ups.

The plan was submitted to Brussels by the previous cabinet, the caretaker government of

photo Nadezhda Chipeva

Galab Donev, almost at the last possible moment — in November last year, and approved by the European Commission (EC) in December of this year. But as soon as it was sent to the document, criticism rained down both from the entire agricultural industry and from a number of politicians. Among them were accusations of pushing controversial proposals, for example, the subsidies for growing potatoes for starch, for which there are no production facilities in Bulgaria.

During the first public discussion of the draft changes to the plan in the parliamentary agriculture commission the Minister of Agriculture Kiril Vatev announced that the existing document has „no market strategy".

Now, in addition to higher requirements, some of the proposals also see an increase in project funding ceilings as well as adjustments to a number of requirements. It is possible that until the final submission to Brussels, there will be additional changes in the current proposals, some of which are in clear opposition to the government's request that the focus in agro-subsidies be small and medium-sized farms.

In addition to higher requirements, some of the proposals also see an increase in project funding ceilings as well as adjustments to a number of requirements.

Redistribution of money

The changes presented to the parliament's commission did not contain many details and calculations, so until the publication of the document, the specific parameters of the changes will not be completely clear. However, it was understood that one of the big changes in the strategic plan is related to direct subsidies and key eco-schemes, for which 825 million euros, or 1/4 of all direct payments by 2027, are allocated. The changes will tackle the redistribution of the budget between support schemes, support rates, requirements that farmers must meet in order to receive the funding.

The Ministry of Agriculture is also planning to increase the money for eco-programs in which there is a high demand, at the expense of those for which not many farmers applied this year. Thus, the most new funding, if the adjustments in the Bulgarian plan are approved by Brussels, will go to the programs for reducing the use of pesticides, the funding of which will increase by 204 million euros. Another significant change will be in the support for preserving the soil potential, where the support should become 166 million euros, or 50 million euros more than now. These two schemes are the most interesting for producers this year, according to the data of the Ministry of Agriculture.

Correspondingly, less money is proposed to be in the program for maintaining and improving biological diversity and ecological infrastructure, where the budget will decrease by more than €120 million to a just over €17 million.

With a budget of up to 1.7 million euros, it is planned to remain the program for maintaining and improving biodiversity in forests — a downward adjustment of nearly 24 million euros. There is also a reduction for the maintenance of permanently grassed areas up to 70 million euros.

No segrgation

Another of the key changes proposed by the Ministry of Agriculture is the elimination of the ranking of applicants for investment projects according to their size and an increase in the maximum subsidy for one project in some of the support interventions. In the current plan for a number of support programs, including investments in farms or straight processing, it is envisaged that applicants will be grouped according to their size — small, medium and large, and accordingly this is tied to the requirements for the applicant's business history.

With changes in a large part of the support programs for cows, sheep and goats, the requirements for the amount of production sold on the market are also increased — on average by between 20 and 50%.

However, according to the new idea of the ministry, the division in question should be dropped for part of the interventions related to investments in agricultural holdings, processing and non-agricultural business in the villages. Thus, a requirement will be introduced for them that applicants have a standard production volume of 8,000 levs and a two-year history in general, and a three-year history for large businesses applying for processing financing.

Another main change is that in some of the programs, the support ceilings are being raised. For example, for one agriculture project 850 thousand euros are proposed to be granted, and specifically for agricultural machinery, the ceiling should be 400 thousand euros. Currently, the rule sets three different ceilings — 250,000 euros for small companies, 500,000 euros for medium and 750,000 euros for large ones. For medium and large ones the maximum for agricultural machinery is 250,000 and 375,000 euros.

According to the plan of the Ministry of Agriculture, there will be a new higher aid for one project and for processing, where up to 1 million euros can be received for small and medium-sized enterprises and up to 2 million euros for large ones, which according to the current plan can apply for 1.5 million euros maximum. A double increase in the support of projects for non-agricultural activities in the villages is planned — for them the subsidy could reach 400 thousand euros per project compared to the current 200 thousand euros now.

An increase in the subsidy in the „repair" of the strategic plan is also planned for the measure to support young farmers up to 40 years old. The Ministry of Agriculture proposes that they can receive funding of 40,000 euros to start a business, not 25,000 euros, as it is at the moment.

It is also planned to create a completely new scheme to support new farmers who do not fall into the „young" category. >34

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They will be able to receive a subsidy of 20,000 euros for an agricultural business, with the category covering people aged 40 to 64.

Increase in market requirements for animal husbandry

Another significant change will be made to the subsidies in animal husbandries. Under various programs, animal breeders now have to prove that they have produced and sold a certain amount of stock — meat or milk — in order to receive support. Now, with changes in a large part of the support programs for cows, sheep and goats, the requirements for the amount of production sold on the market are also increased — on average by between 20 and 50%.

166

million euro will go towards supporting the preservation of the soil potential.

The issue of proof of production has been controversial for years: it is argued that some of the smaller breeders keep non-productive animals in order to receive a subsidy, which in the end is bad for their business, and they make under the table deals. At the same time, however, smaller companies have the biggest difficulties with the sale of the production, due to lack of cooperation and difficult access to markets, as they are often completely dependent on the dairies in their own region.

The Ministry of Agriculture also proposes dropping the so-called a modulated cattle rate that provides higher funding per animal for the first 150 animals on the farm — a way to support small producers. In the current plan, for the first 150 animals, the subsidy is 219 euros per head, and after that — 175 euros. If the „modulation" is dropped, the financing would be a little over 201 euros per animal, which, however, is in favor of larger breeders.

204

million euro will go to the programs for reducing the use of pesticides.

It was this amendment that led to the most serious criticism in the parliament, and it is not clear whether it will be included in the final plan that will be sent to Brussels. | K

How the Dutch got too good at farming

A small, fertiliser-rich country sniffs the limits of its old model

Visitors to dairy farms are always well advised to watch their step. Those inspecting the three dozen milking cows kept by Minke van Wingerden and her team have more to fear than landing in manure: the entire farm is set up on a floating platform, docked a 20-minute cycle ride away from Rotterdam's central railway station. One wrong step and you will wind up spluttering in the Nieuwe Maas river-as a couple of the cows have discovered (firemen fished them out of the harbour). Forget vistas of the placid Frisian countryside: these animals spend their days overlooking tankers and trucks unloading wares at Europe's biggest port. Throughout the day, schijt-scooping robots scour the milking area, keeping it clean. On two lower floors of the barge, the cows' output is variously turned either into cheese or fertiliser.

Ms Van Wingerden's Floating Farm is the apotheosis of centuries of Dutch thinking about how to grow lots of food in a crowded corner of northern Europe. Since the age of Rembrandt and Vermeer, land has been reclaimed from the sea and windmills erected to drain the plains. Town-size greenhouses are built to grow tulips or vegetables. A food shortage during the second world war convinced the Dutch they needed to grow as much as their fields could manage. Calvinist industriousness turned the Netherlands into an unlikely agrarian powerhouse: with more than €100bn ($108bn) of annual farming sales overseas, it is the world's biggest exporter of agricultural products after America, a country more than 250 times its size. Some of that is re-exported imported food. But the Dutch make twice as much cheese per head as France.

Two questions have long dogged Dutch farming. The first is whether quantity made up for quality: having tasted the tomatoes, cucumbers and chilies grown in its hyper-efficient greenhouses, one may be forgiven for not being able to tell them apart. The second is whether its approach made any sense. The Netherlands is the most densely inhabited country in the eu bar tiny Malta; officials joke it is a city-state in the making. Efficient as its farmers may be, the sector is a footnote to the modern Dutch economy, employing just 2.5% >36

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The Economist

Floating farms are the pinnacle of the Netherlands' centuries-old ideas of how to grow a lot of food on a small patch of land.

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of workers. Countries usually pick between having lots of farms or lots of people. The Dutch approach was to have their Gouda and eat it. That has landed both farmers and politicians in a heap of natural fertiliser.

Limits to the Dutch model of turbo-farming have been suspected for decades. Already in the 1980s, authorities realised that importing lots more animal feed would result in lots more animal excrement. Yet the limits of the land kept being tested: each acre of Dutch farm supports four times as many animals, by weight, as others in Europe. The result of all those digestive tracts has been a surfeit of excreted nitrogen, a key nutrient for plants but one that in excessive quantities can destabilise ecosystems. Cars and industry emit nitrogen compounds too. All this has contributed to damaging the soil and polluting waterways. Flora that thrive on excess nitrogen have been killing off plants that would otherwise manage to compete for resources. That in turn has knock-on effects, not all of which scientists understand.

Ernst van den Ende of Wageningen University, a food-research hub, says there is not much wrong with individual Dutch farms, which are often models of sustainability. The problem is that there are too many of them, pumping out too much nitrogen. For more than a decade there have been efforts (mostly ineffectual) to cut back such emissions to meet eu rules that protect nature reserves. But in 2019 things came to a head. A decree from the highest Dutch court gave wishy-washy laws an unexpected bite. Every activity that led to nitrogen being produced-including the construction of buildings, roads and other infrastructure-would henceforth require cuts in nitrogen elsewhere. The country has a housing shortage, but new building has been throttled by the rule. Daytime speed limits on motorways were cut from 130kph to 100kph in the hope that lower emissions might let other bits of the economy keep going. Schiphol airport, one of the world's busiest, resorted to buying farms to shut them down so planes could take off.

The crisis has been all-encompassing. A bastion of free-market liberalism in Europe has morphed into something akin to a planned economy, with a „Minister for Nature and Nitrogen Policy" as lead commissar. In the end, it became clear a piecemeal approach would not cut it. Last year a sweeping plan to halve nitrogen emissions by 2030 was unveiled. The government said it would pay €24bn to buy out as many as 3,000 big emitters, meaning mostly farms. Livestock numbers would be cut by nearly a third. The era of ever-increasing agricultural exports was over.

Sacred cows, this way please

Strangely, even in a country bursting at the seams, picking people over cows turns out to be politically fraught. The prospect of buy-outs or expropriations fuelled farmer protests across the country. (Think burning hay-bales and nitrogen-rich animal matter dumped on motorways.) Last week the revolt hit the ballot box. A newish party representing farmers triumphed in local elections on March 15th, topping the polls that elect the nationwide senate as well as regional governments. The farmers' party got 1.5m votes, 19% of the total, in a country that employs just 244,000 people in agriculture. City-dwellers backed it out of a nostalgic attachment to farmers and resentment against nagging authorities. Whether the government can force through its nitrogen cuts is up in the air.

Other countries are heading for nitrogen crises too; neighbouring Belgium, also pretty crowded, already has one. But the wider parallel is with carbon emissions, which Europe plans to cut to „net zero" by 2050. That will demand adaptations well beyond what the Dutch have experienced with nitrogen. The Netherlands, a generally well-run place, has made a hash of adapting its economy to ecological constraints it knew about for decades. That does not bode well for everyone else.

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