

AGRICULTURAL REPORT

2023

ANNUAL REPORT ON THE STATE AND DEVELOPMENT OF AGRICULTURE



MINISTRY OF AGRICULTURE AND FOOD

AGRICULTURAL REPORT '23

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List of abbreviations used

AGC	Administrative Grant Contracts
AEP	Agri-environmental Payments
AACS	Administrative Assistance and Cooperation System
AEAV	Act to Establish an Administrative Violation
BFSA	Bulgarian Food Safety Agency
BSMAEC	Bulgarian Survey for Monitoring the Agricultural and Economic Conjuncture
GDP	Gross Domestic Product
GVA	Gross Value Added
BSS	Bulgarian State Standard
Buffaloes	Coupled support scheme for buffaloes/Support for buffaloes coupled with production
BNB	Bulgarian National Bank
BEP	Biological and Economic Properties
BRC	Bulgarian Red Cross
Grants	Grants
RES	Renewable Energy Sources
VMP	Veterinary Medicinal Products
VOC	Verification of Official Controls Directorate General
CLLD	Community-led local development
HNV	Restoration and maintenance of grasslands of high nature value
C-mr	Coupled with production support of cattle in mountain regions
BIP	Border Inspection Posts
BCRP	Border crossing points
GMO	Genetically Modified Organism
PG	Producer Groups
FRM	Forest Reproductive Materials
FMPP	Forestry management plans and programs
SG	State Gazette
SF units	State forestry units
VAT	Value Added Tax
SSF	Scheme for small farmers/Payments for small farmers
SHU	State Hunting Units
SE	State Enterprise
SMR	Coupled Support Scheme for ewes and/or goats in mountain regions/Coupled with production support of ewes and goats in mountain regions
AR-BISS	Additional Redistributive Income Support for Sustainability
SLF	State Land Fund
SMR – EB	Coupled with production support of ewes and goats of endangered breeds
SMR – BP	Coupled with production support of ewes and goats included in breeding programs
SSC	Coupled support scheme for ewes and/or does under selection control
SFA/SF Agriculture	State Fund Agriculture
SFA-PA	State Fund Agriculture - Paying Agency
EFTA	European Free Trade Association
SSCc-MILK	Coupled Support Scheme for dairy cows under selection control
SSCc-MEAT	Coupled Support Scheme for meat-breed cows under selection control
EAFRD	European Agricultural Fund for Rural Development:
EC	European Commission
Eco-OF	Organic farming (livestock) eco scheme
Eco-BEI	Eco scheme for maintenance and improvement of biodiversity and ecological infrastructure
Eco-FE	Eco scheme for maintenance and improvement of biodiversity in forest ecosystems

Eco-PRSP	Eco scheme for preservation and restoration of soil potential - promoting green manuring and organic fertilization
Eco-RPU	Eco scheme to reduce pesticide use
Eco-MPG	Eco scheme for extensive maintenance of permanent grasslands
Eco-DCC	Eco scheme for diversification of cultivated crops
Eco-MP	Eco scheme for ecological maintenance of perennials
SMNCP	Single Multiannual National Plan for Foods, Animal Feed, Animal Health and Welfare and Plant Health
EFSA	European Food Safety Authority
EERP	European Economic Recovery Plan
EU	European Union
ESF	European Social Fund
EAGF	European Agricultural Guarantee Fund
EMFF	European Maritime and Fisheries Fund
EFF	European Fisheries Fund
ERDF	European Regional Development Fund
GMOA	Genetically Modified Organisms Act
AFM	Agricultural and forestry machinery
PGI	Protected geographical indication
GDP	Payment scheme for agricultural practices that are climate and environment friendly (green direct payment)
SMR	Statutory management requirements
IND	Infectious nodular dermatitis
PDO	Protected designation of origin
SPMA	Seed and Propagating Material Act
OUALA	Ownership and Use of Agricultural Land Act
LICOAMEU	Law on the Implementation of the Common Organization of Agricultural Markets of the European Union
EFA	Executive Forest Agency
EAVW	Executive Agency on Vine and Wine
EAFA	Executive Agency for Fisheries and Aquaculture
EAVTASC	Executive Agency for Variety Testing, Approbation and Seed Control
EASRAB	Executive Agency for Selection and Reproduction in Livestock Breeding
CV-TCGE	Coupled support for vegetables (tomatoes, cucumbers, gherkins and eggplant)
SV-POG	Coupled support for vegetables (onions and garlic) and starch potatoes;
SV-CCWM	Coupled support for vegetables (carrots, cabbage, watermelon and melon)
SVg	Coupled support for vegetables - Greenhouse Production
SV-P	Coupled support for vegetables (pepper)
UAA	Utilized agricultural area
SVF-mr	Coupled support for fruits and vegetables in mountain regions
IIS	BFSA Integrated Information System
SF	Coupled support for fruits
SF-C	Coupled support for fruit crops until fruiting
IACS	Integrated Administration and Control System
SPC	Coupled support for protein crops
UMIS 2020	Unified Management Information System for the EU structural instruments in Bulgaria 2020
C-EB	Coupled with production support of cows of endangered breeds
Traffic police	Traffic police
CP	Consulting packages
CN	Combined Nomenclature
Mol	Ministry of Interior

YFS	Young Farmers Scheme/Additional income support for Young Farmers
MeC	Coupled with production support for meat cows
MeC-BP	Coupled with production support of meat cows included in breeding programs
DaC	Coupled with production support for dairy cows
DaC-BP	Coupled with production support of dairy cows included in breeding programs
MAF	Ministry of Agriculture and Food
LAG	Local action groups
FLAG	Fisheries local action groups
MoEW	Ministry of Environment and Water
NRA	National Revenue Agency
HACCP	Hazard Analysis and Critical Control Point
NB	National budget
NGF	National Guarantee Fund
NDRVI	National Diagnostic Research Veterinary Institute
NMP	National Monitoring Program for Control of Pesticide Residues in and on Foods of Plant Origin
NMPRC	National Monitoring Program for Residue Control
PD	Penal Decree
NPCGMF	National Program for Control of Genetically Modified Foods
NPCPR	National Program for Control of Pesticide Residues in and on Foods
NBP	National Bee-keeping Program
NRL	National Reference Laboratory
NSI	National Statistical Institute
NAAS	National Agricultural Advisory Service
TNM	Total number of microorganisms
TNSC	Total number of somatic cells
RD Agriculture	Regional Directorates of Agriculture
RDFS	Regional Directorate for Food Safety
OECD	Organization for Economic Cooperation and Development
CIS	Commonwealth of Independent States
CMO	Common Markets Organization
PO	Producer Organizations
BISS	Basic Income Support for Sustainability
OPIC	Operational Program “Innovation and Competitiveness”
SESG OP	Operational Program “Science and Education for Smart Growth”
CFP	Common Fisheries Policy
EOP	Environment Operational Program
RDOP	Regional Development Operational Program
OPDFS	Consulting packages
HRDOP	Human Resources Development Operational Program
CAP	Common Agricultural Policy
Cotton	Special support for cotton
MFP	Maritime and Fisheries Program
TMSA1	Transitional national aid for cattle, decoupled with production
TMSA3	Transitional national aid for ewes and/or does, coupled with production
TNT	Transitional national aid scheme for tobacco, decoupled with production
IRALOUA	Implementing Regulations for the Agricultural Land Ownership and Use Act
PPP	Plant protection products
RDP	Rural Development Program
Priority	European Union Priority
FDI	Foreign Direct Investment

RDF	Regional Directorate of Forestry
CMD	Council of Ministers Decision
DUS	Distinctness, uniformity and stability
SAPS	Single Area Payment scheme
ESS	Electronic services system
SV-TCGE	Coupled support scheme for vegetables (tomatoes, cucumbers, gherkins and eggplant)
SV-P	Coupled support scheme for vegetables (pepper)
SV-POG	Coupled support scheme for vegetables (potatoes, onions and garlic)
SV- CCWM	Coupled support scheme for vegetables (carrots, cabbage, watermelons and melons)
SV - other	Coupled support scheme for vegetables (cabbage, watermelons and melons)
SV - main	Coupled support scheme for vegetables (main group)
SVg	Coupled support scheme for vegetables - greenhouse production
LPIS	Land Parcel Identification System
SDC	Coupled support scheme for dairy cows
SDC-MA	Coupled support scheme for dairy cows in mountain areas
SMKH	Coupled support scheme for meat cows and/or heifers
LDS	Local development strategies
IA	Irrigation associations
SP-other	Coupled support scheme for fruit (plums and table grapes)
SP-main	Coupled support scheme for fruit (main group)
SPC	Coupled support scheme for protein crops
SRP	Scheme for redistributive payment
SPARD	Strategic Plan for Agricultural and Rural Development
AA	Agricultural Academy
LDS	Local development strategies
TSP	Thematic sub-program for small farms
FCA	Physical and chemical analysis
FBI	Food and beverage industry
FTST	Food of traditional and specific taste
CLVSEE	Central Laboratory for Veterinary Sanitary Expertise and Ecology
CLPQ	Central Laboratory for Plant Quarantine
CLCTC	Central Laboratory for Chemical Testing and Control
FCRAC	Food Chain Risk Assessment Center
DOM	Digital orthophoto map
PTC	Professional Training Center
HQ	Headquarters
CPVO	Community Plant Variety Office
ESVAC	European Surveillance of Veterinary Antimicrobial Consumption
OIE	International Office of Epizootics
PPPAMS	Plant Protection Products Authorization Management System
RASFF	Rapid Alert System for Food and Feed

SECTION A

I. STATE AND DEVELOPMENT OF THE NATIONAL ECONOMY. MACROECONOMIC FRAMEWORK. PLACE OF THE AGRICULTURAL SECTOR IN THE NATIONAL ECONOMY

According to NSI data, in 2022 the gross domestic product generated in the country grew by 3.9% compared to the previous year in real terms.

The nominal volume of GDP for the year is worth BGN 167,809 million (EUR 85,799 million).

By the end of 2022, the inflation increased by 16.9% compared to last year, and the average annual inflation is 15.3%.

According to BNB data on the country's balance of payments, in 2022 the export amounted to BGN 92,208 million (EUR 47,145 million), which represents 54.9% of the country's GDP. Imports for the year amounted to BGN 102,132 million (EUR 52,219 million) or 60.9% of the GDP. Thus, in the course of 2022, a negative trade balance for Bulgaria amounting to BGN 9,924 million (EUR 5,074 million) was formed.

In 2022, the foreign direct investment in Bulgaria amounted to BGN 5,146 million (EUR 2,631 million), which represents 3.1% of GDP.

Table I.1. Main macroeconomic indicators of the Republic of Bulgaria

Indicator	2018	2019	2020	2021	2022
GDP at current prices, BGN million	109,916	120,342	120,492	138,979	167,809
GDP at current prices, EUR million	56,199	61,530	61,607	71,059	85,799
Annual rate of change in real GDP, %*	2.7	4.0	-4.0	7.7	3.9
Average annual inflation (CPI), %	2.8	3.1	1.7	3.3	15.3
Inflation at the end of the year (CPI), %	2.7	3.8	0.1	7.8	16.9
Trade balance, BGN million	-5,293	-5,688	-3,796	-5,646	-9,924
Trade balance, EUR million	-2,706	-2,908	-1,941	-2,887	-5,074
FDI, BGN million	1,892	3,206	5,817	2,967	5,146
FDI, EUR million	968	1,639	2,974	1,517	2,631

Source: NSI – GDP and inflation; BNB – data on trade balance, and FDI (according to the principle of the initial direction of investment)

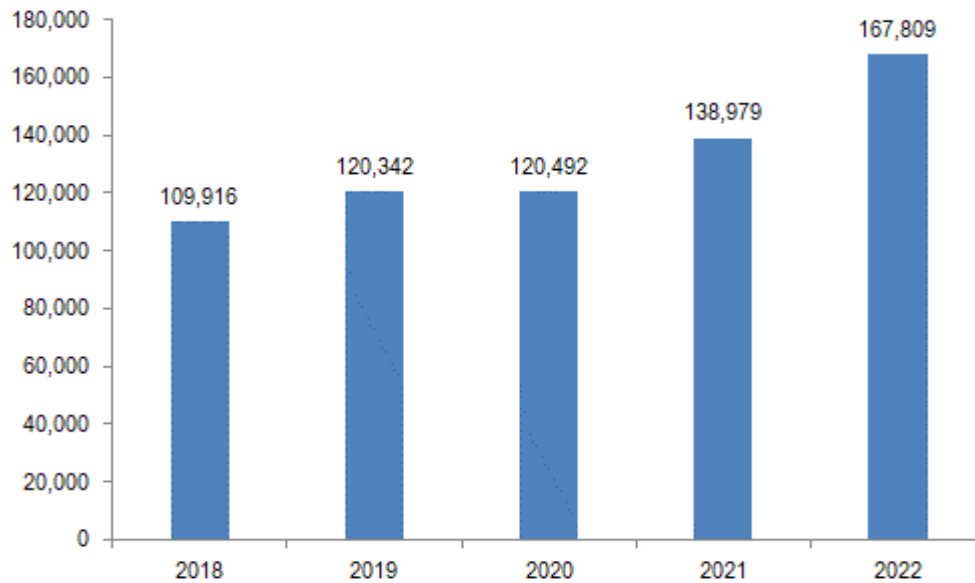
* The real rate of change of GDP was calculated at comparable prices in 2015.

Note: Due to the different methodologies used, the export, import and trade balance data, compiled by the BNB for the balance of payments statistics differ from the export, import and trade balance data, compiled by the NSI for foreign trade statistics.

Gross Domestic Product

The data for 2022 show an increase in GDP of 3.9% on an annual basis in real terms. At current prices, the GDP for the year amounted to BGN 167,809 million (EUR 85,799 million), with GDP at current prices amounting to BGN 25,956 (EUR 13,271) per capita.

Figure I.1. Amount of GDP for the period 2018 - 2022, BGN million



Source: NSI

Gross Value Added

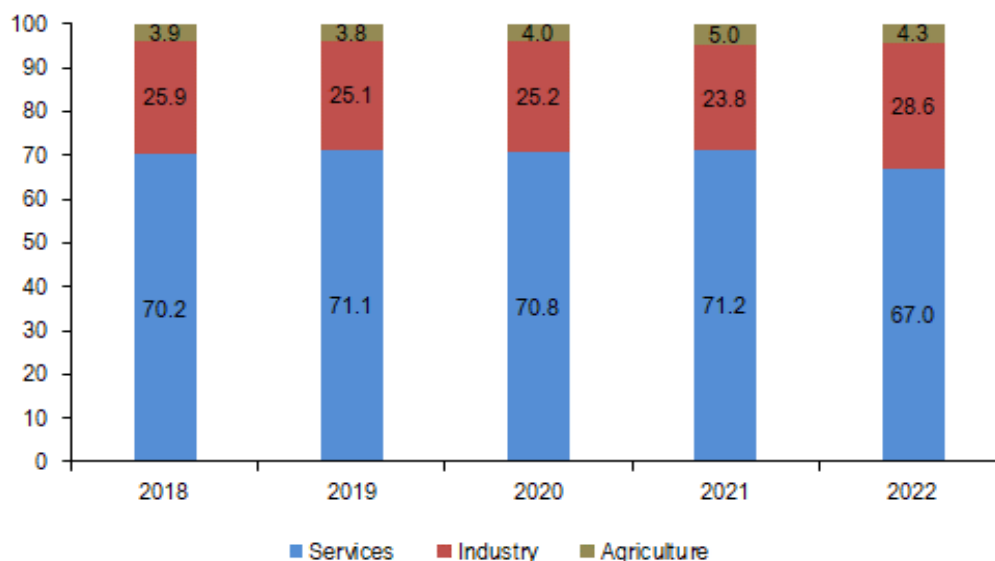
The gross value added generated by the sector of the national economy in 2022 amounted to BGN 149,164 million (EUR 76,266 million) at current prices, showing a real growth of 5.3% compared to the previous year. The added value of the entities from the agricultural sector in 2022 amounted to BGN 6,480 million at current prices. In real terms, it shrank by 4.4% on an annual basis.

By economic sectors, the GVA for 2022 is distributed as follows:

- Industry (including construction) - 28.6%;
- Services - 67.0%;
- Agricultural sector (agriculture, forestry and fisheries) - 4.3%.

The share of the agricultural sector in total GVA decreased by 0.7 percentage points compared to the previous year.

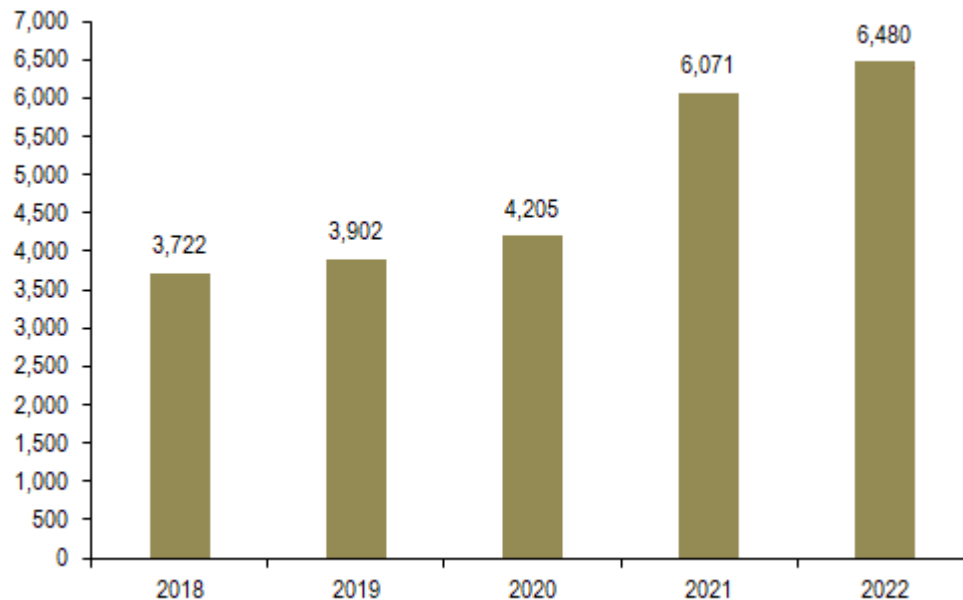
Figure I.2. GVA share by economic sectors for the period 2018 - 2022, %



Source: NSI

According to NSI preliminary data, in the first quarter of 2023 the real GVA growth for the economy in total reaches 1.4% compared to the corresponding period in 2022, and in the second quarter it is 1.1%. Regarding the GVA formed by the agricultural sector, the data for the first two quarters of 2023 indicate a decrease of 1.1% and 0.3% year-on-year, respectively.

Figure I.3. GVA in the Agriculture, Forestry and Fisheries sector, 2018 - 2022, BGN million

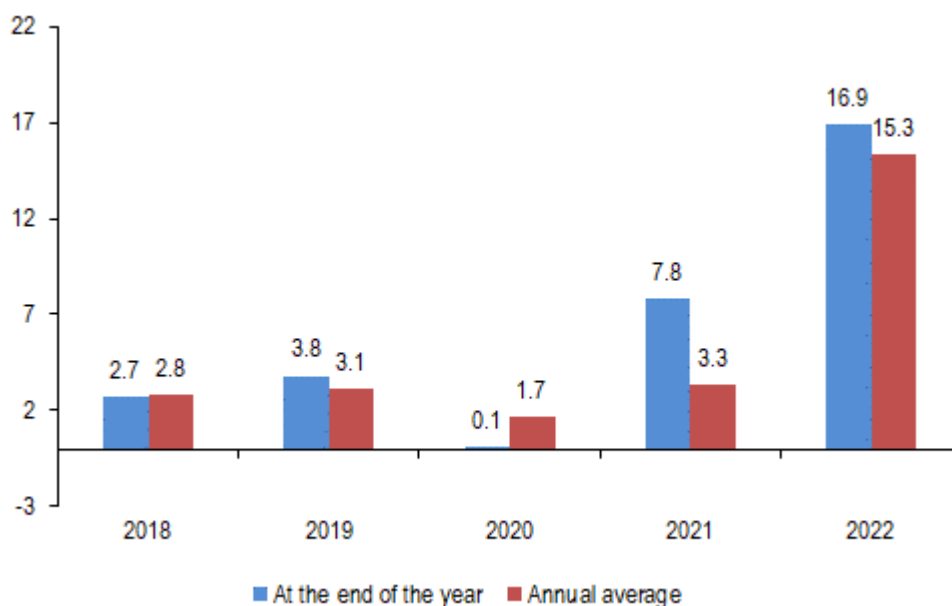


Source: NSI

Inflation

The annual inflation for December 2022 compared to the same month of 2021 was 16.9%, and the average annual inflation for 2022 was 15.3%. As of December 2022, the food prices increased by 25.6% compared to the year before, those of non-food products increased by 13.3%, catering prices - by 23.2%, and service prices - by 10.3%.

Figure I.4. Inflation, 2018 - 2022, %



Source: NSI

Employment and unemployment

According to NSI data, in 2022 the total number of employed people in the country is 2,940.6 thousand, or 53.2% of the population aged 15 and over.

The number of persons employed in the agriculture, forestry and fisheries sector is 184.9 thousand, forming a share of about 6.3% in the structure of employment by economic activities.

The average annual number of unemployed people is 127.3 thousand, and the unemployment rate is 4.1%.

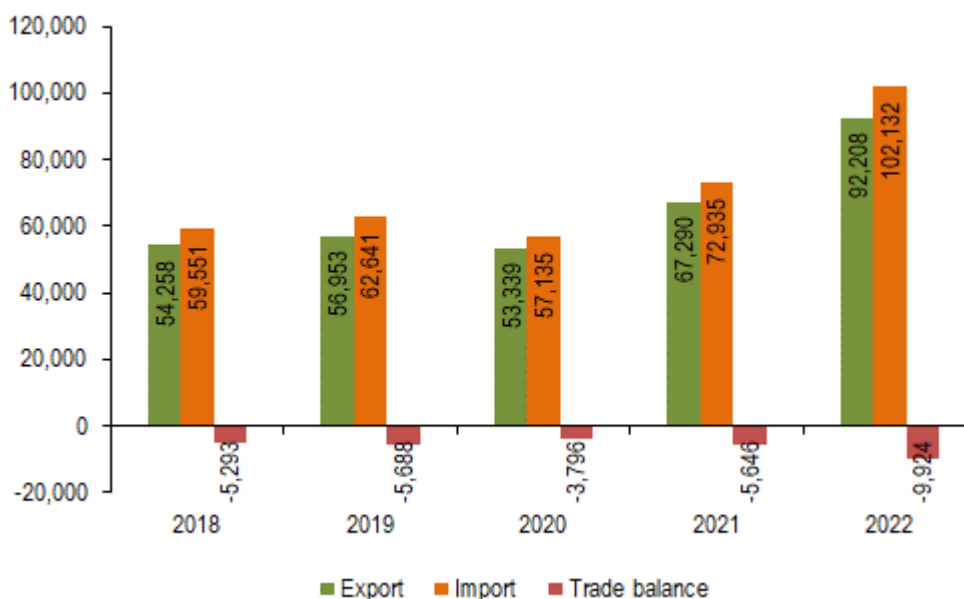
According to preliminary NSI data, in 2022 the average annual salary of employees under employment contracts was BGN 21,128, which is BGN 2,395, or 12.8%, more than the previous year. In the sector of agriculture, forestry and fisheries there was a more serious increase on an annual basis - by 18.5%, up to an average of BGN 15,568 per person.

Export and import

According to preliminary data of BNB on the balance of payments, in 2022 Bulgaria's exports amounted to BGN 92,208 million (EUR 47,145 million) - 37.0% above the level of the previous year, representing 54.9% of the country's GDP. A growth by 40.0% to BGN 102,132 million (EUR 52,219 million) or 60.9% of GDP, was reported also in imports.

As a result of imports outpacing exports in rate of increase, in 2022 the negative trade balance for Bulgaria grew to BGN 9,924 million (EUR 5,074 million), compared to a deficit of BGN 5,646 million (EUR 2,887 million) for 2021.

Figure 1.5. Export, import and trade balance for the period 2018 - 2022, BGN million

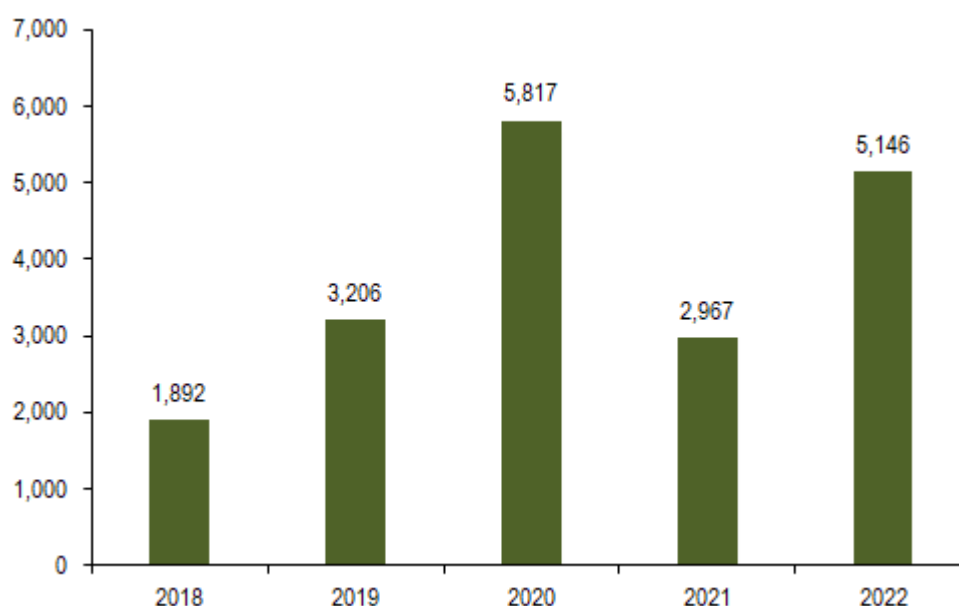


Source: BNB (preliminary data for 2022)

Foreign Direct Investment

According to preliminary data of the BNB, foreign direct investment in the country in 2022 amounted to BGN 5,146 million (EUR 2,631 million), reporting an increase of 73.4% on an annual basis. Compared to the previous year, their share in the GDP increased by 1 percentage point - from 2.1% in 2021 to 3.1% in 2022.

Figure I.6. Foreign Direct Investment, 2018 - 2022, BGN million



Source: BNB (preliminary data for 2022)

Within 2022, the most investments are attracted in the sectors "Financial and insurance activities" (EUR 1,007.2 million), "Manufacturing" (EUR 984.7 million) and "Trade; repair of motor vehicles and motorcycles" (EUR 403.6 million).

Net foreign investment in agriculture, forestry and fisheries during the year amount to EUR 5.2 million.

II. DEVELOPMENT OF THE AGRICULTURAL SECTOR IN 2022 AND FORECASTS FOR 2023

1. Use of agricultural land and structures in agriculture

1.1. Use of agricultural land

The area designated for agriculture in 2022 was 5,226,087 ha (without significant change compared to last year), which was 47.1% of the country's territory.

Table II.1. Arable land, utilized agricultural area and land designated for agriculture for the period 2018 - 2022, ha

EMPLOYMENT	2018	2019	2020	2021	2022
wheat	1,237,736	1,250,478	1,203,964	1,247,453	1,207,969
barley	115,773	112,264	131,340	139,109	127,270
rye and triticale	29,767	28,163	25,875	35,053	31,327
oat	16,886	13,866	11,386	10,421	13,632
corn	478,354	641,555	642,373	633,735	572,048
other cereals	24,641	26,352	22,757	21,903	14,549
sunflower	859,910	789,604	888,200	840,185	985,591
tobacco	8,668	4,849	5,440	3,015	3,207
industrial oilseed crops	203,397	158,305	120,055	142,838	146,800
other industrial crops	46,640	57,878	65,209	64,261	48,837
potatoes	14,611	11,177	11,524	12,363	10,285

EMPLOYMENT	2018	2019	2020	2021	2022
peas, beans, broad beans, lentils and other legumes	103,445	42,167	24,989	30,584	22,198
fresh vegetables	35,483	35,627	25,705	31,015	21,206
annual crops for feed	18,152	13,859	8,345	8,115	5,940
meadows sown with legumes	112,702	117,708	119,134	119,942	104,618
meadows sown with cereal grasses	5,917	6,625	8,152	7,345	5,010
fallow land	149,683	149,636	161,565	137,707	132,752
greenhouses	1,606	1,503	1,502	1,704	1,904
ARABLE LAND:	3,463,370	3,461,615	3,477,514	3,486,748	3,455,143
kitchen gardens	14,836	14,636	14,231	13,728	13,332
orchards	88,829	90,221	91,339	90,261	83,572
vineyards - axenic culture	53,787	53,005	51,356	50,252	47,551
mixed perennials	8,312	7,813	7,120	6,820	6,310
nurseries	2,100	1,699	1,703	1,709	1,907
Total perennials:	153,029	152,738	151,518	149,042	139,341
Permanent grasslands and meadows-orchards	1,399,041	1,408,481	1,403,988	1,397,079	1,414,246
UTILIZED AGRICULTURAL AREA:	5,030,276	5,037,470	5,047,252	5,046,597	5,022,062
Non-cultivated land	195,918	185,455	180,651	180,753	204,026
LAND DESIGNATED FOR AGRICULTURE:	5,226,194	5,222,925	5,227,902	5,227,350	5,226,087

Source: MAF, Agrostistics Department

The **utilized agricultural area (UAA)** is formed by arable land, permanent crops, nurseries, permanent grasslands and kitchen gardens. In 2022 it amounted to 5,022,062 ha, which was 45.2% of the country's territory. Compared to the previous year, its size reports a slight downward deviation of 0.5%.

The **arable land** includes the areas where crop rotation is applied, the temporary meadows with cereals and legumes, the fallow land and the greenhouses. In 2022, the arable land decreased by 0.9% year-on-year, to 3,455,143 ha, representing 68.8% of the country's utilized agricultural area.

Orchards - axenic cultures occupied 83,572 ha in 2022 - 7.4% less than the previous year, representing 1.7% of the country's UAA.

Vineyards - axenic culture - in 2022 they occupied 47,551 ha, which was 5.4% less than in 2021. The share of vineyards in the country's UAA was 0.9%.

Non-cultivated land includes both abandoned permanent crops and arable land, which have not been used for agricultural production for more than five years, but their operational recovery is possible with minimal resources. In 2022, non-cultivated land increased by 12.9% compared to the previous year, occupying 204,026 ha or 1.8% of the country's area.

1.2. Use of agricultural parcels

1.2.1. Land Parcel Identification System

The Land Parcel Identification System (LPIS) is a main part of the Integrated Administration and Control System, on the basis of which areas are declared for support and administrative control is carried out on the submitted applications for support, based on area. Therefore, the data in it must be as up-to-date and reliable as possible.

In 2022, the maintenance of LPIS data covers the following activities:

- Update of the digital orthophoto map (DOM) of the country based on aerial photography in 2022 is 38.17% (42,363.18 sq. km);

- Update of the physical blocks as per the new DOM - borders, long-term use, layer "Areas eligible for support" according to the changes that have occurred in the use of agricultural areas and their condition;
- Carrying out field inspections, using GNSS devices, to measure and survey the inspected physical blocks with a total area of 165,518.54 ha (5631 physical blocks);
- Recording the findings and measurements from these field inspections in the LPIS databases;
- Updating of a specialized layer "Environmentally friendly areas", containing landscape elements in the arable lands for the needs of green payments;
- Updating of physical blocks and the layer "Areas eligible for support" that are used to make administrative checks in order to determine area-related payments;
- Updating of a specialized layer "Permanent grassland" by issuing orders on individual applications;
- Performing quality control of the LPIS data and preparation of the annual report on the state of the LPIS to the European Commission.

The activities on updating and maintaining the LPIS data continue in 2023, with the following being planned for the year in particular:

- Aerial photography of part of the country's area (34,610 sq. km) and delivery of satellite imagery for 22,000 sq. km;
- Creating and updating a specialized layer for landscape elements under GAEC 8.

1.3. Registration of farmers

Pursuant to Ordinance No. 3 of 1999, the Register of Farmers serves to collect information about farmers and their activities in order to support agriculture and rural development.

The activity on keeping of a register of farmers covers registration of new farmers, re-registration and updating of the data for already registered ones, as well as deregistration of farmers upon termination of their activity.

In the 2021/2022 business year, the total number of registered farmers was 72,371, and by June 2023 - 69,669, with the deadline for registration of new farmers in the 2022/2023 business year being 30.09.2023.

Table II.2. Farmers registered under Ordinance No. 3/1999

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023*
Total number of registered farmers	96,476	93,023	88,162	80,905	76,965	72,371	69,669

Source: MAF, LPIS

* Data as of June 2023

1.4. Participation of the State Land Fund in land relations in Bulgaria

1.4.1. Provision of State Land Fund own terrains for rent or lease

Agricultural lands from the State Land Fund (SLF) are provided for lease and rent following a tender procedure in accordance with the provisions of the Agricultural Land Ownership and Use Act (ALOUA) and the Rules for implementation of the Implementing Regulations for the Agricultural Land Ownership and Use Act (IRALOUA). As of 2022, the total amount of agricultural properties provided for rent or lease by the SLF to individuals and legal entities amounted to 107,094 ha.

In 2022, based on the provisions of Art. 24A (1) of the ALOUA and Art. 47B (1) of the IRALOUA, tenders were held for renting and leasing of available agricultural lands from the SLF in the country for the 2022/2023 business year. Of the announced 43,597 ha of available agricultural land, 24,850 ha were

contracted, which was 5,815 ha more than the previous year. A total of 1,154 lease/rental agreements were concluded

1.4.2. Distribution of pastures, grasslands and meadows, part of a state and municipal land fund pursuant to art. 37 and the ALOUA

The pastures, grasslands and meadows part of the state and municipal land fund are leased or rented to owners or users of livestock facilities with grazing farm animals registered in the Integrated Information System of the BFSA, according to the number and type of registered animals, at prices determined by a market mechanism.

The areas determined for the 2022/2023 economic year from the municipal land fund (MLF) are 123,572 ha for general use and 372,721 ha for individual use. The submitted applications for allocation are 3,945 for 152,817 ha, with 37,733 ha allocated for general use, and 114,887 ha for individual use of pastures, meadows and meadows. The announced by order of the Minister of Agriculture and Food pastures, grasslands and meadows of the State Land Fund (SLF) amount to 23,860 ha. 239 applications for 15,772 ha were submitted, 5,475 ha were allocated. The concluded contracts for use, after distribution of MLF, are 3,022 for 77,693 ha, for SLF - 96 for 2,670 ha. The conducted tender procedures and concluded one-year lease contracts for lease of properties from MLF are 760 for 13,714 ha, for SLF - 197 for 6,276 ha. The trend is for increased interest on the part of livestock farmers in the use of MLF and SLF properties with long-term use - pastures, grasslands and meadows, due to a shortage of this land resource.

1.4.3. Establishment of limited rights in rem in SLF lands

In 2022, 88 requests from mayors of municipalities, legal entities and individuals were considered in relation to investment intentions for construction or expansion of site and/or linear sites affecting lands owned by the SLF, were considered. Pursuant to Art. 24c of the ALOUA, 12 preliminary consents were prepared for assigning the elaboration of a detailed development plan for the design of sites and routes in connection with the construction of water supply and sewage networks, routes of power lines and elements of the technical infrastructure.

12 contracts for establishment of limited rights in rem in lands from the state land fund were concluded on the grounds of art. 24 (1) of the ALOUA, Art. 47 (20, 21, 24) of the IRALOUA.

1.5. Activities on the transfer of registered legal grounds for the use of agricultural land

In relation to ensuring the implementation of the Direct Payments 2022 campaign, digital and graphic data from the restored property map and cadastral maps and registers of legal grounds for use were periodically collected, processed, verified and loaded into the Integrated Administration and Control System of State Fund Agriculture - Paying Agency. Pursuant to the provisions of the Farmers Support Act, 58,190 applications have been submitted by applicants under area payment schemes and measures for 3,876,192 ha.

During the campaign, a total of 12,576,583 legal grounds for 4,636 lands passed through a pre-specified set of checks, processing and controls. Of these, 7,504,811 are within actual boundaries and 5,071,772 are in land consolidation areas under voluntary agreements and/or allocations.

For the Direct Payments 2022 campaign, 588 farmers were subjected to additional checks on the presence or absence of legal grounds for the use of agricultural land, as a result of which adjustment data was submitted to SFA-PA.

1.6. Agricultural Land Protection Activities

In 2022, the Agricultural Land Commission considered a total of 1,114 proposals for changing the designation of agricultural land, issuing decisions for a total area of 14,020 ha.

The commissions of the Regional Directorates of Agriculture considered a total of 1,527 proposals for changing the designation of agricultural land, and decisions have entered into force for an area of 5,091 ha. Compared to the previous year, the areas with changed designation of agricultural land for non-agricultural needs have increased.

The procedure for changing the purpose of agricultural land for non-agricultural needs in accordance with the Agricultural Land Protection Act is two-stage and it includes: first stage - approval of a design site; second stage - changing the purpose of the agricultural land. A mandatory document for the first stage is an effective decision or opinion issued pursuant to chapter six of the Environmental Protection Act and under Art. 31 of the Biodiversity Act of the respective Regional Environment and Water Inspection Agency (REWIA) - requirement of Art. 21 (1) of the Occupational Safety and Health Act and Art. 30 (1.6) of the Regulations for the implementation of the Agricultural Land Protection Act. The commissions under Art. 17 (1) of the Agricultural Land Protection Act do not approve sites and do not change the purpose of agricultural land if there is an opinion issued by REWIA/MoEW, in which it is recorded that the construction of the site will have an adverse effect on species and habitats.

Within 2022, no new areas were determined for reclamation and no reclaimed land was accepted to be added to lands for agricultural use.

2. Economic and Production results in 2022 and forecast data for 2023

2.1. Economic Accounts for Agriculture for 2022

Table II.3. Main economic indicators for agriculture for the period 2020 - 2022, BGN million

	Indicators	2020	Change 2021/2020 %	2021	Change 2022/2021 %	2022
1	Value of crop and livestock production (at producer prices*), including:	7,131.9	41.2%	10,072.3	20.3%	12,113.7
1.1	Crop production	5,212.4	56.0%	8,133.8	20.4%	9,796.1
1.2	Livestock production	1,919.5	1.0%	1,938.5	19.6%	2,317.6
2	Agricultural services	462.0	18.2%	546.3	9.0%	595.3
3	Non-agricultural inseparable secondary activities	204.1	-0.9%	202.3	35.0%	273.2
4	Value of gross production from the Agriculture sector (at producer prices*) (line 4 = line 1.1 + line 1.2 + line 2 + line 3)	7,798.0	38.8%	10,820.9	20.0%	12,982.2
5	Value of final production from the Agriculture sector (at basic prices**)	7,866.1	37.6%	10,821.4	19.2%	12,901.9
6	Intermediate consumption (excluding internal turnover)	4,446.6	26.2%	5,612.8	24.5%	6,988.7
7	Gross value added at basic prices	3,419.5	52.3%	5,208.6	13.5%	5,913.2

Source: NSI

* Producer prices - prices, excl. subsidies on products

** Basic prices - prices, incl. subsidies on products

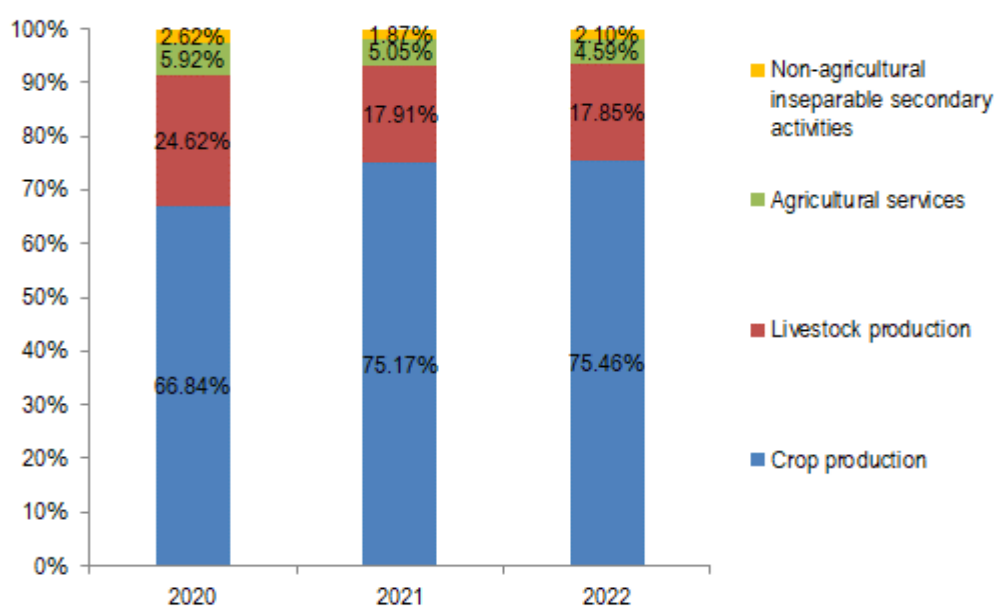
2.1.1. Value of gross production of the Agriculture sector

The value of the gross production of the Agriculture sector for 2022 at current producer prices (according to final data) amounted to BGN 12,982.2 million, showing a sharp growth of 20.0% compared to the previous year (Annex 2). It is formed by the value of:

- Crop production - BGN 9,796.1 million (with a share of 75.4%);
- Livestock production - BGN 2,317.6 million (with a share of 17.9%);
- Agricultural services - BGN 595.3 million (with a share of 4.6%);
- Production from inseparable secondary activities - BGN 273.2 million (with a share of 2.1%).

Figure II.1. Structure of the value of gross production from the Agriculture sector for the period

2020 - 2022,%



Source: MAF calculations based on NSI data

The largest contributor to the increase in the value of gross production in the sector in 2022 was the increase of production of the Crop production sub-sector (by BGN 1,662.3 million or by 20.4% compared to the previous year). The value of production from the Livestock breeding sub-sector increased by BGN 379.1 million or 19.6% and agricultural services increased by BGN 49.0 million or 9.0%. Non-agricultural inseparable secondary activities observed a significant growth of 35.0% (by BGN 70.9 million) year-by-year.

All of the main divisions of the crop production sub-sector showed growth of the production value compared to the previous 2021 - grain production (by BGN 1,112.6 million or 24.5%), technical crops production (by BGN 406.5 million or by 15.8%), vegetable production, including potato production (by BGN 77.4 million or by 15.6%), fruit production (by BGN 22.2 million or c 6.8%).

In the Livestock sub-sector, there has been a year-on-year increase in the value of production in all major production areas:

Livestock:

- Poultry - by 26.0% (BGN 76.2 million)
- Pigs - by 22.4% (BGN 64.3 million)
- Cattle - by 16.1% (BGN 27.9 million)
- Ewes and goats - by 12.1% (BGN 16.6 million)

Livestock production:

- Eggs - by 39.9% (BGN 90.8 million)
- Milk - by 11.7% (BGN 82.8 million)

The total amount of agricultural products sold (crop and livestock products) in 2022 amounted to BGN 9,441.2 million or 72.7% of the gross production of the Agriculture sector (Annex 1). The crop production sold during the year amounted to BGN 7,520.3 million (57.9% of the gross production), and the sold livestock production - amounted to BGN 1,920.9 million (14.8% of the gross production). Outside the sector, crop and livestock production were sold for BGN 8,752.7 million (including export), and within sales between agricultural enterprises - for BGN 688.5 million.

The agricultural units used for production purposes agricultural products (seeds, planting material, feed, etc.) produced during the year in the amount of BGN 652.6 million (5.0% of gross production).

Agricultural products, mainly agricultural products processed on the farm, amounting to BGN 386.7 million (3.0% of gross production) were used for own needs on the farms.

Produced goods - fixed capital (production of perennial crops and productive animals/livestock) for own needs amounted to BGN 215.0 million (1.7% of gross production).

2.1.2. Final Production Value

According to preliminary data, the value of final production from the Agriculture sector (value of production after deducting internal turnover) at basic prices (prices including subsidies by products) for 2022 amounted to BGN 12,901.9 million and showed an increase of 19.2% (by BGN 2,080.5 million) compared to the previous year (Appendices 4 and 5).

The structure of the final production in agriculture for 2022 preserved the formed ratios between the branches of the sector, outlined in terms of the gross production value. And in the final production the relative share of the crop production is the largest - 75.2%. For 2022, the relative share of livestock production was 18.1%, of agricultural services - 4.6% and of the production of inseparable non-agricultural secondary activities - 2.1%.

Cereals and oilseed crops remain with the largest share in the final production value in the sector. The two groups of crops together (respectively cereals - amounting to BGN 5,485.4 million and oilseed crops - BGN 2,754.2 million) account for 63.9% of the value of production in the Agriculture sector. Out of these, the following had the greatest contribution to the formation of the final production in the sector in 2022:

- Soft wheat - a share of 28.0% with BGN 3,607.4 million final production;

Despite the decrease in physical volume (by 13.4%), the value of production grew by 31.6% compared to the previous year, mainly driven by price factors (growth in production prices of 52.0%).

- Sunflower - a share of 18.8% with BGN 2,422.9 million;

In terms of value, the division showed a growth of 22.7%, influenced by the growth of the physical volume (by 6.3%) and the increase in prices (by 15.4%) compared to the previous year.

- Corn for grain - a share of 10.9% with BGN 1,405.9 million;

In the case of corn for grain, there is also an increase in final production year-on-year - by 3.5%. This growth is driven by a significant increase in prices in 2022 – by 40.5%, while there is a significant increase in physical volume (by 26.3%).

In 2022, the Fruit and Vegetable sector (including potato production and vineyards) generated production amounting to BGN 996.6 million, 11.2% more than the previous year. The sector forms a share of 7.7% in the final production.

The final production of vegetable production (including potatoes) amounted to BGN 610.2 million (share of 4.7% in the total value), marking an increase of 14.1% compared to the previous year. The final production from the Fruit sub-sector, amounting to BGN 386.4 million, increased by 7.0% year-on-year in terms of value and accounted for a 3.0% of the sector's total value. In both sub-sectors, fruit and vegetables, there was a decrease in physical volume of production by 4.8% and 9.0% respectively.

In 2022, the final production of the Livestock sub-sector reported a growth of 18.9% compared to the previous year, reaching BGN 2,333.6 million. There is a slight decrease in physical volume of livestock production - by 3.4%, which is offset by an increase in prices (by 23.1%).

A growth in physical volume of production in the main areas of the sub-sector was recorded only in the poultry and eggs production. Egg production also saw the most significant increase in prices – by 42.6%.

The divisions of the livestock sub-sector with the largest contribution to the total value of final production from the Agriculture sector in 2022 were:

- Milk production - a share of 6.3% with BGN 812.9 million final production;

In the production of milk on an annual basis, an increase of 11.4% in terms of value was observed, primarily as a result of the price growth (by 17.8%), outpacing the rate of decline in physical volume of production (5.4%)

- Poultry - a share of 2.9% with BGN 369.7 million;

In poultry farming, there was a slight increase compared to the previous year in physical volume (by 2.1%) and a more significant growth in prices (by 23.4%). As a result, the production increased by 26.0% in terms of value.

- Pig breeding - a share of 2.7% with BGN 351.5 million;

The pig farming production value increased by 22.4% year-on-year under the influence of higher prices, while its physical volume decreased by 2.9%.

- Egg production - a share of 2.1% with BGN 271.5 million;

The registered significant increase of 49.3% in final production compared to 2021 is a consequence of the increase of both the physical volume and the production prices.

- Cattle breeding - share of 1.8% with BGN 227.5 million.

For 2022, the sub-sector registered a decrease of physical volume of 5.0% and an increase in prices by 20.5%. As a result, there was an increase in terms of value of 14.5%.

- Sheep and goat farming - share of 1.6% with BGN 202.3 million.

Compared to other divisions of livestock production, this production sees the most significant shrinking of physical volume - by 14%. This is offset by a growth in prices and overall the division reports growth in terms of value of 8.4%.

2.1.3. Intermediate consumption

The intermediate consumption used to generate the final production in the sector in 2022 amounted to BGN 6,988.7 million, showing an increase by 24.5% on annual basis (Appendices 3 and 4).

The largest share in its structure is occupied by the expenses for feed - 21.2% (BGN 1,479.3 million) and for fertilizer and soil improvers - 20.2% (BGN 1,412.7 million), followed by the expenses for fuels and oils - 18.7% (BGN 1,305.7 million), agricultural services - 8.5% (BGN 595.3 million), expenses for plant protection products and pesticides - 7.3% (BGN 511.8 million).

Compared to the previous year, there was growth in all elements of the intermediate consumption, with the exception of veterinary costs. The biggest increase was in the costs of fertilizers and soil improvers - by 90.5% (BGN 671.1 million), for plant protection products and pesticides - by 39.5% (BGN 144.9 million) and for seeds and propagating material - by 32.5% (BGN 79.9 million). Veterinary expenses decreased by 11.6% (by BGN 29.1 million).

In 2022, intermediate consumption represented 54.2% of the production value, or 100 final production units were created by the Agriculture sector with the use of 54.2 intermediate consumption units.

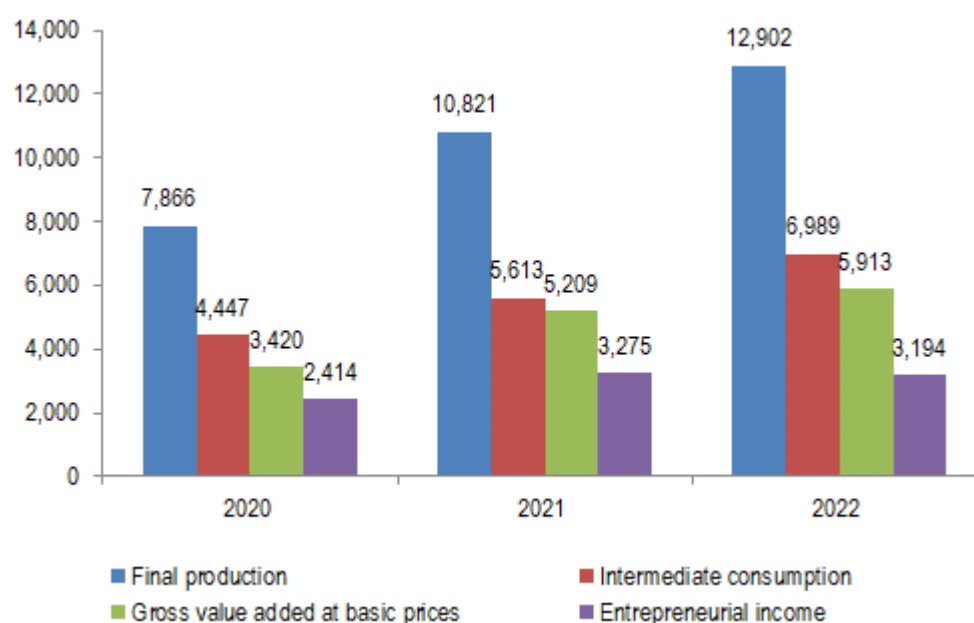
2.1.4. Gross Value Added

The gross value added created in the agriculture in 2022 amounted to BGN 5,913.2 million (at basic prices), showing growth of 13.5% (by BGN 704.6 million) year-by-year (Annexes 4 and 5).

2.1.5. Entrepreneurial income

For 2022, the entrepreneurial income in the sector amounted to BGN 3,194.2 million - 2.5% below the level of the previous year (Annex 4).

Figure II.2. Basic economic indicators for the Agriculture sector for the period 2020 - 2022, BGN million



Source: NSI

2.2. Plant Growing Production Results

The agrometeorological conditions in 2022 were determined by frequent and abrupt fluctuations in temperatures, as well as the amount of rainfall in the different months and seasons.

The winter in 2022 was warmer and drier. February was an exception - the western and northeastern farming regions of the country received amounts reaching two monthly norms.

Early spring was dry with temperatures close to the norm, and towards the end of the season the drought deepened and the temperatures at the end of May had summer values.

In many agriculture areas summer started with intense rainfall, which was also registered in August. Temperatures also rose to 38-39°C, causing increased water consumption from the soil and gradual formation of a water deficit, particularly in the second half of August and the early September.

In the autumn of 2022, the agrometeorological conditions were a result of the warmer and drier weather. Rainfall had a distinctly spotty character and its amounts by month were below or around the norm. Under these conditions, winter rapeseed sown on time could not germinate, and where they did germinate the plants died as a result of the prolonged autumn drought in September and October. The autumn drought caused a delay in soil preparation and sowing of winter wheat and barley. In places where it did take place within the agrotechnical deadlines, the crops grew unevenly and had stunted growth.

Farmers increasingly need to take into account the agrometeorological conditions throughout the year, which are the most important factor in determining the soil condition and crop development.

The reported crop damage in 2022 was a result of the adverse weather events - storm/torrential rain with hurricane force winds, flooding, hail and drought.

2.2.1. Grain production

In general, in 2022 there was a decrease in the production of the main cereals in the country compared to the previous year (except for rice and oats), mainly due to lower average yields per decare.

Table II.4. Grain production in 2021 and 2022 harvest years

Crop	Harvested areas (ha)			Average yield (tons/ha)			Production (tons)		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
Wheat	1,206,187	1,206,580	0.03%	5.90	5.16	-12.5%	7,119,474	6,230,431	-12.5%
Rye	7,633	8,326	9.1%	2.17	1.96	-9.5%	16,567	16,345	-1.3%
Triticale	15,939	14,136	-11.3%	3.28	2.97	-9.3%	52,206	41,974	-19.6%
Barley	126,310	122,411	-3.1%	5.41	4.93	-8.9%	683,406	603,546	-11.7%
Oat	9,937	11,442	15.1%	2.37	2.18	-8.2%	23,579	24,931	5.7%
Corn for grain	573,023	520,461	-9.2%	5.89	4.80	-18.6%	3,376,278	2,496,318	-26.1%
Rice	12,053	10,577	-12.2%	4.86	6.15	26.7%	58,526	65,063	11.2%

Source: MAF, Agrostistics Department

Wheat

Wheat production in 2022 amounted to 6,230.4 thousand tons - 12.5% less than the record high level in 2021, due to unfavorable climatic conditions in the process of crop development, which led to a decrease in average yield by 12.5%. The areas sown with wheat in 2022 are 1,209,085 ha, up 0.1% year-on-year. The relative share of the areas with wheat to the total arable land is 35%.

The Northwest region has the largest share of wheat areas - 23.2%, followed by the Northeast with 21.6% and the Southeast with 20.9%.

According to data from BSMAEC survey of the Agrostistics Department, in 2022 wheat-on-wheat is grown on 5% of the area, compared to 5.8% in the previous year. Good crop rotation has been carried out on about 94.1% of the wheat areas in the 2022 harvest. After trench crops, 76.4% of the area was planted with wheat, compared to 78.3% in 2021. The wheat rotation in 2022 included 1.4% fallow lands.

Rye and triticale

The grain produced from the rye harvest in 2022 was 1.3% less compared with the previous year, with the decrease in the average yield (by 9.5%) being largely offset by an increase of harvested areas.

The harvested areas with triticale in 2022 decreased by 11.3% compared to 2021, and the average yield - by 9.3%, which led to a decrease in production by 19.6%.

The most harvested areas with rye are in the Southwest region - 2,313 ha, and with triticale - in the South-central region - 6,302 ha.

Barley

Barley production in 2022 amounted to 603.5 thousand tons. This represents a 11.7% decrease compared to the previous year, in result of a decrease of harvested areas (by 3.1%) and a decrease in average yield (by 8.9%).

The largest area of barley in 2022 was in the Southeast region (27% of the total harvested barley area in the country), followed by the Northeast region (25.3%).

In view of crop sequence, a good crop rotation was performed on about 75.8% of the areas with barley. The share of sunflower is again the highest – 39.5%. The fallows included in the barley crop rotation in 2022 are 2.7%. After trench crops, 56.4% of the area was sown with barley.

Oat

With 15.1% more harvested area, oat production grew by 5.7% compared to 2021. Most areas with oat were harvested in the Southwest region (33% of the total area).

Corn for grain

In 2022, grain maize production decreased by 26.1% compared to the previous year, to 2,496.3 thousand tons. This was due to a combination of lower average yield (by 18.6%) and shrinking of harvested areas (by 9.2%).

The Northwestern region has the largest share in the total harvested corn fields during the year (33.9%), followed by the North-central region (31.2%) and the Northeastern region (28.3%).

For yet another year corn has the largest share of wheat predecessor - 55.6%. The share of barley included in the corn crop rotation is 4.5%.

Rice

In 2022, the country produced 65.1 thousand tons of rice husk - 11% more compared to the previous year. There was a decrease in harvested areas, but higher average yields.

2.2.2. Oilseed crops

The most widespread oilseed crops grown in the country are sunflower and winter oilseed rape.

Table II.5. Oilseed production in 2021 and 2022 harvest years

Crop	Harvested areas (ha)			Average yield (tons/ha)			Production (tons)		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
Sunflower	836,469	916,959	9.6%	2.38	2.31	-2.9%	1,989,068	2,117,319	6.4%
Rapeseed	130,809	129,334	-1.1%	2.85	2.29	-19.5%	372,116	296,169	-20.4%

Source: MAF, Agrostistics Department

Sunflower

Sunflower production in 2022 amounted to 2,117.3 thousand tons. The amount is 6.4% above the level of the previous year, taking into account an increase in the harvested areas by 9.6% and lower average yield by 2.9%. The areas sown with sunflower in 2022 were 918,583 ha - 9.4% more compared to the previous year.

The areas with sunflower in the Northwestern region represent 24.7% of the total harvested areas in the country in 2022. The Northeastern region follows with 23.5%.

The share of sunflower located on wheat precursor is the largest - 65.5%. Barley included in the sunflower crop rotation in 2022 was 7%.

Rapeseed

In 2022, the country produced 296.2 thousand tons of rapeseed, 20.4% less on an annual basis. The areas sown with rapeseed in 2022 were 129,961 ha, of which 129,334 ha were harvested - a decrease of 1.1% compared to the previous year. The average yield sees a decrease of 19.5%.

2.2.3. Grain market monitoring

In 2022 there was an increase in the total grain storage capacity in Bulgaria.

During the year the Register of grain storage sites in the country was updated, as 82 new grain storage sites were entered, 213 circumstances of the registered sites were changed and 22 were deleted. As of 31.12.2022, the active grain storage sites were 4,213 in total, with a capacity of 17,802,785 tons.

2.2.4. Quality grading of the 2022 harvest

In order to carry out a representative characterization of barley, wheat, corn, sunflower and rice husk from the 2022 harvest, 3,126 samples of 4,718,715 tons of the harvested grain were taken and analyzed.

Wheat quality grading in the 2022 harvest

The final results of the laboratory analyses of average wheat samples conducted by the BFSA show that 66.3% of the wheat produced in the 2022 harvest is of high baking quality and is classified as First, Second and Second B group, respectively. There is a significant increase in the quantity of high quality wheat compared to the previous year, during which its share was 49.4%.

The allocation of grain in groups is as follows:

- First group - 7.0%, compared to 3.4% in 2021;
- Second group - 15.4%, compared to 7.3% in 2021;
- Second B group - 43.9%, compared to 38.7% in 2021;
- Third group - 33.6%, compared to 50.6% in 2021.

The average values of the main indicators that determine the quality characteristics of the grain from the 2022 harvest for the country are:

- moisture content: $10.9\% \pm 0.5\%$, compared to $11.1\% \pm 0.6\%$ in 2021;
- hectolitre mass: $75.8 \text{ kg}/100 \text{ dm}^3 \pm 2.7 \text{ kg}/100 \text{ dm}^3$, compared to $76.6 \text{ kg}/100 \text{ dm}^3 \pm 2.4 \text{ kg}/100 \text{ dm}^3$ for 2021;
- wet gluten yield: $25.9\% \pm 3.3\%$, compared to $23.1\% \pm 3.2\%$ in 2021;
- gluten release: $7.4 \text{ mm} \pm 1.4 \text{ mm}$, compared to $7.1 \text{ mm} \pm 1.5 \text{ mm}$ for 2021;
- baking strength: $58.1 \text{ cond. units} \pm 5.8 \text{ cond. units}$, compared to $54.8 \text{ cond. units} \pm 5.2 \text{ cond. units}$ for 2021;
- protein content: $12.7 \text{ v.c.} \pm 1.2\% \text{ v.c.}$, compared to $11.7\% \text{ v.c.} \pm 1.2\% \text{ v.c.}$ for 2021;
- falling number: $337.0 \text{ sec.} \pm 49.7 \text{ sec.}$, compared to $353.0 \text{ sec.} \pm 40.7 \text{ sec.}$ for 2021.

Barley quality grading in the 2022 harvest

The final results of the analysis of the 2022 barley batches lead to the conclusion that the quality of the barley meets the requirements of the malting and feed barley standards.

The average values of the main quality indicators of the barley harvest in 2022 were as follows:

- protein content: $11.6\% \pm 1.3\%$, compared to $11.2\% \pm 0.7\%$ in 2021;
- hectolitre mass: $60.1 \text{ kg}/100 \text{ dm}^3 \pm 3.7/100 \text{ dm}^3$, compared to $62.4 \text{ kg}/100 \text{ dm}^3 \pm 2.4 \text{ kg}/100 \text{ dm}^3$ for 2021;
- equality of batches: $79.5\% \pm 13.2\%$, compared to $85.8\% \pm 7.8\%$ in 2021;
- humidity: $11.2\% \pm 0.9\%$, compared to $11.6\% \pm 0.8\%$ in 2021;
- crop impurities: $1.3\% \pm 1.3\%$, compared to $1.7\% \pm 1.8\%$ in 2021;
- other impurities: $0.9\% \pm 0.6\%$, compared to $1.1\% \pm 0.9\%$ in 2021.

Sunflower quality grading in the 2022 harvest

The data from the analyzed average samples show that the sunflower harvested in the 2022 harvest has good values for the main quality indicators of moisture, fat content and impurities, which are laid down in the standard. According to the final results, 80.4% of the analyzed samples meet the requirements of the sunflower seed quality standard, compared to 70.8% in the previous year.

The sunflower seed harvested in Bulgaria in 2022 has an average hectolitre mass of $40.3 \text{ kg}/100 \text{ dm}^3$, i.e. it is well fed, with high level values of the oil content" indicator - 45.6%.

The average values of the main quality indicators of sunflower harvest in 2022 are:

- moisture content: $5.7\% \pm 0.5\%$, compared to $6.0\% \pm 0.4\%$ in 2021;
- fat content: $45.6\% \pm 1.9\%$, compared to $44.5\% \pm 2.0\%$ in 2021;
- crop impurities: $1.5\% \pm 0.7\%$, compared to $1.6\% \pm 0.8\%$ in 2021;
- other impurities: $2.7\% \pm 1.5\%$, compared to $3.2\% \pm 1.7\%$ in 2021.

Corn quality grading in the 2022 harvest

The final results show that 90.4% of the analyzed batch meets the requirements of the corn grain quality standard in terms of moisture and impurities indicators, compared to 99.6% during the previous year.

A total of 76.4% of the analyzed amount of corn grain meet the criteria for starch content and the minimum limits laid down in the standard for moisture content and impurity content, compared to 74.6% in 2021.

The average values of the main quality indicators of the corn harvest in 2021 are:

- moisture: $12.3\% \pm 0.6\%$, compared to $13.1\% \pm 0.9\%$ in 2021;
- crop impurities: $3.8\% \pm 2.0\%$, compared to $4.7\% \pm 1.7\%$ in 2021;
- other impurities: $0.6\% \pm 0.5\%$, compared to $0.9\% \pm 0.4\%$ in 2021;
- starch content: $72.7\% \pm 0.8\%$, compared to $72.8\% \pm 0.7\%$ in 2021;
- hectolitre mass: $70.5 \text{ kg}/100 \text{ dm}^3 \pm 2.3 \text{ kg}/100 \text{ dm}^3$, compared to $71.1 \text{ kg}/100 \text{ dm}^3 \pm 1.8 \text{ kg}/100 \text{ dm}^3$ in 2021.

Rice husk quality grading in the 2022 harvest

In 2022, 100.0% of the analyzed batch meets the requirements of the rice husk quality standard in terms of the moisture and impurities indicators, compared to 100.0% in 2021.

The average values of the main quality indicators of the rice husk harvest in 2020 are:

- moisture: $12.5\% \pm 0.6\%$, compared to $12.9\% \pm 0.8\%$ in 2021;
- crop impurities: $1.3\% \pm 0.2\%$, compared to $1.0\% \pm 0.5\%$ in 2021;
- other impurities: $1.2\% \pm 1.0\%$, compared to $1.0\% \pm 0.9\%$ in 2021;
- red grains: $0.6\% \pm 0.4\%$, compared to $0.1\% \pm 0.1\%$ in 2021;
- yellowed grains - none, same as in 2021, 2020, 2019, and 2018;
- bare grains: $-2.1\% \pm 0.8\%$, compared to $1.3\% \pm 0.6\%$ in 2021;
- hectolitre mass: $59.5 \text{ kg}/100 \text{ dm}^3 \pm 1.7 \text{ kg}/100 \text{ dm}^3$, compared to $57.7 \text{ kg}/100 \text{ dm}^3 \pm 2.0 \text{ kg}/100 \text{ dm}^3$ in 2021

Industrial crops Tobacco

The tobacco production in 2022 amounted to 3,823 tons, which is 36.8% less compared to 2021. The drop in production is due to a decrease of harvested areas by 36.1% - from 3,782 ha for 2021 to 2,415 ha for 2022.

2.2.5. Cotton

The amount of fiber cotton harvested in 2022 was 1,086 tons, down 25.7% compared to the previous year. The harvested areas amounted to 1.299 ha - 44.8% less than in 2021, while the average yield went up 34.6%, to 0.84 tons/ha.

Fiber hemp

The harvested areas sown with fiber hemp in the country in 2022 were 47 ha. 79 tons of fiber were produced, with an average yield of 1.68 tons/ha.

2.2.6. Medicinal and aromatic plants

In 2022, the areas occupied by basic medicinal, aromatic and essential oil plants, such as Damask rose (rose flower), lavender (fresh flower), balm (dry mass), coriander (seed), fennel (seed), milk thistle (seed), etc., amounted to 55,451 ha, which is 4.4% less than in 2021. Harvested areas with these crops went down 5.8% year-on-year to 50,060 ha.

Areas planted with oil-bearing rose amounted to 5,068 ha, 3.8% above the level in 2021. Due to a decrease in average yield by 14.2% the quantity of rose flower produced went down 10.8%.

With 16.7% less harvested areas and 13.7% lower average yield per acre, the quantity of lavender flowers from the 2022 harvest went down 28.1% compared to the previous year, to 58,585 tons.

Table II.6. Oilseed production in 2021 and 2022 harvest years

Crop	Harvested areas (ha)			Average yield (tons/ha)			Production (tons)		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
Lavender	18,242	15,194	-16.7%	4.47	3.86	-13.7%	81,523	58,585	-28.1%
Oil-bearing rose	4,161	4,293	3.2%	2.89	2.48	-14.2%	11,954	10,657	-10.8%
Lemon balm	665	579	-12.9%	3.71	2.73	-26.5%	2,468	1,579	-36.0%
Coriander	23,976	17,524	-26.9%	1.33	1.27	-4.9%	31,924	22,181	-30.5%
Fennel	1,537	1,209	-21.3%	0.35	0.98	184.4%	532	1,190	123.7%

Source: MAF, Agrostistics Department

In 2022, 22,181 tons of coriander were produced in the country - 30.5% less on an annual basis. There was a decrease in both the harvested areas (by 26.9%) and the average yield (by 4.9%).

The harvested production of lemon balm was 36% below the level in 2021, with harvested areas going down by 12.9% and average yield by 26.5%.

At the same time, fennel production more than doubled, reaching 1,190 tons, due to an almost three times higher average yield.

2.2.7. Fruit

The total areas with fruit, shell and berry plantations in agricultural holdings in 2022 were 63,327 ha, which is 3% below the level of the previous year. Of these, 45,525 ha were harvested - 1% more on an annual basis. Due to climate and other reasons about 10% of the productive areas with orchard trees were not harvested. 22% of the areas planted with orchard trees were irrigated.

Cherries had the largest share of harvested areas in 2022 - 23.7%, followed by plums and cherry plums with 20.6% and walnuts with 18.3%. Compared to 2021, the harvested areas with plums and cherry plums, walnuts, pears, almonds and cultivated rose hips went up by between 1.3% (plums) and 18.3% (rose hips), while the remaining monitored crops registered a decrease in the range of 0.5% (apricots) - 6.1% (sour cherries).

The areas of young orchards that have not started fruiting were 9,191 ha. The largest relative share of them was occupied by walnuts - 38.7%, followed by plums and cherry plums - 17.4%.

Of the newly planted crops in the 2021/2022 business year, 52% were stone species, 20% - nut species, 14 - pome species and 14 - berry species. Of the stone species, the largest share was occupied by plums and cherry plums (43%), followed by cherries (27%), while nut species were led by walnuts (48%) and hazelnuts (37%).

In 2022, the total fruit production in agricultural holdings amounted to 222,177 tons - 1.7% below the level of the previous year, mostly due to a 13% decrease in production of plums and cherry plums. Also lower

in comparison to 2021 were the harvested quantities of sour cherries - by 3.5%, apricots - by 8% and walnuts - by 14.7%. On the other hand, production of pears, raspberries, cherries, apples, hazelnuts, peaches and nectarines, almonds and cultivated rose hips went up by between 2% (pears) and 19.2% (rose hips).

The largest relative share of the total fruit production in 2022 was formed by plums and cherry plums - 25.5%, followed by cherries - 24.3%, apples - 20.9% and peaches and nectarines - 10.9%.

The leading place in fruit production was occupied by the Southeastern region with 27.8% and the South-central region with 24.8%. In the Southeastern region, the focus is on the production of peaches (70%) and cherries (42%), and in the South-central region - on apples (42.4%) and plums and cherry plums (28%). North-central region, 82.7% of apricots and 28.1% of sour cherries in the country were produced. In the production of raspberries, the Northeast region has the highest share - 35%.

Table II.7. Fruit production in the 2021 and 2022 harvest years

Orchard crops	Harvested areas (ha)			Average yield (kg/ha)			Production (tons)		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
Apples	3,778	3,720	-1.5%	11,654	12,474	7.0%	44,030	46,403	5.4%
Pears	545	575	5.5%	5,574	5,391	-3.3%	3,038	3,100	2.0%
Peaches and nectarines	2,673	2,533	-5.2%	8,117	9,547	17.6%	21,698	24,182	11.4%
Apricots	3,064	3,049	-0.5%	6,754	6,245	-7.5%	20,701	19,040	-8.0%
Plums and cherry plums	9,275	9,398	1.3%	7,021	6,028	-14.1%	65,123	56,650	-13.0%
Cherries	10,754	10,799	0.4%	4,893	4,993	2.0%	52,615	53,920	2.5%
Sour cherries	1,183	1,111	-6.1%	3,731	3,834	2.8%	4,414	4,260	-3.5%
Walnuts	8,066	8,327	3.2%	587	485	-17.4%	4,731	4,035	-14.7%
Almonds	1,284	1,506	17.3%	645	637	-1.2%	828	960	15.9%
Hazelnuts	1,561	1,529	-2.0%	443	496	12.0%	692	759	9.7%
Raspberries	1,632	1,566	-4.0%	3,409	3,634	6.6%	5,563	5,691	2.3%
Cultivated rose hips	780	923	18.3%	1,947	1,961	0.7%	1,519	1,810	19.2%
Other orchard tree varieties	491	489	-0.4%	-	-	-	1,166	1,367	17.2%
Total:	45,086	45,525	1.0%	-	-	-	226,118	222,177	-1.7%

Source: MAF, Agrostistics Department

Compared to the previous year 2021, the average yields of rose hips, cherries, sour cherries, apples, hazelnuts and peaches and nectarines went up by between 0.7% (rose hips) and 17.6% (peaches and nectarines). At the same time, for the other main fruits there was a decrease in the average yields from 1.2% for almonds to 17.4% for walnuts.

97% of the fruits produced in 2022 were sold through. The largest share was the production intended for direct sales and in the commercial network - 52%, while 41% was directed for processing.

2.2.8. Vegetables

In 2022, the main areas used for vegetable production on agricultural holdings were 30,942 ha, which was 16.5% less year-on-year. The open areas planted with vegetables decreased by 16.9% to 29,869 ha, of which 29,354 ha were harvested. Greenhouse areas also saw a decrease, but less so - by 3.1% to 1,073 ha.

Table II.8. Main areas used for vegetable production - 2021 and 2022 harvests, ha

Main areas	2021 harvest	2022 harvest	Change 2022/2021
Open areas with fresh vegetables, strawberries, potatoes, and legumes	35,965	29,869	-16.9%
Total greenhouse area	1,107	1,073	-3.1%
Total area	37,072	30,942	-16.5%

Source: MAF, Agrostistics Department

The harvested open areas with vegetables during the year were 16.4% less than in 2021. By groups of vegetables, a decrease was registered in the harvested areas with tuber and onion vegetables (by 2.1%), strawberries (by 10.6%), potatoes (by 16%), fresh legumes (by 18.3%), fruit vegetables (by 24.9%) and leafy or stem vegetables (by 26.1%). The exception is the vegetables of the Brassica genus, which have seen a 30% increase in harvested open areas.

With the largest relative share of the total harvested areas with vegetables in 2022 are the areas with potatoes - 31.2%, followed by those with watermelons - 11.4%, tomatoes - 8.5%, pepper - 7.5%, melons - 7.1%, cabbage - 6%, etc.

By types of vegetable crop, in 2022 there was a significant year-on-year growth of harvested areas with cauliflower (more than double), sweet corn - by 52.8% and spinach - by 50.8%. The harvested areas with eggplant, cabbage and zucchini were also significantly more - within 26% - 29.3%. On the other hand, there was a significant decrease in harvested areas with gherkins (by 66%), green garlic (by 58%), garden beans - green (by 56.7%), pumpkins (by 50.8%), cucumbers (by 49.3%), watermelons (by 29.7%), melons (by 29.5%) and pepper (by 22.7%).

Table II.9. Areas, production, and average yields of vegetables - 2021 and 2022 harvests

Crops	Open harvested areas (ha)		Production (tons)							Average yield from open areas (kg/ha)	
			From open areas		Greenhouse production		TOTAL				
	2021	2022	2021	2022	2021	2022	2021	2022	Change 2022/2021	2021	2022
Fruit and vegetables, including:	16,693	12,529	290,690	248,365	107,826	108,543	398,516	356,908	-10.4%	-	-
Tomatoes	2,427	2,488	57,398	69,381	59,020	57,074	116,418	126,455	8.6%	23,650	27,886
Cucumbers	432	219	7,381	4,231	44,033	46,794	51,414	51,025	-0.8%	17,086	19,320
Gherkins	156	53	2,143	1,146	125	96	2,268	1,242	-45.2%	13,737	21,623
Eggplants	321	415	7,733	9,689	71	c	7,804	c	-	24,090	23,347
Zucchini	131	165	2,094	3,602	c	57	c	3,659	-	15,985	21,830
Pumpkins and gourds	1,623	798	14,776	9,978	c	c	c	c	-	9,104	12,504
Seed pumpkins	66	37	47	21	-	-	47	21	-55.3%	712	568
Melons	2,952	2,080	29,173	21,485	30	8	29,203	21,493	-26.4%	9,882	10,329
Watermelons	4,747	3,338	107,342	79,978	-	-	107,342	79,978	-25.5%	22,613	23,960
Pepper (incl. hot pepper)	2,866	2,215	57,052	42,332	4,524	4,461	61,576	46,793	-24.0%	19,906	19,112
Sweet corn	472	721	3,445	6,522	-	-	3,445	6,522	89.3%	7,299	9,046
Fresh legumes, including:	1,124	918	5,600	4,603	c	c	c	c	-	-	-
Garden beans - green	699	734	2,723	2,666	-	-	2,723	2,666	-2.1%	3,896	3,632
Garden beans - green	425	184	2,877	1,937	c	c	c	c	-	6,769	10,527

Crops	Open harvested areas (ha)		Production (tons)							Average yield from open areas (kg/ha)	
			From open areas		Greenhouse production		TOTAL				
	2021	2022	2021	2022	2021	2022	2021	2022	Change 2022/2021	2021	2022
Vegetables of the Brassica genus, incl.	1,475	1,918	32,705	41,319	c	39	c	41,358	-	-	
Cabbage	1,394	1,774	31,818	39,551	c	39	c	39,590	-	22,825	22,295
Cauliflower	36	78	532	1,188	-	-	532	1,188	123.3%	14,778	15,231
Broccoli	-	66	355	580	-	-	355	580	63.4%	7,889	8,788
Leafy or stem vegetables (excluding vegetables of the Brassica genus), including:	856	633	6,544	7,636	487	789	7,022	8,425	20.0%	-	-
Garlic - green	200	84	626	1,122	15	c	641	c	-	3,130	13,357
Salad greens and lettuce	135	149	2,333	3,306	301	702	2,634	4,008	52.2%	17,281	22,188
Spinach	63	95	339	518	69	c	408	c	-	5,381	5,453
Leek	122	89	1,318	997	-	-	1,318	997	-24.4%	10,803	11,202
Green onions	-	88	255	866	-	14	255	880	245%	2,406	9,841
Other leafy or stem vegetables (dill, parsley, green onion, asparagus, etc.)	230	128	1,673	827	93	59	1,766	886	-49.8%	7,274	6,461
Tuber and onion vegetables, including:	3,207	3,139	44,286	39,636	45	c	44,331	c	-	-	-
Onions - ripe	2,351	2,318	29,859	27,459	15	c	29,874	c	-	12,701	11,846
Carrots	459	359	12,056	9,540	-	4	12,056	9,544	-20.8%	26,266	26,574
Garlic - ripe	272	335	1,031	1,287	-	c	1,031	c	-	3,790	3,842
Other tuber and onion vegetables s (beetroot, seed onion, turnips, radishes, etc.)	125	127	1,340	1,350	30	106	1,370	1,456	6.3%	10,720	10,630
Other vegetables (okra, etc.)	-	310	-	781	-	-		1,456	-	-	2,519
Potatoes	10,902	9,159	195,625	172,193	14	16	195,639	172,209	-12.0%	17,944	18,800
Strawberries	837	748	6,138	4,902	142	227	6,280	5,129	-18.3%	7,333	6,553
Total vegetables	35,094	29,354	581,588	519,435	108,516	109,726	690,104	629,161	-8.8%	-	-

Source: MAF, Agrostistics Department

c - confidential data (there were less than 3 farms in the category under consideration)

The total production of vegetables from the 2022 harvest amounted to 629.2 thousand tons - 8.8% below the level of 2021. The production of open areas decreased by 10.7% on an annual basis to 519.4 thousand tons, while greenhouse production reported a slight increase by 1.1%, up to 109.7 thousand tons.

In 2022, the production of potatoes was the largest - 172.2 thousand tons (27.4% of total vegetable production), followed by tomatoes - 126.5 thousand tons (20.1%), watermelon - 80 thousand tons (12.7%),

cucumbers - 51 thousand tons (8.1%), pepper - 46.8 thousand tons (7.4%) and cabbage - 39.6 thousand tons (6.3%).

By groups of vegetables, a decrease in the harvested quantities from open areas compared to the previous year was seen for tuber and onion vegetables (by 10.5%), fruit vegetables (by 14.6%) and fresh legumes (by 17.8%), and an increase was reported for leafy or stem vegetables (by 16.7%) and vegetables of the Brassica genus (by 26.3%).

Among the more significant crops, a significant increase in the production of open areas was reported for sweet corn (by 89.3%), eggplants (by 25.3%), cabbage (by 24.3%) and tomatoes (by 20.9%), and a decrease was reported for cucumbers (by 42.7%), pumpkins (by 32.5%), melons (by 26.4%), pepper (by 25.8%), watermelons (by 25.5%), carrots (by 20.9%), strawberries (by 20.1%), potatoes (by 12%) and ripe onions (by 8%).

Table II.10. Total production of basic vegetables from the 2021 and 2022 harvests, tons

Types of vegetables	2021 harvest	2022 harvest	Change 2022/2021
Tomatoes	116,418	126,455	8.6%
Pepper (sweet and hot)	61,576	46,793	-24.0%
Cucumbers and gherkins	53,682	52,267	-2.6%
Potatoes	195,639	172,209	-12.0%
Cabbage*	31,818	39,551	24.3%
Ripe onions*	29,859	27,459	-8.0%
Strawberries	6,280	5,129	-18.3%

Source: MAF, Agrostistics Department

* Data is from open areas only

In 2022, for the main vegetable crops, there were divergent changes in the average yields per hectare compared to 2021. The average yields of carrots, potatoes, melons, watermelons, cucumbers, tomatoes, sweet corn and pumpkins were higher on an annual basis - by between 1.2% and 37.3%, while those of cabbage, eggplant, pepper, ripe onions and strawberries were lower - in the range of 2.3% - 10.6%.

The greenhouse production in the country was determined by several major vegetable crops - tomatoes, cucumbers, salads and lettuce, peppers and gherkins. Its development is determined on the basis of market demand. Part of the production is intended for export.

The total production of greenhouse vegetables in 2022 amounted to 109.7 thousand tons, which was 1.1% more compared to the previous year. This was mainly due to the increase in cucumber production of 6.3%. On the other hand, greenhouse production of pepper and tomatoes went down by 1.4% and 3.3% respectively compared to 2021, and that of gherkins by 23.2%.

Table II.11. Greenhouse production of basic vegetables from the 2021 and 2022 harvests, tons

Types of vegetables	2021 harvest	2022 harvest	Change 2022/2021
Tomatoes	59,020	57,074	-3.3%
Pepper	4,524	4,461	-1.4%
Cucumbers	44,033	46,794	6.3%
Gherkins	125	96	-23.2%
Other vegetables (excluding mushrooms)	814	1,301	59.8%
Total	108,516	109,726	1.1%

Source: MAF, Agrostistics Department

The trend for modernization of existing greenhouses with the application of new and more modern technologies for quality vegetables from greenhouse production continues.

There is a diversification of the types of crops grown in greenhouses. In addition to the main greenhouse crops, potatoes, green onions, green garlic, zucchini, melons, strawberries, raspberries and others were also produced.

2.2.9. Forecast data for the production of basic cereals and oilseeds from the 2023 harvest

The forecast data available at the end of September 2023 show an increase in the production of wheat and barley compared to the previous year, as a result of the increase of harvested areas and the average yields (due to the favorable climatic conditions for autumn crop development). At the same time, the estimated rapeseed production shows a decrease of 21.3%, as the increased productivity per decare is not sufficient to offset the decrease of areas.

At this stage, the production of the two main spring crops - corn and sunflower is expected to be 0.9% and 18.8% below the 2022 level, respectively. Both crops are expected to show a decrease in average yields due to the less favorable climatic conditions during the economic year, with this being accompanied by a reduction of areas for sunflower.

Table II.12. Forecast for the production of major cereals and oilseeds in 2023

Crop	Indicator / year	2022	2023 (forecast)	Change 2023/2022
Wheat	Areas (thousand ha)	1,207	1,215	0.7%
	Average yield (tons/ha)	5.16	5.42	5.0%
	Production (thousand tons)	6,230	6,591	5.8%
Corn for grain	Areas (thousand ha)	520	537	3.2%
	Average yield (tons/ha)	4.80	4.60	-4.1%
	Production (thousand tons)	2,496	2,475	-0.9%
Barley	Areas (thousand ha)	122	138	12.7%
	Average yield (tons/ha)	4.93	5.30	7.5%
	Production (thousand tons)	604	729	20.8%
Sunflower	Areas (thousand ha)	917	860	-6.2%
	Average yield (tons/ha)	2.31	2.00	-13.4%
	Production (thousand tons)	2,117	1,720	-18.8%
Rapeseed	Areas (thousand ha)	129	89	-31.2%
	Average yield (tons/ha)	2.29	2.60	13.5%
	Production (thousand tons)	296	233	-21.3%

Source: MAF, Agrostistics Department (forecast data for 2023).

2.3. Livestock Breeding Production Results

The state policy in the field of livestock breeding is aimed at creating conditions for sustainable development of the sector and protection of the interests of farmers.

Livestock breeding is a specific and dynamic sector which ensures the production of basic materials for the processing industry, guaranteeing the population's food security. As a priority sector, it is supported through various financial instruments with European budget funds under the two pillars of the CAP (for direct payments and market measures and for rural development), as well as with national funds.

The Covid-19 global pandemic and Russia's invasion of Ukraine in early 2022 presented agriculture with serious challenges related to an unprecedented increase in prices of main produce resources (feed, electricity, fuels) and uncertainty on agricultural markets.

To help producers in the agricultural sector to adapt to these challenges, exceptional financial support has been made available under the schemes "Liquidity support to farmers to overcome the negative economic impact of Covid-19" and "Liquidity support to farmers to overcome the negative economic impact of the Russian aggression against Ukraine" for 2022.

In 2022, the classification of carcasses of cattle, pigs and sheep (lambs) according to the EU Scales continued to be applied. The classification aims to improve market transparency and increase the

competitiveness of meat products on the European market, as well as to provide feedback to farmers on the results of their livestock production methods.

Towards the end of 2022, there was an overall decrease in the number of farms raising farm animals compared to the previous year. The biggest decrease was recorded in goat farms - by 27.2% and pigs - by 26.7%, followed by sheep farms - by 18.7%, buffaloes - by 16.7% and cattle - by 15.3%. Farms with hens and young laying hens were down 14.6% year-on-year. There is an increase only for farms with hens for meat - by 8.5%.

In 2022 the number of most types of livestock went down compared to 2021, with goats going down by 14.4%, pigs - by 13.4%, sheep - by 8.6%, buffaloes - by 6.3%, cattle - by 5.1%. The number of bee colonies went down by 1.8% year-on-year. The exception is the total number of birds, which by the end of 2022 was 9.5% above the level from a year ago.

Animals from the meat sector in 2022 reported an increase in ewes by 11.4%, while beef cows went down by 1.8%.

Table II.13. Number of animals in 2021 and 2022

Type of animals	2021	2022	Change 2022/2021
Cattle - total, including:	589,512	559,544	-5.1%
cows - total, including:	381,419	361,476	-5.2%
- milk cows	214,936	197,996	-7.9%
- beef cows	166,483	163,480	-1.8%
buffaloes - total, including:	21,686	20,317	-6.3%
female buffaloes	15,407	14,841	-3.7%
sheep - total, including:	1,199,547	1,096,399	-8.6%
ewes - total, including:	1,013,239	928,849	-8.3%
- milk sheep - ewes	860,559	758,821	-11.8%
- meat sheep - ewes	152,680	170,028	11.4%
Goats - total, including:	215,002	184,019	-14.4%
Does	179,836	156,285	-13.1%
Pigs - total, including:	694,663	601,702	-13.4%
total breeding sows over 50 kg	65,750	59,851	-9.0%
Poultry - total, thousand, including:	14,168	15,507	9.5%
hens and pre-laying hens	6,659	7,139	7.2%
chicken for meat	5,517	6,673	21.0%
waterfowl	1,909	1,632	-14.5%
other poultry	83	63	-24.1%
Bee colonies	837,955	823,250	-1.8%

Source: MAF, Agrostistics Department

Note: the data on animals of the genus LR (large ruminants), SR (small ruminants) and pigs are as of 1 November, for poultry - as of 31 December, and for bee colonies - as of 1 October.

In 2022, the average number of farms for almost all types and categories of livestock increased compared to the previous year. The largest increase in the average number of animals kept in one holding was reported for female buffaloes - by 20.1% (up to 37 animals) and mother goats - by 19.1% (up to 23.5 animals). The annual increase of the average number of buffaloes was by 12.8%, of cattle - by 12%, of cows - by 10%. The average number of ewes and sheep in total in one holding was 12.7% and 11.7% more respectively compared to a year prior. There is an insignificant increase in the average number of pigs total - by 0.4%, up to 465.1 animals. Only the average number of sows went down by 20.3% (up to 144.3 animals), due to the reported reduction in the number of sows at the end of the year, while the number of farms remains unchanged.

Table II.14. Milk production for the period 01.11.2021 - 31.10.2022 by planning regions, thousand liters

Regions	Total milk	Including:			
		Cow milk	Buffalo milk	Sheep milk	Goat milk
Northwestern	114,935	94,533	6,082	9,569	4,751
North-central	139,826	126,482	1,396	5,056	6,892
Northeastern	144,813	135,745	932	5,433	2,703
Southeastern	155,007	138,340	3,034	10,297	3,336
Southwestern	73,431	59,130	620	9,865	3,816
South-central	215,015	194,048	2,740	14,522	3,705
Total for the country	843,027	748,278	14,804	54,742	25,203
Change 2022/2021	-8.9%	- 7.8%	-7.9%	-19.5%	-14.5%

Source: MAF, Agrostatistics Department”

The total production of dairy raw material in 2022 amounted to 834,027 thousand liters - 8.9% below the level of the previous year, mainly due to the reduced number of milk animals. Compared to the previous year, there is a decrease in the yield of all types of milk, which is more significant for the milk yield of small ruminants - by 19.5% for sheep milk and by 14.5% for goat milk. The decrease in milk yield for large ruminants - cows and female buffaloes is less pronounced - by 7.8% and 7.9% respectively.

Traditionally, the largest share in the total production of raw milk belongs to the cow's milk - 88.8%. Sheep milk accounts for 6.5%, goat's for 3% and buffalo's for 1.7%.

In 2022, the South-central region remains the leader in milk production, representing 25.5% of the total volume, followed by the Southeastern region with a share of 18.4%. The lowest production was reported in the Southwestern region - 8.7%.

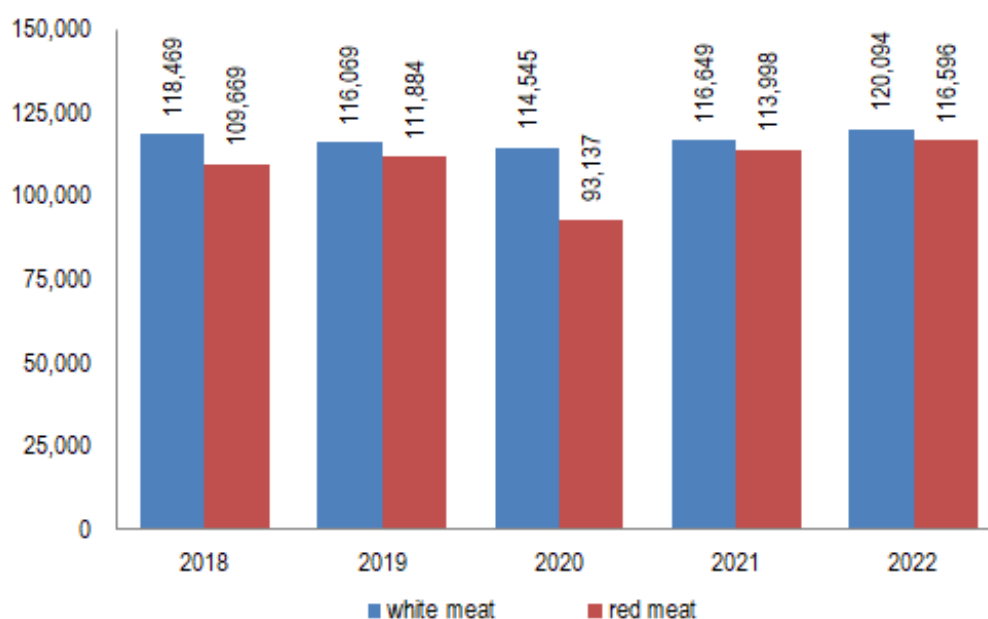
Table II.15. Animal production in 2021 - 2022

Product	2021	2022	Change 2022/2021
1. Milk - total (thousand liters), including:	924,980	843,027	-8.9%
Cow milk	811,436	748,278	-7.8%
Buffalo milk	16,069	14,804	-7.9%
Sheep milk	67,987	54,742	-19.5%
Goat milk	29,486	25,203	-14.5%
2. Meat - total carcass weight (tons), including:	230,647	236,690	2.6%
Red meat	113,998	116,596	2.3%
White meat	116,649	120,094	3.0%
3. Eggs (thousand pieces)	1,325,578	1,401,830	5.8%
4. Bee honey (tons)	11,638	11,944	2.6%

Source: MAF, Agrostatistics Department

The total meat production in the country in 2022 was 2.6% over the previous year's level, reaching 236,690 tons of carcass meat. The production of red meat amounted to 116,596 tons - 2.3% more year-on-year, with production in slaughterhouses increasing by 0.6%, and in farms - by 9%. The produced white meat amounted to a total of 120,094 tons - 3% more compared to 2021, due to an increase in industrial production (by 3%) and in the production on farms (1.3%).

Figure II.3. Meat production in the period 2018 - 2022, tons



Source: MAF, Agrostatics Department

In 2022, the honey produced in the country increased by 2.6% on an annual basis, up to 11,944 tons, with an average yield per bee colony in the amount of 17.8 kg, or 1.7% more compared to a year prior.

The production of poultry eggs increased by 5.8% compared to 2021, reaching 1,401,830 thousand.

Expected data for 2023

In 2023, the total number of livestock by individual species and categories is expected to be around or slightly above the levels of the previous year.

In the period January - July 2023, a total of 116,611 tons of meat were produced in the country's slaughterhouses - 3.1% less on an annual basis, including: 47,002 tons of red meat and 69,609 tons of white meat.

Compared to the same period in 2022, the industrial production of red meat decreased by 11.2% to 47,002 tons. This is mainly related to the shrinking production of 12.5% in pork (up to 41,544 tons), which accounts for about 88% of total red meat production.

The total production of white meat in slaughterhouses for the first seven months of 2023 was 69,609 tons, reporting an increase by 3.1% on an annual basis. It mainly includes meat from broiler chickens of the hen species - 52,354 tons, which represents a relative preservation (-0.1%) of the level from the same period in 2022. The industrial production of duck meat increased by 23%, up to 14,203 tons.

For the entirety of 2022, a slight increase in white meat yield can be expected compared to a year prior, as well as some reduction or retaining of red meat yield.

In the period January - August 2023, milk processing enterprises processed nearly 500 million liters of milk in total, including 467.1 million cow's milk, which is 6.3% and 6.4% more respectively compared to the same period of 2022.

The total yield of dairy raw material for the entire 2023 is predicted to be slightly above the level of the previous year. Egg production is expected to increase by about 2% on an annual basis, and bee honey production is expected to remain at about the same level of the previous year.

2.3.1. Cattle breeding and buffalo breeding

Cattle breeding is a sub-sector of livestock breeding of great economic importance, providing the main share of materials for the dairy production in the country.

As of 01.11.2022, a total of 559,544 cattle heads were bred in the country - 5.1% less than a year earlier. The total number of cows went down 5.2% year-on-year, to 361,476 animals, with a more significant decrease registered for dairy cows - by 7.9% (up to 197,996 animals) and a smaller decrease for beef cows - by 1.8% (up to 163,480 animals). The share of beef cows in the total number of cows went up to 45.2%, compared to 43.6% in 2021. This is due to the ongoing process of specialization of production in cattle breeding, which is characterized by a shift from dairy to beef production.

Table II.16. Distribution of cattle by regions in 2021 and 2022

Regions	01.11.2021				01.11.2022			
	Cattle		Cows		Cattle		Cows	
	thousand heads	thousand heads	thousand heads	thousand heads	thousand heads	share	thousand heads	share
Northwestern	59.9	10.2%	37.9	9.9%	55.0	9.8%	36.3	10.0%
North-central	68.7	11.7%	40.2	10.5%	65.3	11.7%	36.5	10.1%
Northeastern	67.3	11.4%	36.4	9.5%	63.5	11.4%	34.3	9.5%
Southeastern	114.3	19.4%	73.1	19.2%	106.3	19.0%	66.8	18.5%
Southwestern	93.3	15.8%	64.7	17.0%	90.3	16.1%	64.3	17.8%
South-central	186	31.5%	129.1	33.8%	179.1	32.0%	123.3	34.1%
Total for the country	589.5	100%	381.4	100%	559.5	100%	361.5	100%

Source: MAF, Agrostistics Department

Cattle breeding is concentrated in Southern Bulgaria, where 67% of the country's total number of cattle is reared in 2022. Over one third of cows are reared in the South-central region, including 28.2% of dairy cows and 41.3% of beef cows.

Table II.17. Distribution of dairy cows by number of farm animals on a farm as of 01.11.2022

Number of animals on a farm	Farms		Dairy cows	
	heads	Change in 2022/2021	thousand heads	Change 2022/2021
1 - 2	7,556	-26.1%	9.0	-30.5%
3 - 9	1,531	-22.6%	9.5	-15.9%
10 -19	816	-17.7%	11.1	-17.8%
20 -49	1,601	-7.3%	50.2	-3.8%
50 - 99	605	-12.6%	41.4	-12.4%
100 and more	330	-7.3%	76.8	-1.3%
Total	12,439	-22.1%	198.0	-7.9%

Source: MAF, Agrostistics Department

Dairy farms as of 1 November 2022 were 12,439, down 22.1% compared to a year prior, with all farm categories reporting a decrease. The biggest decrease was observed in small farms with 1 - 2 and 3 - 9 animals, by 26.1% and 22.6% respectively, where dairy cows also decreased by 30.5% and 15.9% respectively. Farms with 10 - 19 dairy cows were 17.7% less, while those with 50 to 99 animals - 12.6% less. There was a more moderate decrease for farms with 20 - 49 and with 100 or more cows of 7.3%. In 2022, nearly 39% of all dairy cows in the country are kept by the large farms with 100 or more animals.

The production of cow milk in 2022 amounted to 748,278 thousand liters - 7.8% less than the previous year, due to the 7.9% reduction in the number of dairy cows.

Traditionally, the South-central region accounted for the largest share of total cow milk production - 25.9%, followed by the Southeastern region with 18.5%. The share of cow milk produced in the Southwestern region is the smallest - 7.9%.

Table II.18. Distribution of buffaloes by regions in 2021 and 2022

Regions	01.11.2021				01.11.2022			
	Buffaloes total		Female buffaloes		Buffaloes total		Female buffaloes	
	thousand heads	share	thousand heads	share	thousand heads	share	thousand heads	share
Northwestern	6.4	29.5%	4.6	29.6%	6.2	30.5%	4.7	31.9%
North-central	2.4	10.9%	1.2	8.0%	2.0	9.7%	1.2	8.1%
Northeastern	1.5	6.8%	0.8	5.4%	1.4	7.0%	0.8	5.8%
Southeastern	4.8	21.1%	3.8	24.6%	5.0	24.8%	3.7	25.0%
Southwestern	1.4	6.5%	0.9	5.9%	1.1	5.5%	0.8	5.3%
South-central	5.2	24.2%	4.1	26.6%	4.6	22.5%	3.6	23.9%
Total for the country	21.7	100%	15.4	100%	20.3	100%	14.8	100%

Source: MAF, Agrostatistics Department

Farms rearing female buffaloes by the end of 2022 went down by 11.7% year-on-year to 406, while the number of female buffaloes in them went down by 3.5%. Farms keeping 10 to 19 animals registered the most significant decrease - by 33.1%, with female buffaloes in them being nearly 34% less than a year prior. Small farms with 1 - 2 and 3 to 9 animals also decreased - by 18.9% and 11.8%, respectively. On the other hand, farms with 20 - 99 animals and large farms with 100 and more animals increased by 4.5% and 5.7%, respectively. About 90% of female buffaloes in the country are raised in these farms.

Leaders in buffalo breeding in 2022 remain the Northwestern, Southeastern and South-central regions, where about 81% of the livestock are concentrated.

As a result of the reduced number of female buffaloes, the total buffalo milk yield in 2022 shrank by 7.9% compared to the previous year, to 14,804 thousand liters. The highest buffalo milk production during the year was recorded in the Northwestern region with a share of 41% of the total production in the country. This was followed by the Southeastern and South-central regions with shares of 20.5% and 18.5%, respectively.

Table II.19. Beef production in 2021 and 2022 (tons of carcass weight)

Categories of animals	In slaughterhouses			In farms			Total production		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
Calves and young cattle	616	586	-4.9%	7,390	8,015	8.5%	8,006	8,601	7.4%
Other cattle	6,519	6,459	-0.9%	3,671	5,669	54.4%	10,190	12,128	19.0%
Total for the country	7,135	7,045	-1.3%	11,061	13,684	23.7%	18,196	20,729	13.9%

Source: MAF, Agrostatistics Department

The total production of beef in the country in 2022 amounted to 20,729 tons, nearly 14% more than the previous year, due to the reported increase in farm yields by 23.7% to 13,684 tons. At the same time, slaughterhouse production saw a slight decrease by 1.3%, to 7,045 tons. Beef accounts for about 18% of the total red meat produced during the year.

In 2022, a total of 13,098 cattle heads over 8 months of age were classified as per the scale of the Classification Union, which is 23.4% above the level in 2021. Slaughterhouses classifying bovine carcasses were ten - five more than a year prior.

The highest was the share of category "D" cows - 73.1%, followed by cattle of category "A" - young bull (12.5%), "E" - heifer (8%), "B" - bull (4.8%), "Z" - an animal aged 8 to 12 months (1.6%). Once again there are no cattle classified as category "C" for the year. The main part of the classified beef was from dairy

animals, whose carcasses have a low yield and poorly developed conformation. Therefore, the largest was the share of classified carcasses of cattle with conformation class P (poor) - 56.2%, followed by O (fair) - 28.2%, class R (good) - 14.1% and U (very good) - 1.5%. When determining the classes by fat cover, the largest is the number of carcasses class 2 (slight) - 44.2%, class 1 (low) - 32.7%, class 3 (average) - 21.3% and class 4 (high) - 1.8%.

2.3.2. Sheep and goat breeding

Appropriate natural and climatic conditions and long-standing traditions favor the development of sheep breeding in the country. It is widespread in the plains as well as in the mountainous and semi-mountainous areas, providing livelihood for a large part of the population in rural areas.

As of 1 November 2022, the total number of sheep in the country amounted to 1,096,399 - 8.6% below the level reported a year earlier. A decrease of the number of sheep is observed from most categories (by between 5% and 11.8%), with the exception of meat-producing ewes, the number of which increased by 11.4%.

Traditionally, sheep breeding is concentrated mainly in southern Bulgaria, where 66.2% of the total population was raised in 2022. Over a quarter of ewes are reared in the South-central region.

By the end of 2022, the number of holdings raising sheep and ewes decreased by 18.7% and 19%, respectively, compared to the previous year. The average number of sheep on a farm increased by 11.7% to 69.4, and that of ewes - by 12.7% to 60.4.

Table II.20. Distribution of sheep by regions in 2021 and 2022 (thousand heads)

Regions	Sheep in general			Including ewes		
	01.11.2021	01.11.2022	Share (2022)	01.11.2021	01.11.2022	Share (2022)
Northwestern	146.1	132.6	12.1%	123.3	113.9	12.3%
North-central	116.2	106.1	9.7%	95.3	86.5	9.3%
Northeastern	140.7	131.9	12.0%	116.2	109.9	11.8%
Southeastern	231.9	217.9	19.9%	199.9	187.4	20.2%
Southwestern	236.4	202.5	18.5%	194.6	171.9	18.5%
South-central	328.2	305.3	27.8%	283.9	259.2	27.9%
Total for the country	1,199.5	1,096.4	100%	1,013.2	928.8	100%

Source: MAF, Agrostistics Department

The number of farms with inseminated sheep and one-year-old sheep decreased by 19% on an annual basis, and the number of animals in them - by 8.2%. The biggest decrease was recorded for small farms with 1 - 9 animals (by 24.7%) and those with 10 - 19 animals (by 23.8%). For large farms with 100 to 299 animals and 300 and more animals, the decrease was by 6.9% and 3%, respectively.

Table II.21. Distribution of goats by regions in 2021 and 2022 (thousand heads)

Regions	Goats total			Including does		
	01.11.2021	01.11.2022	Share (2022)	01.11.2021	01.11.2022	Share (2022)
Northwestern	34.8	28.8	15.6%	29.7	25.2	16.1%
North-central	30.3	26.8	14.5%	24.3	21.9	14.0%
Northeastern	24.9	20.3	11.1%	19.8	17.6	11.2%
Southeastern	34.7	30.4	16.5%	30.4	26.9	17.2%
Southwestern	53	45.2	24.6%	42.7	36.5	23.4%

Regions	Goats total			Including does		
	01.11.2021	01.11.2022	Share (2022)	01.11.2021	01.11.2022	Share (2022)
South-central	37.3	32.5	17.7%	32.9	28.2	18.1%
Total for the country	215.0	184.0	100%	179.8	156.3	100%

Source: MAF, Agrostistics Department

By the end of 2022, the total number of goats, including mothers, decreased significantly on an annual basis - respectively by 14.4% (to 184,019 heads) and by 13.1% (to 156,285 heads). A serious decline was reported in the number of kids - by 29.1%, to 13,712. Young does inseminated for the first time were 13.6% less, while bucks were nearly 8% less.

Compared to the previous year, there was a significant decrease in the number of farms keeping goats in total (by 27.2%) and does (by 27.5%), with animals in them being 14.4% and 13.1% fewer, respectively. Thus, the average number of animals kept in one holding went up by 18% to 27.6 goats total and by 19.1% to 23.5 does, respectively.

In 2022, the number of farms with pregnant goats decreased by 27% on an annual basis, and the number of animals in them - by 13.1%. The biggest decrease was registered for small farms with 1 - 9 animals - by 34.1%, as well as for the goats in them - by 35.6%. Farms with 20 - 49 pregnant goats decreased by 19.4%, while those with 50 - 99 decreased by 14.3%. About 55% of pregnant goats were kept at large farms with 100 and more animals, with their numbers decreasing the least - by 6.3%, and the number of pregnant goats in them decreasing by 7.7%.

About 60% of the goat herds in 2022 was bred in the southern regions of the country. The Southwestern region with a share of 24.6% of the total number of goats and 23.4% of mother goats remains the leading region.

In 2022, 79,945 liters of raw milk from small ruminants were produced in the country, including: 54,742 thousand liters of sheep milk and 25,203 thousand liters of goat milk. Compared to a year prior, both types of milk reported a decrease by 19.5% and 14.5%, respectively. The relative share of sheep milk in the total volume of raw milk produced during the year was 6.5%, and the one of goat milk - 3.4%.

The meat produced from small ruminants in 2022 amounted to 10,364 tons (about 9% of total red meat production during the year) - 16.6% less on an annual basis, of which 1,956 tons in slaughterhouses and 8,408 tons - on farms. The production of sheep meat decreased by 14.7% compared to 2021 to 8,966 tons, while goat meat went down by 27.2% to 1,398 tons.

In 2022, the classification of light and heavy carcasses of sheep (lambs) is applied in five slaughterhouses - three more than a year prior. A total of 4,925 light carcasses of sheep (lambs) were classified, which was 22% less than in 2021. The classified light carcasses of sheep (up to 13 kg) were 4,446, with about 73.1% being classified as first quality, while 26.9% were second quality. The largest share was the one of light carcasses weighing from 7.1 kg to 10 kg - category B - by 52.7%. They are followed by those weighing 10.1 kg to 13 kg - category C - 42.3%, and lambs weighing up to 7 kg, classified in category A, are 5%. The classified carcasses of sheep aged under 12 months and over 13 kg were 479.

In 2023, the number of classified sheep is expected to remain the same.

2.3.3. Pig breeding

The pig sector in the country is well structured and specialized, which is a prerequisite for its sustainability. This allows the sector to overcome the negative effects of the war in Ukraine more easily.

As of 1 November 2022, a total of 601,702 pigs were kept in the country - 13.4% less on an annual basis. The total number of breeding sows decreased by 9% (to 59,851), while the number of main sows - by 8.4% (to 49,763).

Total pig holdings went down by 26.7%, while those with primary sows remained at the level of the previous year.

About 89% of all pigs during the year were kept in three planning regions - Southeastern (40.7%), Northeastern (24.7%) and North-central (23.4%). The same regions also reared the largest number of main sows - 36.4%, 20.7% and 25.6%, respectively. The fewest pigs were kept in the Southwestern region - 1.5%, while the fewest sows were in the Northwestern region - 3.6% of the total.

Table II.22. Distribution of pigs by regions in 2021 and 2022 (thousand heads)

Region	Pigs total			Primary sows		
	01.11.2021	01.11.2022	Share (2022)	01.11.2021	01.11.2022	Share (2022)
Northwestern	22.0	19.0	3.2%	2.1	1.8	3.6%
North-central	168.7	140.8	23.4%	11.7	12.7	25.6%
Northeastern	203.4	148.8	24.7%	14.3	10.3	20.7%
Southeastern	255.5	244.8	40.7%	18.8	18.1	36.4%
Southwestern	8.8	8.8	1.5%	2.0	2.3	4.7%
South-central	36.3	39.5	6.5%	5.5	4.5	9.0%
Total for the country	694.7	601.7	100%	54.4	49.7	100%

Source: MAF, Agrostistics Department

By the end of 2022, the total number of farms raising breeding sows (over 50 kg) decreased by 6.2% compared to a year earlier, and the number of animals in them decreased by 8.9%. The most significant decrease was registered in farms with 10 - 49 female pigs - by 26.9%, with a more moderate reduction in the number of animals in them - by 15.4%. The smallest decrease was on large farms with 200 and more animals - by 2.4%, where over 90% of all breeding sows in the country were reared. Compared to a year prior, the number of farms with 50 - 199 animals went up 20% and the number of breeding sows reared in them was 12.1% higher. Small farms (with up to 2 female pigs) reported a slight increase by 2.4%, while the number of animals kept in them decreased by 18.7%.

Table II.23. Distribution of breeding sows over 50 kg according to the number of animals bred on a farm as of 01.11.2022

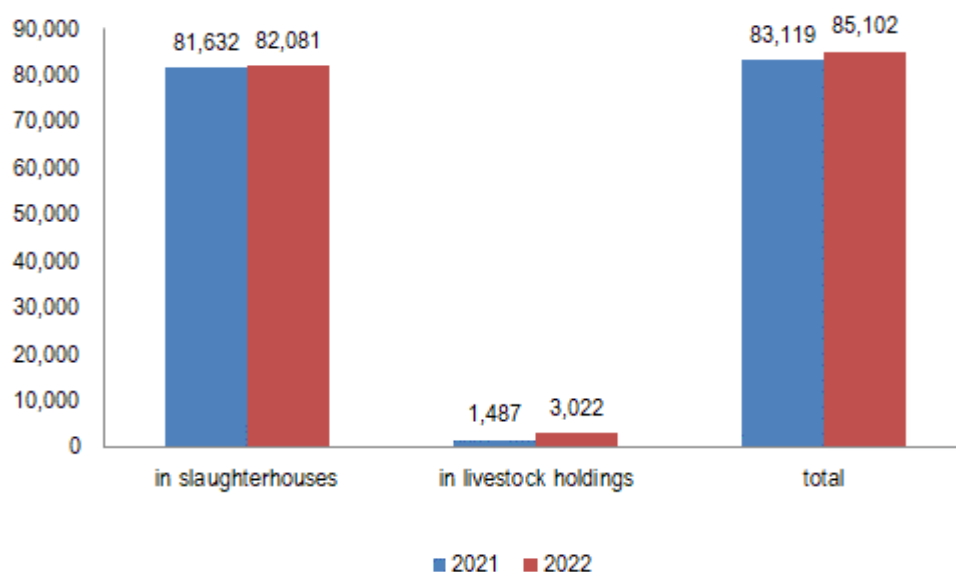
Number of animals on a farm	Farms		Breeding sows over 50 kg	
	Heads	Change 2021/2020	Thousand heads	Change 2021/2020
1-2	84	2.4%	0.1	- 18,7%
3-9	80	-3.6%	0.4	16.6%
10-49	57	-26.9%	1.1	-15.4%
50-199	24	20.0%	2.2	12.1%
200 and more	41	-2.4%	56.0	- 9,6%
Total	286	-6.2%	59.8	-8.9%

Source: MAF, Agrostistics Department

In 2022, the state aid scheme for implementation of the five-year voluntary commitments on swine welfare will continue to apply. Subsidies are granted annually and cover the additional costs or lost income related to these commitments.

The total production of pork in 2022 went up 2.4% on an annual basis to 85,102 tons, representing 73% of the total number of red meat in the country. Pork production in slaughterhouses reported a slight increase (by 0.5%), to 82,080 tons. While more than doubling on an annual basis, the livestock production remained limited - 3,022 tons.

Figure II.4. Pork production in 2021 and 2022, tons



Source: MAF, Agrostatistics Department

In 2022, a total of 72,803 heads were classified as per the scale of the Classification Union for pig carcasses, which was 7.1% more compared to 2021. Two slaughterhouses carried out classification during the year (one of which starting at the end of the year).

Over 78% of the pigs classified in 2022 were of class E, with a lean meat content of 55% to 60% of the carcass weight, and 18.1% of the other classified pigs were of conformation class U - from 50% to 55% content of lean meat.

According to the regression equation applied in Bulgaria, only steamed pig carcasses were classified. The slaughterhouses carrying out classification during the year classified nearly 44.7% of all pigs slaughtered and steam-processed and only 6.1% of all fattened pigs slaughtered in industrial conditions in the country.

The number of classified pigs is expected to be below the 2022 level in 2023, as no new regression equation has been developed for the classification of skinned pigs.

Table II.24. Classified pig carcasses by lean meat content

Year	60% and more	s from 55 to 60%	u from 50 to 55%	e from 45 to 50%	o from 40 to 45%	p 40% less	Total (heads)
2017	240	70,525	20,967	82	17	0	97,831
2018	318	70,422	18,888	134	0	0	89,762
2019	151	37,081	9,491	35	0	0	46,758
2020	161	33,079	7,050	31	0	0	40,321
2021	218	61,580	6,130	80	0	0	68,008
2022	2,370	57,240	13,182	11	0	0	72,803

Source: MAF, Animal Husbandry Directorate

2.3.4. Horse breeding

According to expert estimates, in 2022 the number of equidae (including horses) in Bulgaria remained at about 116 thousand. Their main purpose is as draught power in agriculture.

Kabiuk stud is the only state-owned enterprise operating in the sector, which breeds Bulgarian and foreign tribal horse breeds, such as Karakachan horse, East Bulgarian horse, Pleven horse, Thoroughbred

English horse, Thoroughbred Arabian horse, Arabian Shagia and others. The remaining horses are bred in the private sector.

In order to preserve the number of horses, in 2014, for the first time, support was provided to horse breeding through the granting of de minimis state aid, which had a beneficial effect on the development of the sector. This contributed to the continuation of the existing centuries-old cultural and historical traditions and the consolidation of the country's position in this sector among other EU Member States.

The work related to the conservation and development of genetic resources in horse breeding continued in 2022.

2.3.5. Poultry farming

Poultry farming is one of the most intensive sectors in livestock breeding, characterized by widespread mechanization and automation of production processes, which ensures highly efficient industrial production.

Table II.25. Number of birds at the end of the year, thousand

Type of poultry	2020	2021	2022	Change 2022/2021
Adult and young laying hens	7,062	6,659	7,139	7.2%
Chickens for meat	5,349	5,517	6,673	21.0%
Turkeys	21	16	8	-50.0%
Ducks	1,360	1,889	1,627	-13.9%
Geese	8	4	5	25.0%
Other poultry (quail, ostriches and guinea fowl)	164	83	55	-33.7%
Total	13,964	14,168	15,507	9.5%

Source: MAF, Agrostistics Department

As of 31.12.2022, the total number of birds in the country increased by 9.5% compared to the previous year, reaching 15,507 thousand, including: 7,139 thousand hens and young laying hens, 6,673 thousand hens for meat, 8 thousand turkeys, 1,627 thousand ducks, 5 thousand geese and 55 thousand other poultry.

The increase in the total number of birds is mainly due to the registered growth in chickens for meat - by 21% and in hens and young laying hens - by 7.2%. Although going up by 25% on an annual basis, the number of geese remained relatively low. On the other hand, the number of reared ducks decreased by 13.9%, turkeys decreased by 50% and birds from the "other" category (quail, ostriches and guinea fowl) decreased by 33.7%.

About 59% of birds by the end of 2022 were kept in the North-central and Northeastern region of the country and only 2% - in the Southwestern region.

Table II.26. Number of poultry by species and regions in 2022, thousand heads

Region	Adult and young laying hens	Chickens for meat	Hens and chickens total	Turkeys	Ducks	Other poultry	Poultry, total	Change 2022/2021 Poultry, total
Northwestern	460	873	1,333	2	306	2	1,643	46.3%
North-central	2,370	3,056	5,426	0	c	c	5,582	3.7%
Northeastern	1,649	1,770	3,419	1	c	c	3,517	24.8%
Southeastern	1,014	937	1,987	2	366	15	2,370	-4.3%

Region	Adult and young laying hens	Chickens for meat	Hens and chickens total	Turkeys	Ducks	Other poultry	Poultry, total	Change 2022/2021 Poultry, total
Southwestern	339	1	340	1	2	37	380	-0.8%
South-central	1,307	0	1,307	2	703	3	2,015	1.6%
Total for the country	7,139	6,637	13,812	8	1,627	60	15,507	9.5%
Change 2022/2021	7.2%	21.0%	13.4%	-50.0%	-13.9%	-31.8%	9.5%	

Source: MAF, Agrostistics Department, c - confidential data

Farms raising adult and young laying hens decreased by 14.6% on an annual basis. The most significant decrease was observed for small poultry farms with 1 to 99 animals - by 14.7%, as well as for the birds in them - by 17.8%. The decrease in the number of farms raising between 100 and 9,999 birds was more moderate - by 4.7%, as well as those with 10,000 - 99,999 birds - by 6.3%, with laying hens in them decreasing by 8.7% and 3.6%, respectively. On the other hand, industrial poultry farms with 100,000 and more adult and young laying hens went up by 17.6%, and the birds in them - by 13.4%.

The number of farms raising chickens for meat at the end of 2022 increased by 8.5% compared to a year earlier, and the number of birds in them increased by 21%. There was a significant increase of industrial poultry farms with 100,000 and more birds - by 40% (or 4 units), as well as of the number of birds in them - by 54.1%, with these farms holding about 57% of chickens for fattening. The number of small farms with 1 - 199 birds also increased by 24%, with the number of birds held in them remaining unchanged year-on-year.

In 2022, the total production of eggs increased by 5.8% compared to the previous year, reaching 1,401,830 thousand. Of these, 1,387,117 thousand (99%) were hen eggs, including 212,613 thousand for breeding and 1,174,504 thousand for consumption. Eggs for consumption were 10% more on an annual basis, and breeding eggs decreased by 10.6%.

By planning regions, the leader in egg production in 2022 was the North-central region with a share of 29.9% of total egg production in the country, where a significant yield growth was recorded compared to a year prior - by 69.3%. This was followed by the Northeastern, South-central and Southeastern regions with shares of 27.7%, 17.9% and 14.7%, respectively.

Table II.27. Egg production in 2022 by planning regions, thousand pieces

Region	Eggs from hens	Other eggs	Total eggs	Change, total eggs, 2022/2021
Northwestern	73,815	416	74,231	-14.2%
North-central	418,879	568	419,447	69.3%
Northeastern	388,434	115	388,549	-1.9%
Southeastern	198,674	6,717	205,391	-12.2%
Southwestern	58,390	4,374	62,764	-6.0%
South-central	248,925	2,523	251,448	-14.7%
Total for the country	1,387,117	14,713	1,401,830	5.8%

Source: MAF, Agrostistics Department

The total yield of poultry meat and by-products in the country in 2022 amounted to 120,094 tons, which is 3% more than the previous year. The industrial production grew by 3% on an annual basis, while farm production (making up less than 1% of the total volume of production) dropped by 1.3%. Over 81% of the meat produced in the country in 2022 was of the chicken species.

Table II.28. Production of poultry meat and by-products in the period 2021 - 2022

	Slaughtered poultry - thousand heads			Total meat and by-products - tons		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
In slaughterhouses	59,724	59,792	0.1%	115,828	119,262	3.0%
In farms	486	434	-10.7%	821	832	1.3%
Total	60,210	60,226	0.03%	116,649	120,094	3.0%

Source: MAF, Agrostistics Department

The development of poultry farming in recent years has been contributed by the scheme of state aid for the implementation of voluntarily undertaken commitments for the humane treatment of birds (for fattening and for egg production) for a period of five years, the implementation of which continues in 2022.

2.3.6. Beekeeping

The development of beekeeping in Bulgaria is favored by long-standing traditions and the appropriate natural, climatic and ecological conditions in the country. Given the irreplaceable medicinal properties of bee honey and bee products, there is increased interest and demand from consumers, and the good quality parameters of Bulgarian honey make it largely export-oriented.

Beekeeping is an alternative employment for the population in underdeveloped rural areas, providing additional income.

The sector was positively affected by the already implemented for the fifth consecutive three-year National Beekeeping Program, which is being developed with the broad participation of branch beekeeping organizations.

As of Saturday, October 1, 2022, there were 10,224 bee farms in the country, which raised 823,250 bee colonies - respectively 5.3% and 1.8% less on an annual basis. The average number of bee colonies in a holding increased by 3.7%, reaching 80.5 units (at 77.6 units in 2021).

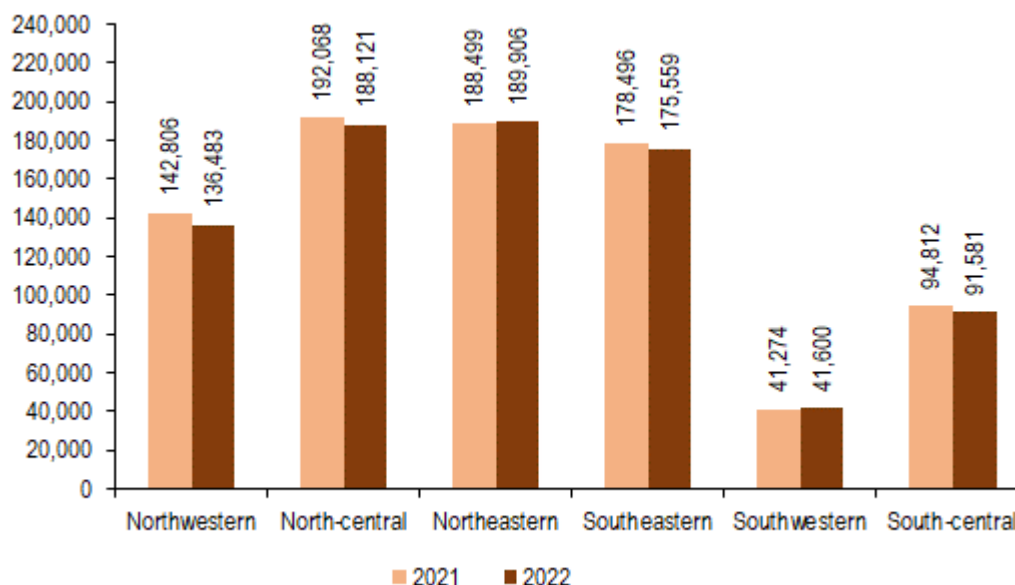
Table II.29. Number of bee farms and bee colonies as of 1 October

Number of bee colonies on a farm	Number of farms			Number of bee colonies			Average number of bee colonies		
	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021	2021	2022	Change 2022/2021
from 1 to 9	1,188	1,238	4.2%	5,942	5,882	-1.0%	5.0	4.8	-4.0%
from 10 to 49	3,945	3,455	-12.4%	92,751	79,340	-14.5%	23.5	23.0	-2.1%
from 50 to 149	3,819	3,383	-11.4%	347,585	298,194	-14.2%	91.0	88.1	-3.2%
150 and more	1,849	2,148	16.2%	391,677	439,834	12.3%	211.8	204.8	-3.3%
Total	10,801	10,224	-5.3%	837,955	823,250	-1.8%	77.6	80.5	3.7%

Source: MAF, Agrostistics Department

Beekeeping is more widespread in Northern and Southeastern Bulgaria, where 85% of bee colonies were raised in 2022. The largest number of bee colonies were registered in the Northeastern and North-central regions, followed by the Southeastern and Northwestern regions.

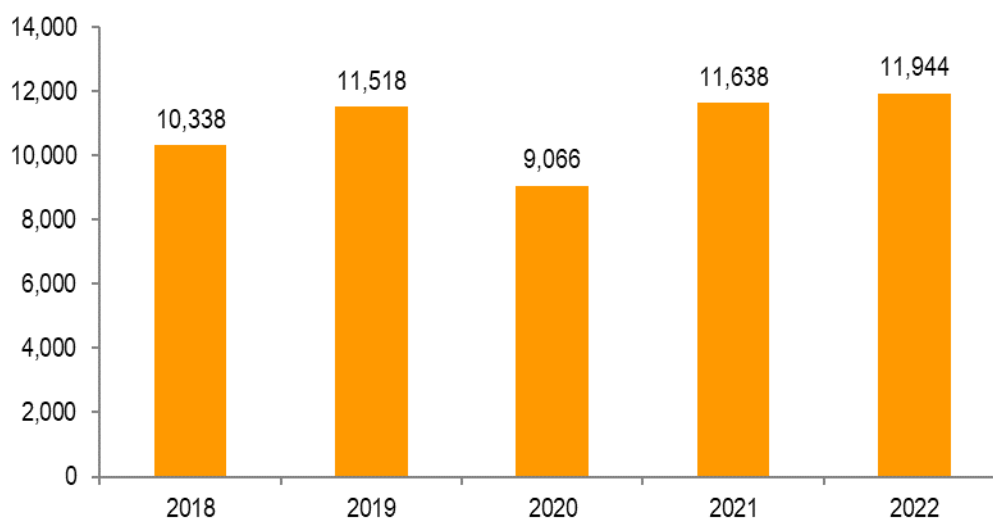
Figure II.5. Number of bee colonies by regions in 2021 and 2022



Source: MAF, Agrostatistics Department

In 2022, the number of bee colonies from which honey was extracted was 672,163 - 1.1% less than the previous year. With a 1.7% higher average bee colony yield of 17.8 kg, honey production increased by 2.6% on an annual basis, amounting to 11,944 tons.

Figure II.6. Production of honey in the period 2018 - 2022, tons



Source: MAF, Agrostatistics Department

The sales of honey and the average selling prices (excluding VAT) in 2022 were as follows:

- Direct sales to the end user - 2,127 tons - BGN 8.90/kg;
- Direct sales to retailers - 461 tons - BGN 8.27/kg;
- Sales to processing enterprises - 4,441 tons - BGN 5.85/kg;
- Sales for industry - 510 tons - BGN 5.91/kg;

- For own consumption and nutrition of bees - 1,437 tons.

The total realized quantity of bee honey in 2022 decreased by 7% on an annual basis, mainly due to a decrease in sales to processing enterprises by 21.6%. The quantities of honey set aside for own consumption and feeding of bees also decreased by 6.7%. At the same time, sales to industry more than doubled, direct sales to retailers went up by 66.4% and direct sales to end user - by 9%.

As a result of poisoning, diseases, famine and other causes, a total of 44,663 bee colonies were destroyed in 2022 - 45.2% less compared to a year prior, including: 8,518- from poisoning, 7,509 - from disease, 4,947 - from hunger and 23,689 - from other causes.

Varroasis is a common disease in Europe, including Bulgaria. Its invasion significantly affects the yields, and the treatment measures against it affect the quality of honey. In 2022, 810,439 bee colonies were treated (98.4% of their total number), with an average price of BGN 6.61 per treatment.

The nutrition of bee colonies during the year includes: autumn - 539,411, winter - 493,350 and spring feeding - 581,579 bee colonies.

In 2022, the number of farms practicing in mobile beekeeping were 236 - 19.7% less compared to a year prior, while the number of bee colonies in them went down by 8.2% to 26,182. The value of transport costs and veterinary certificates during the year was BGN 14.44 per bee colony - 29.6% higher than in 2021.

The fifth three-year National Beekeeping Program (NBP) 2020-2022 was implemented in - 2022. A budget of BGN 8,073,092 (including 50% national co-financing) was provided for the financial year 2022. The funds utilized by the beekeepers amounted to BGN 7,057,879.15, or 87% of the total resource. The highest percentage of budget absorption was achieved under measure A "Technical assistance for beekeepers and beekeepers' associations" - 99%, followed by measure E "Measures to support the renewal of beehives in the European Union" - 87% and measure D "Measures to support laboratories for analysis of bee products" - 75%. With the financial assistance under the program, 2,137 pieces of different types of beekeeping equipment, necessary for the primary extraction and processing of honey and other bee products, such as bee pollen and wax, was purchased. 25,459 new beehives were also purchased to replace the depreciated ones or to increase the number of beehives on farmers' holdings. In 2022, 46,587 queen bees were purchased - the largest number for all years since the beginning of the program.

2.3.7. Rabbit breeding

In recent years, rabbit breeding in the country was rather a hobby. According to expert estimates, the total number of rabbits in 2022 was about 115 thousand.

Despite the good natural and climatic conditions and the presence of traditions in breeding, the development of rabbit breeding was poorly represented in the country due to a number of difficulties, such as:

- Poor professional training of rabbit farmers;
- Obsolete equipment;
- High production costs, which often exceed purchase prices;
- Lack of stable strategic export markets and partners;
- Strong dependence of rabbit meat exports on the situation on foreign markets;
- Lack of direct subsidies for rabbit farmers;
- Insufficiently developed scientific potential to provide the sector;
- Insufficient marketing and management on the Bulgarian market.

2.4. State of organic production in Bulgaria in 2022

Thanks to its positive impact on the environment and climate in terms of improving carbon sequestration and soil health, protecting biodiversity and animal welfare, as well as the additional

ecosystem services that organic production provides, organic agriculture contributes to achieving the objectives of the European Green Deal, the EU Farm to Fork Strategy and the EU Biodiversity Strategy 2030.

Organic production is a sustainable management system that preserves elements of the natural landscape and uses energy and natural resources responsibly.

The current rate of increase in organic farming areas, combined with agro-ecological measures, leads to high and multi-aspect benefits both for achieving the goals of biodiversity protection and for mitigating the impact of climate change and improving the water and soil quality and soil biodiversity, due to the non-use of mineral fertilizers and chemical pesticides. The application of organic production practices has an indirect effect on improving or maintaining the good condition of natural habitats and the Natura 2000 species.

The development of organic production in Bulgaria is favored by the availability of high-quality land resources, climatic conditions, traditions in the agricultural sector. Defining the organic farming sector is the specific method of production that maintains ecological balances and produces production covering the principles of ecological cycles for the continuous movement in nature by converting substances such as water, minerals, nitrogen, oxygen and carbon into different forms between living beings, water, air and soil.

The information on the state of organic production in Bulgaria in 2022 is based on the data from the annual reports of a total of 15 controllers of organic production, approved by the Minister of Agriculture and Food.

2.4.1. Control System Operators

The collection of information from the organic production control system is done within the calendar year.

At the end of 2022, the total number of biological operators registered with the MAF was 4,863 - 50 less than a year earlier, of which 4,260 were agricultural producers. The number of operators with the main and/or additional activity of processing is 386, with the activity of trade - 693, with the activity of import - 101 and with the activity of export - 86. In 2022, the number of biological operators in a control system represented 5.9% of the total number of registered farmers under Ordinance No. 3 of 29 January 1999 on the establishment and maintenance of a register of farmers, compared to 6.4% in 2021.

2.4.2. Organic plant growing

The total areas on which the methods of organic production were applied (transitional areas and organic areas) in 2022 amounted to 110,440.7 ha, 28% more than in 2021 and represented 2.2% of the used agricultural area in the country. The areas with cereals and permanent meadows and pastures increased by over 50% each compared to the previous year 2021, while those for green/forage crops from arable land more than doubled.. Slight decrease was recorded for areas with perennial crops (by 2.3%), grain legumes and protein crops for grain production (by 5%) and technical crops (by 7.8%), while a more significant decrease was reported for those with fresh vegetables, melons, strawberries, cultivated mushrooms (greenhouse and field production) - by 21.8%.

Table II.30. Areas under a control system, including "in transition" and "organic" (ha)

Type of crops	2021	2022
Cereals, incl. rice	12,496.6	18,802.5
Cereals, protein crops for grain production	6,718.7	6,382.6
Root crops	588.8	362.5
Industrial crops - total	18,544.0	17,088.6
Green/Forage crops from arable land	841.5	1,905.3
Fresh vegetables, melons, strawberries, cultivated mushrooms (greenhouse and field production)	1,716.2	1,342.0

Type of crops	2021	2022
Perennials	23,124.0	22,592.6
Permanent meadows and pastures	19,063.4	29,855.7
Fallow land	3,216.9	12,108.9
Total areas in a control system	86,310.0	110,440.7

Source: MAF, according to data from the controlling persons, entered in the register under Art. 16a, para. 1, item 1 of the Act on the Implementation of the General Organization of the Markets of Agricultural Products of the European Union.

Table II.31. Areas of organically grown crops and areas in transition (ha)

Type of crops	Areas in transition		Areas that have passed the transition period		Total area	
	2021	2022	2021	2022	2021	2022
Cereals, incl. rice	1,553.6	10,265.4	10,943.0	8,537.1	12,496.6	18,802.5
Industrial Crops	3,226.0	4,082.2	15,318.0	13,006.4	18,544.0	17,088.6
Fresh vegetables, melons, and strawberries	277.4	254.0	1,438.8	1,087.9	1,716.2	1,342.0
Perennials	3,741.4	4,910.6	19,382.6	17,682.0	23,124.0	22,592.6
Permanent meadows and pastures	4,380.3	18,132.0	14,683.1	11,723.8	19,063.4	29,855.7
Fodder crops from arable land (green crops)	15.3	116.1	826.2	1,789.2	841.5	1,905.3
Fallow land	1,450.9	10,525.4	1,765.9	1,583.5	3,216.9	12,108.9

Source: MAF, according to data from the controlling persons, entered in the register under Art. 16a, para. 1, item 1 of the Act on the Implementation of the General Organization of the Markets of Agricultural Products of the European Union.

2.4.3. Organic Livestock Breeding

In 2022, the trend of weaker development of the organic livestock sector in Bulgaria compared to organic crop production continued. Mainly bees, goats, cattle, and sheep are reared organically in the country. Compared to the previous year, there was an increase in the number of sheep, cattle and buffaloes in a control system and a decrease in the number of goats and bee colonies.

Table II.32. Livestock in a control system

	Number of organically raised animals		Total number of animals as of 1 November 2022	Share of organically raised animals from the total number of animals as of 1 November 2022
	2021	2022		
Cattle and buffaloes	10,408	13,724	579,861	2.4%
Sheep	19,873	25,995	1,096,399	2.4%
Goats	8,108	7,333	184,019	4.0%
Bee colonies	218,949	214,183	823,250	26.0%

Source: MAF, according to data from the controlling persons, entered in the register under Art. 16a, para. 1, item 1 of the Act on the Implementation of the General Organization of the Markets of Agricultural Products of the European Union.

In 2022, 9,782.3 tons of raw milk, 309 thousand eggs, 3,201.1 tons of honey and bee products were produced by organic means.

2.4.4. Organic products market

The prevailing part of the organically produced foods in the country are exported, mainly to the European market. Bulgaria mainly exports certified wild dried berries and herbs. Frozen fruits (strawberries, raspberries and blueberries), honey, essential rose oil, lavender, mint, white cheese, yellow cheese, and jams are exported and are very well received on the international markets. In 2022, the number of specialized stores for the sale of organic food continues to increase, as well as the commercial establishments that are included in the distribution of organic food. The Ministry of Agriculture and Food carries out effective supervision and control in the field of organic farming, which makes Bulgarian organic products legitimate on the EU common market. The development of the sector is encouraged through information and awareness-raising activities on the benefits and advantages of organic farming.

2.5. Viticulture and wine production

2.5.1. Grapes production

Areas

In 2022, the areas with vine plantations in the agricultural holdings, including the fruiting ones (incl. the abandoned ones with the possibility of restoration) and the young orchards that have not started fruiting amounted to 33,188 ha. Of these, about 2% were young orchards that have not started fruiting.

The newly planted vineyards were about 367 ha.

The total harvested areas with vines in 2022 were 28,466 ha with no significant change compared to a year prior (-0.2%). In the case of red wine grape varieties, a decrease in harvested areas is observed by 2.6% in total for the country, most significantly in the Southeastern region - by 5.4%. At the same time, harvested areas with red wine grape varieties in the Northeastern and North-central regions increased by 4.1% and 18.2%, respectively. In the case of white wine grape varieties, the total harvested areas are about 2.2% more compared to 2021. An increase in almost all planning regions was recorded, most significantly in the North-central region - by 20.3%. Only the Southeastern region showed a certain decrease of harvested areas with white varieties - by 2%. The total harvested areas with table grape varieties were 6.4% over the level in 2021. An increase in these areas was recorded in the South-central, Southeastern, North-central and Northwestern regions - by between 2.1% and more than double, while in the Southwestern and Northeastern regions there was a decrease by 7.4% and 12.8%, respectively.

Due to bad weather conditions, out of 996 ha of fruit-bearing vineyards, no produce was harvested.

Table II.33. Distribution of harvested vineyards in 2021 - 2022 by statistical regions

Regions	Red wine varieties (ha)		White wine varieties (ha)		Table varieties (ha)		Total vineyards (ha)	
	2021	2021	2021	2021	2021	2021	2021	2021
Northwestern	1,532	1,506	698	731	25	56	2,255	2,293
North-central	446	527	629	757	74	88	1,149	1,372
Northeastern	615	640	1,553	1,675	94	82	2,262	2,397
Southeastern	4,425	4,186	5,198	5,094	539	624	10,162	9,904
Southwestern	1,838	1,740	190	202	135	125	2,163	2,067
South-central	7,589	7,421	1,737	1,770	1,216	1,242	10,542	10,433
Total	16,445	16,020	10,005	10,229	2,083	2,217	28,533	28,466

Source: MAF, Agrostistics Department

Of the total harvested vineyard area in 2022, 56.3% were with red wine varieties, 35.9% with white wine varieties and 7.8% with table varieties.

Average yields

In 2022 there was a decrease in the average yields from vineyards compared to the previous year both in wine varieties - by 9.5%, up to 5,636 kg/ha, and in table varieties - by 3.7%, up to 6,154 kg/ha.

The highest average yields were recorded in the Southeastern region - 6,625 kg/ha for the wine varieties and 6,631 kg/ha for the table varieties.

Table II.34. Average yields of grapes from vineyards - 2022 harvest

Regions	Average yields from vineyards (kg/ha)	
	Wine varieties	Table varieties
Northwestern	3,370	3,679
North-central	4,681	4,716
Northeastern	5,673	3,561
Southeastern	6,625	6,631
Southwestern	5,070	6,088
South-central	5,433	6,305
Bulgaria	5,636	6,154

Source: MAF, Agrostatistics Department

Production:

The total production of grapes in the country in 2022 amounted to 161,720 tons, which was 9.3% less on an annual basis. The grape harvested from vineyards amounted to 161,591 tons - 9.3% below the level of the previous year, in the ratio of wine variety - 92% and table variety - 8%. Compared to a year prior, the harvested produce of wine grapes decreased by 10.2% to 147,948 tons, while table grapes saw an increase by 2.5%. The production of grapes from vine-arbors decreased by 36.8% to 129 tons.

Traditionally, the largest production of vineyards was reported in the southeastern and south-central regions, where about 76% of all production is concentrated.

All regions in the country saw a decrease in grape production from vineyards compared to the previous year 2021, ranging from 3.8% in the South-central region to 18.6% in the Northwestern region.

Table II.35. Grape production - 2022 harvest

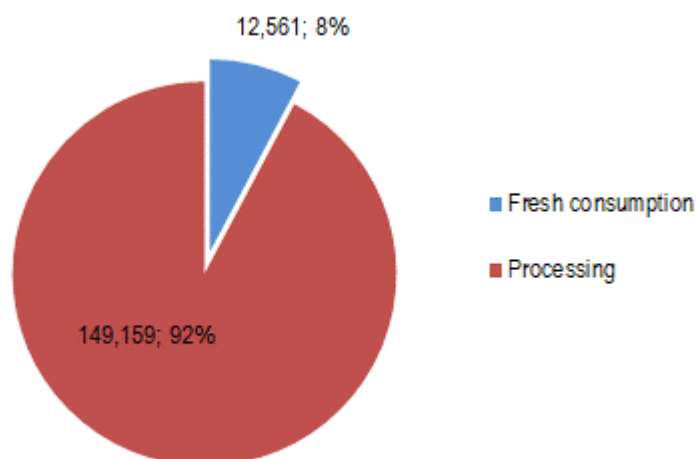
Regions	Grapes from the vineyards			Grapes from arbors (tons)	Total grapes produced (tons)
	Wine grape (tons)	Table grape (tons)	Total grapes produced from vineyards (tons)		
Northwestern	7,538	206	7,744	-	-
North-central	6,010	415	6,425	-	-
Northeastern	13,134	292	13,426	-	-
Southeastern	61,483	4,138	65,621	-	-
Southwestern	9,845	761	10,606	-	-
South-central	49,938	7,831	57,769	-	-
Total	147,948	13,643	161,591	129	161,720

Source: MAF, Agrostatistics Department

Out of the total grape produced during the year, 92% were destined for processing and 8% - for fresh consumption.

According to the data of the Executive Agency for Vine and Wine, in 2022 the quantity of wine grapes purchased and processed by wine enterprises amounted to 114,946 tons, which is 12,500 tons less than the previous year.

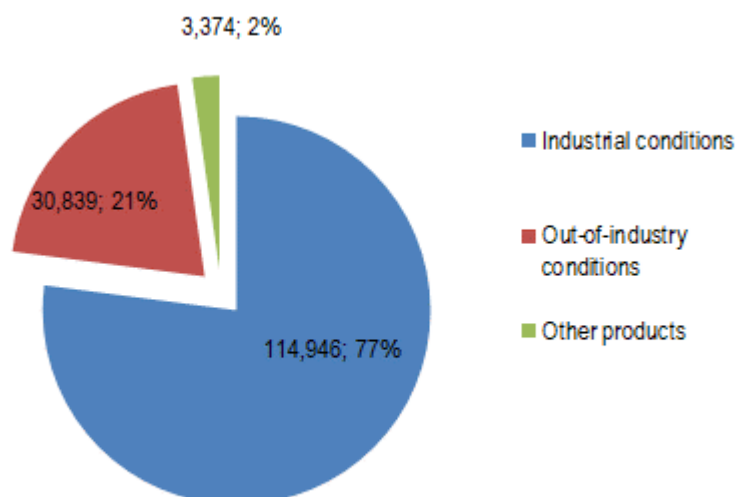
Figure II.7. Distribution of grapes produced - 2022 harvest, tons and percentage



Source: MAF, Agrostatistics Department

Grapes intended for processing in non-industrial conditions amounted to 30,839 tons and 3,374 tons of processed grapes were used for products other than wine and grape must.

Figure II.8. Distribution of grapes - harvest 2021, intended for processing, tons and percentage



Source: MAF, Agrostatistics Department

2.5.2. Wine production

The total production of wine from the 2022 harvest, declared by the registered wine producers, amounted to 746,683 hectoliters. This quantity is 10.8% less than the previous year, with white wine production going down 11.8% to 392,794 hectoliters, while the production of red wines and rosé - by 9.7% to 353,887 hectoliters.

Table wines (wines without protected designation of origin or protected geographical indication) had the highest share in industrial wine production from the 2022 harvest - 55.3%, followed by regional wines (wines with a protected geographical indication) with 44.3%. The share of wines with PDO was insignificant - only 0.4%.

The leader in wine production in 2022 was the Southeastern region with 61.8% of total industrial production, followed by the South-central region with 18.5%. The share of wine produced in the Northwestern region was the smallest - 2.4%.

Table II.36. Quantity of wine and grape must produced by wine-producing enterprises, 2022 harvest

Region	Quantity of wine and grape must produced, hectoliters								
	PDO* wines (quality)		PGI** wines (regional)		Other wines (incl. table wines)		Must	Total wine	
	white	red and rosé	white	red and rosé	white	red and rosé		white	red and rosé
Northwestern region	0	0	4,567	4,896	3,081	5,458	0	7,648	10,354
North-central region	0	0	11,164	14,586	10,981	8,536	0	22,145	23,122
Northeastern region	87	0	21,782	7,357	18,748	6,132	0	40,617	13,489
Southeastern region	694	1,627	74,502	83,900	191,256	109,245	6,197	266,452	194,772
Southwestern region	103	369	4,935	12,299	4,405	7,763	0	9,443	20,431
South-central region	0	20	23,665	67,193	22,825	24,506	19,705	46,489	91,719
TOTAL WINE:	884	2,015	140,615	190,231	251,295	161,641	46,135	392,795	353,888

Source: Executive Agency on Vine and Wine

*PDO - Protected designation of origin; **PGI - Protected geographical indication

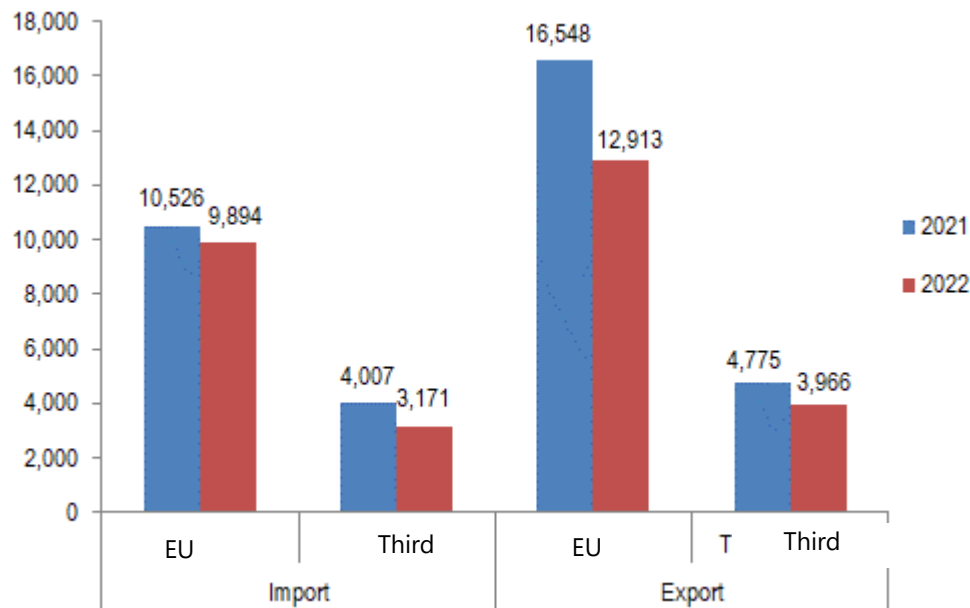
141,837 hectoliters of wine were produced in non-industrial conditions in 2022, compared to 157,447 hectoliters for the previous year.

Thus, the total production of wine from the 2022 harvest amounted to 888,520 hectoliters, 10.7% less than the 2021 harvest.

2.5.3. Export and Import of Wine

The export of wine from Bulgaria traditionally significantly exceeds the import in the country.

Figure II.9. Foreign trade in wine during the 2021 - 2022 period, thousand liters



Source: NSI

Export

According to NSI data, 16,879 thousand liters of wine were exported in 2022 - 20.8% less compared to the previous year. In terms of value, exports decreased more moderately - by 8.6% to EUR 27,859 thousand, as a result of the 15.5% higher average export price of EUR 1.65 per liter.

The total amount of wine directed towards the EU went down 22% on an annual basis to 12,913 thousand liters (76.5% of all exports). The leading destination was Poland - 6,673 thousand liters, although this is down 21.6% compared to 2021. Among the other major partners within the EU, a decrease in export compared to the previous year is also reported, ranging from 7.5% (Belgium) to 100% (Croatia). There were higher quantities sold in Denmark (by 59.9%) and the Netherlands (more than double).

Wine export to third countries in 2022 amounted to 3,966 thousand liters, nearly 17% below the 2021 level. There was a decline in export to leading markets such as the United Kingdom (by 27.7%) and Japan (by 19.6%). The quantities to China, Nigeria, Mongolia and others were also significantly lower. This is only partially offset by expanding sales to the Russian Federation, USA, Algeria, the United Arab Emirates, Benin, Switzerland, Georgia, Armenia and Norway.

Table II.37. Wine Exports in 2021 and 2022, liters

Countries	2021	2022	Change 2022/2021	
			liters	%
EU - total, including:	16,548,451	12,913,037	-3,635,414	-22.0%
Poland	8,514,136	6,672,779	-1,841,357	-21.6%
Sweden	3,701,334	3,424,620	-276,714	-7.5%
Czech Republic	1,890,644	1,378,219	-512,425	-27.1%
Belgium	637,946	565,991	-71,955	-11.3%
The Netherlands	169,048	343,140	174,092	103.0%
Germany	272,385	120,106	-152,279	-55.9%
France	251,736	111,327	-140,409	-55.8%
Lithuania	112,022	76,176	-35,846	-32.0%
Denmark	37,495	59,967	22,472	59.9%

Countries	2021	2022	Change 2022/2021	
			liters	%
Italy	291,271	30,077	-261,194	-89.7%
Greece	134,925	19,449	-115,476	-85.6%
Latvia	101,679	14,454	-87,225	-85.8%
Slovakia	143,960	10,412	-133,548	-92.8%
Slovenia	92,462	10,286	-82,176	-88.9%
Croatia	114,216	0	-114,216	-100.0%
Other	83,192	76,036	-7,156	-8.6%
Third countries, including:	4,775,396	3,966,687	-808,709	-16.9%
Russian Federation	920,149	947,690	27,541	3.0%
United Kingdom	1,285,799	929,085	-356,714	-27.7%
USA	583,204	619,845	36,641	6.3%
Japan	621,901	500,253	-121,648	-19.6%
Benin	126,360	136,940	10,580	8.4%
Nigeria	216,143	129,416	-86,727	-40.1%
Côte d'Ivoire	132,165	102,299	-29,866	-22.6%
Algeria	0	83,520	83,520	-
United Arab Emirates	46,690	69,805	23,115	49.5%
Lebanon	111,703	68,234	-43,469	-38.9%
Switzerland	47,020	62,534	15,514	33.0%
China	170,413	61,001	-109,412	-64.2%
Brazil	59,459	41,502	-17,957	-30.2%
Georgia	0	27,519	27,519	-
Armenia	6,540	29,360	22,820	348.9%
Canada	62,421	24,111	-38,310	-61.4%
Hong Kong	23,970	20,787	-3,183	-13.3%
Norway	2,039	19,817	17,778	871.9%
Mongolia	103,464	8,208	-95,256	-92.1%
Kazakhstan	41,278	7,364	-33,914	-82.2%
Burundi	45,860	7,056	-38,804	-84.6%
Ukraine	26,757	2,043	-24,714	-92.4%
Ghana	45,832	0	-45,832	-100.0%
Other	96,229	68,301	-27,928	-29.0%
Total	21,323,847	16,879,724	-4,444,123	-20.8%

Source: NSI and MAF calculations.

Import

The total import of wine in 2022 amounted to 13,064 thousand liters, which was 10.1% below the 2021 level. At a 25.2% higher average import price of EUR 2.60 per liter, the total value of imports went up 12.5% on an annual basis to EUR 33,927 thousand.

Table II.38. Wine imports in 2021 and 2022, liters

Countries	2021	2022	Change 2022/2021	
			liters	%
EU - total, including:	10,525,925	9,893,662	-632,263	-6.0%
Italy	3,205,740	3,229,157	23,417	0.7%
Spain	3,643,076	2,250,133	-1,392,943	-38.2%
France	1,737,764	1,963,888	226,124	13.0%
Germany	1,319,200	1,272,413	-46,787	-3.5%
Hungary	259,272	506,851	247,579	95.5%
Romania	16,495	227,672	211,177	1280.2%
Czech Republic	62,103	89,958	27,855	44.9%
Greece	70,222	78,933	8,711	12.4%
Lithuania	0	65,146	65,146	-
Poland	900	54,980	54,080	6008.9%
Belgium	19,143	34,941	15,798	82.5%
The Netherlands	48,257	33,991	-14,266	-29.6%
Denmark	17,976	32,400	14,424	80.2%
Portugal	36,565	27,845	-8,720	-23.8%
Sweden	69,381	8,484	-60,897	-87.8%
Other	19,831	16,873	-2,958	-14.9%
Third countries, including:	4,006,971	3,170,648	-836,323	-20.9%
Northern Macedonia	2,598,138	1,656,652	-941,486	-36.2%
South Africa	313,579	623,206	309,627	98.7%
New Zealand	504,547	522,506	17,959	3.6%
Chile	170,323	156,040	-14,283	-8.4%
Argentina	89,788	70,496	-19,292	-21.5%
United Kingdom	40,227	48,092	7,865	19.6%
Georgia	26,671	32,139	5,468	20.5%
Moldova	219,908	24,786	-195,122	-88.7%
Other	43,790	36,732	-7,058	-16.1%
Total	14,532,896	13,064,310	-1,468,586	-10.1%

Source: NSI and MAF calculations.

EU wine supplies decreased by 6% on an annual basis, to 9,894 thousand liters (75.7% of the total imports). Traditionally, the most significant quantities were imported from Spain, Italy, France and Germany. Compared to a year prior, imports from Spanish and German wines went down by 38.2% and 3.5%, respectively, while those of French and Italian wines increased by 13% and 0.7%, respectively. In 2022, wine deliveries from Romania and Poland increased several times.

Wine import from third countries in 2022 amounted to 3,171 thousand liters - 20% less than the previous year 2021, mostly due to a decrease in quantities from Northern Macedonia (by 36.2%) and Moldova (by 88.7%). On the other hand, import from South Africa nearly doubled.

III. TRADE IN AGRICULTURAL GOODS

1. Key trading indicators

In 2022, Bulgaria's agricultural trade increased by 42.8% on an annual basis in terms of value, reaching EUR 14,938.8 million. This is largely due to unusually high global inflation, which also affected the agricultural sector. Exports of agricultural goods during the year amounted to EUR 8,269.9 million, 36.9% above the 2021 level. With imports increasing even more (by 50.9%), Bulgaria's traditionally positive balance in agricultural trade shrank by 1.3% on an annual basis, to EUR 1,601 million.

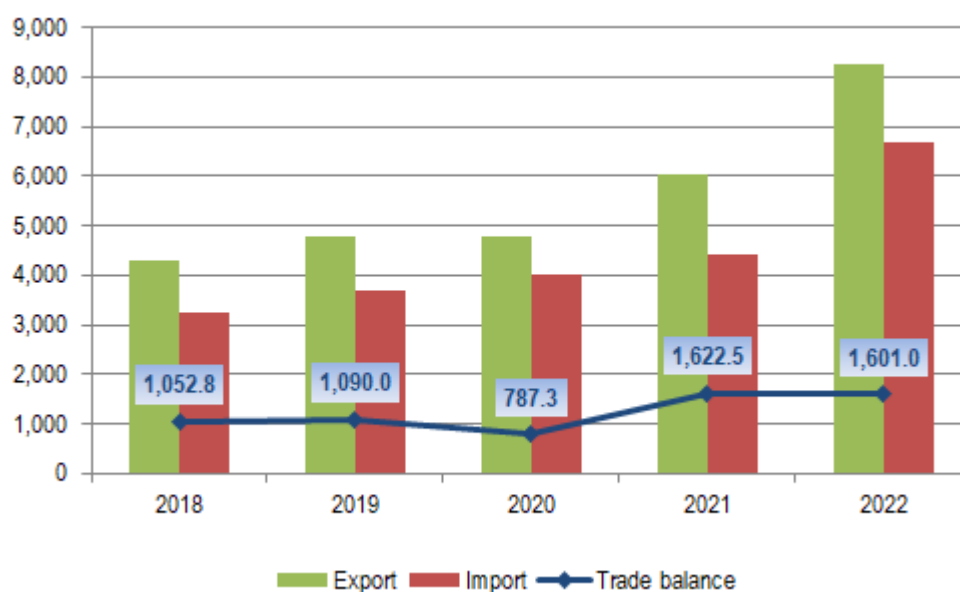
In 2022, the agricultural sector accounted for 14.5% of the country's total trade for the year, including 17.4% of total export and 12.1% of total import.

Table III.1. Agricultural trade in Bulgaria in the period 2018 - 2022 (EUR thousand)

	2018	2019	2020	2021	2022	Change 2022/2021 (%)
Agricultural export	4,308,894	4,793,025	4,786,052	6,041,007	8,269,923	36.9%
Share of total exports	15.1%	16.0%	17.1%	17.3%	17.4%	
Agricultural imports	3,256,142	3,702,996	3,998,783	4,418,463	6,668,884	50.9%
Share of total imports	10.1%	11.1%	13.0%	11.3%	12.1%	
Balance	1,052,752	1,090,029	787,269	1,622,544	1,601,039	-1.3%
Commodity exchange	7,565,036	8,496,021	8,784,835	10,459,470	14,938,807	42.8%

Source: NSI and MAF calculations.

Figure III.1. Agricultural trade of Bulgaria (EUR million)



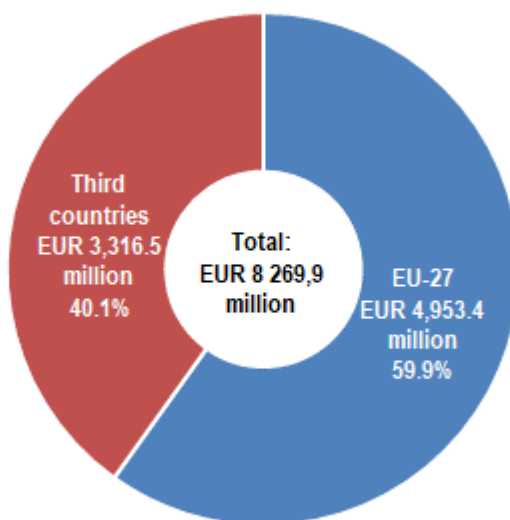
Source: NSI and MAF calculations

2. Structure of Bulgaria's agricultural trade by country

A major part of Bulgaria's agricultural trade takes place with European Union countries. In 2022, trade with EU member states accounted for 59.9% of Bulgaria's total agricultural export and 62.8% of the total agricultural import, compared to the previous year's 62.2% and 75.9%, respectively. The substantial decrease in EU's participation in the total agricultural imports in 2022 is largely explained by the sharp increase in the supply of certain products from Ukraine (notably oilseed sunflower and crude sunflower oil) as

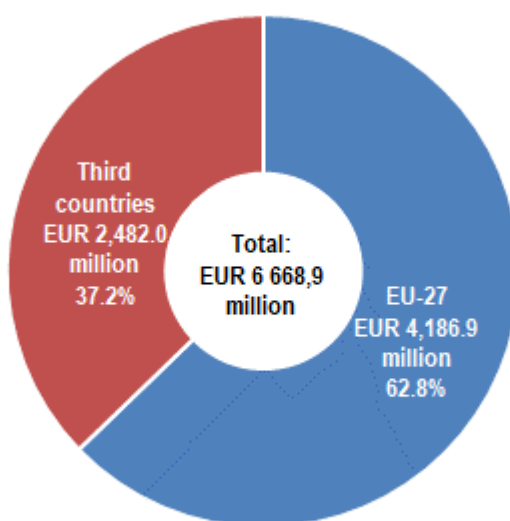
a consequence of the military conflict between Russia and Ukraine and the measures undertaken at European and international level to facilitate Ukrainian export, including through new routes.

Figure III.2. Structure of Bulgaria's agricultural exports in 2022 by country



Source: NSI and MAF calculations

Figure III.3. Structure of Bulgaria's agricultural imports in 2022 by country



Source: NSI and MAF calculations

2.1. Exports by country

The neighboring Greece and Romania account for the most significant share of Bulgaria's total exports of agricultural goods in 2022 - 12.1% and 9.8%, respectively. Top destinations also include Spain and Germany, followed by Algeria, the Netherlands, Italy, Turkey, France, China and others.

The comparison with 2021 shows an increase in exports for almost all major partners with the exception of Turkey. Shipments of agricultural goods to the EU increased by 31.9% on an annual basis, and exports to third countries - by 45.1%.

In terms of value, the largest increase was seen in exports for Algeria (EUR +434.4 million, mainly due to expanded wheat sales) and Greece (EUR +258.9 million, mainly as a result of the reported higher value of shipments of sunflower oil, cereals and sugar).

Table III.2. Export of agricultural goods by country (EUR thousand)

	2020	2021	2022	Share in total agricultural exports (2022)	Change 2022/2021	
					EUR thousand	%
TOTAL, including:	4,786,052	6,041,007	8,269,923	100.0%	2,228,916	36.9%
EU-27 total	3,041,289	3,754,932	4,953,404	59.9%	1,198,472	31.9%
Greece	584,937	744,863	1,003,727	12.1%	258,863	34.8%
Romania	578,029	679,769	813,944	9.8%	134,175	19.7%
Spain	259,483	438,192	616,227	7.5%	178,035	40.6%
Germany	317,935	371,305	476,626	5.8%	105,321	28.4%
The Netherlands	251,269	294,807	398,557	4.8%	103,750	35.2%
Italy	286,179	341,849	395,915	4.8%	54,065	15.8%
France	137,369	184,599	333,333	4.0%	148,734	80.6%
Poland	121,013	156,285	203,751	2.5%	47,466	30.4%
Belgium	103,214	97,678	140,621	1.7%	42,943	44.0%
Cyprus	44,760	72,133	107,372	1.3%	35,239	48.9%
Hungary	49,286	67,373	84,052	1.0%	16,679	24.8%
Other	307,814	306,078	378,356	4.6%	72,278	23.6%
Third countries total	1,744,763	2,286,039	3,316,519	40.1%	1,030,480	45.1%
Algeria	10,985	22,264	456,666	5.5%	434,402	1951.1%
Turkey	309,317	357,824	346,887	4.2%	-10,937	-3.1%
China	65,692	161,498	247,710	3.0%	86,212	53.4%
India	22,952	27,693	217,090	2.6%	189,397	683.9%
United Kingdom	140,839	159,220	198,080	2.4%	38,860	24.4%
USA	147,406	156,207	182,175	2.2%	25,968	16.6%
South Africa	79,038	49,783	181,956	2.2%	132,174	265.5%
Tunisia	27,425	93,392	163,034	2.0%	69,642	74.6%
Iraq	13,212	13,837	140,547	1.7%	126,710	915.7%
Israel	37,297	105,816	103,135	1.2%	-2,681	-2.5%
Egypt	22,190	22,157	94,939	1.1%	72,782	328.5%
Serbia	44,206	55,076	72,443	0.9%	17,367	31.5%
Indonesia	23,874	55,185	63,383	0.8%	8,198	14.9%
Northern Macedonia	48,432	53,989	60,859	0.7%	6,870	12.7%
Russia	57,894	63,718	59,008	0.7%	-4,710	-7.4%
Other	694,005	888,380	729,488	8.8%	-158,892	-17.9%

Source: NSI and MAF calculations.

2.2. Import by country

In 2022, agricultural imports from third countries more than doubled compared to the level of the previous year, mainly due to the reported increase of nearly twelve times in imports from Ukraine. There was a more moderate increase in the value of deliveries from EU member states - by 24.8%.

Table III.3. Imports of agricultural goods by country (EUR thousand)

	2020	2021	2022	Share in total agricultural imports (2022)	Change 2022/2021	
					EUR thousand	%
TOTAL, including:	3,998,783	4,418,463	6,668,884	100.0%	2,250,421	50.9%
EU-27, total, including:	2,883,501	3,355,558	4,186,910	62.8%	831,352	24.8%
Romania	512,439	685,924	875,101	13.1%	189,177	27.6%
Germany	405,995	453,460	546,208	8.2%	92,748	20.5%
Greece	389,798	468,252	530,169	7.9%	61,917	13.2%
Poland	270,150	309,143	378,135	5.7%	68,992	22.3%
The Netherlands	228,051	262,181	321,940	4.8%	59,759	22.8%
Italy	243,705	233,491	320,584	4.8%	87,093	37.3%
Hungary	155,038	190,768	231,492	3.5%	40,724	21.3%
Spain	141,108	162,054	217,332	3.3%	55,279	34.1%
France	123,693	146,909	157,603	2.4%	10,694	7.3%
Belgium	85,822	88,301	124,319	1.9%	36,018	40.8%
Austria	75,734	79,160	112,640	1.7%	33,479	42.3%
Czech Republic	52,959	63,158	91,755	1.4%	28,597	45.3%
Denmark	36,716	37,693	53,625	0.8%	15,932	42.3%
Lithuania	28,532	40,364	40,822	0.6%	458	1.1%
Ireland	19,769	26,783	39,501	0.6%	12,718	47.5%
Third countries, including:	1,115,282	1,062,905	2,482,000	37.2%	1,419,095	133.5%
Ukraine	144,101	95,626	1,106,200	16.6%	1,010,574	1056.8%
Turkey	190,497	261,181	278,878	4.2%	17,697	6.8%
China	65,240	62,368	202,132	3.0%	139,765	224.1%
Serbia	116,450	140,927	151,898	2.3%	10,971	7.8%
Moldova	22,139	38,158	121,489	1.8%	83,331	218.4%
Brazil	21,890	19,825	54,223	0.8%	34,399	173.5%
United Kingdom	55,366	51,024	48,072	0.7%	-2,952	-5.8%
Northern Macedonia	29,220	34,494	43,562	0.7%	9,068	26.3%
Côte d'Ivoire	19,903	35,701	39,898	0.6%	4,197	11.8%
Other	234,765	227,832	301,515	4.5%	73,683	32.3%

Source: NSI and MAF calculations.

With a 16.6% relative share of all agricultural imports in terms of value, Ukraine became a leading supplier of agricultural goods in Bulgaria in 2022, which is mainly associated with a shift in trade flows due to the military conflict between Ukraine and Russia. The international initiatives to secure export corridors for Ukrainian agricultural products and temporary liberalization of EU trade with Ukraine from June 2022 have influenced a sharp increase in imports of some Ukrainian products on the Bulgarian market, mostly of sunflower and crude sunflower oil.

Traditionally, the imports of agricultural goods from Romania, Germany and Greece were significant (representing 13.1%, 8.2% and 7.9% of the total agricultural imports in 2022, respectively), followed by Poland, the Netherlands, Italy, Turkey, Hungary, Spain, China and others.

After Ukraine, the biggest increase on an annual basis was reported by the value of deliveries from Romania (EUR +189.2 million) and China (EUR +139.8 million). Among our main trading partners, only the United Kingdom showed a decrease in agricultural imports compared to the previous year 2021.

3. Structure of Bulgaria's agricultural trade by products

3.1. Export by products

Cereal plants remained the leading group of products in the structure of the agrarian exports in 2022, although their share in the total value of agricultural goods sold abroad declined from 27.7% in 2021 to 22.7%. In second place is the group of fats of vegetable or animal origin with 21.1%, displacing oilseeds and fruits, the share of which shrank to 11.1% compared to 13.8% a year prior. Exports of residues from the food industry and animal feed, food products prepared on the basis of cereal plants, cocoa products, milk and dairy products, meat and offal, soft drinks and others were also relatively high.

Table III.4. Agricultural exports from Bulgaria by product groups in the period 2021 - 2022 (EUR thousand)

		2021		2022		Change 2022/2021 (%)
		EUR, thousand	share of the total agricultural exports %	EUR thousand	share of the total agricultural exports %	
	Total agricultural goods, including:	6,041,007	100%	8,269,923	100.0%	36.9%
1	Live animals	40,530	0.7%	64,625	0.8%	59.4%
2	Meat and edible offal	148,186	2.5%	244,939	3.0%	65.3%
3	Fish and crustaceans, mollusks and other aquatic invertebrates	43,197	0.7%	50,573	0.6%	17.1%
4	Milk and dairy products; poultry eggs; natural honey; edible products of animal origin, not elsewhere specified	2,291,55	3.8%	271,945	3.3%	18.7%
5	Other products of animal origin, not elsewhere specified	16,739	0.3%	18,519	0.2%	10.6%
6	Live plants and flower products	14,824	0.2%	9,566	0.1%	-35.5%
7	Edible vegetables, plants, roots and tubers	141,295	2.3%	166,677	2.0%	18.0%
8	Edible fruit; citrus or melon peels	127,834	2.1%	150,862	1.8%	18.0%
9	Coffee, tea, maté and spices	97,029	1.6%	117,609	1.4%	21.2%
10	Wheat plants	1,673,915	27.7%	1,880,871	22.7%	12.4%
11	Milling products; malt and starch; inulin; wheat gluten	61,809	1.0%	115,082	1.4%	86.2%
12	Oilseeds and oleaginous fruits; seeds for sowing and fruits; industrial or medicinal plants; straw and feed	832,083	13.8%	918,236	11.1%	10.4%
13	Natural varnishes, glues, resins and other plant juices and extracts	3,339	0.1%	2,763	0.0%	-17.3%
14	Weaving materials and other products of vegetable origin, not elsewhere specified or included	1,134	0.0%	1,341	0.0%	18.3%
15	Fats and oils of animal or vegetable origin; processed fats for food purposes; waxes of animal or vegetable origin	713,155	11.8%	1,748,158	21.1%	145.1%
16	Products of meat, fish or crustacean products, mollusks or other aquatic invertebrates	101,360	1.7%	127,577	1.5%	25.9%
17	Sugar and sugar confectionery	122,751	2.0%	213,956	2.6%	74.3%
18	Cocoa and cocoa products	257,061	4.3%	340,246	4.1%	32.4%
19	Food prepared from cereals, flour, starch, farina or milk; pastry confectionery	310,874	5.1%	375,439	4.5%	20.8%

		2021		2022		Change 2022/2021 (%)
		EUR, thousand	share of the total agricultural exports %	EUR thousand	share of the total agricultural exports %	
20	Food products from vegetables, fruit or other parts of plants	165,739	2.7%	189,637	2.3%	14.4%
21	Various types of food products	152,564	2.5%	199,330	2.4%	30.7%
22	Non-alcoholic and alcoholic beverages and vinegars	212,418	3.5%	251,346	3.0%	18.3%
23	Residues and waste from the food industry; prepared animal feed	408,733	6.8%	618,820	7.5%	51.4%
24	Tobacco and processed tobacco substitutes	165,288	2.7%	191,806	2.3%	16.0%

Source: NSI and MAF calculations.

The main contribution to the increase in total exports of agricultural goods in 2022 is the registered significant growth in the value of exported sunflower oil (by EUR 933.8 million or 144.1%), wheat (by EUR 252.1 million or 22.3%) and oil cakes (by EUR 152.5 million or 92.7%). Significant increases were also observed in the export of sunflower (by EUR 86.9 million), poultry meat (by EUR 85.7 million), ethyl alcohol (by EUR 55.3 million) and bakery, pastry or biscuit products (by EUR 51.9 million). The increase in value of products sold abroad was largely due to the higher export prices achieved compared to a year prior, although some of the products, such as wheat and sunflower, saw a decrease in exports in terms of quantity.

Table III.5. Leading products in agricultural exports from Bulgaria (EUR thousand)

	2021		2022		Change 2022/2021	
	Quantity (tons)	Value (EUR thousand)	Quantity (tons)	Value (EUR thousand)	Quantity	Value
Sunflower oil, cottonseed oil or safflower oil	559,457	647,933	910,012	1,581,751	62.7%	144.1%
Wheat and a wheat and rye mix	5,119,222	1,130,256	4,051,292	1,382,364	-20.9%	22.3%
Sunflower seeds, even crushed	758,221	602,642	660,346	689,553	-12.9%	14.4%
Bakery, pastry or biscuit products	106,397	267,831	103,866	319,706	-2.4%	19.4%
Oil cakes and other solid residues	645,340	164,476	931,961	316,945	44.4%	92.7%
Corn	1,759,340	398,509	963,503	312,915	-45.2%	-21.5%
Chocolate and other food products containing cocoa	50,412	205,018	51,709	243,630	2.6%	18.8%
Preparations used in animal feeding	135,853	182,066	111,411	204,898	-18.0%	12.5%
Poultry meat and offal	35,276	118,869	37,560	204,524	6.5%	72.1%
Food preparations not elsewhere specified or included	42,638	134,151	45,154	172,657	5.9%	28.7%
Rapeseed, even broken	270,658	152,309	205,418	135,033	-24.1%	-11.3%
Sugars, including lactose, maltose, glucose and fructose	203,119	76,158	211,121	126,078	3.9%	65.5%
Cheese and curd	25,757	97,931	23,517	111,656	-8.7%	14.0%
Raw or unprocessed tobacco; tobacco waste	22,908	111,205	23,658	108,292	3.3%	-2.6%
Undenatured ethyl alcohol, distillates, denatured	58,471	52,909	83,611	108,241	43.0%	104.6%

Source: NSI and MAF calculations.

3.2. Import by products

In 2022, all major groups of agricultural products reported an increase, most significantly for fats and oils of animal and vegetable purposes (nearly triple) and oilseeds and oleaginous fruits (more than double). The group of oilseeds and oleaginous fruits retained its leading position in the structure of total imports of agricultural goods during the year and even increased its share to 16.2%, compared to 10.5% in 2021. The significant increase in imports of crude sunflower oil led to an increase of the relative weight in the total agricultural imports of the fats and oils of animal or vegetable origin group from 6.7% in 2021 to 13.2% in 2022. Moving into third position are the meat and offal with 7.8% (compared to 9.2% in 2021), followed by non-alcoholic and alcoholic beverages and vinegar; milk and dairy products, poultry eggs and natural honey; tobacco and processed tobacco substitutes and others.

Table III.6. Agricultural imports from Bulgaria by product groups in the period 2021 - 2022 (EUR thousand)

		2021		2022		Change 2022/2021 %
		EUR, thousand	share of the total agricultural import %	EUR thousand	share of the total agricultural import %	
	Total agricultural goods, including:	4,418,463	100%	6,668,884	100%	50.9%
1	Live animals	26,703	0.6%	28,459	0.4%	6.6%
2	Meat and edible offal	405,215	9.2%	520,014	7.8%	28.3%
3	Fish and crustaceans, molluscs and other aquatic invertebrates	99,935	2.3%	128,060	1.9%	28.1%
4	Milk and milk products; poultry eggs; natural honey; edible products of animal origin, not elsewhere specified	306,200	6.9%	403,163	6.0%	31.7%
5	Other products of animal origin, not elsewhere specified	22,503	0.5%	28,930	0.4%	28.6%
6	Live plants and flower products	31,855	0.7%	38,800	0.6%	21.8%
7	Edible vegetables, plants, roots and tubers	221,394	5.0%	251,698	3.8%	13.7%
8	Edible fruit; citrus or melon peels	275,736	6.2%	303,871	4.6%	10.2%
9	Coffee, tea, maté and spices	137,453	3.1%	185,840	2.8%	35.2%
10	Wheat plants	106,596	2.4%	190,286	2.9%	78.5%
11	Milling products; malt and starch; inulin; wheat gluten	28,012	0.6%	35,705	0.5%	27.5%
12	Oilseeds and oleaginous fruits; seeds for sowing and fruits; industrial or medicinal plants; straw and feed	462,065	10.5%	1,080,412	16.2%	133.8%
13	Natural varnishes, glues, resins and other plant juices and extracts	19,023	0.4%	31,301	0.5%	64.5%
14	Weaving materials and other products of vegetable origin, not elsewhere specified or included	1,308	0.0%	2,330	0.0%	78.1%
15	Fats and oils of animal or vegetable origin; processed fats for food purposes; waxes of animal or vegetable origin	296,468	6.7%	878,109	13.2%	196.2%
16	Products of meat, fish or crustacean products, molluscs or other aquatic invertebrates	73,464	1.7%	91,734	1.4%	24.9%
17	Sugar and sugar confectionery	137,178	3.1%	238,510	3.6%	73.9%
18	Cocoa and cocoa products	286,085	6.5%	336,041	5.0%	17.5%
19	Food prepared from cereals, flour, starch, farina or milk; pastry confectionery	230,415	5.2%	304,805	4.6%	32.3%
20	Food products from vegetables, fruit or other parts of plants	165,052	3.7%	203,994	3.1%	23.6%
21	Various types of food products	259,552	5.9%	332,458	5.0%	28.1%

		2021		2022		Change 2022/2021 %
		EUR, thousand	share of the total agricultural import %	EUR thousand	share of the total agricultural import %	
22	Non-alcoholic and alcoholic beverages and vinegars	359,816	8.1%	413,132	6.2%	14.8%
23	Residues and waste from the food industry; prepared animal feed	174,612	4.0%	261,984	3.9%	50.0%
24	Tobacco and processed tobacco substitutes	291,825	6.6%	379,249	5.7%	30.0%

Source: NSI and MAF calculations.

Compared to the previous year, in 2022 there was a sharp increase in sunflower imports (by EUR 630.7 million or 190%) and sunflower oil (by EUR 406.1 million or over thirteen times). There was also a significant increase in the value of imports of animal or vegetable fats and sugar (by EUR 128.6 million and EUR 85.1 million, respectively), chocolate products, bakery, pastry or biscuit products, pork, coffee, poultry meat and others.

Table III.7. Leading products in agricultural imports in Bulgaria (EUR thousand)

	2021		2022		Change 2022/2021	
	Quantity (tons)	Value (EUR thousand)	Quantity (tons)	Value (EUR thousand)	Quantity	Value
Sunflower seeds, even crushed	585,158	331,989	1,337,262	962,725	128.5%	190.0%
Sunflower oil, cottonseed oil or safflower oil	26,475	32,572	308,935	438,648	1066.9%	1246.7%
Pork	138,372	230,694	131,971	280,955	-4.6%	21.8%
Chocolate and other food products containing cocoa	39,717	172,802	47,210	226,264	18.9%	30.9%
Animal or vegetable fats and oils and their fractions; inedible mixtures	81,840	87,216	137,804	215,822	68.4%	147.5%
Bakery, pastry or biscuit products	64,676	153,600	73,117	205,454	13.1%	33.8%
Cigars (including those with cut ends), cigarillos and cigarettes of tobacco or of tobacco substitutes	14,625	176,345	15,453	188,522	5.7%	6.9%
Food preparations not elsewhere specified or included	30,093	145,652	29,793	182,115	-1.0%	25.0%
Cane or beet sugar and chemically pure sucrose, in solid form	207,950	93,459	304,633	178,509	46.5%	91.0%
Coffee and coffee substitutes	38,212	116,077	35,944	161,039	-5.9%	38.7%
Waters, including mineral waters and aerated waters, and other non-alcoholic beverages	221,271	138,203	213,644	154,073	-3.4%	11.5%
Cheese and curd	33,446	110,191	35,072	146,395	4.9%	32.9%
Poultry meat and offal	93,347	99,559	93,592	141,207	0.3%	41.8%
Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80% vol; distillates, liqueurs and other spirituous beverages	18,949	109,791	23,612	139,086	24.6%	26.7%
Preparations used in animal feeding	91,202	93,504	99,375	125,974	9.0%	34.7%

Source: NSI and MAF calculations.

4. Development of foreign trade in agricultural goods in 2023

According to preliminary NSI data, in the first six months of 2023 the export of agricultural goods amounted to EUR 3,913.2 million - 5.6% less than the same period in 2022, mainly due to a decrease in

value of sunflower oil and wheat sold abroad. On the other hand, there was a significant increase in exports of live animals (mainly cattle) and sugar and sugar confectionery - by EUR 106.9 million or over eleven times and by EUR 64.4 million or 77.7%, respectively. There was also a significant increase in the value of exported meat and offal (by 41.5%), tobacco and processed tobacco substitutes (by 26.8%), food products prepared on the basis of cereal plants (by 22.8%), cocoa products (by 18.1%) and others.

The leading groups of products in the structure of the country's agrarian exports in the period January - June 2023 are cereal plants and fats of vegetable or animal origin, followed by oilseeds; residues and waste from the food industry and prepared animal feed; food products prepared on the basis of cereal plants; cocoa products; sugar and sugar confectionery; meat and offal; dairy products, eggs and honey and others.

Imports of agricultural goods for the six months of 2023 reported a slightly smaller decrease on an annual basis - by 3.5% to EUR 2,940.5 million.

Thus, for the first half of 2023, there was a positive trade balance for Bulgaria in the amount of EUR 972.7 thousand, 11.6% more compared to the same period of 2022.

Main partners in the country's agricultural trade remain the EU countries. In the first six months of 2023, the exchange of agricultural goods with the EU decreased by 9% on an annual basis, forming 53.1% of total agricultural exports and 71% of total agricultural imports.

5. Activities to support the export of agricultural products

One of the main mechanisms to support exports is the collection and provision of information on potential markets for agricultural products produced in the country. In this regard, upon receipt of specific inquiries in 2022, market analyses and studies on the opportunity of exporting various agricultural products to trading partners from both the EU and third countries were conducted. During negotiations between EU and third countries, MAF followed the process related to Free Trade Agreements (FTAs), aiming to ease administrative burdens in trade and commodity exchange. The subject of consideration are the trade and economic relations in the agricultural sector between Bulgaria and the respective countries, with which trade agreements are to be concluded.

In 2022, the negotiations for concluding FTAs between the EU and Australia, New Zealand, Mercosur, Chile, Indonesia, and Mexico continued. The effect of the implementation of the Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community and the United Kingdom of Great Britain and Northern Ireland was also monitored.

An analysis was performed on the effect of liberalizing the EU - Republic of Moldova Association Agreement in the form of additional duty-free quotas for certain agricultural products to be applied for a period of one year.

The MA maintains information regarding the import bans on a number of foods originating in the European Union, imposed by the Council of Ministers of the Republic of Belarus in 2022 in response to the sanctions by the European Union.

Materials have been prepared regarding the EU - Chile Association Agreement, the negotiations for which concluded in 2022, in order to inform Bulgarian exporters about export opportunities to this country.

The Ministry of Agriculture and Food traditionally organizes the country's participation in various international events and exhibitions for the food industry in order to promote and build a recognizable image of Bulgarian agricultural products, support exports and develop international contacts between business operators in the sector.

In 2023, national stands of the Republic of Bulgaria with the participation of producers of honey, wine, dairy and meat products, organic products, jam, essential oils and other attended the Green Week International Exhibition in Berlin, Federal Republic of Germany, BIOFACH 2023 International Exhibition of Organic Food in Nuremberg, Federal Republic of Germany, and the AGRA 2023 International Exhibition of Agriculture and Food in Gornja Radgona, Republic of Slovenia.

IV. SUPPORT OF THE AGRICULTURAL INDUSTRY

1. Support under the First Pillar of CAP

1.1 Area-Based Direct Payments, Transitional National Aid and Coupled Support

Financial support through direct payments is provided by the EAGF and the NB. During the calendar year 2022, funds were authorized under direct payment schemes to the amount of BGN 1.7 billion, including for the 2021 and 2022 campaigns.

2021 campaign

Table IV.1. Authorized funds for the 2021 campaign in 2022

Scheme/Measure	Number of valid applications submitted	Number of applications with authorized payments	Percentage distribution of budget (%)		Authorized amount (BGN)
			EAGF	NB	
SAPS	54,154	67	100	-	72,253,383
GDP	54,154	54,122	100	-	451,763,852
SRP	54,084	54,051	100	-	104,573,117
YFS	3,748	3,746	100	-	2,526,136
Cotton	77	77	100	-	3,746,324
SDC	3,239	6	100	-	201,386
SMKH	4,776	9	100	-	213,485
SSCc-meat	488	2	100	-	53,192
SMR	1,962	1	100	-	6,340
SSC	2,069	3	100	-	72,942
Buffaloes	256	0	100	-	51,478
SF (main)	5,745	5,744	100	-	30,495,161
SV (main)	2,871	2,870	100	-	16,301,426
SVg	1,124	1,124	100	-	8,203,537
SPC	16,150	16,143	100	-	30,847,577
SMLK-milk	921	4	100	-	210,072
SDC-MA	326	0	100	-	2,100
SF (other)	3,323	3,323	100	-	6,862,574
CV-CCWM	2,829	2,829	100	-	6,120,574
CV-TCGE	1,688	1,688	100	-	4,463,141
SV-P	1,213	1,213	100	-	4,335,866
SSF	2,249	2,249	100	-	2,401,604
TMSA1	3,763	15	-	100	13,246,737
TMSA3	5,582	346	-	100	9,187,119
TNT	38,804	38,785	-	100	70,241,739
Financial discipline	n/a	n/a	100	-	33,693,111
TOTAL					872,073,973

Source: SFA-PA

2022 campaign

During the 2022 campaign, farmers were supported under the following direct payment schemes, financed by European and national funds:

Direct payment schemes

- Single area payment scheme
- Payment scheme for climate and environmentally friendly agricultural practices — green direct payments
- Redistributive payment scheme;
- Young farmers scheme;
- Scheme for small farmers;
- Coupled support scheme for dairy cows;
- Coupled support scheme for dairy cows under selection control;
- Coupled support scheme for dairy cows in mountain areas;
- Coupled support scheme for beef cows and/or heifers;
- Coupled support scheme for beef cows under selection control;
- Coupled support scheme for ewes and does in mountain areas
- Coupled support scheme for ewes and does under selection control;
- Coupled support scheme for buffaloes;
- Coupled support scheme for fruit;
- Coupled support scheme for fruit (plums and table grapes);
- Coupled support scheme for vegetables (tomatoes, cucumbers, gherkins and eggplants)
- Coupled support scheme for vegetables (pepper);
- Coupled support scheme for vegetables (potatoes, onions and garlic);
- Coupled support scheme for vegetables (carrots, cabbage, watermelons and melons);
- Coupled support scheme for greenhouse vegetables;
- Coupled support scheme for protein crops;
- Specific support for cotton.

Transitional National Aid Schemes

- Transitional national aid scheme for tobacco, uncoupled with production;
- Transitional national support scheme for cattle and buffaloes, uncoupled with production;
- Transitional National Coupled Support Scheme for Ewes and Does.

Payments for the 2022 campaign started in October 2022 with the payment of funds under the transitional national support schemes in the Livestock sector. In December of the same year, authorization was granted under the coupled production schemes in the Livestock sector and under the single area payment scheme financed by the EAGF.

A total of 96,643 applications for support were accepted under all schemes and measures for the campaign and the submitted area for support amounted to 3,835,356 ha.

Table IV.2. Authorized funds for the 2022 campaign in 2022

Scheme/Measure	Number of valid applications submitted	Number of applications with authorized payments	Percentage distribution of budget (%)		Authorized amount (BGN)
			EAGF	NB	
SAPS	54,465	52,509	100	-	660,972,103
SDC	2,932	2,927	100	-	27,478,206
SMKH	4,552	4,522	100	-	18,456,224
SSCc-meat	515	509	100	-	3,181,767
SMR	1,792	1,778	100	-	3,249,187
SSC	2,079	2,075	100	-	23,816,684
Buffaloes	256	253	100	-	4,391,503
SMLK-milk	895	893	100	-	38,804,902
SDC-MA	340	338	100	-	917,016
TMSA1	3,464	3,451	-	100	30,823,332
TMSA3	5,105	5,087	-	100	21,229,702
TOTAL					833,320,626

Source: SFA-PA

Area-based support schemes (hectare)

Single area payment scheme

For the 2022 campaign, 54,465 applications for funding were submitted. As of 30.06.2023, the total amount of authorized funds amounted to BGN 737,156,198, with payment per unit area of BGN 195.95/ha. The budget for the campaign amounted to BGN 745,163,712.

The minimum size of an eligible for support holding is 0.5 ha and of a parcel - 0.1 ha. Under SAPS, a reduction of payments is applied for amounts over EUR 150,000, as an instrument to counteract the structural imbalance, taking into account employment on farms by deducting the costs of agricultural work remuneration before the reductions in payments.

Payment scheme for climate and environmentally friendly agricultural practices (green direct payments)

Support under the scheme is available to farmers, who are eligible for SAPS payment and follow practices for crop diversification, preservation of permanently grassed areas and maintaining of ecologically oriented areas within all their hectares, depending on the structure of the agricultural holding, its size and the cultivated crops. For the 2022 campaign, the scheme has a budget of BGN 467,782,377 and payment per unit area of BGN 123.04/ha. The funds authorized as of 30 June 2023 amounted to BGN 466,075,884 or 99.6% of the budget.

Redistributive payment scheme

The scheme provides additional support to more economically vulnerable small and medium-sized farms in the form of a higher single payment per hectare for the first 30 ha of each farm eligible for SAPS support. In the 2022 campaign, 54,383 farmers applied for the scheme with a budget of BGN 109,460,259. Payment per unit area amounted to BGN 140.81/ha. As of 30 June 2023, funds to the amount of BGN 108,219,346, representing 98.9% of the budget, were authorized.

Young Farmers Scheme

Farmers who were not more than 40 years old during the application year and had started farming in the last 5 years received an increased payment of 50% of the SAPS payment for their first 30 ha. 3,221 young farmers applied for support in the 2022 campaign. As of 30 June 2023, BGN 2,406,091 were authorized under the scheme.

Scheme for small farmers

Support for small farmers replaced all payments under direct payment schemes. The financial support is set up annually and individually for each individual beneficiary, depending on the size of eligible areas, the number of eligible animals and the applied schemes, and may not exceed the BGN equivalent of EUR 1,250, while payments of up to EUR 500 are rounded up to EUR 500.

Application for participation in the scheme was only possible in the reference year 2015. Beneficiaries who had submitted SAPS applications were eligible for support and they had to meet the minimum requirements for receiving direct payments. In order to benefit from the financial aid, each year of their application they have to maintain at least the amount of areas declared for the 2015 campaign.

1,847 farmers continued to participate in the scheme during the 2020 campaign. As of 30 June 2023, funds amounting to BGN 2,020,607 were authorized under the scheme.

Coupled support schemes

Coupled Support Scheme for Dairy Cows

For the 2022 campaign, 2,932 farmers applied for funding under the scheme, with a budget of BGN 27,868,538. The set payment per animal was BGN 375.49 a head for the first 50 animals and BGN 300.39 a head for the animals over the 50th eligible one. As of 30 June 2023, BGN 27,520,252 were authorized under the scheme, representing 98.8% of the budget.

Coupled Support Scheme for dairy cows under selection control

The annual budget of the scheme amounted to BGN 39,307,035, and the payment per animal was BGN 569.78 a head for the first 50 eligible animals and BGN 455.82 a head over the 50th eligible one. 895 farmers applied for support for the 2022 campaign. As of the end of June 2023, funds to the amount of BGN 38,821,198 - 98.8% of the set budget were authorized.

Coupled Support Scheme for Dairy Cows in Mountain Areas

The scheme has an annual budget of BGN 924,981. 340 farmers applied for the 2022 campaign. The support rate per animal amounted to BGN 380.03/head. By the end of May 2023, BGN 917,016 or 99.1% of the allocated for the campaign funds were disbursed.

Coupled support scheme for beef cows and/or heifers

4,552 farmers applied for support for the 2022 campaign. The scheme has an annual budget of BGN 18,749,713. By 30.06.2023, the paid funds amounted to BGN 18,533,215 at a support rate of BGN 157.43 a head for the first 50 animals and BGN 125.94 a head for the animals over the 50th eligible one. Budget absorption was 98.9%.

Coupled Support Scheme for meat-breed cows under selection control

The annual budget of the scheme for the 2022 campaign was BGN 3,249,951. 515 applications for funding were submitted. At a payment per animal of BGN 118.21/head for the first 50 eligible animals and BGN 94.57/head for the animals over the 50th eligible one, funds to the amount of BGN 3,220,231 or 99.1% of the budget have been authorized as of 30 June 2023.

Coupled support scheme for ewes and/or she-goats in mountain areas

The budget of the scheme for the 2022 campaign amounted to BGN 3,284,950. 1,792 farmers applied to participate in it. The rate for one animal amounted to BGN 63.82/head. As of 30 June 2023, funds to the amount of BGN 3,258,912 were authorized, which represented 99.2% of the budget.

Coupled support scheme for ewes and/or does under selection control

The scheme supports farmers who breed 50 or more ewes under selection control of one breed and/or 20 or more does under selection control of one breed. The resources set for the 2022 campaign amounted to BGN 24,004,232. Applications for support were submitted by 2,079 farmers. At a rate of BGN 74.24/head for the first 200 eligible animals and BGN 59.39/head for the animals over 200, funds to the amount of BGN 23,834,559 or 99.3% of the budget have been paid out as of 30 June 2023.

Coupled support scheme for buffaloes

256 farmers applied for the 2022 campaign under the scheme with a budget of BGN 4,424,442. The payments per animal amounted to BGN 411.96/head for the first 50 eligible animals and BGN 329.57/head for the animals over the 50th one. The authorized funds by the end of June 2023 amounted to BGN 4,408,675, which corresponded to 99.6% of the budget.

Coupled support scheme for fruit (main group)

5,776 farmers submitted applications under the scheme of the 2022 campaign. The financial resource set for the year amounted to BGN 33,707,761. With a rate for a unit area of BGN 1,842.92/ha for the first 30 ha of the farm and BGN 1,228.61/ha for areas over 30 ha, by 30.06. In 2023, funds to the amount of BGN 33,301,609, representing 98.8% of the budget, were authorized.

Coupled support scheme for fruit - plums and table grapes

The budget of the scheme for the 2022 campaign amounted to BGN 7,754,031. 3,404 applications were submitted for the campaign, while payment for a unit area was BGN 981.24/ha for the first 30 ha of the farm and BGN 654.11/ha for areas over the 30th ha. Absorption of the financial resource by the end of June 2023 was 98.2%, with paid funds amounting to BGN 7,617,513.

Coupled Support Scheme for Vegetables (tomatoes, cucumbers, gherkins and eggplant)

1,552 farmers applied for the 2020 campaign under the scheme. The set annual budget amounted to BGN 4,955,774, and the rate for a unit area for the first 30 ha of the farm was BGN 2,266.13/ha and BGN 1,510.75/ha for areas over the 30th ha. By 30 June 2023, authorized funds amounted to BGN 4,773,287 or 96.32% of the budget.

Coupled support scheme for vegetables (pepper)

The set annual financial resource for the 2022 campaign under the scheme amounted to BGN 4,130,407. Payment for a unit area for the first 30 ha of the farm amounted to BGN 2,299.08/ha, while for areas over 30 ha it was BGN 1,577.88/ha. Applications for support were submitted by 1,096 farmers. By mid-2023, BGN 4,080,700 were authorized - 98.8% of the budget.

Coupled support scheme for vegetables (potatoes, onions and garlic)

2,439 farmers submitted applications for support under the scheme for the 2022 campaign. With an annual budget of BGN 16,281,425, rates for a unit area to the amount of BGN 1,809.11/ha were set for the first 30 ha of the farm and BGN 1,206.07/ha for hectares over 30. By mid-2023, funds to the amount of BGN 15,765,647, representing 96.8% of the budget, were authorized.

Coupled support scheme for vegetables (carrots, cabbage, watermelons and melons)

The budget for the 2022 campaign under the scheme amounted to BGN 5,252,590. 2,710 farmers applied for funding. The set payment for a unit area was BGN 891.06/ha for the first 30 ha of the farm and BGN 594.04/ha for over 30 ha. As of 30 June 2023, payments to the amount of BGN 5,160,907 were made - 98.3% of the annual budget.

Coupled support scheme for greenhouse vegetables

Due to the specific nature of vegetable production in greenhouses, areas with a minimum farm size of 0.5 ha are eligible for funding, which can be combined with field and greenhouse production. For the 2022 campaign, applications for support under the scheme were submitted by 1,114 farmers. The annual budget amounted to BGN 8,808,953, and the payment per unit area was BGN 12,724.18/ha. By mid-2023, funds to the amount of BGN 8,533,853, representing 96.9% of the budget, were authorized.

Coupled support scheme for protein crops

The scheme was implemented for the first time during the 2015 campaign and aims to indirectly support livestock farmers by stimulating the production of protein crops for feed. At the same time, it contributed to the fulfillment of the requirements for maintaining of ecologically oriented areas, as part of the green requirements. 15,477 farmers applied for the 2020 campaign under the scheme. As of 30 June 2023,

out of the annual budget amounting to BGN 31,185,427, BGN 31,147,729 were authorized with a rate of BGN 248.37/ha.

Specific payment for cotton

Cotton cultivation was supported through a stand-alone scheme with a specific budget, which for the 2022 campaign amounted to BGN 5,093,987. 56 farmers submitted applications for support and the paid funds amounted to BGN 1,960,062.

Transitional national aid

During the 2022 campaign, following consistency in the policy to support the Livestock and Tobacco sectors with national funds, Bulgaria continued to implement transitional national aid schemes for cattle, buffaloes, ewes and does, and tobacco, under the conditions of the national co-payment schemes implemented in 2013.

Transitional national aid for tobacco

For the 2022 campaign, 38,218 farmers applied for support under the scheme for the quantities of tobacco delivered during the reference years. As of June 30, 2023, the authorized funds amounted to BGN 69,991,181.

Transitional national aid for cattle and buffaloes (decoupled with production)

The annual budget for the scheme amounted to BGN 32,064,360. 3,464 farmers applied for the 2022 campaign. The set rate for cattle was BGN 192.57/head, and for buffaloes it was BGN 337.00/head. As of the end of June 2023, authorized funds amounted to BGN 30,933,675 (96.5% of the budget).

Transitional national aid for ewes and/or she-goats (coupled)

5,105 farmers applied for the scheme, with a budget of BGN 21,760,654 for the 2022 campaign. Payment for one animal was BGN 41.07/head. As of 30 June 2023, an amount of BGN 21,363,303 was authorized (98.2% of the set budget).

Table IV.3. Amount of assistance under direct payment schemes and transitional national assistance and utilization of their budgets for the 2022 campaign, BGN

Scheme	Budget for 2022 campaign	Number of valid applications submitted	Rate for 2021 campaign (BGN/ha, BGN/head)		Authorized funds for 2021 campaign (BGN)	Budget utilization (%)
			up to (ha/no.)	over (ha/no.)		
SAPS	745,163,712	54,465	195.95		737,156,198	98.9%
GDP	467,782,377	54,465	123.04		466,075,884	99.6%
SRP	109,460,259	54,383	140.81		108,219,346	98.9%
YFS	-	3,221	97.98		2,406,091	-
SSF	-	1,847	-	-	2,020,607	-
SDC	27,868,538	2,932	375.49	300.39	27,520,252	98.8%
SSCc - milk	39,307,035	895	569.78	455.82	38,821,198	98.8%
SMLU- MR	924,981	340	380.03		917,016	99.1%
SMKH	18,749,713	4,552	157.43	125.94	18,533,215	98.8%
SSCc-meat	3,249,951	515	118.21	94.57	3,220,231	99.1%
DPZh - Sq	3,284,950	1,792	63.82		3,258,912	99.2%
SSC	24,004,232	2,079	74.24	59.39	23,834,559	99.3%
Buffaloes	4,424,442	256	411.96	329.57	4,408,675	99.6%

Scheme	Budget for 2022 campaign	Number of valid applications submitted	Rate for 2021 campaign (BGN/ha, BGN/head)		Authorized funds for 2021 campaign (BGN)	Budget utilization (%)
SP - main	33,707,761	5,776	1,842.92	1,228.61	33,301,609	98.8%
SP - others	7,754,031	3,404	981.17	654.11	7,617,513	98.2%
NW - DKKP	4,955,774	1,552	2,266.13	1,510.75	4,773,287	96.3%
NW - P	4,130,407	1,096	2,299.08	1,532.72	4,080,700	98.8%
NW - CLC	16,281,425	2,439	1,809.11	1,206.07	15,765,647	96.8%
NW - MZDP	5,252,590	2,710	891.06	594.04	5,160,907	98.3%
SVg	8,808,953	1,114	12,724.18		8,533,853	96.9%
SPC	31,185,427	15,477	248.37		31,147,729	99.9%
Cotton	5,093,987	56	-		1,960,062	38.5%
TNT	70,500,000	38,218	-		69,991,181	99.3%
TMSA1	32,064,360	3,464	192.57	337	30,933,675	96.5%
TMSA3	21,760,654	5,105	41.07		21,363,303	98.2%
Total	-	-	-		1,671,021,649	-

Source: Direct Payments Directorate, Ministry of Agriculture

*Data as of 30.06.2023

2023 campaign

The 2023 campaign gives the start of the implementation of the new Common Agricultural Policy with the introduction of interventions included in the Strategic Plan for Agricultural and Rural Development 2023-2027.

Under direct payments, the following interventions are applied:

Area-based support interventions for farmers:

- Basic income support for sustainability;
- Additional redistributive income support for sustainability;
- Additional income support for young farmers;
- Payments for small farmers.

Climate, environment and animal welfare schemes (Eco schemes):

- Organic farming (livestock) eco scheme;
- Eco scheme for maintenance and improvement of biodiversity and ecological infrastructure;
- Eco scheme for preservation and restoration of soil potential - promoting green manuring and organic fertilization;
- Eco scheme to reduce pesticide use;
- Eco scheme for ecological maintenance of perennials;
- Eco scheme for extensive maintenance of permanent grasslands;
- Eco scheme for maintenance and improvement of biodiversity in forest ecosystems;
- Eco scheme for diversification of cultivated crops.

Farmer support interventions for livestock:

- Coupled with production support for dairy cows;
- Coupled with production support of dairy cows included in breeding programs;

- Coupled with production support for meat cows;
- Coupled with production support of meat cows included in breeding programs;
- Coupled with production support of cows of endangered breeds;
- Coupled with production support of cattle in mountain regions;
- Coupled with production support for buffaloes;
- Coupled with production support of ewes and goats of endangered breeds;
- Coupled with production support of ewes and goats included in breeding programs;
- Coupled with production support of ewes and goats in mountain regions (SMR);
- Transitional national aid for cattle, decoupled with production (TMSA1);
- Transitional national aid for ewes and/or does, coupled with production (TMSA3).

Farmer support interventions for fruit crops, fruits and vegetables:

- Coupled support for fruits;
- Coupled support for fruit crops until fruiting;
- Coupled support for vegetables (tomatoes, cucumbers, gherkins and eggplant);
- Coupled support for vegetables (pepper);
- Coupled support for vegetables (onions and garlic) and starch potatoes;
- Coupled support for vegetables (carrots, cabbage, watermelons and melons);
- Coupled support for greenhouse production;
- Coupled support for fruits and vegetables in mountain regions.

Other interventions:

- Coupled support for protein crops;
- Specific support for cotton;
- Transitional national aid scheme for tobacco, decoupled with production.

Table IV.4. Intervention budgets for direct payments for the 2023 campaign, BGN

Intervention	2023 campaign budget
Basic Income Support for Sustainability	758,581,284
Additional Redistributive Income Support for Sustainability	180,267,185*
Additional income support for young farmers	23,642,297
Payments for small farmers	5,622,925
Eco schemes	393,959,808
Coupled support (Animals/Fruits and vegetables)	204,852,667
Coupled support (Protein crops)	31,515,794
Cotton	5,002,584
Total	1,603,444,545

Source: Direct Payments Directorate, Ministry of Agriculture

**Includes the amount foreseen to be generated by the imposition of reductions in payments under BISS (payment ceiling) pursuant to Article 57(2) of the Farmers Support Act*

Table IV.5. Budget for implementation of transitional national aid for the 2023 campaign, BGN

Scheme	2023 campaign budget
Transitional national aid for cattle, decoupled with production	32,064,363
Transitional national aid for ewes and/or does, coupled with production	26,828,687
Transitional national aid scheme for tobacco, decoupled with production	78,774,735
Total	137,667,784

Source: Direct Payments Directorate, Ministry of Agriculture

1.2 Market support mechanisms

1.2.1. Milk sector

Contractual relations in the milk sector

Contractual relations in the milk and dairy products sector are regulated by Ordinance No. 1 of 28.01.2015 for the contractual relations in the milk sector and the terms and conditions for the recognition of producer organizations, their associations and interbranch organizations in the milk and dairy products sector.

The purpose of the regime is to ensure the sustainable development of raw milk production of all types, improve the possibilities of milk producers to negotiate with buyers and fairer distribution of added value along the supply chain.

The legislation allows milk producers' organizations or their associations to jointly negotiate with a raw milk buyer the terms of contracts, including price, for part or all of the raw milk of their members.

In 2022, 241 inspections of manufacturers and 192 of purchasers were performed. 16 CEAVs were issued, the criminal proceedings on which resulted in the issuance of 14 penal rulings and two motivated resolutions for the termination of administrative and criminal proceedings. Property sanctions were imposed to the amount of BGN 35,900. By the end of December 2022, BGN 15,000 were paid voluntarily.

More than 1,310 applications were accepted and processed for the first half of 2023 under the scheme, relating to 7,993 contracts between producers and first buyers of raw cow, sheep, goat and buffalo milk. 93 applications for the registration of contracts have been received electronically in the ESS of SFA. 225 on-site inspections of first buyers have been ordered, of which 216 are based on risk analysis and 9 are based on identified violations. 157 on-site inspections of raw milk producers have been carried out, of which 149 are based on risk analysis and 8 are based on identified violations.

1.2.2. Fruit and Vegetable Sector

Producer organization scheme

Producer organizations in the fruit and vegetables sector;

The grouping of fruit and vegetable farmers into producer organizations and financially supporting them under the Operational Programs scheme is aimed at increasing competitiveness and market orientation in the sector, reducing the fluctuations in producer income in result of crises, increasing fruit and vegetable consumption and increasing the use of environmentally friendly cultivation and production techniques.

In order to receive financial support, the organization of fruit and vegetable producers shall be recognized by the Ministry of Agriculture and Food, it shall prepare and submit for approval an operational program and to establish an operational fund.

The operational fund shall only pay for expenditure and activities under the operational program. It is funded through financial contributions from the organization and/or its members and financial support from

the EAGF. Contributions to the operational fund shall be determined by decision of the General Assembly of the organization.

The EU financial aid shall not exceed the lesser of 50% of the actually incurred expenses by the operational program or 4.1% of the value of the organization's marketed production.

Supplementing the European subsidy with national funds is also possible.

There were a total of two approved programs running in 2022. After completion of the administrative processing and on-site inspections, financial support to the amount of BGN 572,530 was authorized, of which BGN 166,480 was from the EAGF and BGN 406,050 was from the NB. The financial aid disbursed in 2022 was for the supply and installation of fruit and vegetable greenhouses, for purchasing of hydraulic platforms for harvesting fruit and vegetables, fertilizer spreaders and wheeled tractors and for the implementation of ecological activities.

In November 2022, submitted amendments for 2023 on two approved operational programs were approved and additional agreements to concluded contracts with producer organizations were agreed on.

In 2023, two producer organizations implemented their approved three-year operational programs, with this being the final year for one of the programs. By 30 June 2023, 2 applications for final payment for 2022 and 2 applications for interim payment in 2023 were submitted. 2 applications for ongoing amendments for 2023 of two operational programs were submitted, as well as one application for amending the approved operational fund for 2023 of one operational program.

Producer organizations and groups in other sectors

As of the end of 2022, the total number of recognized organizations and groups of producers of agricultural products was 40, of which: 2 PGs in the Cereals sector, 1 PG in the Potatoes sector, 2 PGs in the Meat sector, 10 PGs in the Milk sector, 1 PG in the Fruits sector, 2 PGs in the Medicinal and essential oils sector, 6 POs in the Fruits and vegetables sector, 6 POs in the Fruit sector, 3 POs in the Vegetables sector, 3 POs in the Honey and bee products sector, 3 POs in the Milk and dairy products sector and 1 PO in the Cereals and Oilseeds sector.

The largest number of associations was set up in the Fruit and vegetable sector - 15 POs and 1 PG, followed by those in the Livestock sector (milk, dairy products and meat) - 3 POs and 12 GPs. In terms of the number of representatives of agricultural producers with the highest degree of association, the Livestock sector stood out (Milk and Dairy products sub-sector - 253 farmers participating in 10 GPs and 3 POs; Meat and wool sub-sector - 105 farmers included in 2 GPs), followed by the Fruits and vegetables sector, in which 119 farmers were united in associations.

The Strategic Plan for Agricultural and Rural Development for the 2023-2027 plans for interventions through operational programs of recognized producer organizations and producer organization associations in the Fruit and Vegetable Sector and in the Milk and Dairy products sector.

For the Milk and Dairy products sector, producer groups are also eligible for support and alongside their operational program they must submit a plan for recognition. Groups should be recognized as organizations within four years of the start of their approved operational program and no later than 31 December 2027.

For producer organizations in the Fruit and Vegetable Sector operating in regions of the country in which the degree of organization of producers is below the EU average, national financial aid could be paid in addition to the European one. It equals a maximum of 80% of the actually paid contributions to the operational fund and up to 10% of the value of the marketed production of each such producer organization.

Table IV.6. Planned amount of financial aid for implementation of operational programs in the Fruit and Vegetable Sector and Milk and Dairy products sector under SPARD 2023-2027, BGN

	2024	2025	2026	2027	2028	Total for the 2024 – 2028 period
Operational programs in the Fruit and Vegetable Sector	553,500	738,000	738,000	738,000	0.00	2,767,500
Operational programs in the Milk and Dairy products sector	360,000	360,000	360,000	360,000	360,000	1,800,000
Total	913,500	1,098,000	1,098,000	1,098,000	360,000	4,567,500

Source: SFA-PA

Scheme to supply fruits, vegetables, milk and dairy products to kindergartens and schools in Bulgaria (School Fruit Scheme and School Milk Scheme)

The scheme aims to create healthy eating habits for children and students by making regular deliveries to institutions in the preschool and school education system. The aid is intended for children regularly attending kindergarten and school throughout the country and it covers children from 1st to 4th group in kindergartens and pupils from preschool to 4th grade. Deliveries of fruit, vegetables, milk and dairy are made only during school days. Financial aid is provided for supply of products accompanying educational measures and monitoring, evaluation and publicity.

2021/2022 academic year

Under the School Fruit scheme, deliveries of fruit and vegetables were made by 111 approved applicants. Products were received by 428,268 children in 3,407 institutions in the preschool and school education system. The total budget for the school year, which also covers costs for accompanying measures and information activities, amounted to BGN 12,780,881, of which BGN 4,196,595 - from the EU and BGN 8,584,286 from NB. 95.1% of the established annual budget has been used.

Apples account for the highest share in fruit and vegetable deliveries (over 1,600 t, including 288 t organic production), followed by pears (668 t, including 50 t organically grown).

Under the School Milk scheme, supplies of milk and milk products were made by 101 approved applicants. Products were received by 428,154 children in 3,411 institutions in the preschool and school education system. The total annual budget under the scheme amounts to BGN 15,597,437, of which BGN 1,995,798 from the EU and BGN 13,601,639 from the NB. The annual budget has been absorbed at 100%.

During the 2021/2022 academic year, under the School Milk scheme, at least 4 but no more than 6 of the deliveries must be of organically produced fresh pasteurized milk and dairy products. For 2021/2022, the main share of organically produced dairy products provided was held by yogurt (204 t) and fresh milk (50 t).

2022/2023 academic year

Under the School Fruit scheme, deliveries of fruit and vegetables were made by 95 approved applicants. Products under the scheme were received by 422,671 children in 3,347 institutions in the preschool and school education system. The total budget under the scheme for the school year, which also covers costs for accompanying measures and information activities, amounted to BGN 12,781,092, of which BGN 4,196,806 - from the EU and BGN 8,584,286 from NB. The set annual budget is currently used at 106.6% (BGN 13,621,559).

Under the School Milk scheme, supplies of milk and milk products were made by 86 approved applicants. Products under the scheme were received by 421,029 children in 3,336 institutions in the preschool and school education system. The total annual budget under the scheme amounts to BGN 15,616,782, of which BGN 2,015,143 from the EU and BGN 13,601,639 from the NB. The set annual budget is currently used at 120.6% (BGN 18,828,674).

1.2.3. Beekeeping sector

National Bee-keeping Program for the 2020-2022 three-year period

The support in the sector was provided through the National Beekeeping Program, prepared in cooperation with the beekeeping organizations, in accordance with the requirements of Regulation (EU) 1308/2013 of the European Parliament and of the Council on 17 December 2013 for establishing a common organization of the markets in agricultural products. The main goal of the Program was to improve the conditions for production and trade in honey and bee products, to increase the efficiency of production, quality and competitiveness of Bulgarian honey and bee products, protection and sustainable development of the bee population and to ensure better employment and higher incomes of beekeepers.

The total financial resource for the implementation of the Program measures for the 2020-2022 period amounted to BGN 22,545,493, including: for 2020 - BGN 6,399,307, for 2021 - BGN 8,073,093 and for 2022 - BGN 8,073,093.

In 2022, the financial resources utilized under the NBP amounted to BGN 7 million, which was the largest amount of aid disbursed under the NBP for all years of its implementation (2008-2022). The trend of high budget absorption is retained - 87%. These funds were used to finance measures and activities aimed at beekeeper associations - exchange of knowledge and good technological practices for beekeeping, promoting Bulgarian bee products, testing for resistance of the causative agent to varroasis control agents, testing of bee colonies for presence of nosematosis and its spread in the country, testing of samples of food stocks of bee colonies for pesticide residues above the limit norms, monitoring of pesticide residues in beekeeping regions with intensive farming.

The highest percentage of absorption of the funds in 2022 was achieved under measure A - Technical assistance for beekeepers and beekeepers' associations (99%), followed by measure E - Measures to support the renewal of beehives in the European Union (87%) and measure D - Measures to support laboratories for analysis of bee products (75%).

Table IV.7. Budget and paid financial aid under the NBP for 2022, BGN

Measure / activity	Budget	Paid financial aid	Budget utilization (%)
Measure A - Technical assistance - total	3,667,691	3,616,311	99%
Activity 1 - Support for the purchase of technical equipment for the primary extraction and processing of bee products	3,661,736	3,613,362	99%
Activity 2 - Exchange of knowledge and good technological practices for beekeeping	5,955	2,949	50%
Activity 3 - Promotion of Bulgarian bee products by organizing bazaars in which local beekeepers participate	0	-	-
Measure B - Fight against aggressors and diseases in the hive, especially against varroasis - total	989,362	540,173	55%
Activity 1 - Purchase of VMPs against varroasis	989,362	540,173	55%
Activity 2 - Testing for the resistance of the Varroa destructor to VMPs authorized for use to combat varroasis	0	-	-
Activity 3 - Study of bee colonies for the presence of nosematosis and its spreading in the country	0	-	-
Measure C - Rationalization of mobile beekeeping - total	188,937	116,277	62%
Activity 1 - Support for the purchase of new attachment equipment mobile beekeeping	22,127	17,167	78%
Activity 2 - Reimbursement of mobile beekeeping costs in terms of the movement of bee colonies	166,810	99,110	59%

Measure / activity	Budget	Paid financial aid	Budget utilization (%)
Measure D - Measures to support laboratories for analysis of bee products - total	57,731	43,306	75%
Activity 1 - PCA of honey	57,731	43,306	75%
Activity 2 - Examination of food samples of bee colonies /honey, pollen/ for residual amounts of pesticides above the limit values	0	-	-
Measure E - Measures to support the renewal of beehives in the EU - total	3,169,372	2,741,813	87%
Activity 1 - Purchase of new hives	1,572,282	1,373,683	87%
Activity 2 - Purchase of nucleus colonies	805,300	669,925	83%
Activity 3 - Purchase of queen bees	791,790	698,205	88%
Measure E - cooperation with specialized bodies for the implementation of research programs in the beekeeping and bee products sectors - total	0	-	-
TOTAL	8,073,093	7,057,879	87%

Source: IACS, module National Beekeeping Program - Call 2022

Wine sector

In 2022, the following measures were implemented under the National Program for Support of the Viticultural Sector 2019-2023, financed by the EAGF:

- Measure "Restructuring and conversion of vineyards", with a budget of BGN 28,687,552;
- Measure "Investments in enterprises", with a budget of BGN 20,367,580;
- Measure "Harvest Insurance", with a budget of BGN 400,000;
- Measure "Green Harvesting", with a budget of BGN 950,000;

Under the "Restructuring and conversion of vineyards" measure, there was one call for applications for financial assistance, within which 37 contracts were concluded. The disbursed funds for the calendar year 2022 amounted to BGN 19,924,663.

No project proposals were received in 2022 under the "Promotion in third countries" measure. Funds were paid for a project agreed in the previous year to the amount of BGN 20,093 from the EAGF and BGN 27,439 in the form of state aid - from the national budget.

Under the "Investments in enterprises" measure, there were two calls with 52 projects agreed upon. For the calendar year 2022, payments were made in the amount of BGN 17,241,800.

Under the "Harvest Insurance" measure, one reception was held and 52 support contracts were concluded. Within the calendar year 2022, funds to the amount of BGN 380,793 were disbursed.

Under the "Green Harvesting" measure, which is of a crisis nature, there was one call, with 12 contracts for financial assistance concluded. In 2022, Bulgaria continued to implement the measure to rebalance the farmers affected by the COVID-19 pandemic crisis. The measure is aimed at grape producers who find it difficult to find a market for their products and consists of full removal of bunches while they are still green so that the yield from the area is reduced to zero. The disbursed funds for the calendar year 2022 are BGN 874,490.

Under the "Information in the Member States" measure, there was one call, with two projects agreed upon. In the calendar year 2022, no payments were made under this measure.

For projects agreed by 15 October 2022, an increased amount of aid is applied under all measures of the Program, as follows:

- Under measure "Restructuring and conversion of vineyards" - from 75% to 90% of the costs incurred;
- Under measures "Promotion of third country markets", "Investment in enterprises" and "Green Harvesting" - from 50% to 70% of the costs incurred;
- Under measure "Harvest insurance" - 80% of the costs incurred for insurance premiums.

1.2.4. Public Intervention and Private Storage

In the event of the regulatory market conditions, public intervention for regular and durum wheat, barley, corn and paddy rice, beef and veal, butter and skim powdered milk, meat, as well as private storage of products, may be opened by means of implementing acts of the European Commission.

The beginning of 2022 is characterized by extremely difficult market conditions for the pork sector due to the restrictions related to the containment of African swine fever and the increased production requirements in slaughterhouses in the conditions of the COVID-19 pandemic. The increase in pork on the European market led to a suppression of purchase prices while at the same time there was an increase in the costs of feed. The Russian invasion of Ukraine has caused further market disruptions due to hampered exports. In order to achieve a balance between supply and demand, the European Commission has taken measures to provide financial assistance by introducing exceptional support for the Pig farming sector with the provision of assistance to private storage of pork. The aim of the scheme is to regulate average market prices in the EU by restoring market equilibrium by temporarily withdrawing pork from the market. The scheme supports private storage of fresh or chilled pork that has not previously been stored and originates from animals slaughtered no earlier than 10 days before the day the meat enters storage. The permissible storage period is between 60 and 150 days.

In April 2022, the call for applications for assistance under the temporary emergency scheme for assistance for private storage of pork was opened. 5 contracts for providing financial aid were concluded, under which a total of BGN 185,330 were disbursed.

1.2.5. Sugar sector

As of 01.10.2017, the production in the Sugar sector in EU has been liberalized and is not subject to a quota regime. Thus, from the 2017/2018 market year, there are no longer restrictions on the production of sugar from sugar beet, isoglucose and inulin syrup. In 2022, one enterprise for the production of isoglucose and one sugar refinery operate on the territory of Bulgaria.

Pursuant to Regulation No. 2017/1185 and Article 10a of the Law on the Implementation of the Common Organization of Agricultural Markets of the European Union, refineries submit notifications to the MAF for prices and stocks of sugar, and isoglucose producers - notifications for isoglucose production.

1.2.6. Promotional programs

Promotional programs cover activities aimed at providing information about the presented product and facilitating its market offering. The programs may include organization of trainings, conferences with the participation of journalists and doctors, promotions in supermarkets and shops, tastings, advertising, organization of competitions, publications in the specialized press and the Internet, participation in exhibitions, fairs, national and international exhibitions.

The implementation of promotional programs contributes to increasing the market share and the demand of the products in the target countries, improves the image of products compared to other similar products, and at the same time increases the consumption of promoted products.

The rules for implementation of promotional programs after the reform from 2015 are set in Regulation (EU) 2015/1831 and Regulation (EU) 1144/2014. According to the European legislation, the selection of the 2021 programs, for which financial support is available, is made by the EU-Chafea Executive Agency for Consumers, Health, Agriculture and Food (CHAFEA) established for this purpose. For the 2022 campaign, Bulgaria has no approved promotional program.

1.2.7. Quality Policy

The Ministry of Agriculture and Food actively supports groups of producers - applicants for products with PDO/PGI/FTST with consultations and expert advice at every stage of implementation of procedures, related to the registration of traditional Bulgarian products under the quality schemes.

In 2022, the EC procedure for review and reflection of notes in relation to the application for registration of Lukanka Troyanska FTST was completed. In September 2022, EC published in the Official Journal of the EU an application for providing a right to an objection from EU member states and third countries, to which no objections were received.

The national procedure for the processing of the application - specification for registration of Strandjanski Herbal Tea PDO was completed. The application has been sent to the EC for an European procedure.

The national procedure is underway for the processing of the application - specification of Lutenitsa Parvomay PGI. 2 on-site inspections were carried out and a procedure for providing a right to objection was carried out on a national level.

In 2022, new producers of Bulgarian Rose Oil PGI, Strandzhanski Manno Honey/Manno Honey from Strandzha PDO and Fillet Elena FTST, as well as new producers were entered into the "mountain product" register.

Following an European application procedure for the registration of "Bulgarian yogurt" and "Bulgarian white brine cheese" applying for registration as protected designations of origin, the applications for registration of the two products were published in the Official Journal of the EU in April 2023 to provide the right to reasoned objection to member states and third countries.

In the first six months of 2023, Lukanka Troyanska/Troyanska Lukanka and Sudzhuk Tarnovski/Tarnovski Sudzhuk were registered in the European Register of foods of a traditionally specific nature.

The application for registration of Strandjanski Herbal Tea as a PDO is at the stage of the European procedure and the first notes received from the EC are reflected.

In 2023, the implementation of the Framework Program for Local Traditional and Regional Traditional Products 2022-2032 started. The first meeting with stakeholders was held, in which tasks related to the implementation of Measure 1 "Research, recovery and preservation of information on local traditional and regional traditional products that are or have been produced by local communities; study of the experience of other countries" of the program were set.

1.2.8. Temporary Emergency Measures Scheme

Emergency measure in certain sectors

Due to the development in recent years of crises of various natures, such as the COVID-19 pandemic and the Russian invasion of Ukraine, and their negative impact on agriculture, the EC has taken measures in 2022 to provide emergency aid for the adaptation of the sector. The planned financial support was directed towards the affected farmers whose activity has an impact on the food security of the member states. Due to the scale of the crisis, in addition to the European funds allocated for Bulgaria, amounting to BGN 20,753,273, national co-financing was also provided to the amount of BGN 41,506,547, or the total budget of the measure amounted to BGN 62,259,820.

On the basis of an economic analysis, the sectors in Bulgaria to be targeted for emergency support were identified as Pig farming, Poultry farming, Viticulture, Greenhouse production of vegetables. Within the call held in 2022, 1,722 applications for support were received. The total disbursed funds amounted to BGN 62,259,398, including for the Pig farming sector - BGN 24,999,854, for the Poultry farming sector - BGN 24,999,827, for the Viticulture sector - BGN 5,999,900 and for the greenhouse production of vegetables - BGN 6,259,816, of which BGN 5,007,856 were for heated greenhouses and BGN 1,251,959 were for non-heated greenhouses.

Provision of emergency financial aid to sunflower farmers

In April 2023, the Implementing Regulation (EU) 2023/739 of the Commission of 4 April 2023 entered into force, providing for an emergency support measure for the cereals and oilseed sectors in Bulgaria, Poland and Romania, under which the three member states may grant exceptional financial aid to farmers in these sectors. The Regulation provides for the support of farmers affected by the increased import of agricultural products due to the establishment of solidarity corridors between the EU and Ukraine. The EAGF budget for Bulgaria amounted to BGN 32,759,650, allowing for national co-financing of up to 100% of the European funds.

In June 2023, the Implementing Regulation (EU) 2023/1343 of the Commission of 30 June 2023 entered into force, providing for an emergency support measure for the sectors of cereals and oilseeds in Bulgaria, Poland, Romania, Slovakia and Hungary, according to which the five member states may provide emergency financial aid to farmers affected by the increased import of agricultural products due to the establishment of solidarity corridors between the EU and Ukraine. The budget set for Bulgaria amounted to BGN 19,108,166.00, allowing for national co-financing of up to 200% of the European funds.

Following an analysis of the situation in the cereals and oilseed sectors, a significant imbalance was identified on the sunflower market in the country - a sharp increase of import from Ukraine in 2022, which directly affects the Bulgarian market and puts pressure on domestic prices. The Ministry of Agriculture and Food has prepared a draft Ordinance on granting emergency financial aid to farmers growing sunflower. The support aims to compensate for the risk of partial or total lack of market returns for the high production costs for the 2022 harvest. The emergency financial aid will be paid to approved applicants until 30 September 2023 and until 31 December 2023.

1.3. Trade mechanisms

1.3.1. Export licensing

Scheme - Export licenses for dairy products to the USA and Canada for the calendar year 2022

According to the Agreement between the European Community and Canada, signed in 1995, in order for the traders to benefit from the reduction of customs duties on imports of cheese and yellow cheese in Canada, an export license issued within the quota is mandatory. The quota system is a mechanism to protect domestic production and is a combination of two tools - quotas and import duties. For Bulgaria, the agreement entered into force after joining the EU on 01.01.2007 and interest towards this scheme was evident immediately after its launch.

As a result of the negotiations between the USA and the EU conducted within the framework of the World Trade Organization, an agreement was concluded, with which, from 2013, Bulgaria and Romania became part of the quota for imports into the USA of European cheese under code 0406 of the Combined Nomenclature, with a reduced duty.

In 2022, 59 licenses were issued for the export of milk and dairy products within the quotas for the USA and Canada, including: 26 licenses for export of 66.9 tons of yellow cheese; 27 licenses for export of 337.4 tons of cow's cheese and 6 licenses for export of 59 tons of sheep's cheese.

For the first six months of 2023, a total of 27 licenses were issued for the export of dairy products to the USA and Canada.

1.3.2. Import licensing of agricultural products from third countries

In accordance to European legislation, the following products are subject to compulsory licensing when imported from third countries: rice; hemp seeds for sowing; hemp seeds not intended for sowing; unprocessed or melted hemp and ethyl alcohol of agricultural origin.

The application of the licensing regime for the import of agricultural products from third countries within the framework of tariff quotas and preferential regimes covers the following groups of agricultural products: cereals, rice, sugar, olive oil and table olives, fresh and processed fruits and vegetables (garlic and canned mushrooms), beef and veal, pork, milk and dairy, eggs and egg albumin, and poultry meat.

In 2022, 404 applications were submitted for issuance of licenses for the import of agricultural products from third countries, of which 4 were for license extracts. 396 licenses were issued, including 214 under tariff quotas and preferential regimes and 182 under general conditions.

The guarantees established in favor of the Ministry of Agriculture for fulfillment of the import obligation under the licenses issued in 2021 amounted to BGN 85,043,876. Guarantees in the total amount of BGN 83,605,521 were reimbursed to importers.

In 2022, 7 new companies of importers of agricultural products were entered in the MAF register. As of 31.12.2022, the number of registered importers of agricultural products was 515.

2. Support under the Second Pillar of CAP

Rural Development Program 2014 - 2020

The total RDP 2014-2020 budget amounted to BGN 7,418,583,185 (EUR 3,793,119,534), including a contribution from the European Agricultural Fund for Rural Development amounting to BGN 6,119,785,771 (EUR 3,129,044,775) and national co-financing - BGN 1,298,797,414 (EUR 664,074,759). As of 31.12.2022, the 14th amendment of the RDP 2014-2020 entered into force.

The agreed funds (excluding future and transitional commitments under the measures with a multi-year commitment) from 2015 until the end of 2022 amount to BGN 5,350,538,640 in public funds (EUR 2,735,728,930), representing 72.1% of the total RDP 2014-2020 budget.

The subsidies disbursed by 31.12.2022 amount to BGN 4,493,396,611 in public funds or 60.6% of the total available budget of the program.

In 2022, payments of a total amount of BGN 683,507,263 (EUR 349,477,075) were made.

Measure 1 "Knowledge transfer and information actions"

Sub-measure 1.1. "Vocational training and skills acquisition"

The support under Sub-measure 1.1. "Vocational training and skills acquisition" is aimed at increasing the knowledge and skills of farmers and foresters and employees on their farms by achieving an appropriate level of technical and economic training and increasing the capacity for access to knowledge and information in the field of agriculture and forestry.

There was one call under the sub-measure (in the 2019 - 2020 period), within which 42 administrative contracts were concluded for the provision of grants for a total amount of BGN 12,392,777.

In 2022, by order of the head of the managing authority of the RDP 2014-2020 and in accordance with changes in European legislation, an amendment was made to the conditions for the implementation of approved projects under sub-measure 1.1, which extended the deadline for their implementation until September 2025.

As of 31.12.2022, 30 administrative contracts were in the process of implementation and 12 contracts were terminated at the request of the beneficiaries. Payments for the total amount of BGN 111,901 were made, entirely in 2022.

Sub-measure 1.2. "Demonstration and awareness activities"

Implementation of sub-measure 1.2. "Demonstration and awareness activities" stimulates the organization and holding of demonstration activities in the field of agriculture and forestry with the aim of increasing the knowledge and skills of farmers and foresters and employees on their farms by achieving an appropriate level of technical and economic training and increasing the capacity for access to knowledge and information.

In 2022, there was a call for applications for support, with 14 project proposals received at a total value of BGN 6,747,510. By the end of the year, the projects were being processed and no payments were made under sub-measure 2.1.

Measure 2 "Consulting Services, Farm Management and Farm Replacement Services"

Sub-measure 2.1 "Assistance for provision of consultancy services"

Sub-measure 2.1. is applied with two sub-measures - Sub-measure 2.1.1 "Consultancy Services for Farmers and Forester Holders" and Sub-measure 2.1.2 "Consultancy Services for Small Farmers". From the beginning of its implementation until the end of 2012, a total of BGN 21,170,507 of public funds have been disbursed under the two sub-measures.

Sub-measure 2.1.1. "Consultancy services for farmers and forester holders"

The sub-measure allows for the provision of consultancy services to farmers and foresters to improve the economic and environmental performance, climate compatibility and resilience to climate change of their holdings.

The implementation of the sub-measure started in 2015. During the first call period, the National Agricultural Advisory Service was designated as the only beneficiary to provide consulting services to farmers, applicants under sub-measure 6.1 "Start-up Aid for Young Farmers" of the RDP 2014-2020.

During the 2022 call, three project proposals were received and approved with a value of the requested subsidy of BGN 1,897,126.

The total public funds paid for the period of implementation of the sub-measure by 31.12.2022 amounted to BGN 3,237,461. No payments were made in 2022.

Sub-measure 2.1.2 "Consultancy services for small farmers".

Sub-measure 2.1.2. "Consultancy services for small farms" is aimed at providing quick and easy access of small farms to quality consultancy services and meeting their needs to improve their skills and management skills, viability, awareness, knowledge of environmental protection, climate change adaptation and risk management improvement.

Since 2016, the sub-measure has provided six basic completely free advisory packages to small farms, contributing both to their economic development and strengthening, as well as improving environmental protection and counteracting climate change.

For the 2016-2022 period, funds have been disbursed under sub-measure 2.1.2 for a total amount of BGN 17,933,046, out of which BGN 2,409,518 were in 2022.

Sub-measure 2.2 "Establishment of Consultancy Services"

The implementation of the sub-measure started in 2021. Within the call held, one application for support was received, with requested public funds to the amount of BGN 10,412,042.

The only beneficiary under the sub-measure was the National Agricultural Advisory Service and the supported activity is "Creation of mobile municipal centers (offices) for advisory services". No payments have been made in 2022 under the ongoing administrative contract.

Measure 4 "Investments in tangible assets"

Sub-measure 4.1 "Investment in agricultural holdings"

The implementation of the sub-measure started in 2015, and the first call period was set before the official approval of the RDP 2014-2020. The second call for applications for support took place in 2016.

In 2020, a third call was conducted electronically through the UMIS 2020 system, which was targeted at farmers in the Livestock sector.

In 2021, a fourth call for applications for support was open under the sub-measure through the UMIS 2020 system, within which 1,868 applications with a total value of BGN 734,722,907 were received. The processing of the project proposals received within the call was completed at the end of 2022.

For the 2015-2022 period, 1,756 contracts for financial aid were concluded under the sub-measure, with a value of public expenditure of BGN 746,371,842. The total public funds paid amounted to BGN 598,290,097.

492 administrative contracts worth BGN 104,932,980 were concluded in 2022. The disbursed public expenditures during the year amounted to BGN 34,541,768.

Sub-measure 4.1.2: "Investments in agricultural holdings under a Thematic sub-program for development of small farms"

Two calls for applications for support were held under the sub-measure - in 2018 and 2020.

In 2022, 56 financial aid contracts were concluded, with approved public expenditures in the amount of BGN 1,362,905. Funds were disbursed to the amount of BGN 1,496,036.

For the entire period of application of the sub-measure, 163 support contracts were concluded, with amount of the agreed subsidy of BGN 4,321,905. The total public funds paid amounted to BGN 2,124,652.

Sub-measure 4.2 "Investments in processing/marketing of agricultural products"

The first two calls under the sub-measure were open in 2015 and 2018. In the period September 2021 - March 2022, a third call of project proposals was carried out where 523 applications for support were received with a total value of BGN 653,656,994. By the end of 2022, the projects were in the process of review and evaluation.

For the 2015-2022 period, 375 contracts for financial aid were concluded, with a total amount of approved expenditure of BGN 447,392,711. The cumulative disbursed public funds amounted to BGN 303,420,037. In 2022, BGN 53,499,180 were authorized.

Sub-measure 4.3 "Support for investments in infrastructure related to the development, modernization or adaptation of agriculture and forestry"

In 2020, there was a call for project proposals under Procedure No. BG06RDNP001-4.010 "Project proposals from Irrigation Systems EAD for restoration of existing hydro-ameliorative irrigation facilities". The 26 project proposals received were rejected as they did not meet the eligibility conditions.

In 2020, there was also a call for project proposals under Procedure BG06RDNP001-4.011 "Project proposals from irrigation associations and other legal entities for restoration of existing hydro-ameliorative irrigation facilities". 6 project proposals were submitted, out of which 3 have passed the technical and financial evaluation. 3 administrative contracts for the provision of grants were concluded with a total amount of the agreed subsidy of BGN 8,044,757. The concluded contracts are in the process of implementation.

In 2022, there was a new call under Procedure No. BG06RDNP001-4.016 "Project proposals from Irrigation Systems EAD for restoration of existing hydro-ameliorative irrigation facilities". Out of 26 submitted project proposals, 24 project proposals passed the technical and financial evaluation. After approval of the Evaluation Report, in accordance with the law on the management of EU funds under shared management, a check for compliance is carried out for the applicant Irrigation Systems EAD with the beneficiary requirement. In case of compliance with the requirement, a call for administrative grant contracts will be sent to the applicant Irrigation Systems EAD.

Sub-measure 5.1 "Support for investments in preventive measures"

For the period of implementation of RDP 2014-2020 under the sub-measure, 3 calls for selection of project proposals were opened - one in 2020 and two in 2022. 54 contracts for financial support were concluded with a total amount of the agreed subsidy of BGN 26,285,384. The public funds paid in 2022 amounted to BGN 5,097,841.

Measure 6 "Development of farms and enterprises" of RDP 2014-2020

Sub-measure 6.1 "Start-up aid for young farmers"

Implementation of the sub-measure started in 2015. For the period until 2022, there were four calls for support applications. 2,221 contracts for financial assistance were concluded, with a total amount of public expenses of BGN 108,595,795.

As of 31.12.2022, the total cumulative disbursements under the sub-measure amounted to BGN 101,232,208. In 2022, payments were made in the amount of BGN 7,802,008.

Sub-measure 6.3 "Starting Aid for Development of Small Farms"

There were four calls for project proposals under the sub-measure. For the period 2016-2022, 4,162 support contracts were signed with approved public expenditures to the amount of BGN 122,100,594. The total public funds paid amounted to BGN 107,060,492.

In 2022, funds to the amount of BGN 19,886 914 were disbursed.

Sub-measure 6.4.1 "Investments in support of non-agricultural activities"

In the period of implementation of RDP 2014-2020, there was one call under the sub-measure, which included three procedures for the selection of project proposals to guarantee a budget for all sectors. During the implementation process of project proposals, the managing authority received numerous signals from beneficiaries related to the effects of the COVID-19 pandemic, leading to the impossibility to maintain some of the evaluation criteria against which the project proposal was assessed. In relation to this, in order to facilitate the implementation of the concluded administrative contracts, the managing authority made a number of amendments to the application guidelines, including an increase in the deadline for the implementation of project proposals.

As of 31.12.2022, 254 financial aid contracts were concluded, with a total amount of approved public expenditures of BGN 68,318,645. For the entire period of application of the sub-measure, payments were made to the amount of BGN 17,519,846, and BGN 12,980,620 were disbursed in 2022.

Measure 7 "Basic services and renewal of villages in rural areas"

Sub-measure 7.2 "Investments in the creation, improvement or expansion of all types of small-scale infrastructure"

In the 2021-2023 period, four procedures were carried out under the sub-measure for the selection of project proposals for the following areas:

- Construction, reconstruction and/or rehabilitation of water supply and sewerage systems and facilities in agglomerations with under 2000 PE in rural areas;
- Reconstruction, repair, equipment and/or fitting of municipal buildings, where public services are provided, in order to improve their energy efficiency;
- Construction, reconstruction and/or rehabilitation of new and existing municipal roads sidewalks and facilities and their equipment;
- Construction, reconstruction and/or rehabilitation of new and existing streets, sidewalks and facilities and their equipment.

The total allocated budget for the described procedures amounts to BGN 293,370,000, with 316 projects being received during the period of accepting support applications. As of mid-2023, the project proposals were being processed and administrative contracts are to be concluded with approved applicants.

For the period of implementation of RDP 2014-2020, 704 support contracts have been concluded under the sub-measure with a total amount of approved subsidy of BGN 1,082,141,702. The disbursed funds amounted to BGN 973,768,049, of which BGN 122,023,924 were in 2022.

Sub-measure 7. 6 "Surveys and investments for maintenance, restoration and improvement of the cultural and natural heritage of the villages"

During the period of application of the sub-measure, which aims to improve the quality of life and preserve the cultural identity and traditions in rural areas, there were two calls for support applications - in 2016 and 2020. 192 administrative contracts have been concluded with approved subsidy to the amount of BGN 108,373,551. The total disbursed funds amounted to BGN 47,180,760.

In 2022, payments were made in the amount of BGN 3,853,740.

Measure 8 "Investments in the development of forest regions and improvement of the forest viability"

Sub-measure 8.1 "Afforestation and maintenance"

The support under the sub-measure is targeted at increasing the forest cover in lowland areas, limiting erosion and preserving land quality, improving water balance and adapting to climate change. Individuals, sole traders, local branches of religions, municipalities and legal entities, owners of agricultural or non-agricultural land are eligible for support.

The first call for project proposals, with a budget of BGN 18,028,131, was in 2020. 22 project applications were received, with a value of the requested subsidy of BGN 3,179,551. The evaluation committee has completed its work and notification letters have been sent for the approval of 6 project proposals, with approved public expenditures to the amount of BGN 450,945. 1 administrative contract worth BGN 142,665 was concluded in 2022.

Sub-measure 8.3. "Prevention of damage to forests from forest fires, natural disasters and catastrophic events"

The purpose of support under this sub-measure is to promote the introduction and improvement of preventive activities to reduce the risk of forest fires, as well as to limit the risk of pests, diseases, natural disasters and catastrophic events in forest territories. From the beginning of its implementation (2018) until the end of 2022, one call was announced under sub-measure 8.3 with a budget of BGN 40,042,474. 21 contracts for financial assistance with approved subsidy to the amount of BGN 32,828,032 were concluded. The total public expenditure paid for the period amounted to BGN 14,440,018, while payments in 2022 amounted to BGN 5,693,964.

Sub-measure 8.4 "Recovery from damage to forests from forest fires, natural disasters and catastrophic events"

The provision of grants under sub-measure 8.4 is aimed at restoring forests affected by forest fires, natural disasters, catastrophic events, diseases and pests, as well as protecting the environment and adapting to climate change.

For the period of implementation of RDP 2014-2020, there was one call under the sub-measure with a budget of BGN 15,646,400. 8 administrative contracts were concluded, with approved subsidy of BGN 4,206,626. The total public funds disbursed were BGN 1,432,964, of which in 2022 - BGN 216,249.

Sub-measure 8.6. "Investments in forestry technologies and in processing, mobilization and trade in forest products"

Sub-measure 8.6 aims to increase the competitiveness of forestry, logging and primary processing of wood and create new jobs. Investments in the processing and marketing of forest products are encouraged, as well as those that contribute to improving the condition of forests, their protection and sustainable management. By the end of 2022, 47 support contracts were concluded with a total amount of subsidy of BGN 19,415,121, and payments amounting to BGN 1,915,148 were made, entirely in 2022.

Measure 9 "Creating producer groups and organizations"

The aid under measure 9 is aimed at stimulating the establishment of producer groups and organizations in the agricultural sector. The grant is provided in the form of a fixed payment in annual installments, based on a business plan, for no more than five years from the date on which the producer group or organization is recognized. The maximum amount of the support for one year cannot exceed the equivalent of EUR 100,000 in BGN.

For the period of implementation of the measure, 23 contracts for financial support were concluded with a subsidy value of BGN 12,728,448. The total funds paid for the same period amounted to BGN 7,331,508. In 2022, public expenses to the amount of BGN 2,042,836 were disbursed.

Measure 10 "Agri-Environment-Climate"

For the 2015-2022 period of application of the measure, the public resource paid amounted to BGN 421,561,323.

In 2022, funds amounting to BGN 42,587,012 were disbursed for the following areas of support:

- Restoration and maintenance of grasslands of high nature value;

- Traditional practices for seasonal grazing (pastoralism);
- Soil erosion control;
- Conservation of endangered local varieties with agricultural significance;
- Preservation of endangered local breeds with agricultural significance.

Measure 11 "Organic Farming"

The measure includes two sub-measures - Sub-measure 11.1 "Payments for transition to organic farming" and Sub-measure 11.2 "Payments for maintenance of organic farming". Support is planned in three areas - organic crop production, organic beekeeping, and organic livestock

For the 2015-2022 period, payments amounting to BGN 330,180,793 have been made under measure 11 "Organic Farming". The funds paid in 2022 amounted to BGN 34,774,415.

Measure 12 "Natura 2000 Payments and the Water Framework Directive"

In the period of application of measure 12, the rate of absorption of the funds is uniform and reflects the size of the agricultural areas included in the measure.

In 2021, 136 new areas were promulgated under Directive 92/43/EEC for the protection of natural habitats and wild flora and fauna. In 2022, those areas were included in the scope of the measure, with relevant amendments being made to Ordinance No. 5 of 24 February 2015 on the application of measure 12 "Natura 2000 Payments and the Water Framework Directive" of the RDP 2014- 2020.

The total amount of funds disbursed under the measure for the 2015-2022 period amounted to BGN 387,227,730. The payments made in 2022 (for the 2021 campaign and for the 2022 campaign) amounted to BGN 112,831,134.

Measure 13 "Payments for areas with natural or other specific constraints"

Measure 13 started in 2015 with two sub-measures - sub-measure 13.1 "Compensation payments in mountain areas" and sub-measure 13.2 "Compensation payments for other areas affected by significant natural constraints". Since 2020, the sub-measure 13.3 "Compensatory payments for other areas affected by specific constraints" has been applied.

The total financial resource paid under the measure for the 2015-2022 campaign amounted to BGN 748,502,667. In 2022, public funds were disbursed to the amount of BGN 98,991,538 (for campaign 2022).

Measure 14 "Animal Welfare"

The measure is implemented in two sub-measures - sub-measure 14.1 "Animal welfare payments in the large ruminant sector" and sub-measure 14.2 "Animal welfare payments in the small ruminant sector". For the period 2017-2022, the total public funds paid under both sub-measures amount to BGN 31,534,879. In 2022, BGN 11,306,307 were authorized.

Measure 16 "Cooperation"

Sub-measure 16.1. "Support for establishment and functioning of operational groups within the EMI"

The support under sub-measure 16.1. "Support for establishment and functioning of operational groups within the EMI" is aimed at the functioning of task forces set up to implement a specific innovative project to achieve the objectives of the European Innovation Partnership on Agricultural Productivity and Sustainability.

Two calls were realized under the sub-measure - in 2019 and 2020, with a total budget of BGN 59,710,000.

The total number of contracts concluded under sub-measure 16.1 by the end of 2022 (from the 2019 call) were 19, with the total value of public funds amounting to BGN 11,633,353. As of 31.12.2022, the submitted project proposals from the second call were in the process of review and evaluation.

For the period of application by the end of 2022, payments were made to the amount of BGN 2,560,221 under sub-measure 16.1.

Sub-measure 16.4 "Support For Horizontal And Vertical Cooperation Between Participants In The Supply Chain"

The support is provided for creation and development of short supply chains and of local markets. The support covers only short supply chains, which include no more than one intermediary between the farmer and the consumer. Local markets are markets within a radius of 75 km from the holding of origin of the product, within which both the processing of the product and its sale to the final consumer must take place.

By the end of 2022, 3 projects were under implementation, with the value of approved public expenditure amounting to BGN 540,559. No payments under the sub-measure have been made.

Measure 19 "Community-led local development"

Sub-measure 19.1 "Aid for preparatory activities"

In May 2022, a call was opened for project proposals under sub-measure 19.1 "Aid for preparatory activities" with a budget of BGN 6,845,300. 111 project proposals have been received with a requested subsidy amounting to BGN 5,223,309. By the end of 2022, the project proposals were in the process of evaluation.

For the period of application of the sub-measure by the end of 2022, 119 administrative contracts have been concluded and the total disbursed funds amounted to BGN 3,957,391. In 2022, payments to the amount of BGN 22,600 were made.

Sub-measure 19.2 "Implementation of operations within community-led local development strategies"

The implementation of the sub-measure aims to expand the scope of the territories that will be supported by the CLLD approach by supporting as many local action groups as possible.

In 2022, 334 contracts for financial support were concluded, out of which 80 had municipalities, community centers and NGOs as beneficiaries for projects of public benefit. The total value of the agreed subsidy amounted to BGN 30,328,384. The payments made during the year amounted to BGN 27,023,463.

Since the beginning of the sub-measure's implementation until 31.12.2022, a total of 1,048 contracts for the implementation of projects were concluded for strategies with public expenditures amounting to BGN 102,006,842. Funds were disbursed to the amount of BGN 40,472,651.

Sub-measure 19.3 "Preparation and implementation of LAG cooperation activities"

The sub-measure, with a budget of BGN 12,712,700, supports projects for preparation and implementation of internal and transnational cooperation. Local initiative groups are encouraged to contribute to the development of the respective rural areas through interaction and implementation of joint projects.

For the period 2018-2022, under sub-measure 19.3, 58 project proposals were received with amount of the requested subsidy of BGN 9,708,702. By the end of 2022, 41 contracts for financial support were signed with approved public expenditures to the amount of BGN 5,083,533. Payments to the amount of BGN 2,121,882 have been made, of which BGN 1,010,758 were in 2022.

Sub-measure 19.4. "Running Costs and Popularization for strategy for Community-led local development"

The support provided under sub-measure 19.4 provides the necessary financial resources for the effective implementation and promotion of the strategies of the CLLD. The aim is to develop LAGs as strong and efficient partnerships and operational structures.

For the period of implementation of the sub-measure until the end of 2022, public funds amounting to BGN 47,925,408 were reimbursed from SFA-PA to LAG, out of which BGN 9,366,894 were disbursed in 2022.

Strategic Plan for Agricultural and Rural Development 2023-2027

In 2023, financial support is planned under the following interventions of the Strategic Plan for Agricultural and Rural Development 2023-2027:

- Support for the cultivation of climate-resilient varieties through integrated production practices;
- Promotion of natural pollination;
- Promotion of the use of climate-resilient crops and varieties;
- Conservation of endangered local varieties with agricultural significance;
- Preservation of local breeds (autochthonous) with agricultural significance;
- Traditional practices for seasonal grazing (pastoralism);
- Maintenance of the habitats of the Red-breasted Goose (*Branta ruficollis*), the Eastern Imperial Eagle and the Egyptian Vulture in areas of ornithological significance in arable land;
- Restoration and maintenance of degraded pastures;
- Animal welfare and antimicrobial resistance;
- Payments for agricultural lands in areas of Natura 2000;
- Payments for areas with natural or other specific constraints;
- Organic plant growing;
- Organic beekeeping.

3. Additional state support

The support of the agricultural sector in Bulgaria under the two pillars of the CAP is supplemented by financial support with national funds under state aid schemes, short-term and investment loans granted by the Agriculture State Fund.

3.1. State aid

The policy of the Ministry of Agriculture and Food regarding the support with state aid in agriculture is implemented in accordance with the legislation of the European Union in the field of state aid and the Law on State Aid.

State aid support is provided with priority to small and medium-sized agricultural holdings. Measures are applied, aimed at stimulating investments to increase the efficiency of holdings and the production of higher-quality products, insuring and compensating for damage from natural disasters and adverse climatic events; assistance in the prevention of plant and animal diseases; conservation of genetic resources in crop and livestock production; promoting animal welfare; stimulating the participation in exhibitions for promotion of the Bulgarian agricultural production and for exchange of experience.

The state aid initiative usually comes from the branch concerned (Crop, Livestock, Agricultural Processing), which is involved in the development of the measure.

The total value of state aid support in the Agriculture sector in 2022 amounted to BGN 981,125,377, of which:

- BGN 751,882,334 under state aid and de minimis aid schemes administered by the SFA;
- BGN 229,243,043 under 2 tax relief schemes (assignment of corporate tax for the tax year 2021 and reduced excise rate on gas oil).

During the year, state aid was provided in the following areas:

1) Investment aid - aimed at small and medium-sized agricultural holdings in order to increase investment activity.

- Aid for investment in tangible assets of agricultural holdings related to the primary production of agricultural crop production;

The aid is granted in the form of a capital subsidy to cover part of the costs of investing in machinery, equipment and lines for preparation, cooling and storage of primary agricultural products, as well as machinery, equipment and facilities for protection against frost and hail, necessary for the production of own primary agricultural production in the Crop sector.

- Investments for purchase or construction of facilities for processing and/or handling of raw milk;

The aid is provided in the form of a capital subsidy to cover part of the investment costs for construction of a facility for processing and/or processing of raw milk with the necessary equipment (mini

dairies) or for the purchase of a temporary retail facility for dairy products (including the purchase of the necessary equipment) in which raw milk is processed and/or processed, according to Ordinance No. 26 of 14.10.2010 on the specific requirements for direct deliveries of small quantities of raw materials and food of animal origin.

- Investments for purchase of facilities for production and storage of raw milk and facilities for feeding newborn animals with milk;

The aid is provided in the form of a capital subsidy to cover part of the costs of the investment in the purchase of facilities for production and storage of raw milk and facilities for feeding newborn animals with milk.

- Investments for construction of slaughterhouses;

The aid is granted in the form of a capital subsidy to cover part of the costs of investing in the construction of points for production and cutting of meat from own large ruminants and small ruminants on the farm and/or the purchase of mobile ones (movable objects that can be transported by vehicle).

2) Risk and crisis management - aimed at counteracting and compensating for damage in the event of natural disasters or adverse weather conditions, as well as in case of animal and plant diseases:

- Aid to compensate for damage to crops caused by adverse climatic events that can be equated to natural disasters

The support under the scheme is direct aid amounting to up to 80% of the average production costs of growing a crop during the relevant marketing year.

- Aid to compensate for material damage to dead livestock and destroyed beehives;

The support is paid in the form of direct aid up to 100% of the average market prices of farm animals by species and category;

- Aid to prevent plant and animal diseases:
 - Aid to compensate the costs of farmers related to the implementation of measures under the National Pest Control Program in perennials during the winter;
 - Aid to compensate the costs of agricultural producers related to the implementation of measures under the "National program of measures for control of soil pests on potatoes from the Wireworms (Elateridae) Family;
 - Aid to compensate farmers for the implementation of measures under the National Program of Measures for Control of Tomato Leaf Miner - *Tuta absoluta* Meyrick (Lepidoptera);
 - Aid to compensate farmers for costs related to implementation of measures under the State Prophylactic Program and the Programs for the Surveillance and Eradication of Animal Diseases
 - Aid for co-financing of insurance premiums for insurance of agricultural production;
 - Aid to compensate for the costs of disposing and destroying of dead animals.

3) Aid aimed at ensuring the use of quality seed in crop production, maintaining a high level of breeding activity in livestock breeding and optimizing the process of producing quality agricultural products:

- Aid for the participation of farmers in a quality scheme for production of quality seeds and propagating material;
- Aid for keeping a herd book and determining the productivity traits of animals;
- Aid for certification of holdings in the fruit and vegetables sector under the GLOBALG.A.P standard.

4) Aid aimed at improving the quality of food and raw materials of animal origin by paying particular attention to animal welfare:

- Aid to implement voluntary commitments for the welfare of pigs;
- Aid to implement voluntary commitments for the welfare of poultry.

5) Aid for participation in exhibitions

Support of this kind contributes to the popularization of Bulgarian agricultural products on the market, as well as to the promotion of profitable plant varieties, animal breeds, innovative and effective technologies and practices among Bulgarian farmers. It is applied in the "Crop production", "Livestock breeding" and "Processing of agricultural products" sectors.

6) Minimum de minimis aid

De minimis aid is granted in compliance with the provisions of Regulation and Regulation (EU) No. 1408/2013, Regulation (EU) 1407/2013 and Regulation (EU) 717/2014. The de minimis rule applies to aid which, due to its small size, does not endanger competition and can be provided by member states without the need for approval from the European Commission.

In 2022, support amounting to a total of BGN 32,028,179 was provided under developed de minimis schemes.

7) State aid in the form of tax relief (administered under another procedure)

- Aid for investment in agricultural holdings by transfer of the corporate tax.

The aid is administered by the National Revenue Agency. According to preliminary data of the National Revenue Agency as of 16 May 2023 (with a deadline for filing tax returns until 30 June 2023), the tax declared for transfer for the tax year 2022 was BGN 44,193,848.

- Aid in the form of a rebate on the value of excise duty on gas oil used in primary agricultural production.

In 2022, BGN 99,996,356 was paid to 14,000 farmers under the aid line.

8) Emergency aid to provide liquidity to farmers under temporary European Commission legislation - Temporary framework for the state aid measures to support the economy in the conditions of the current COVID-19 outbreak and Temporary framework for state aid measures during crises to support the economy following Russia's aggression against Ukraine:

- Liquidity support to farmers to overcome the negative economic impact of COVID-19;
- Liquidity support to farmers to overcome the negative economic impact of the Russian aggression against Ukraine.

Table IV.8. State aid in agriculture in 2022

Item No.	State aid	Utilized financial resource - BGN	Number of beneficiaries
	Total state aid administered by the Agriculture State Fund		
1	Aid to compensate farmers for costs related to implementation of measures under the State Prophylactic Program and the Programs for the Surveillance and Eradication of Animal Diseases	19,125,026	86,800
2	Aid for creation and maintenance of a herd book and for determination of the productivity and genetic traits of animals	7,882,029	4,957
3	Aid to compensate for material damage to dead livestock and destroyed beehives and bee colonies	70,317	4
4	Aid to implement voluntary commitments for the welfare of pigs	58,038,462	66
5	Aid to implement voluntary commitments for the welfare of poultry	36,809,108	298
6	Aid to compensate for the costs of disposing and destroying of dead animals* (indicate the number of organizations providing the subsidized service to farmers)	7,994,559	2

Item No.	State aid	Utilized financial resource - BGN	Number of beneficiaries
7	Aid "Investments for purchase of facilities for production and storage of raw milk and facilities for feeding newborn animals with milk"	1,287,132	73
8	Aid "Investments for construction of slaughterhouses"	90,000	1
9	Aid "Investments for purchase or construction of facilities for processing and/or handling of raw milk"	59,350	1
10	Aid to compensate for damage to crops caused by adverse climatic events that can be equated to natural disasters	2,622,161	267
11	Aid for compensating the costs of farmers related to implementation of measures under the National Program for Pest Control in Perennials during the winter period	7,344,917	3,444
12	Aid to compensate farmers for the implementation of measures under the National Program of Measures for Control of Tomato Leaf Miner	218,672	100
13	Aid to compensate the costs of agricultural producers related to the implementation of measures under the "National program of measures for control of soil pests on potatoes from the Wireworms family"	1,293,340	280
14	Aid for co - financing of insurance premiums for insurance of agricultural production	1,826,283	547
15	Aid for participation of farmers in a quality scheme for production of seeds and propagating material	1,150,081	401
16	Aid "Investments in tangible assets of agricultural holdings related to the primary production of agricultural crop production"	3,389,647	60
17	Aid for participation in exhibitions	1,758,920	422
18	Aid for certification of holdings in the fruit and vegetables sector under the GLOBALG.A.P standard	69,716	63
19	Aid to support the provision of liquidity to farmers operating in primary agricultural production to overcome the consequences of the negative economic impact of COVID-19 (for large ruminants, small ruminants, bee colonies, fruit and vegetables)	143,463,861	26,674
20	Liquidity support to farmers to overcome the negative economic impact of the Russian aggression against Ukraine	425,360,574	35,277
21	De minimis aid (Regulation (EU) 1407/2013, Regulation (EU) 1408/2013 and Regulation (EU) 717/2014)	32,028,179	16,197
	Tax measures		
22	Aid for investment in agricultural holdings by transferring the corporate tax - tax 2022	129,246,687	3,046
23	Aid in the form of a rebate on the value of excise duty on gas oil used in primary agricultural production	99,996,356	14,000
	Total state aid administered by the Agriculture State Fund	751,882,334	
	TOTAL state aid (including through tax measures)	981,125,377	

Source: SF Agriculture, National Revenue Agency, Customs Agency

Expected data for 2023

In accordance to the State Budget Act of the Republic of Bulgaria for 2023 (SBARB), the SFA's budget for 2023 includes BGN 300,350,000 for state aids, transitional national aid and other payments related to the implementation of support schemes. From this resource, over BGN 150,000,000 are planned for state aid.

In addition, for the implementation of policies in the area of Agriculture, SBARB has put aside BGN 363,000,000 for providing support to farmers under national measures and for compensations for the

increased prices of energy carriers, feed, plant protection products, fuels and fertilizers, as well as BGN 20,000,000 for measures to compensate farmers for damage caused by adverse climatic events, including before the insurance period.

In addition, BGN 16,000,000 are provided by decree and decision of the Council of Ministers to support irrigation water costs, as well as BGN 63,000,000 for national measures and compensations for the increased prices of energy carriers, feed, plant protection products, fuels and fertilizers.

By mid-2023 (06.06.2023) and by decision of the Management Board of State Fund Agriculture, a resource was approved for state aid in agriculture to the amount of BGN 322,346,183 under state aid schemes and for de minimis aid, applied by the SFA.

3.2. Short-term credits

In 2022, State Fund Agriculture provided a total of BGN 126,796 in the form of short-term loans to farmers for the production of fruit and/or vegetables (field and/or greenhouse) and for rearing of large and/or small ruminants in 2022.

During the year, credits for livestock breeders, poultry farmers and pig farmers received in the period 2008-2012 were deferred.

3.3. Investment credit schemes of the Agriculture State Fund

In 2022, the SFA applied the following credit schemes for the investment intentions of farmers:

- Scheme for crediting with funds from State Fund Agriculture to persons with approved projects under the National Beekeeping Program for the three-year period 2020-2023;
- Credit scheme of the State Fund Agriculture for investments in agriculture.
- **Scheme for crediting with funds from State Fund Agriculture to persons with approved projects under the National Beekeeping Program for the three-year period 2020-2022;**

The scheme is implemented for the eleventh year in a row, which contributes to a significant increase in the utilization of funds under the National Beekeeping Program.

Under the terms of the scheme, a larger number of agricultural producers is given the opportunity to provide the necessary financial resources for implementation of approved projects under Measures A, B, C and E of the NBP - purchase of new hives, swarms, queen bees, veterinary medicines, beekeeping equipment and attached equipment for mobile beekeeping, by using credit.

The maximum amount of the loan is up to 95% of the amount of the due grant under measures A, B, C, and E of the NBP, calculated on the basis of the actually agreed costs under concluded contracts for purchase and sale of assets approved in the contract for providing grants under the NBP, with an interest rate of 2.5% annual interest.

Within the term of the call under the scheme, 195 credit applications were submitted, all of which were processed and financed. The amount of the provided funds was BGN 827,169.00.

The repayment of the credit and the due interests shall be implemented by offsetting the approved financial assistance under the NBP. If there is remaining balance on the credit, the borrower is given the option to repay the difference at own expense at once or over a period of one year.

After offset with the approved financial aid, 195 loans to the amount of BGN 827,169.00, or 100% the provided resource, were fully repaid.

- **Credit scheme of the Agriculture State Fund for investments in agriculture**

There are three main directions: Crop, Livestock Breeding, and Technical Assistance, in the credit scheme of the Agriculture State Fund for investments in agriculture. The scheme aims to encourage the investment process, to increase the competitiveness and quality of agricultural products by facilitating the access to credit.

The activities and sites envisaged for financial support are:

- creation, restoration and cultivation of perennial crops and investments in greenhouse production;
- establishing and equipping of livestock farms and purchase of purebred, hybrid and market animals;
- purchase of machinery, equipment and inventory used in agriculture.

The credits under the scheme have a repayment term from 12 to 114 months, depending on the type of investment, which also includes grace periods in terms of repayment of the principal.

The investment projects are financed at an annual interest rate equal to the reference interest rate applicable on the date of concluding the credit agreement, but not lower than the one determined by the Management Board of State Fund Agriculture for 2022 - 2.5% for direct crediting and up to 7% for refinancing through commercial banks. For credits financed directly by State Fund Agriculture, the processing and management fee is 0.5%.

Expected data for 2023

For 2023, farmers are expected to be provided with investment credits under the Credit scheme for investments in agriculture and a new scheme for crediting with SFA funds to persons with concluded contracts for providing grant interventions from the Strategic Plan for Agricultural and Rural Development for the period 2023 - 2027 in the beekeeping sector - up to BGN 90 million, if a net balance is of up to minus BGN 40 million is maintained.

The annual interest rate for new credits financed directly by the SFA under the credit scheme for investments in agriculture is 3%. No applications have been received by June 2023.

V. AGRICULTURAL PRODUCTION ACTIVITIES

1. Control of agricultural and forestry machinery

1.1. Registration of agricultural and forestry machinery

The registration of agricultural and forestry machinery allows to monitor the technical condition of each machine, to control their safety at work and transport, to maintain a database of all machines in the country, to track the dynamics of renewal of machinery and tractor fleet.

In 2022, a total of 29,042 pieces of agricultural and forestry machinery were registered in the country, of which 10,041 were brand new.

Table V.1. Registered agricultural and forestry machinery in 2022

Machine type	Total	including new machines
Caterpillar tractors	110	14
Wheeled tractors	8,698	1,568
Self-propelled chassis	121	0
Other self-propelled equipment	5,378	1,560
Tractor trailers	2,700	919
Forestry equipment	1,514	433
Combine harvesters	1,159	233
Self-propelled feed harvesters	46	2
Other self-propelled machines	104	23
Sowing and planting machines	1,435	840
Fertilizer and plant protection machines	1,298	782
Fodder harvesters and feed processors	3,135	1,644
Soil cultivators	3,267	1,966
Dryers and others	6	4

Machine type	Total	including new machines
Grain and seed cleaners	21	16
Irrigating machines	50	37
Total:	29,042	10,041

Source: MAF

1.2. Technical inspection of the equipment

The effective control of the technical condition and safety of equipment ensures protection of life and health of workers with agricultural and forestry equipment and reduction of accidents at work and victims of road accidents associated with equipment malfunctions.

In 2022, the regional directorates of agriculture conducted 136,207 technical inspections of agricultural and forestry machinery.

1.3. Qualification to work with machinery and issuance of certificates

After on-site inspections of the facilities and the training documentation, 9 certificates for registration of educational forms were issued in 2022 for training of the candidates for acquiring qualification to work with agricultural and forestry equipment on 9 training forms for 9 categories. 21 corrections were made to permits and certificates for registration of educational forms due to change of the circumstances.

Table V.2. Issued permits and qualification certificates by categories in 2022

Category	Number of permits issued	Number of qualification certificates issued
tracked and wheeled tractors and machinery attached thereto	5	5,798
specialized and special agricultural machinery	2	2,660
specialized and special self-propelled reclamation equipment (earthmoving machines).	1	639
specialized and special self-propelled forestry equipment (hydraulic cranes and jaw loaders).	1	802
chainsaws and brushcutters	0	1,816
log bandsaw	0	25
cableways	0	26
Change of circumstances	21	
Total:	30	11,766

Source: MAF

1.4. Testing and certification of used agricultural and forestry machinery

In 2022, 2,641 tests of used agricultural and forestry machinery and earthmoving machinery were performed at the testing and certification centers in Ruse and Plovdiv.

2. Hydromelioration

2.1. Sites for protection against the harmful effects of water

The annual statement of expenses for the activity in 2022 is for a total value of BGN 22,507,151 including VAT, and the advance funds provided under the contract for the sites for protection against the harmful effects of water (SPHWI) are BGN 26,452,501, included VAT.

In 2022, compromised sections of river and gully corrections and protective dikes were restored, which improved their conductivity and their function of flood protection of agricultural lands, settlements and technical infrastructure.

Maintenance of the operational condition of drainage systems and canals was carried out, which improved the water-air balance of the soil in cultivated agricultural lands, contributing to an increase in the yields of agricultural products.

The condition of the Danube dikes has been improved, with areas of shrubby and woody vegetation being cleared. Repairs were made to drainage pumping stations.

The activities carried out by Irrigation Systems EAD (financed with funds from the state budget of Bulgaria) have improved the general operating condition of water management systems and facilities.

For the period 01.01.2023 - 30.07.2023, the costs incurred by Irrigation Systems EAD for carrying out the activities under the SPHWI contract amount to BGN 12,540 million including VAT. In the period by the end of June 2023, 6 sites have been restored (compromised sections of river corrections) and an update on one project for the reconstruction of drainage pump station Kapitan Andreevo - 1 has been carried out.

In 2023 the programs include further restoration of compromised sections of dikes, river corrections and other sites for protection of the harmful water impact (SPHWI), as well as the assignment and preparation of work designs for compromised sites with the purpose of their subsequent restoration. The costs for the activities under the contract for 2022 for SPHWI are expected to reach BGN 25 million. Due to the lack of sufficient construction mechanization and means of transport, it is difficult to respond to accidents, which deepens critical situations.

The Ministry of Agriculture and Food has assigned Irrigation Systems EAD as contractor for the implementation of construction named "Engineering - research, design and implementation of construction and installation works related to the prevention of flooding of the surrounding agricultural lands and the adjacent facilities and embankments of LOT 4 of the Trakia Motorway "Yambol - Karnobat." 10 sub-sites of the construction have been completed and handed over, as this leaves 2 sub-sites along Azmak Dere for implementation. Preliminary archaeological surveys on 8 sites have been completed. Full archaeological surveys are to be carried out on 3 sites.

It is expected that in 2023, the archaeological surveys along the route of the two sub-sites and the coordination procedures of the project will continue. The main goal of this stage is to carry out the appropriate expropriations and settle the ownership of the forest fund properties, private and municipal properties affected by the detailed development plan. This will enable the implementation and completion of the construction of the two sub-sites along Azmak Dere.

2.2. Irrigation

There are 181 dams owned and managed by Irrigation Systems EAD. Of these, 19 complex and significant dams (public state property) have been provided for use, including management, maintenance, operation, protection and monitoring, and 15 are retention dams (including 6 that are public state property). In 2022, Irrigation Systems EAD carried out partial repair works on the irrigation infrastructure. The most large-scale and providing water for larger areas for irrigation are local repair and restoration works on the Manole dam (thus enabling the 2022 irrigation season activities for irrigation areas in the territories of the districts of Pazardzhik and Plovdiv, where significant areas sown with rice are irrigated) and assistance in carrying out emergency repair and restoration works on the water supply facilities of the Muglene (Benkovski) dam. Cleaning, repair and restoration works on the M-2 Stara Zagora irrigation canal, repair of the steel water pipeline to the pumping station Leshko - 1, as well as installation of a butterfly valve at Stoykovtzi reservoir, the land of Logodash village and restoration of the dike of the Main Rila Irrigation Canal have been carried out. During the year, repair and restoration works were also carried out on the Aleko-Potoka Main Irrigation Canal (MIC) and a broken down fountain in the village of Dobovnitsa, as well as on the lower leveler of the Aleko Hydroelectric Power Plant (emergency drainage outlet), and emergency repair and restoration works were carried out on the MIC-2 at the crossing of Kanina river, the village of Marchevo

In 2022, Irrigation Systems EAD irrigated a total of 274,800 decares, supplying water masses to the amount of 266,637 thousand m³, incl. 101,771 decares of rice with 241,286 thousand m³ of water masses. The total irrigated areas were about 3% less than in 2021.

Table V.3. Watered areas and supplied water masses by Irrigation Systems EAD in 2022 by types of crops

	TOTAL		Corn		Tobacco		Vegetables		Perennials		Rice		Other crops	
	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses	Irrigated areas	Supplied water masses
	decares	thousand m ³	decares	thousand m ³	decares	thousand m ³	decares	thousand m ³	decares	thousand m ³	decares	thousand m ³	decares	thousand m ³
Burgas	4,823	238	2	0			71	5	1,357	52			3,393	180
Vidin	0	0	0	0			0		0					
Gorna Tundzha	19,280	31,144	3,623	557	962	165	986	215	1,124	96	12,545	30,108	41	3
Lower Danube	9,304	1,934	1,391	334	0		596	211	95	16			7,222	1,373
Maritsa	87,954	132,586	25,980	3,393	809	99	509	62	3,168	250	54,753	128,442	2,735	340
Mizia	2,010	121	1,657	41	0	0	335	77	13	2			6	1
Sofia	4,898	552	0	0	0	0	3,643	447	998	86			257	19
Middle Danube	15,366	1,948	5,531	270	446	98	6,099	1,280	479	20			2,810	280
Middle Tundzha	37,838	4,629	24,190	3,354	0		1,117	180	4,818	552			7,713	543
Struma-Mesta	9,024	1,469	3,732	433	169	20	2,143	489	945	92			2,034	435
Topolnitsa	62,958	88,283	20,328	4,446	854	134	3,687	517	3,394	308	34,473	82,735	222	143
Haskovo	4,303	995	1,885	384	484	64	1,431	485	237	29			267	33
Black Sea	4,527	420	2,277	104	0		1,690	282	127	6			433	28
Shumen	12,515	2,318	8,080	1,392	0		294	132	25	6			4,116	788
TOTAL	274,800	266,637	98,675	14,709	3,723	580	22,602	4,381	16,780	1,516	101,771	241,286	31,249	4,165

Source: Irrigation Systems EAD

In 2022, the prices at which Irrigation Systems EAD performs the service "supply of water for irrigation" are differentiated by regions and depending on the method of supply. During the year, the price by delivery method component increased by up to a maximum of 17% per decare (with the exception of pumped water for rice production, which increased by 139%) and up to 22% for the price per volume of water delivered, compared to prices for the 2018-2021 period.

Table V.4. Summary for Irrigation by Irrigation Systems EAD for the 2020 - 2022 period

	2020			2021			2022		
	1 st irrigation	Irrigated decares	Water masses	1 st irrigation	Irrigated decares	Water masses	1 st irrigation	Irrigated decares	Water masses
	decares	decares	thousand m ³	decares	decares	thousand m ³	decares	decares	thousand m ³
Burgas	4,891	5,578	255	5,144	7,464	302	4,823	5,864	238
Vidin	1,066	5,267	206	4,201	6,675	151	0	0	0
Gorna Tundzha	19,432	26,753	31,807	21,395	32,596	35,638	19,280	32,481	31,144
Lower Danube	7,896	44,059	1,859	8,640	37,979	1,621	9,304	42,781	1,934
Maritsa	101,753	113,941	167,523	99,327	314,953	162,841	87,954	269,376	132,586
Mizia	853	3,009	103	2,896	10,246	222	2,010	5,475	121
Sofia	4,951	12,399	765	7,211	14,198	857	4,898	9,012	552
Middle Danube	16,545	65,773	2,195	15,233	66,422	1,893	15,366	62,326	1,948

	2020			2021			2022		
	1 st irrigation	Irrigated decares	Water masses	1 st irrigation	Irrigated decares	Water masses	1 st irrigation	Irrigated decares	Water masses
	decares	decares	thousand m ³	decares	decares	thousand m ³	decares	decares	thousand m ³
Middle Tundzha	36,027	65,853	4,930	36,293	60,268	4,802	37,838	66,328	4,629
Struma-Mesta	8,329	17,838	1,247	8,775	17,777	1,189	9,024	22,157	1,469
Topolnitsa	60,647	83,686	88,706	61,707	78,081	93,690	62,958	88,363	88,283
Haskovo	4,646	18,875	1,070	4,663	17,085	1,085	4,303	15,602	995
Black Sea	2,322	9,283	377	2,223	8,393	335	4,527	10,279	420
Shumen	3,763	7,810	463	5,755	27,959	1,258	12,515	42,590	2,318
TOTAL	273,118	480,123	301,507	283,462	700,095	305,886	274,800	672,632	266,637

Source: Irrigation Systems EAD

2.3. Activities under sub-measure 4.3 "Investments for development, modernization or adaptation of agricultural and forestry infrastructure" of the RDP 2014-2020

In order to permanently provide better quality service and reduce water losses, it is necessary to provide significantly more funds. In this regard, Irrigation Systems EAD was given the opportunity to apply for rehabilitation of existing irrigation and irrigation facilities under sub-measure 4.3 "Support for investments in infrastructure related to the development, modernization or adaptation of agriculture and forestry" of measure 4 "Investments in tangible assets" from the Rural Development Program for the period 2014-2020.

The support under the sub-measure will focus on the reconstruction/rehabilitation and modernization of hydro-ameliorative irrigation facilities used only for agricultural purposes, outside agricultural holdings, in order to reduce water losses and for adaption of agriculture to the effects of climate change. The support under the sub-measure will ensure efficient use of water resources through the introduction of new technologies, leading to a real reduction in losses and water consumption in agriculture, increasing competitive advantages and reducing the pressure on water bodies.

The company has prepared a total of 26 investment proposals for support, which were selected to include sections of the most intensively used irrigation facilities with a primary need for rehabilitation, located throughout the country. After their approval and inclusion in the program by the evaluating bodies, the repair and restoration works may start after the end of the irrigation season for the current year, respectively - before the beginning of the next irrigation season, and the deadline for their implementation is 2025.

In 2023, the unapproved projects under measure 4.3 (including additionally prepared project proposals) are expected to be provided with an opportunity to apply under the instrument Strategic Plan for the Development of Agriculture and Rural Areas of Bulgaria for the 2023-2027 period.

3. Plant protection and phytosanitary control

3.1. Monitoring the development of economically important pests and plant protection

Plant protection inspectors at the RFSD carry out systematic observations of agricultural crops for the emergence, development and spread of economically important diseases and pests that are directly dependent on agro-meteorological conditions during the growing season. It is the obligation of the farmers to inspect the fields for disease and pest infestation in a timely manner and to apply chemical control only when the thresholds of economic harmfulness of pests in different crops are reached.

3.2. Plant protection

▪ Plant protection in cereals

In 2022, the general phytosanitary condition of cereals was good.

Weed control

During the year, herbicides were applied to a total of 1,164,270 thousand ha with autumn crops (compared to 1,397,702 thousand ha in the previous year 2021), including 1,056,360 thousand ha with wheat

and 107,904 thousand ha with barley. Treatment against broadleaf weeds was carried out on 492,080 thousand ha.

Pests and Diseases Control

Corn bug (Eurygaster integriceps Put.)

The total areas affected by the adult of the corn bug are 168,340 thousand ha and treatment was carried out on 126,880 thousand ha.

Treatment against the larvae of the pest was carried out on 115,410 thousand ha, while 164,800 thousand ha were affected.

Cereal Leaf Beetle (Oulema melanopa (L.))

In 2022, 122,764 thousand ha were treated against the larvae of the cereal leaf beetle, while 145,554 thousand ha were affected.

Powdery mildew

In 2022, the wheat fields affected by powdery mildew were 351,323 thousand ha, treatment was carried out on 410,880 thousand ha. Multiple early chemical treatments were carried out, as in most of the treated areas the fungicides used were combined with the application of vegetation herbicides.

Septoria

316,540 thousand ha were affected by the disease and treatment was carried out on 399,43 thousand ha.

▪ Plant protection in industrial crops

Weed control

In 2022, soil herbicides were applied on 417,130 thousand ha of sunflower, and 449,060 thousand ha were treated vegetatively.

Soil herbicides were applied on 183,450 thousand ha of areas sown with corn during the year. A total of 266,820 thousand hectares were treated with vegetation herbicides against cereal and broadleaf weed species.

In the autumn, chemical control of weeds in rapeseed was carried out, mainly with soil herbicides, and they were applied on 64,130 ha. Vegetation herbicides were applied on 61,800 thousand ha.

In 2022, soil herbicides were applied on 1,150 thousand ha of tobacco, and 0.260 thousand ha were treated with vegetation herbicides.

Chemical control of weeds in potatoes was carried out by applying soil and vegetation herbicides. Soil herbicides were applied on 5,220 thousand ha, and vegetative herbicides were applied on 2,420 thousand ha.

Control of diseases and pests

Black spots (Phoma) and Stem canker (Phomopsis) in sunflower

Throughout 2022, 67,470 thousand ha were treated against phoma and 68,190 thousand ha against phomopsis. The treatments were mainly preventive.

Mildew on Sunflower

The total area affected by the disease in 2022 was 1,610 thousand ha.

The cause for the mildew is *Plasmopara helianthi* (halstedii). The control measures for the pathogen are mainly agro-technical (application of a high level of agrotechnics) - mandatory decontamination of seeds before sowing, deep plowing after harvesting, sowing of resistant varieties and hybrids, mandatory destruction of self-sowing plants and, in case of an established infection, observance of 7-8 annual crop rotation with cereal crops.

Western corn rootworm - Diabrotica virgifera virgifera

In July 2022, damage was found on the silk and leaf surface of corn plants caused by Western corn rootworm. The affected crops cover a total area of 1,158 thousand ha in the districts of Vratsa, Dobrich, Pazardzhik, Pernik and Stara Zagora.

An interdepartmental working group has been established to address ongoing problems associated with the proliferation of Maize Leaf Weevil (*Tanymecus dilaticollis*) and the Western corn rootworm.

Crop rotation is the best means of reducing the density and damage caused by the pest, which reproduces strongly only under monoculture and irrigated conditions.

In 2023, the Western corn rootworm has been included in the list of economically important pests and has been placed under increased systematic surveillance, with adult emergence expected towards the end of June.

Rape beetle (Meligethes aeneus)

In the months of April and May of 2022, treatments against the Rape beetle were carried out on 103.17 thousand ha.

Rape stem weevil (Ceutorhynchus napi)

In 2022, 39,860 thousand ha of rapeseed were treated against the pest.

▪ Plant protection in vegetable crops

Pests Control

Tomato leafminer (Tuta Absoluta)

The reproduction of the pest was not allowed in most greenhouses in the country in 2022. From 1 to 9 insecticide treatments were carried out on 0.609 ha.

Under field conditions, 1 to 9 treatments against the tomato leafminer were carried out on an area of 1,117 thousand ha.

During the year, the implementation of state aid under the "National Program of Measures for Control of Tomato Leafminer" continues. Beneficiaries of the aid are farmers growing tomatoes in greenhouses, as well as peppers, aubergines, potatoes grown in greenhouses on areas larger than 1 decare. 102 farmers applied under the program in 2022.

▪ Plant protection in orchard crops Pests and Diseases Control

Apple scab and pear scab

In 2022, 5,270 thousand ha were treated against apple and pear scab.

Powdery mildew on apple trees

4,060 thousand ha of apple and pear orchards were treated against powdery mildew during the year.

Early brown rot

In 2022, 1 to 4 treatments against early brown rot were carried out on 18,230 thousand ha of the total managed stone fruit trees (including plums, cherries, sour cherries, peaches, apricots).

Late brown rot

In the district of Plovdiv, low levels of late brown rot were observed on cherry and sour cherry fruit.

Peach powdery mildew

During the vegetation, 1 to 7 sprays were carried out. 3,870 thousand ha of peach orchards were treated.

Peach Leaf Curl

1 to 3 treatments were carried out on an area of 2,590 thousand ha peach trees.

Cherry leaf spot (Blumeriella jaapii) on cherries and sour cherries

Blumeriella jaapii manifestation on cherry and sour cherry leaves has not been observed. Preventive post-emergence treatment was carried out on 0.100 thousand ha in the district of Pazardzhik. A low level of cherry leaf spot infestation has been established in the districts of Razgrad and Targovishte, but weather conditions favor a more widespread infestation. In 2022, 1 to 3 treatments were carried out on an area of 6,990 thousand ha of cherries and sour cherries.

Leaf-eating caterpillars

Predominant species in orchards are: *Lymantria dispar* L.; *Euproctis chrisorrhoea* L.; Geometridae; *Hyphantria cunea* Drury. In 2022, the pests were in low population density and degree of attack. The harmful activity and the spread of leaf-eating caterpillars were limited by treatments against other economically important pests on fruit crops. Treatment against the main leaf-eating species was carried out on 11,130 thousand ha of orchards, including 1,570 thousand ha of pome fruit and 9,560 thousand ha of stone fruit species in combination with the fight against other pests.

Tortrix moths (Tortricidae) and Temetocera ocellana F. and Hedya nubiferana Haw

Treatment against pests was carried out on 2,480 thousand ha of pome fruit species.

Aphididae

During the year, all fruit crops were affected by aphids. 4,300 thousand ha of pome fruit and 19,410 thousand ha of stone fruit species were treated, from 1 to 6 times.

Quadraspidiotus perniciosus

A total of 1,750 thousand ha of orchards were treated against the San Jose scale.

Parthenolecanium corni Bouche

In 2022, 1,860 thousand ha of plums from a total of 9,028 thousand ha of plum trees were treated, as mainly combined treatments for plum fruit moth were carried out.

Cherry fruit fly (Rhagoletis cerasi L.)

The treated areas were 8,940 thousand ha.

Black plum sawfly (Hoplocampa minuta Christ.)

In 2022, 5,840 thousand ha were treated against the pest from 1 to 3 times.

Fruit worms

5,200 thousand ha of apple orchards were treated against apple fruit worm, 8,320 thousand ha of plum orchards against plum fruit worm and 6,990 thousand ha against eastern fruit worm for peaches and apricots.

Peach-twig borer (Anarsia lineatella Zell.)

During the year, 4,890 thousand ha with peaches and apricots were treated.

Roundworm moth (Leucotera (Cemiostoma) scitella Zell.) on apple trees

In 2022, 0.470 thousand ha were treated against roundworm moth and applications for support to farmers for state aid under the National Program for Pest Control in Perennials during the winter period continued to be accepted.

▪ Plant protection in vineyards

Weed control

In 2022, soil herbicides were applied on 2,300 thousand ha and vegetation herbicides on 18,900 thousand ha of the managed areas occupied by vineyards.

- **Pests and Diseases Control**

- Grapevine Downy Mildew**

- During the year, 1 to 8 treatments against the mildew were carried out on an area of 34,500 thousand.

- Powdery mildew (*Oidium*)**

- 1 to 8 treatments were carried out on an area of 34,660 thousand ha of vineyards.

- Gray mould rot (*botrytis*)**

- From 1 to 7 treatments were carried out in the areas treated against gray rot (19,160 thousand ha).

- European Grapevine Moth (*Lobesia botrana* Schiff.)**

- In 2022, out of a total of 37,718 thousand ha of vineyards, 17,830 thousand ha were treated.

- Schizotetranychus viticola* Reck.**

- 1 to 5 treatments were carried out on 5,660 thousand ha vineyards.

An interdepartmental working group is planned be set up in 2023 to develop a pest control program for vineyards, on the basis of which farmers will be financially supported.

- **Plant Protection against Omnivorous Pests**

- Common Vole (*Microtus arvalis*)***

- In the spring of 2022, the total area of autumn trees attacked by the common vole was 37,250 thousand ha. Chemical control was carried out on 21,850 thousand ha.

- Crickets***

- Sunflower areas attacked by crickets were 16,200 thousand ha, while 7,630 thousand ha of corn were attacked and 6,660 thousand ha were treated. At present, there are no registered plant protection products for fighting the pest.

- Wireworms***

- The total areas affected by wireworms are 20,930 thousand ha and for corn - 17,200 thousand ha.

In 2022, applications continued to be accepted for farmers to receive state aid under the National Program for Control of Pests on Potatoes from the Wireworm Family. Beneficiaries of the aid are farmers producing potatoes.

During the year, there were 286 submitted declarations for 3,539 thousand ha of potatoes attacked.

- Maize Leaf Weevil (*Tanymecus dilaticollis* Gyll.)***

- In 2023 it was included in the list of economically important pests for all districts of the country and is subject to systematic and constant monitoring. The maize leaf weevil is mainly spread in the regions of the Danube Plain, Ludogorie and Dobrudzha. It causes the most serious damage in corn and sunflower.

There are no suitable seed decontamination products authorized to deal with the pest.

- Loxostege sticticalis***

- In 2022, a calamity of *loxostege sticticalis* was announced for the territory of the entire country. As a result, guidelines for the implementation of control measures for the third generation of the *loxostege sticticalis* in Bulgaria have been developed.

In 2022, 28,940 thousand ha of sunflower were attacked by the *loxostege sticticalis* and treatment was carried out on 28,300 thousand ha.

In 2023, the pest was included in the list of economically important pests and placed under increased systemic surveillance. The aim is to prevent mass reproduction and to implement timely control measures. During the May-June 2023 period, emergence was established of single *loxostege sticticalis* on the territory

of the districts of Dobrich, Varna, Pazardzhik, Vratsa, Pernik, while there was hatching of caterpillars in the district of Varna. Necessary actions have been taken to inform farmers about the need to carry out plant protection measures.

Moroccan locust (*Doclostaurus maroccanus*)

Annually, the pest is more closely monitored and, if necessary, it is possible to declare a calamity and take action for its physical destruction and damage limitation. In 2022, the pest continues to regress. The species is narrowing its range.

Within 2023, the Moroccan locust is not expected to reach high values and to cause the need of declaring a calamity. A signal has been submitted for the appearance of the pest on meadow areas on the territory of Ivaylovgrad municipality.

The pest continues to be under increased surveillance.

3.3. Phytosanitary Control

The priority activities for achieving the main operational objective in the field of phytosanitary control in 2022 are:

- Production control of plants and plant products on the territory of Bulgaria with a view to timely detection and prevention of the spread of quarantine pests on plants and plant products;
- Effective control on import of plants and plant products from third countries on the territory of the country and the EU, as an external border of the Union;
- Ensuring the export of plants and plant products according to the phytosanitary requirements of the importing country and the IPPC (International Plant Protection Convention);
- Legislation harmonized with the EU plant health regime;
- Carrying out phytosanitary monitoring programs for quarantine pests, in accordance with EU legislation;
- Laboratory-diagnostic network.

3.3.1. Production control of the territory of Bulgaria and movement of plants, plant products and other objects within the EU

Phytosanitary control in the production and movement of plants, plant products and other sites and monitoring in the country for quarantine pests and regulated non-quarantine pests (RNQ) in 2022 was carried out in compliance with the requirements of the Plant Protection Act (PPA), in accordance with EU legislation in the field.

The persons under Art. 22, para. 1 of the Plant Protection Act - importers, producers, processors, warehouses, forwarding centers, markets and persons handling plants, plant products and other sites subject to phytosanitary control, are registered in the official register of the professional phytosanitary control operators.

Registered professional operators in 2022 were 3,240. Of these, 155 were professional operators registered under Standard 15 for thermal treatment of wood packaging material (WPM) and 428 - importers of plants, plant products and other objects.

In 2022, 6,962 inspections were carried out in the production of plants and plant products, compared to 6,480 in the previous year.

The main priority in this area is to ensure the production of healthy plants and plant products, their movement within the EU through the system of plant passports and trouble-free exports to third countries, complying with phytosanitary requirements for imports from the importing - country.

In 2022, the plant protection inspectors of the BFSA carried out phytosanitary control under the following national monitoring programs:

- Monitoring for quarantine pests on potatoes;
- Monitoring for quarantine pests on fruit species, including strawberries and raspberries;
- Monitoring for fruit maggots;
- Monitoring for quarantine pests on vineyards;
- Monitoring for quarantine pests by vegetable species in greenhouses and open areas;
- Monitoring for quarantine pests in greenhouses, nurseries and garden centers for flowers and ornamental plants;
- Monitoring for *Xylella fastidiosa*;
- Monitoring for quarantine pests by forest species;
- Calendar plan for monitoring plants and plant products for quarantine pests.

During the observations carried out under the monitoring programs on the territory of the country during the year, 7,300 inspections were documented (compared to 5,674 for 2021); 1,720 samples were analyzed in the regional diagnostic laboratories for plant health (ODRHR) (1,669 for 2021).

The phytosanitary control at the BFSA is connected with the activity of the Central Laboratory of Plant Quarantine (CLPQ), which is designated as the National Reference Laboratory for plant pests - insects and mites, nematodes, bacteria, fungi and omycetes and for viruses, viroids and phytoplasmas.

In 2022, 4,324 samples were received in the Central Laboratory and 11,673 analyses of plants, plant materials and imported soils, incl. from EU traffic, from field control, from monitoring programs and from the private sector, were performed.

The timely detection of pests enables the phytosanitary inspectors to take timely and appropriate action to locate outbreaks and eradicate them where possible.

The specialized potato laboratory in Samokov, potato varieties are being tested for resistance to potato cyst nematodes and the potato assortment is maintained for potato cancer testing.

During the year, 2,060 plant passports of locally produced goods for the country and the EU, 22 health certificates and 24 pre-export certificates were issued.

3.3.2. Phytosanitary control at export

In 2022, 10,285 inspections were carried out (15,415 in 2021), on 30,410 shipments of plants and plant products intended for export, for compliance with the phytosanitary requirements of the importer country (34,990 in 2021).

The main goods subject to phytosanitary control for export are: wood, sunflower (peeled, colored, black), wheat, coriander, dried herbs, spices and dried fruits. A decrease is observed in phytosanitary export certificates issued as a result of limited grain exports. Timber exports were mainly to Turkey, Northern Macedonia, Serbia, Albania and China. The most significant exports of coriander were to Indonesia, Malaysia, India, UK, Sri Lanka and Turkey. Export of sunflower (peeled and black) was most significant to USA, Turkey, Australia, Mexico and Thailand, and that of wheat - to Israel, UK, Turkey, Lebanon, USA and Indonesia. Export of dried herbs was most significant to the US, Japan, UK, Indonesia and Canada, and that of spices - to the US, UK, Japan, Turkey and Serbia.

3.3.3. Phytosanitary control at import

In 2022, 425 operators were registered in the official register of phytosanitary control of importers of plants and plant products, compared to 556 the previous year. 467 lots were checked. 45 plant passports were issued, compared to 50 in 2021.

3.4. Control of plant protection products and fertilizers

The main purpose of the control over the marketing of plant protection products (PPPs) and fertilizers is to ensure the marketing, storage, repackaging and production of permitted, usable, efficient, maximally safe for human and animal health, sparing environmental PPPs and fertilizers that meet the legal requirements for packaging and labeling. The scope of control covers companies for trade, repackaging and production of PPP and fertilizers, as well as unregulated trade sites and border crossings.

The control over the use of PPP and fertilizers is directed at ensuring the correct and sustainable use of plant protection products in compliance with the requirements of the Plant Protection Act to produce safe plant production. The scope of control involves sites offering PPP and farmers who apply plant protection products and fertilizers in the production of plant products intended for food, feed or other purposes outside the agri-food network.

In 2022, 107 plant protection products were authorized to be placed on the market and in use, in accordance with the requirements of the Plant Protection Act and Regulation (EC) No. 1107/2009 concerning the placing of plant protection products on the market. 24 authorizations of plant protection products were revoked or terminated, 82 products were amended, there were 2 denied applications for limited and controlled use and for 1 refusal on an application for parallel trade and for mutual recognition.

3.4.1. Results of the control activity on the marketing of PPPs

On the territory of the country, 1,321 sites, including 877 for trade in agricultural pharmacies, 428 warehouses for storage and wholesale (own warehouses and cells for rent), 14 sites for repackaging and 2 PPP production companies were registered.

In 2022, 1,582 inspections were carried out, 919 of which were in agricultural pharmacies, 535 in warehouses, 19 in repackaging sites, 9 in PPP production sites and 100 in unregulated sites (municipal markets, shops, etc.). 173 prescriptions, 25 citations for administrative violations and 23 penal citations were drawn up.

Table V.5. Control over the PPP market in the 2018 - 2022 period

Activities	2018	2019	2020	2021	2022
Number of registered sites	1,305	1,300	1,304	1,323	1,321
Number of site inspections	1,675	1,706	1,625	1,763	1,582
Number of prescriptions	250	269	234	290	173
PPP samples taken for analysis	99	99	99	100	88
Citations for violations	19	20	25	34	25

Source: BFSA

During the year, a total of 205 certificates were issued, including 27 certificates for PPP trade in warehouses, 35 for trade in agricultural pharmacies, 1 for repackaging of PPP and 142 certificates for change of circumstances.

Based on received applications, 21 certificates for extending the period of validity of the PPP and 1 opinion on non-compliance of the PPP with the indicators affirmed upon their approval were prepared and issued.

88 compliance control samples were taken in 2022. No discrepancies were found in the analyzed samples.

A total of 70,481 kg and 197,212 liters of PPP were seized from the trading, production and repackaging sites and left for safekeeping.

3.4.2. Results of the control activity on the use of PPP

The total number of inspections of the use of PPP in 2022 was 5,624, including 3,804 documentary checks in RFSD, 1,605 documentary checks during on-site farm inspections, 38 during aerial spraying, 14 during fumigation, 67 during treatment of seeds for sowing and 96 during treatment with ground equipment.

During the year, 1,299 prescriptions, 21 citations for established administrative violation and 17 penal decrees were drawn up.

On the territory of the country, 156 inspections were carried out on signals or complaints regarding the use of PPP, 22 citations for established administrative violations were drawn up and 15 penal decrees were issued.

Table V.6. Control over the use of PPPs in the 2018 - 2022 period

Activities	2018	2019	2020	2021	2022
Number of inspections of the use of PPPs carried out	6,856	7,164	5,649	5,792	5,624
Number of prescriptions	1,321	1,361	1,287	1,085	1,299
Citations for violations	17	52	36	37	21
Number of inspections on signals or complaints regarding the use of PPPs	101	241	141	121	156
Citations for violations for signals and complaints	6	38	23	17	22
Plant samples taken for analysis:					
<i>Pesticide residues</i>	26	71	92	95	29
<i>Leaf samples</i>	58	57	40	50	13
<i>Nitrate pollutants and heavy metals</i>	26	25	25	29	24
<i>On signals and complaints</i>	-	82	41	12	27
Number of individuals providing plant protection services	67	59	50	60	65
Number of permits issued for aerial spraying	157	155	56	112	59

Source: BFSA

Permits issued for the application of PPPs through aerial spraying, pursuant to Art. 109 of the Plant Protection Act

The permits for aerial spraying issued in 2022 were 59, including 46 for agricultural areas and 12 for forest areas. A significant decrease in issued permits is observed compared to a year prior, which is indicative of increased control on the use of PPPs by farmers. The treated areas were 6,221 thousand ha of agricultural areas and 3,505 thousand ha of forest areas.

The individuals providing specialized plant protection services were 65, out of which 34 performed fumigation, 25 performed decontamination of seeds with PPP and 6 provided consultancy service.

Samples for pesticide residues under the National Program for Control of Pesticide Residues in and on Foods of Plant and Animal Origin and leaf samples for identification of PPP

Of the planned 90 samples for pesticide residues, 29 samples were taken in 2022. 2 discrepancies were found in samples of spinach (presence of active substances imidacloprid and famoxadone) and lettuce (carbendazim and thiophanate-methyl). 3 citations for administrative violations were drawn up for the use of non-permitted PPPs and those outside the scope of permitted use.

In 2022, out of the planned 120 plant samples (50 for identification of used PPPs and 70 in cases of reports related to protection of bees for poisoning, signals for unregulated use of PPPs), 13 samples were taken and analyzed. 5 citations for administrative violations were drawn up, of which 2 were for use of unauthorized PPPs (presence of the active substances clothianidin, imidacloprid and thiamethoxam in soybean and corn crops) and 3 - for use of PPPs outside the scope of authorized use (presence of the active substances cyproconazole, metalaxyl and acetamiprid in soybean and rapeseed crops).

Samples of plants and plant products under the National Program for Control of Contaminants in Food (nitrates and heavy metals - lead and cadmium)

Of the planned 33 samples for nitrate and heavy metal content, 24 samples were analyzed (8 for nitrate content and 16 for heavy metal content). 4 discrepancies were found, out of which 1 for presence of nitrates in arugula and 3 for presence of heavy metals in spinach and pepper.

Samples taken from plants and plant products outside the National Plan for Control on the Use of PPPs for 2022

Following signals, complaints and orders, laboratory analysis of 27 samples was carried out and 8 citations for established administrative violation were issued, of which 2 for use of PPPs outside the scope of authorized use, 3 for use of unauthorized PPPs, 1 for use of PPPs on a crop in the flowering phenophase, 1 for failure to ensure protective distances from neighboring sensitive crops and 1 for improper use of PPPs in accordance to the product authorization requirements.

Opinions issued to farmers that applied for support in 2022

In 2022, 977 opinions were issued on the support measures.

Inspections of agricultural holdings for compliance with the rules of Good Agricultural Practice - Nitrates (Agroecology)

During the year, 650 inspections were carried out and 20 prescriptions were made.

3.4.3. Analysis of the results of the control of the market and use of PPPs in 2022

Progress has been made in meeting the objectives set out in the Annual National Plans for Market Control and the Control of the Use of Plant Protection Products and Fertilizers and the controls carried out have been effective.

A large number of PPP traders and farmers comply with the prescriptions, cooperate with the competent authorities and keep the required documentation and records.

In order to counteract the illegal import, trade and use of unauthorized and illegal PPPs, in 2022 the Bulgarian Food Safety Agency participated in the SILVER AXE VII international operation against the distribution of illegal pesticides.

A total of 1,065 targeted inspections for illegal plant protection products were carried out within the control activity in 2022, of which 375 on trading sites and 690 on farmer use of plant protection products, seizing 1,688.25 liters and 513.25 kg of illegal pesticides.

In cooperation with the competent authorities, BFSA confiscated illegal pesticides and counterfeit packaging materials, drawing up two citations for establishing administrative violations and initiating criminal proceedings.

Unregulated sites are risk sites where conditions are created for unregulated trade in PPPs, as well as trade and distribution of unauthorized or counterfeit PPPs, making it necessary to focus on this control in the coming years.

4. Fertilizers

4.1. Registration of fertilizers

In 2022, 110 certificates were issued for the registration of fertilizers, soil improvers, biologically active substances, and food substrates in accordance to national legislation.

4.2. Control of fertilizers upon their placing on the market

A total of 876 inspections were carried out on the territory of the country in 2022 in connection with the control of fertilizers carried out by the BFSA, with 650 inspections planned. 26 prescriptions were issued and a deadline for implementation was specified. 3 citations for established administrative violation were drawn up.

In pursuance of the National Plan for Control of Fertilizers, Soil Enhancers, Biologically Active Substances and Nutrient Substrates, 73 samples of fertilizers were taken and tested in 2022, of which 10 were organic fertilizers registered under the national legislation and 63 were samples of EC fertilizers. 73 statements of compliance were prepared in accordance with the Plant Protection Act. Discrepancies were identified in 7 samples of EC fertilizers, out of which 5 did not comply with the composition declared by the manufacturer and 2 did not meet the requirements of Regulation (EC) No. 2003/2003. Actions have been taken by the control body according to art. 139 of the PPA. As of 16 July 2022, Regulation (EU) 2019/1009 is applied to lay down rules for making fertilizer products available on the EU market and for amending Regulations (EC) No. 1069/2009 and (EC) No. 1107/2009 and repealing Regulation (EC) No. 2003/2003

Table V.7. Control over fertilizers in the 2019-2022 period

Activities	2020	2021	2022
Number of registered fertilizers	93	117	110
Number of site inspections	803	881	876
Samples of fertilizers taken for analysis	94	94	73
Citations for violations	4	8	3

Source: BFSA

Use of sludge in agriculture

In 2022, 33 permits were issued for utilization of sewage sludge for use in agriculture, compared to 121 issued permits in 2021. The sludge was deposited on fields with a total area of 9,269.8 decares in the lands of: the villages of Voluyak, Vrazhdebna, Lesnovo, Lozen and the city of Novi Iskar, Sofia City Province.

The total amount of recovered sludge, expressed as dry matter, was 15,230 tons (52% less compared to the previous year) for barley, wheat, sunflower and corn crops.

5. Variety testing, approbation, and seed control

The state policy in the field of variety testing, variety maintenance, production, trade, import and export of sowing and planting material is implemented through the Executive Agency for Variety Testing, Approbation and Seed Control at the MAF.

EAPVTASC controls the production, harvesting, distribution, trade and storage of sowing and planting material; its certification in compliance with the accepted methods, schemes and technological characteristics for quality; manages the procedure for testing, recognition and zoning of cultivated plant varieties; annually issues the Official Variety List of the Republic of Bulgaria for the varieties of field, vegetable, fruit crops and vines; enters the newly registered varieties in the European catalogs of the EU and is responsible for the full harmonization of the national legislation in the field of seeds and propagating material with that of the EU.

The Agency is the national body for implementation of the Organization for Economic Co-operation and Development (OECD) seed schemes.

In 2022, by-laws on seeds and propagating material, transposing directives amending and supplementing basic EU directives, were updated. The existing regulations were amended and supplemented, specialized internal regulations, such as test methods for distinctness, homogeneity and stability (RCS) according to the technical protocols of the European Plant Variety Office (CPVO) and the International Union for the Protection of New Varieties of Plants (UPOV), test methods for biological and economic qualities (BIA), were developed.

In order to meet the expectations of customers for provision of administrative services, in compliance with the highest professional standards, EAPVTASC is accredited and has effective quality systems according to ISO 9001:2015, as per the standard of the International Association of Seed Laboratories (ISTA) and by the European Plant Variety Office. The Agency is authorized by the EU for the plant varieties

(EAEC/CPVO) to make expert assessments on its behalf in terms of distinctness, uniformity and stability of new varieties, to provide legal protection in the EU.

Administration of state aid

Pursuant to a contract for granting of state aid to promote the production and use of quality seeds and propagating material, in 2022 EAPVTASC provided services to farmers related to:

- field inspection of seed crops and common nursery plantations; labelling;
- sampling of seed batches, intended for certification;
- laboratory analysis of seed samples by groups of crops;
- post-control of seed batches;
- qualification of certified and CAC fruit and certified and standard vine planting material.

The quality scheme introduces additional and some higher requirements to the production process and the final product and guarantees higher quality of the produced seeds and propagating material from the following groups of crops: cereals, feed, oilseeds, potatoes, tobacco, cotton, certified and CAC fruit seedlings, certified and standard vine seedlings and certified and standard vegetable seeds.

The total value of the services provided by EAPVTASC under this scheme in 2022 amounted to BGN 1,150,080.

State aid is a prerequisite for achieving significant added value in the use of certified seeds. The beneficiaries are just over 420, but the positive effect of producing more and better quality products per unit area and improving the agri-environment of agricultural production are beneficial for the whole society.

Publication of an official variety list of the Republic of Bulgaria

In 2022, EAPVTASC regularly exchanged information with the European Commission, Member States and other international institutions regarding the names, entries and de-registration of plant varieties in and from the official variety list, as well as the trade in seeds and propagating material.

The official variety list of the Republic of Bulgaria is part of the European catalogs of varieties of field and vegetable crops, which allows varieties of Bulgarian selection to be present on the EU free market. The official variety list is published on the Agency's website and it is updated promptly after the entry of new plant varieties. Under the Law on Protection of New Varieties of Plants and Breeds of Animals, the Agency carries out substantive examination of the distinctness, uniformity and stability of new plant varieties, on the basis of which the Patent Office issues a certificate of protection.

In 2022, 1,030 varieties (compared to 1,007 in 2021) of the following types of agricultural plants were entered into the official variety list: field species - 563, vegetable species - 290, orchard species - 31, vine - 112, tobacco - 14, medicinal and aromatic species - 11, and species outside the scope of Directives 2002/53/EC and 2002/55/EU - 9 species.

Of these, 243 species are protected in the country with a certificate of legal protection issued by the Patent Office, as follows: field species - 171, vegetable species - 46, vine - 15, tobacco - 7, species outside the scope of Directives 2002/53/EC and 2002/55/EU - 4 varieties.

Carrying out variety testing for distinctness, uniformity and stability, soil control, biological and economic qualities and preliminary testing of new plant varieties

In 2022, a total of 858 species, hybrids and lines were planted and tested (824 for 2021), with 397 of them under signed contracts for species testing (344 for 2021) and 461 - similar species, and a comparative collection to prove the distinctiveness of the requested new species (490 for 2021). There were 42 field trials for DUS and 34 for soil control. The comparative variety collection (seeds, material from vegetatively propagating plant species and official variety descriptions), maintained by EAPVTASC includes 7,650 varieties (compared to 7,853 in 2021) of 82 crop species.

In order to obtain legal protection on the territory of the country, 24 papers were prepared and sent to

the Patent Office (compared to 10 for 2021), final reports and official variety descriptions.

During the year, 5 varieties of sunflower were tested for DUS under a contract by the CPVO, and 1 variety of wheat (two-grain spelt x durum wheat).

Out of the total number of sown/planted varieties, 626 are field, 202 vegetable, 5 essential oils and medicinal, 17 fruit and vine. Compared to the previous year, there was an increase in field and vegetable species and a decrease in fruit species and vine.

By types of agricultural crops, the variety test for DUS is distributed as follows:

- 18 types of field crops (compared to 19 in 2021);
- 14 vegetable crops (compared to 12 in 2021);
- 3 essential oils and medicinals (compared to 2 for 2021);
- 3 types of fruit and vine (compared to 4 for 2021).

226 final reports with official variety descriptions were prepared and accepted (compared to 121 for 2021).

In 2021, 820 soil control samples were set (compared to 913 in 2021) from 35 types of agricultural crops, of which 812 were approved.

The total number of varieties, without varieties, standards, which are set and tested in tests for biological and economic properties (BEP) for inclusion in list "A" of the Official Variety List and in preliminary tests, according to concluded contracts, was 1,140, - 23 less than in 2021

Of these, 925 varieties have been set up and tested in preliminary testing (compared to 960 for 2021), and for BEP - a total of 215 varieties (compared to 201 varieties and 2 silk butterfly hybrids for 2021).

The varieties of standards included in the BEP tests were 67. The number of standard varieties represented 5.9% of the total number of varieties in field trials (compared to 6.1% in 2021). The varieties of standards and their number in the BEP tests are in compliance with the methodological requirements for the respective types of agricultural crops.

Of the 1,140 varieties tested for BEP and preliminary testing, 94.7% were foreign selection, and 5.3% were Bulgarian selection (compared to 95.3% and 4.7% for 2021, respectively).

In 2022, the number of BEP tests and preliminary tests was 164 (14 more compared to 2021).

11 meetings of expert commissions were held to discuss the results of the tests of new varieties by crop groups. 21 varieties (compared to 26 for 2021) of Bulgarian selection and 60 varieties (compared to 39 for 2021) of foreign selection were tested. 67 varieties were recognized for inclusion in list "A" of the official variety list of the Republic of Bulgaria, of which 19 are Bulgarian selections.

54 permits were issued during the year, 14 of which were updated, according to art. 39a of the Law on Seed and Propagating Material and in compliance with Commission Decision 2004/842/EC, which supports the business in terms of production and trade in seeds in the agricultural sector.

Keeping a public national electronic register of the persons who trade in sowing and/or planting material, under art. 28, para. 4 of the LSS

In order to regulate the trade in seeds and planting material, EAPVTASC keeps a public national electronic register of persons trading in seeds and/or planting material, which enables users and other administrative units to quickly find information on registered persons by crop groups.

In 2022, a total of 241 trade certificates were issued (46 more than in 2021), with 133 for initial registration, 108 reissued and 52 deleted from the register.

Certification of sowing and propagating material

The certification of seed and propagating material was carried out in accordance with the requirements of the procedures of the quality management system and the "Quality scheme for production of quality seeds and propagating material".

In 2022, applications for certification were received for 31,570 ha of seed production crops from different crop groups (compared to 31,732 ha in 2021).

The total area of inspected crops of field and vegetable crops by EAPVTASC inspectors amounted to 31,606 ha (67 ha more than in 2021). Of the inspected species of agricultural plants, the largest share was occupied by the group of cereals - 29,347 ha (92.9%), followed by oil and fiber - 1,385 ha (4.4%), fodder - 594 ha (1.9%), potatoes - 239 ha (0.8%), vegetable species - 35 ha (0.1%), tobacco - 3 ha and beets - 0.6 ha.

After the field inspections, 31,479 ha of seed production crops were approved, 119 ha were downgraded to a lower category than the one requested for certification, and 7 ha were rejected due to lower indicators than required by the regulations under Art. 29, para. 6 of the Law on Seed and Propagating Material.

After the field inspections, 1,937 field inspection citations (compared to 2,018 for 2021) were issued.

In connection with the legalization of the seed packages, a total of 249,421 labels were printed.

For the purposes of certification, 4,362 samples were taken from homogeneously prepared seed batches. 459 samples were taken from individuals (samplers) who received permission from the Executive Director of EAPVTASC under the terms and conditions of Ordinance No. 8 of October 31, 2016.

In 2022, 45 ha of vine nurseries, 46 of nursery vineyards and 17 ha of vine rootstocks were inspected. 697 field inspection citations were issued.

A total of 2,620,300 vine propagating material was qualified, of which 603,900 were improved vines, 1,621,100 rootstock cuttings and 395,300 - graft cuttings. 124,200 pieces of fruit planting material were also qualified.

Field inspections were carried out on 6 ha of oil rose rootstocks, including 2 ha of the "pre-basic" category and 3 ha of the "certified" category. 500 pieces of oil rose propagating material have been certified. 1 ha of lavender rootstock, "pre-basic" category of the Institute of Rose and Essential Oil Crops, was also inspected. 35,900 pieces of lavender propagating material have been certified.

Control activities under GMOA and LSS, including import of seeds and propagating material from and to third countries

In 2022, more than 711 document and on-the-spot checks were carried out. The GMO inspections did not detect the presence of GMOs in conventional seed batches.

Effective control was exercised during harvesting and marketing of seeds and propagating material. During carried out inspections, the inspectors took 159 samples for control analysis. The results of the analyses show that the seeds meet the minimum germination requirements. For the results from the inspections, inspection checklists and statements of findings with precepts were issued, in cases of established irregularities.

At the request of producers, 122 samples of hemp plants were taken to quantify the content of tetrahydrocannabinol in hemp varieties at the request of producers and during varietal testing.

10 batches of raw hops were sampled and certified.

Expected data for 2023

In the first half of 2023, the following legislative acts were adopted (promulgated in State Gazette, issue 28 of 28.03.2023 and issue 44 of 19.05.2023):

- Ordinance amending and supplementing Ordinance No. 7 of 2013 for the conditions and procedure for variety testing, recognition, registration and deregistration of plant varieties in and from the Official Variety List of the Republic of Bulgaria;
- Ordinance amending and supplementing Ordinance No. 3 of 2010 on trade in fruit seedlings and fruit plants intended for fruit production on the EU market;
- Ordinance amending and supplementing Ordinance No. 75 of 2006 laying down conditions and a list of requirements for the health status of propagating material of ornamental plants.

In 2023, EAPVTASC continued to provide services related to the application of state aid for participation of farmers in a quality scheme for production of seeds and propagating material. The estimated maximum annual aid budget for 2023 amounted to BGN 1.2 million.

The applications for certification of sowing and planting material from spring and perennial crops were registered in time.

In 2023, a total of 31,012 ha were applied for a field inspection.

Of the declared seed production crops, the largest share was occupied by the group of cereals - 29,066 ha (93.7%), followed by oil- and fiber-producing crops - 733 ha (2.4%), feed - 612 ha (2%), and 298 ha of potatoes (0.8%). Seed production crops of vegetable crops - 18 ha, tobacco - 1.4 ha, and beets - 0.4 ha were also declared.

38.1 ha of nursery wine plantations and 7 ha of nursery plantations of medicinal and aromatic plants applied for certification/approval.

The Agency continues to control the harvesting and marketing of seeds and propagating material. Seeds that do not meet the minimum germination requirements are suspended from marketing.

3 meetings of expert commissions for DUS and 11 meetings of expert commissions for BEP were held to discuss the results of the testing of new varieties by groups of crops and to make decisions for inclusion in lists "A" and "B" of the official variety list of Republic of Bulgaria. For DUS, 134 varieties were discussed and recognized, and for BEP - 81. 63 varieties were recognized.

6. Food chain safety

EU food safety policy aims to ensure a high level of protection of human health and consumer interests in food, including traditional products, as well as the effective functioning of the internal market.

The Ministry of Agriculture manages, coordinates and controls the implementation of state and EU policy in the field of food safety and animal health through its specialized administration.

The Agri-Food Chain Policies Directorate assists the Minister of Agriculture and Food in developing, coordinating and implementing state policy in the field of food and feed quality and safety, animal health, plant health and plant reproductive material.

The Bulgarian Food Safety Agency (BFSA) conducts official control of the entire food chain based on the farm-to-table approach, following the best European practices in the application of high standards in the control of food safety and quality, food additives and beverages, veterinary activity, animal health and welfare, plant protection and fertilizers, phytosanitary control, feed control, border control, etc. A high level of consumer confidence in the quality and safety of food is ensured by uniform controls throughout the food chain.

6.1. Animal health and welfare.

Animal health

The priority tasks of the BFSA in this area are:

- protection of animal health in the country;
- protection of the health of farm animals against dangerous viral infections associated with major economic losses;

- ensuring the production of raw cow milk compliant with the requirements in accordance with European legislation;
- free movement of animals, products and raw materials obtained from them between Member States and exports to third countries;
- protection of the population from the occurrence of zoonoses (diseases transmitted from animals to humans).

To achieve these priorities in 2022, a scheme to assist farmers in implementing the measures set out in the National Program for Prevention, Surveillance, Control and Eradication of Animal Diseases and Zoonoses in the Republic of Bulgaria for the period 2022 - 2024 continues to be implemented.

In 2022, the mandatory measures set out for implementation of the National Program for Prevention, Surveillance, Control and Eradication of Animal Diseases and Zoonoses in the Republic of Bulgaria for the period 2022 - 2024 were implemented.

The activities of the BFSA are aimed at reducing the risk of the occurrence and spread of acute and exotic infectious animal diseases, given the geographical location of our country. To this end, national disease surveillance programs are being implemented, namely:

- Program for surveillance of avian influenza in poultry and wild birds;
- Program for control and eradication of rabies;
- Program for supervision of bluetongue in ruminants;
- Program for supervision and eradication of classical swine fever;
- Program for control of salmonellosis in laying hens, broilers, breeding flocks and turkeys;
- Program for supervision of Transmissible Spongiform Encephalopathies (TSE);
- Program for precautionary measures against some cross-border animal diseases, which includes contagious nodular dermatitis in large ruminants, foot-and-mouth disease in large ruminants, small ruminant plague and smallpox in sheep and goats.

All the above programs are co-financed by the European Commission.

During the year, the following diseases of higher importance were found on the territory of the country, included in the list of priority diseases described in Regulation 2016/429 on animal health in the European Commission: highly pathogenic influenza (23 outbreaks, including: 3 in the Burgas district (two of which in wild birds), 2 in Dobrich district, 2 in Sevlievo district, 3 in Haskovo district, 10 in Pleven district (one of which in wild bird), 2 in Plovdiv district and one in Stara Zagora district).

In accordance with the requirements of Directive 2020/687 and 2016/429 of the EU and the Plan of Emergency Measures for Control of Avian Influenza, the BFSA took immediate measures to eradicate all infected and contact poultry in the outbreaks.

In 2022, five outbreaks of bovine tuberculosis were registered (two in the Pazardzhik district, two in Stara Zagora district and one in Razgrad District).

Two outbreaks of bovine brucellosis in the Kardzhali district were registered, as well as one outbreak of brucellosis in small ruminants in Blagoevgrad district, but due to a lack of laboratory facilities the causal agent for both diseases has not been determined.

During the year, two outbreaks of equine infectious anemia were also registered in the Veliko Tarnovo district and Sliven district.

In 2022, 6 samples were found positive for an immune response to West Nile fever.

9 brain samples from goats tested positive for the presence of the prion causing scrapie. All established results were for the classic manifestation of the disease. There were no positive cases in large ruminants.

In regards to African swine fever, 2 outbreaks have been detected in domestic pigs, affecting 7 animals, and 203 outbreaks in feral pigs.

In connection with the complicated epizootic situation with regard to African swine fever in Europe and the outbreaks identified in 2022 in Bulgaria, the following measures were taken in accordance with EU Regulation 2016/429 and the EU Strategy for ASF Control - SANTE/7113/2015 - Rev. 10:

- Supervision program;
- Control of the movement of people, animals, products, including personal luggage from countries where there is ASF;
- Confiscation of meat products, testing and disposal;
- Disinfection of vehicles coming from ASF countries;
- Disposal of waste from vehicles from countries with ASF;
- Biosecurity inspections in pig farms;
- Development of individual contingency plans for pig farms;
- Regular meetings with the sector, EFA, hunting organizations;
- Biosecurity training for the sector and for hunters;
- Reduction of backyard farms around industrial farms;
- Prohibition of fresh grass feeding and special measures with regard to feed;
- Development of a mobile application for trichinella and ASF samples;
- Prohibition on the movement of wild boar from other EU Member States and for imports from third countries;
- Training of hunters on ASF issues, sampling, biosecurity, including material development;
- Construction of special pits for carcasses and animal by-products for each hunting holding;
- Fence along the border with Romania;
- Obligation to report any wild boar found dead or showing atypical behavior to the RFSD;
- Special regime, restrictions on hunting in restricted areas;
- Information campaigns;
- Coordination between institutions in order to reduce the risks of spread in transport and tourism;
- Additional national requirements such as pre-movement notification and permission received from the receiving RDFS (valid for sites from both Part I and Part II of Commission Implementing Regulation (EU) 2021/605); Biosecurity, contingency plans, incl. during transportation (valid for sites from both Part I and Part II); laboratory tests to identify the pathogen of ASF and when moving from sites of Part I to regions in southern Bulgaria (examination of the carcasses within 24 hours before the transport - by a registered veterinary doctor).

Given the identified outbreaks of bluetongue in 2014 and contagious nodular dermatitis in 2016, in order to protect animals susceptible to these diseases and to protect livestock in the country, vaccination against bluetongue, serotype 4 and against infectious nodular dermatitis continued to be carried out in 2020.

In 2022, for the fourth consecutive year, the coronavirus control program in mink was implemented. No circulating virus was detected in the 5,000 samples tested.

Animal Welfare

The control of animal welfare is carried out through official inspections by the Regional Food Safety Directorates (RFSD) at all stages of animal breeding, including during their transport. The inspections were planned, periodic, on signal, investigative, follow-up and on the basis of risk analysis, which is based on the detected non-conformities in the rearing of the different types of animals, as well as the detected non-conformities during their transportation.

Animal welfare - livestock sites

All livestock sites registered under art. 137 of the Veterinary Activities Act (both industrial and private farms, vivariums, collection centers, control points, shelters, etc.) are covered by the inspections carried out by means of an on-site visit to the livestock site.

Table V.8. Percentage of compliance with animal welfare requirements per sectors in the period 2021-2022

Category	Laying hens		Pigs		Calves		Large ruminants		Sheep		Goats		Ducks	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Inspected production sites - number	163	242	353	313	460	254	2,103	1,999	1,610	1,560	352	359	154	171
Production sites without discrepancy-number	145	231	337	301	368	201	1,600	1,624	1,314	1,314	299	295	140	169
% of compliance	88.9%	95.5%	95.5%	96.2%	80.0%	79.1%	76.1%	81.2%	81.6%	84.2%	84.9%	82.3%	90.9%	98.8%

Source: BFSA

Based on the percentage of the established non-compliances related to failure to comply with the welfare requirements for animals kept in production facilities for 2022, it is established that the compliance rate in the sectors of laying hens, large ruminants and ducks has increased significantly compared to 2021. The reason for this is the intensified control by the RFSD. Corrective measures have been taken to eliminate discrepancies and improve the situation.

In accordance with the requirements of the current legislation, BFSA has taken action to eliminate the discrepancies within the statutory deadline without taking immediate action to impose administrative and criminal sanctions.

During the year, the trend of improvement in animal husbandry conditions continues in terms of providing food and water suitable for the species, freedom of movement, inspections, injuries, automatic and mechanical equipment and staff competence. The data show that the qualifications of the staff taking care of the animals are still not at an optimal level. In this regard, the BFSA has taken measures for additional training.

Animal welfare during transportation

In 2022, the issuance of permits to transport live animals continued, which ensures compliance with the rules of animal welfare and protection during transport. During the year, 107 permits (licenses) were issued for short transportations and 37 for long transportations.

The BFSA keeps an up-to-date register of permits issued for the transport of live animals in accordance with art. 166 of the VAA, and up-to-date information on approved vehicles is entered in the integrated information system of the BFSA - VetIS.

During the year the interaction continued with the submission of signals from the BFSA and other contact points regarding the established violations of the requirements for animal welfare during transport.

In 2022, 7 notifications of infringement of the requirements of Regulation (EC) No. 1/2005/EC were sent to the contact points of other Member States, most of which were found by the official veterinarians at Captain Andreevo Border Checkpoint. The main types of established infringements are: exceeded travel time, lack of guarantees under Art. 21, 1 (e) of Regulation (EC) No. 1/2005/EC; scarce and/or insufficient bedding; unapproved object of final destination.

In 2022, there was a decrease in the identified non-conformities in the implementation of the requirements of the regulation during transportation of animals. Based on the data obtained from the inspections carried out at the Kapitan Andreevo border checkpoint, there is an increase in the percentage of compliance with the requirements of Regulation (EC) № 1/2005 for the transport of live animals to Middle Eastern countries. On the other hand, violations found and notifications received in the transport of pets (dogs and cats) have increased significantly in recent years.

In relation to this, the BFSA works in close cooperation with other institutions and organizations such as the Customs Agency, National Police General Directorate, SANS, NGOs, etc., as well as with Member States.

In 2022, a total of 18,163 inspections were carried out. The percentage of established non-compliances for the year was 0.25%, reporting a significant decrease compared to previous years.

The total number of cases of non-compliance with the requirements for the welfare of animals during transport in 2022 were 46 and they were all sanctioned.

In 2022, there was a positive tendency towards improved control effectiveness. During the year, roadside inspections during transport continued to be carried out in conjunction with the Ministry of Interior in order to put an end to the practice of transporting live animals in unlicensed vehicles and to strengthen controls overall. The discrepancies found with licensed transporters are becoming fewer and less significant.

Official controls carried out on farms and during the transport of live animals are improved on the basis of periodic training of official veterinarians, and also as a result of joint meetings with all stakeholders on animal welfare.

Animal welfare for animals used in testing and stray animals

Pursuant to art. 155, para. 7 of the VAA, in 2022 a total of 10 permits for use of animals in experiments were issued, compared to 36 in 2021. The reasons for the reduced number of issued permits were as follows: the impossibility of holding meetings of the Animal Ethics Committee in the first half of 2022 until the end of the extraordinary epidemic situation introduced worldwide; Completion of a large part of the projects of the Universities, which are the main applicants of the service; Filming of a large part of the exercises of students studying in medical specialties in accordance with the requirements of Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes and the recommendations of the EC.

The BFSA has prepared an annual report for 2022 on the implementation of the municipal programs for control of stray dog population. A report was approved on the implementation of the National Program for Control of Stray Dog Population on the territory of the Republic of Bulgaria for 2022.

The BFSA's website keeps an up-to-date public register of shelters.

6.2. Animal identification and veterinary activities

The activities performed by the BFSA in this area are the following:

- Identification and registration of farm animals (large and small ruminants, pigs, equidae), bee colonies, pets;
- Registration of breeding sites in accordance with the current European and national legislation;
- Ensuring timely entry of correct data in the IIS registers of the BFSA Integrated Information System (VetIS) in connection with the implementation of the National Program for Prevention, Surveillance, Control and Eradication of Animal Diseases, including Zoonoses in Bulgaria;

- Providing up-to-date and correct information maintained in the IIS registers and entering the information in the additionally developed module to the Integrated Administration and Control System (IACS), maintained by the Agriculture State Fund;

In 2022, the work on developing the existing and adding new functionalities in VetIS continued for the purposes of official control, as well as in connection with improving the user experience.

In relation to the expiry of the deadline under art. 20 of the Commission Implementing Regulation (EU) 2021/520 of 24 March 2021 laying down rules for the application of Regulation (EU) 2016/429 of the European Parliament and of the Council with regard to the traceability of certain kept terrestrial animals, related to the identification of animals (21.04.2022), a number of producers/traders of means of official identification have reapplied for the upgrade of official identifiers.

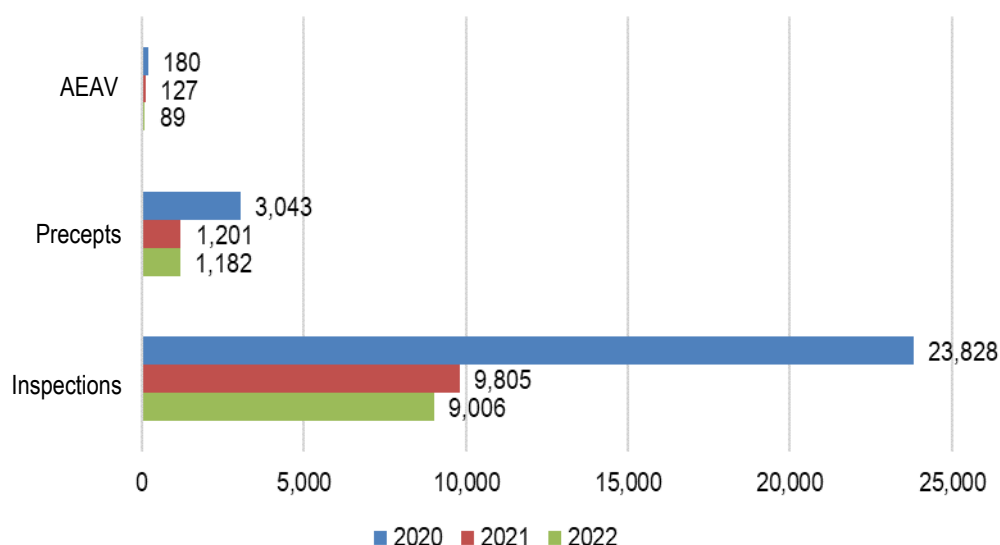
As of 07.02.2022, Commission Implementing Regulation (EU) 2022/160 of 4 February 2022 laying down uniform minimum frequencies of certain official controls to verify compliance with Union animal health requirements in accordance with Regulation (EU) 2017/625 of the European Parliament and of the Council and repealing Regulations (EC) No. 1082/2003 and (EC) No. 1505/2006 applies. It lays down requirements for a minimum frequency of inspection, including of livestock holdings, which is at least 3% for sheep and goats of the sites in the country where these animals are kept.

In 2022, the BFSA carried out inspections on the registration of livestock sites, animal identification, the activities of registered veterinarians (RV) in the implementation of the national prophylactic program and veterinary medical facilities (VMFs), issuing prescriptions and imposing acts to establish an administrative violation (AEAV).

The BFSA employees carried out a total of 9,006 inspections with regard to the registration of livestock holdings, as a result of which a total of 1,182 prescriptions were issued and a total of 89 acts to establish an administrative violation were served. In addition, a total of 46 penal decrees were subsequently issued, of which 35 entered into force.

The number of inspections in 2022 is slightly below the level in 2021. The significant reduction in inspections in this area compared to 2020 (when 23,828 inspections were carried out) is mainly explained by the fact that the legislation was changed in 2020 in order to make it significantly easier for farmers to register livestock holdings of the “private farm” type. A similar trend is found in the issued precepts, respectively the delivered AEAU.

Figure V.1. Control on the registration of animal breeding sites in the 2020 - 2022 period

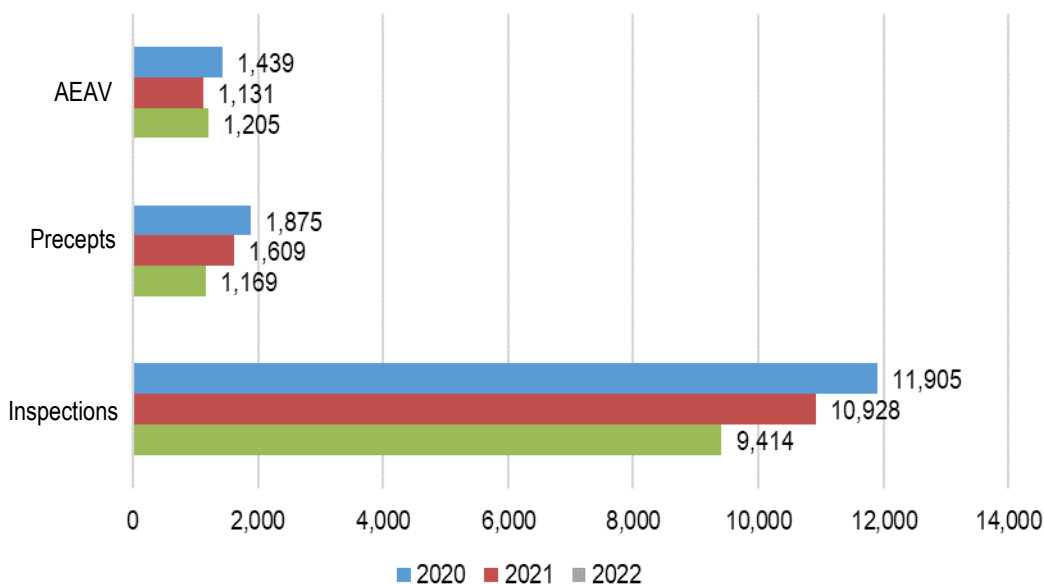


Source: BFSA

During animal identification control in 2022, a total of 9,414 inspections were carried out, showing a slight decrease of the indicator compared to 2021. As a result, a total of 1,169 precepts were issued and

1,205 AEAV were served. 642 penal decrees were issued, 557 of which entered into force. In 2022, the number of precepts went down compared to 2021, while the number of AEAV delivered went up.

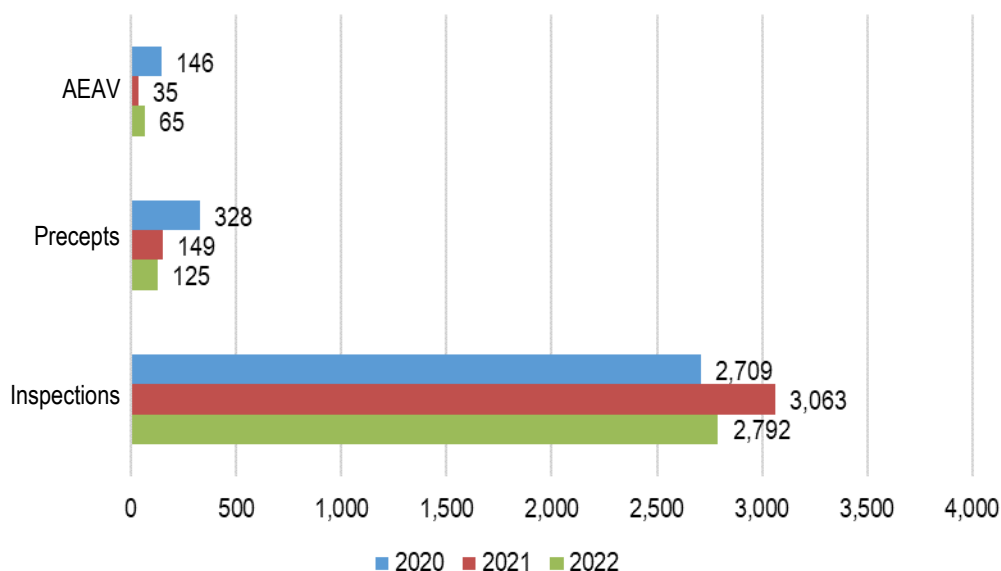
Figure V.2. Animal identification control in the 2020 - 2022 period



Source: BFSA

2,792 inspections were carried out in the control in the area of RV activity in 2022. A total of 125 prescriptions were issued and 65 AEAV were served. 29 penal decrees were also issued, 23 of which entered into force. The number of inspections carried out and precepts issued went down compared to 2021, while the number of AEAV delivered went up.

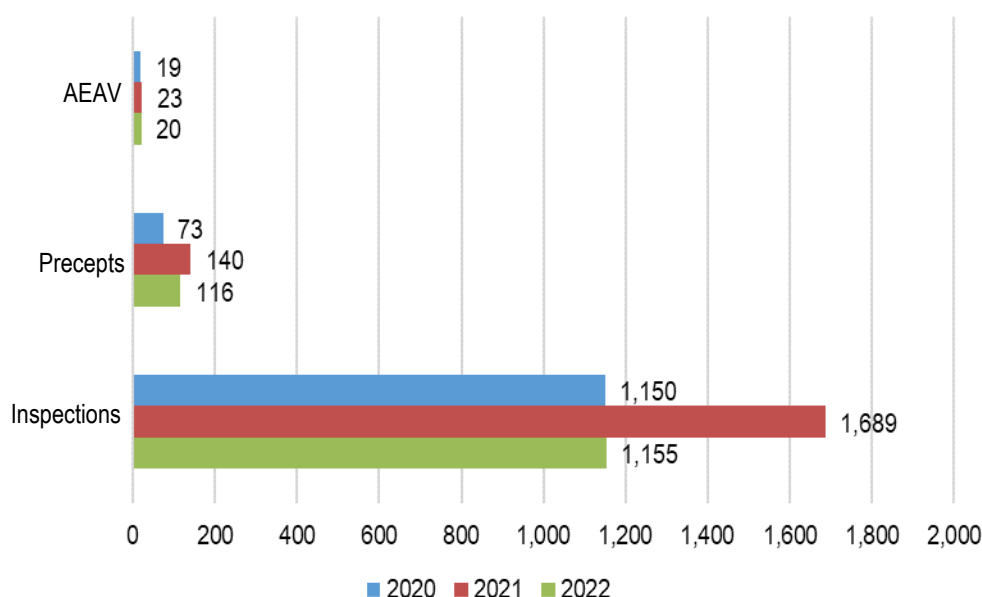
Figure V.3. Control on the activities of registered veterinarians, including the implementation of the National Prophylactic Program in the 2020 - 2022 period.



Source: BFSA

In 2022, the RFSD staff carried out a total of 1,155 inspections of veterinary medical facilities. During their control, 116 precepts were issued and 20 AEAV were delivered. 10 penal decrees were issued, 8 of which entered into force. Compared to 2021, a decrease was observed in the number of carried out inspections of VMFs and issued precepts. The number of delivered AEAV has been relatively stable through the years.

Figure V.4. Control on the veterinary medical facilities in 2020 and 2022



Source: BFSA

In 2022, the RFSD staff carrying out animal identification control, registration of livestock holdings and other veterinary activities carried out 22,367 inspections in these areas. During the control, a total of 2,592 prescriptions were issued and 1,379 AEAV were served. A total of 727 penal decrees were also issued, 623 of which entered into force.

In 2023, the control related to the identification and registration of animals and veterinary activities continued to pursue the main operational objectives set:

- Ensuring the timely identification and registration of animals, as well as registration of livestock farms in accordance with the VAA, which contribute greatly to ensuring the protection of human and animal health and protection against fraud;
- Ensuring timely entry of correct data in the IIS registers of the BFSA - VetIS on the identification and registration of animals, as well as data related to the implementation of the National Program for Prevention, Surveillance, Control and Eradication of Animal Diseases, including Zoonoses in Bulgaria;
- Reporting on the activities performed by the registered veterinarians under the National Program for Prevention, Surveillance, Control and Eradication of Animal Diseases and Zoonoses;
- Livestock service activities;
- Development of the Integrated Information System of BFSA - VetIS.

The fulfillment of these objectives will be achieved through:

- Carrying out checks for compliance with the requirements of the legislation related to the identification and registration of animals, the activities of veterinary specialists, including in veterinary establishments, based on risk criteria and prepared sample, and sending to RFSD information about the farms, included in the sample;
- Work and processing of documentation related to the programs for support of agricultural producers;
- Checks in connection with the preparation of reports of agricultural producers (certification of questionnaires, etc.)

- Preparation of drafts for amendment of regulations;
- Improving individual controls in the IIS of the BFSA - VetIS.

6.3. Food control

The BFSA methodically manages and coordinates the activities of the RFSD to control the safety and quality of raw materials, food, including those with protected geographical names, organic products, as well as materials and articles intended for contact with food, food additives, enzymes and flavorings; animal welfare during slaughter.

The BFSA's website keeps a public national register of business operators, sites for production, processing and/or distribution of food and food supplements and foods intended for use during intense muscular activity. This facilitates the access of users, business operators and institutions to up-to-date information about the registered sites on the territory of the country.

The total number of registered sites and vehicles in the scope of control by the RFSD for 2022 was 261,506.

The official control of food in Bulgaria is carried out adequately, in full compliance with the requirements of the European and national legislation. Based on risk analysis, effective official control over food safety is carried out in food production, wholesale and retail food establishments and catering establishments. Additional thematic inspections (winter and summer tourist season, official and religious holidays, etc.) and inspections on signals are carried out.

Table V.9. Official control carried out on food safety in the 2021 - 2022 period

Inspections	2021	2022
1. Sites for food production and wholesale	43,514	30,020
1.1 Audits	1,672	1,864
1.2 Inspections	28,901	19,991
1.2.1 Traceability inspections (Regulation 178/2002)	11,051	8,918
1.2.2 Inspections for general hygiene requirements (Regulation 852/2004)	17,397	12,121
1.2.3 Inspections for specific hygiene requirements for food of animal origin (Regulation 853/2004)	6,495	4,796
2. In retail establishments and restaurants	169,565	118,736
Total number of inspections performed (planned, thematic, on signal)	219,716	148,756
3. Measures taken by the official control		
3.1 Issued AEAVs (number)	838	797
3.2 Issued precepts (number)	6,254	5,610
3.3 Prohibited and discarded food (kg)	86,818	654,000
3.4 Closed sites/sites with temporarily suspended activity (number)	60	48

Source: BFSA

In 2022, a total of 148,756 official control inspections were carried out in establishments for production, wholesale and retail in food and catering establishments, thematic inspections, unscheduled inspections and inspections on signals.

The established non-conformities can be grouped, with the most common ones being as follows:

- Structural non-conformities concerning the buildings and equipment at the sites;
- Operational non-conformities regarding the implementation of activities related to product safety;
- Non-conformities related to the self-control systems of business operators;
- Inconsistencies in labeling and presentation of consumer information;

- Gaps in food traceability;
- Foods that do not meet statutory safety requirements;
- Non-compliance with anti-epidemic measures introduced to limit the spread of COVID - 19.

The analysis of the average values of effectiveness of the official control performed in 2022 shows that: on average, every 26th inspection resulted in issuance of a Prescription (compared to every 35th in 2021); on average, every 187th inspection ends with drawing up of an act for establishing an administrative violation (compared to every 262th for 2021). There has been an increase in prescriptions issued and AEA drawn up during the official control performed for the past 2 years

The results of official inspections show that a risk-based approach to planning and implementation of official inspections is appropriate and effective in detecting non-conformities and ensuring food safety.

In 2022, the BFSA Head Office received 13 notifications of suspected food poisoning throughout the country. In the joint inspections and an epidemiological study with representatives of the Regional Health Inspectorates, food traceability and sampling for food and personnel analysis, it was not proven that the source of the disease was the food consumed.

Laboratory control

The BFSA coordinates laboratory-diagnostic tests, analyses and expertise related to animal health, plants, raw materials, food, materials and articles intended to come into contact with food, feed, GMOs and products containing, consisting of or produced from GMOs.

The Agency manages and coordinates the implementation of national and monitoring programs for laboratory control, as follows:

- National Program for Control of Quality Characteristics of Foods (NPCQCF);
- National Program for Control of Pesticide Residues in or on Foods of Plant and Animal Origin (NPCPR);
- National Program for control of food and food contact and additives, chemical and microbiological contaminants and control of food treated with ionizing radiation;
- National Program for Control of Genetically Modified Foods (NPCGMF);
- Program for monitoring and reporting of antimicrobial resistance of zoonotic and commensal bacteria in the Republic of Bulgaria (AMR);
- National monitoring program for control of residues of veterinary medicinal products and pollutants from the environment in live animals and products of animal origin (NMPPRC);
- National program for the prevention, supervision, control and eradication of animal diseases, including zoonoses in the Republic of Bulgaria.

Implementation of programs for national and monitoring programs for laboratory control

• National Program for Control of Quality Characteristics of Foods (NPCQCF), 2022;

The control of food produced according to standards (national, approved or branch) was carried out by inspections of production sites and by sampling of commercially available food.

In 2022, a total of 881 samples were planned, of which 785 samples were completed (89%). In 105 of the samples taken, non-compliant results were found for various indicators. 7 samples of refined sunflower oil were not completed, for which the services of an external laboratory should be used.

- Foods produced according to national, established, and industry standards. In 2022, 304 samples of food produced according to national, approved and branch standards were planned. 293 samples were tested, of which 72 non-compliant samples were found as follows:

- according to the approved Stara Planina standard - 78 completed (99%). The non-compliant samples were 10 (13%);
- according to approved Bulgaria standard - 88 samples taken (100%). The non-compliant samples were 12;
- according to branch standard for Lyutenitsa – 15 samples taken (94%). Non-compliance was established in 3 samples;
- according to Bulgarian state standard for dairy products - 112 samples taken (98%). The non-compliant samples were 47.

The laboratory analyses where non-conformities were found during the year accounted for 25% of the total number of food samples produced to industry standards.

- Planned sampling of raw materials and foods of plant and animal origin to study the quality characteristics of: table salt, honey, energy value of foods, foods with nutritional claims, for the presence of non-dairy fats used in dairy products, absorbed water in poultry carcasses and poultry cuts, and olive oils - 492 samples were taken for testing (out of 577 planned). According to these indicators, a total of 33 inconsistencies were found in regards to table salt, honey, energy value, non-dairy fats used in dairy products, absorbed water in poultry carcasses.

In 2022, the number of planned samples went down compared to 2021, while the implementation rate of the program increased (89% compared to 58% in 2021). The number of discrepancies found went up compared to a year prior. Their share of the total number of samples taken also increased - to 13%, compared to 7% in 2021.

- **National Program for Control of Pesticide Residues in and on Food (NPCPR), 2022**

In 2022, during the implementation of NPCPR, there were planned studies of a total of 442 food samples of animal and non-animal origin (plant origin) and baby foods and food for young children, incl. 6 samples from organic production. Out of them, 195 samples (incl. 3 samples from organic production) were in accordance to the requirements of the Commission Implementing Regulation (EU) 2021/601 of 13 April 2021 concerning pesticide residues in an on food of plant and animal origin.

During the year, 130 samples or 29.4% of the total number of planned samples were completed (compared to 83% of completed samples in 2021), with 11 non-compliant results identified during program implementation. The non-implementation of the plan was due to: suspension of sample testing at CLCTC under the implementation of the program due to the commitment of laboratory capacity to analyses for official border control (samples from Kapitan Andreevo BCP) and the lack of financial resources to designate external laboratories to send samples under the 2022 NPCPR.

- **National Program for control of food and food contact and additives, chemical and microbiological contaminants and control of food treated with ionizing radiation 2022;**

The implementation of this program in 2022 was as follows:

- A total of 1,031,582 samples of various matrices of animal and non-animal origin, including digesta/swabs, were tested for microbiological contaminants, resulting in 258 non-compliant results (salmonella, E. coli, listeria);
- A total of 177 samples were tested for chemical contaminants: nitrates - 17 samples with 3 non-compliant results; mycotoxins - 74 samples; ergot alkaloids - 1 sample; inorganic tin - 1 sample; inorganic arsenic - 1 sample; heavy metals (lead and cadmium) - 24 samples (3 non-compliances in spinach); mercury compounds (expressed as mercury) - 9 samples; chemical elements in fish (lead, cadmium, mercury) - 32 samples; nitrite - 28 samples;

- Materials and articles intended to come into contact with food: 18 samples were tested for general migration in plastic articles (2 discrepancies were found) and a total of 12 samples were tested for specific migration in plastic articles.

In connection with the implementation of a recommendation from an audit conducted by the Verification of Official Controls Directorate General in 2022, by order on 07.09.2022 the program was amended and supplemented with regard to the sampling of carcasses with abrasive sponge and sprout samples in production enterprises for *Listeria monocytogenes* in 25 g.

Overall, plan implementation for chemical pollutants in 2022 is 65%. Compared to 2021, there has been a significant reduction in the number of samples taken, with the exception of those for microbiological contamination. In 2022, unlike in 2021, samples of general and specific migration of materials and articles intended to come into contact with food were taken. Regarding the microbiological criteria, there has been increased sampling and a significant reduction in the number of non-compliances detected (258 in 2022, compared to 782 in 2021).

During the year, there was non-performance of samples under the program that were allocated for testing at CLCTC, due to the commitment of its laboratory capacity to samples from Kapitan Andreevo BCP, as well as non-performance of samples that were allocated for testing in external laboratories, related to the lack of financial resources to pay for external laboratories.

- **Program for monitoring and reporting of antimicrobial resistance of zoonotic and commensal bacteria in the Republic of Bulgaria (AMR) 2022**

As in the previous year, in 2022 the implementation of the program was 100%. 150 samples of slaughtered poultry from poultry meat establishments and 450 samples of poultry meat originating from Bulgaria, EU and third countries, from commercial establishments, were tested.

- **National Program for Control of Genetically Modified Foods (NPCGMF), 2022**

In the control of genetically modified foods in 2022, 85 samples were planned to be taken for laboratory testing of raw materials, ready-to-eat foods, baby foods and food for young children based on soy and/or corn, baby formula, and rice and rice products. Of these, a total of 68 samples were taken and tested and no non-compliant results were found. The plan was not completed due to lack of financing for the use of services of external laboratories.

- National monitoring program for the control of residues in live animals and food of animal origin (NMPRC), 2022.

The official control regarding residues of veterinary medicinal products and contaminants in live animals and food of animal origin is carried out through the implementation of the National Monitoring Program for Residue Control (NMPRC) for 2021, approved by the European Commission (EC). According to the requirements of the Program legislation, 2,337 samples were planned, of which 94 samples were foreseen for official border control.

During the year, 1,900 samples were tested, of which 93 were taken during border control. Two non-compliant results were found - for aflatoxin in raw milk and antimicrobial agents in honey (in 2021, there were no discrepancies found).

Compared to 2021, there has been an increase in the number of planned and taken samples. There is also a slight decrease in the percentage of uncompleted analyses (18.7%), compared to 2021 (20%). The non-implementation of the 2022 plan was due to the lack of production of raw materials from the respective animal species, due to temporary suspension of production sites and the lack of accredited methods and the inability of the CLVSEE to perform the type of analysis.

- **National program for the prevention, supervision, control and eradication of animal diseases, including zoonoses in the Republic of Bulgaria**

The main responsibility of the BFSA in relation to the program is to coordinate laboratory-diagnostic research, analysis and expertise related to animal health.

In implementation of the program, the following diagnostic tests were performed in 2022:

Table V.10. The diagnostic tests performed under the program in 2022

Disease	Number of laboratories	Number of tests
Brucellosis in large ruminants	10	184,291/18 <i>positive</i> /2 <i>outbreaks</i>
Brucellosis in small ruminants	10	1,020,141/5 <i>positive</i> /1 <i>outbreak</i>
Brucellosis in pigs	10	7,861/3 <i>positive</i> /1 <i>outbreak</i>
Brucellosis in rams	10	13,725/1 <i>positive</i>
Leptospirosis	9	30,468/72 <i>positive</i>
Leucosis	3	369/210 <i>positive</i>
TSEs in large ruminants	3	28,985
BSE and scrapie in small ruminants	3	17,863
Tuberculosis	1	86 (4 <i>new outbreaks of the disease</i>)
Foot-and-mouth disease	1	1,370
Plague - small ruminants	1	3,455
Rabies	1	Brain samples - active supervision - 386 Brain samples - passive supervision - 1495 Blood samples - 208 18 <i>positive for antibodies</i>
Anthrax	1	13
African swine fever (feral and domestic)	2	22,816/82 <i>positive in feral</i>
Classical swine fever (domestic)	2	5 607
Bluetongue in small ruminants	1	5,199
Equine infectious anemia	1	1,158
West Nile fever	1	2,490
Avian influenza A	1	24,124
Newcastle bird disease	1	4,470
COVID 19	1	4,925
Diseases in fish, mollusks and crustaceans	1	464/33 <i>positive</i>
Diseases in bees	1	669/128 <i>positive</i>
Salmonella in poultry	1	150/6 <i>positive</i>
Salmonella in feed	1	22 p.

Source: BFSA

A major problem during the year remains the lack of financing for the implementation of the laboratory control programs, which hampers the overall implementation of the national official laboratory monitoring programs.

Audit of official controls in 2022

In 2022, the following audits were carried out in Bulgaria by DG SANTE of the European Commission and third countries in the field of official food and animal control:

- Remote audit of the European Commission DG (SANTE) 2022-7422 in order to assess the system of official controls on the import of animals and goods and verify the compliance of border control posts with EU requirements. Competency actions were taken in relation to the recommendations made in the report and the replies of the BFSA to the EC on the recommendations have been sent;
- On-site audit of the European Commission DG(SANTE) 2022-7637 of the official control of animals and goods entering the EU through Kapitan Andreevo Border Checkpoint and verification of its compliance with EU requirements. Replies of the BFSA on the recommendations have been sent to the EC;

- On-site audit of the European Commission DG(SANTE) 2022-7429 in order to assess the implementation of official control on feed hygiene. 8 out of 10 recommendations are closed;
- Hybrid audit of the European Commission DG(SANTE) 2022-7459 (Remote audit) to assess the microbiological safety of food of non-animal origin;
- Remote study of the European Commission DG(SANTE) 2022-7371 regarding fraud on the agri-food chain - fact-finding study;
- Financial audit of the European Commission DG(SANTE)A3/Ex in relation to the request submitted by the BFSA for preventive measures against African swine fever in accordance with Grant Decision No. SANTE/EM/AH/2019/ASF/BG.
- Audit by the Animal and Plant Quarantine Agency of the Republic of Korea - APQA in the feed sector regarding approval for alfalfa export to Korea;
- Audit by Israel's Veterinary and Animal Health Service of the Ministry of Agriculture and Rural Development regarding edible egg export;
- Visit by the Ministry of Agriculture and Forestry of the Republic of Turkey in relation to live animals export and discussion of topics related to animal health.

6.3.1. Alert and Cooperation Network (ACN (RASFF + AAC+ +FFN+PHN))

The Alert and Cooperation Network is a tool for the exchange of information regarding identified hazards and non-compliances throughout the agri-food chain between EU Member States via an online platform - iRASFF, which covers:

Rapid Alert System for Food and Feed (RASFF)

The Rapid Alert System for Food and Feed (RASFF) was established on the basis of the provisions of art. 50 of Regulation (EC) No. 178/2002 and covers any direct or indirect risk to human health arising from food, materials intended for contact with food and feed. At a later stage, with art. 29 of Regulation (EC) No 183/2005, the scope of the Network was extended and covers serious risks to animal health and the environment caused by feed.

The exchange of information is carried out in a clear and structured way using the iRASFF web-based application and enables rapid responses, timely actions, and a coordinated approach by Member States to threats to public health. In 2022, the iRASFF platform has been repeatedly updated to meet legislative requirements and ensure transparency and traceability in decision-making by competent authorities.

A major focus of the iRASFF upgrades in 2022 was the finalization of the expansion process, including the implementation of a module for plant health and legislation in that area, as well as updating documentation procedures and work instructions. Another innovation is the increasing use of the Network's functionality related to the generation of "conversations" between participants with access to the platform - more than 11,990 conversations have been created with exchange of information between participants from the contact points.

For effective operation of the RASFF system in Bulgaria, contact points were set up as follows:

- National Contact Point of the Republic of Bulgaria, located in the specialized administration of the Ministry of Agriculture and Food;
- Contact point at the Ministry of Health;
- Contact point at the Bulgarian Food Safety Agency.

In 2022, the total number of incoming notifications to the RASFF system, distributed by the contact point of the European Commission to the contact points of the member states, was 7,515 and the necessary actions were taken.

Within the year, the highest percentage of notifications generated in RASFF was for shipments rejected at the border following checks carried out at border control posts on initial entry into the Community. These are followed by notifications classified as “follow-up notifications”, followed by those “for information”.

Notifications in the “Food” sector were 3,904, in the “Feed” sector - 234, and in the “Materials and articles intended to come into contact with food” - 216.

Notifications regarding established levels of pesticide residues above the maximum permissible limits in and on foods of plant origin from Turkey occupy the first place in terms of the number of notifications generated. The next group of hazards is related to the spread of Salmonella of poultry meat originating in Poland and irregularities related to the use of materials and articles intended to come into contact with food. For the 2020 - 2022 period, the largest share of notifications reported in iRASFF was for cases of pesticide residues above the permissible thresholds, detected cases of pathogenic microorganisms, detected presence of mycotoxins, undeclared allergens in food and others.

There was an increase regarding notifications issued in the Network to combat fraud on the FFN agri-food chain. Generated cases for 2022 were 600 in total, 47.4% more compared to the previous year. The most common reasons for notifications were detected irregularities related to documentary inaccuracies, missing or falsified/incomplete documentation, incorrect labeling, trading of goods in the “gray sector” and others.

Depending on the type, notifications are distributed as follows:

- Border rejection notifications - 1,514;
- Alert notifications - 1,164;
- Information notifications - 999;
- Follow-up notifications - 667;
- News notifications - 17.

The total number of notifications in the iRASFF system, for which Bulgaria has taken action as a notified and notifying state for 2022 is 595. The dissemination of notifications is as follows:

- Incoming:
 - Food sector - 153 notifications (39 - for non-compliance; 17 - for awareness; 37 - for information that requires follow-up; 60 - for warnings);
 - Feed sector - 8 notifications (4 - for non-compliance; 1 - for awareness; 2 - for information that requires follow-up; 1 - for warnings);
- Outgoing:
 - Food sector - 10 notifications (3 - for non-compliance; 3 - for awareness; 4 - for warnings);
 - Feed sector - 1 notification for awareness;
 - Border Control sector - 421 notifications (252 - for shipments rejected at the border and 169- for non-compliance).

Compared to a year prior, the share of notifications for shipments rejected at the border increased by over 20%. The number of notifications to which Bulgaria is a recipient or a creator also showed an increase, which requires time and resources of the single contact point and the contact points in the competent departments to take measures, conduct an investigation and report the results.

Administrative Assistance and Cooperation (AAC) System

The AAC system serves for exchange of information between the competent authorities of the member states and the Commission when performing official controls and/or taking effective follow-up actions, in accordance with Title IV of Regulation (EU) No. 2017/625. The administrative assistance can include the provision of information and documents, performing investigations and on site inspections, and it is an important tool for maximizing the efficiency of the available resources in Member States.

In 2022, the total number of notifications in the AAC system for the EU was 2,554. There was an increase in the number of notifications of non-compliance by 11%. Germany generated 35% of all notifications distributed in the Network. In 2022, Bulgaria created a total of 170 non-compliance notifications, mainly for non-compliant shipments rejected at border checkpoints, which do not pose a serious risk to the health of consumers.

With regard to traceability notifications, the Commission's report for 2022 states that Bulgaria has 100% prepared responses and "closed" cases, which is extremely important, especially when it comes to the origin of the notified product. According to the indicator "recorded delay in preparing a response" in the implementation of the RASFF procedures and mechanisms, Bulgaria does not feature on any reminder list of open conversations (red bell list).

Agri-Food Fraud Network (FFN)

The FFN provides Member States with the opportunity to exchange information and cooperate on a voluntary basis on issues related to infringements of European legislation in the field of the agri-food chain, in accordance with the rules laid down in Regulation (EU) No. 2017/625, in order to counteract food fraud. The increase in food fraud at EU level requires adequate and timely measures to optimize the control system and strengthen its ability to assess at an early stage the potential vulnerability to fraud in different parts of the food supply chain and the ability of the national authorities to detect and prevent potential fraud.

In mid-2021, the Agri-Food Fraud Network is integrated into iRASFF.

The trend in recent years is towards an increase in the number of fraud notifications - from 8 in 2015, 407 in 2021 to 600 registered cases in total for the whole EU in 2022 (47% more compared to 2021). Within 2022, the most fraud notifications generated were for honey and bee products was generated - 51, followed by notifications of detected irregularities with animals, the most common being pets (27), meat and meat products (25), fish and fish products (25), poultry meat (20) and others. The reasons for reporting fraud during the year were most often missing, incomplete or falsified documentation; unauthorized treatment; omissions and/or incorrect labeling, trade in the "grey" sector and others.

By product groups, most of the notifications created in iRASFF in 2022 were for fruits and vegetables; herbs and spices; dietary foods and nutritional supplements, labeling omissions and missing/falsified documentation.

In 2022, a total of 113 notifications were sent to Bulgaria through the Anti-Food Fraud Network, of which 62 – for information and 51 – for response. Bulgaria has created 2 cases in the FFN Network. There are no notifications on which Bulgaria has not taken action and has not provided an answer.

Our country participated in the coordinated action of the EC and Member States to detect honey fraud "From the hives", and the investigations continue.

In 2022, the BFSA participated again in the international operation OPSON, organized by Europol and Interpol, against the spread of counterfeit and substandard food and drink products.

During carried out inspections, in 14 cases at retail and wholesale sites and catering establishments, 24,099.2 kg of unlabeled, expired and without identification marking meat and dairy products, meat cuts, preparations, sausages, fish and lamb were seized and destroyed. In relation to the detected non-compliances, the business operators were issued prescriptions, served with acts to establish administrative violation and issued an Order for suspension of operation of the establishment due to poor hygiene.

6.3.2. Control on veterinary activities, veterinary medicinal products and feed, border control

6.3.2.1. Control on veterinary medical activity

The planning of audits of official control in the BFSA in 2022 is in accordance with the rules of the approved "Procedure for carrying out audits of the official control of the BFSA" and of the "EC National Audit Systems Network Guide - Risk-based planning of audits of official control systems". In accordance with the requirements of the above-mentioned documents, for the purposes of the audit process at the BFSA, a "Three-year program for the audits of the official control for the 2021 - 2023 period" has been prepared. On the basis of the review and analysis carried out, an update of the program has been made for 2022.

In 2022, 16 audits of the official control were planned to be carried out in different audit areas of the agri-food chain:

- 3 audits in the field of official control of animal health and animal welfare with audited organizations RFSD Silistra, RFSD Sofia District and RFSD Yambol;
- 1 audit in the field of plant health with audited organization RFSD Stara Zagora;
- 6 audits in the field of official control in the production and supply of food of animal origin, including:
 - o official control in the production and supply of milk and dairy products, with audited organizations RFSD Smolyan and RFSD Razgrad;
 - o official control in the production and supply of fish and fish products, with audited organizations RFSD Plovdiv and RFSD Burgas;
 - o official control in the production and supply of meat from ungulates, game meat, poultry meat and products of it, with audited organizations RFSD Vratsa and RFSD Haskovo;
- 3 audits in the field of official control in the production and supply of food of non-animal origin, with audited organizations RFSD Gabrovo and RFSD Shumen;
- 1 audit in the field of official control of animal by-products and products derived from them, that are not intended for human consumption, with audited organization RFSD Varna;
- 1 audit in the field of control of retail and catering establishments, with audited organization RFSD Dobrich;
- 1 audit in the field of laboratory activities performed by RFSD, with audited organization RFSD Sofia City;

Two audits were not performed: Evaluation of the implementation of the National Program for the Prevention, Control and Eradication of Animal Diseases, including Zoonoses - ASF, audited organization RFSD Silistra and Evaluation of the laboratory activities carried out by the testing laboratory at RFSD Sofia City (the audit will be planned for implementation in the next programming period).

During the 14 audits of the official control carried out in 2022, a total of 55 recommendations were issued for non-compliances found in the control system, of which 18 (33%) were aimed at the directorates at central level, which methodically manage the audited activity. There was no audit in 2022 where the audit team did not identify non-compliances and recommendations were not made to the audited organization to eliminate them.

Following the analysis of the written evidence of the measures taken by the audited organizations, it is evident that the most frequent measures taken by them are related to conducting specialized trainings on the proper application of the legislation and the established procedures and instructions, documenting the controls and taking appropriate administrative measures for the business operator to eliminate the identified non-conformities, as well as conducting verification by the head of the department regarding the quality and efficiency of the carried out official control.

The main priorities for effectiveness inspections are:

- Increasing the effectiveness of the official control exercised by the RFSD at all stages of production, processing, storage, import, transportation and distribution of food, feed, VMPs, plant protection products and fertilizers, with a view to achieving a high degree of protection of people's health, animal, plant and environmental health;
- Protecting consumers from fraud, deception and illegal practices with food, feed, VMPs, plant protection products and fertilizers;

Inspections on the effectiveness of the official control carried out by the RFSD were carried out according to an unified Standard Operating Procedure (SOP): "Procedure for verifying the effectiveness of the official control carried out by the BFSA". The programs for verification of the official control implemented by the RFSD are prepared on rotational basis and also according to the number and nature of the non-conformities found during the previous inspections of the respective RFSD.

In 2022, 10 planned inspections were carried out on the activities of the RFSD - Vidin, Gabrovo, Plovdiv, Sofia District, Blagoevgrad, Kardzhali, Kyustendil, Razgrad, Stara Zagora and Shumen. During the inspections, the employee commissions found 91 non-conformities, of which 27 were significant and 64 were non-significant. 98 recommendations were given, according to which the RFSD took the necessary actions to eliminate the identified inconsistencies.

In 2023, 10 inspections on the effectiveness of the official control carried out by the RDFS are planned.

6.3.2.2. Control of veterinary medicinal products and in vitro diagnostic veterinary medicinal products

The control on veterinary medicinal products (VMP) is related to the issuing of authorizations for trading in VMPs, issuing of supplements/amendments in relation to changes in circumstances, where products were have been authorized, work on procedures for mutual recognition of VMPs, decentralized procedure, transfer of rights on licenses for trading in VMPs and others.

The quality, efficacy and safety of VMPs are monitored through the analysis of received periodic reports on the safety of the VMPs, reports on any adverse reactions to the usage of VMPs obtained through the system of pharmacovigilance and any deviations in the qualities of VMPs, as well as through continuous surveillance of the market. The BFSA maintains a system for collecting and exchanging messages about adverse reactions that have occurred in the use of VMPs. The received signals for adverse reactions that occurred on the territory of Bulgaria are published in the EU pharmacovigilance database - EudraVigilance. The maintenance of a pharmacovigilance system by the holders of authorization for trading in VMPs is controlled via periodic inspections by the BFSA.

The register of VMPs authorized for use is updated periodically in order to support the control of the VMP market, as well as to provide veterinary professionals and external users with the information provided for in the law.

In 2022, inspections of the attached documentation and the conditions in the sites under procedures for issuing a license for wholesale trade in VMPs, retail trade in VMPs, production of VMPs, as well as changes in the entered circumstances were carried out.

Checks of enclosed documentation and the conditions at the sites were carried out under the procedures for issuance/renewal of licenses for wholesale and retail trade in narcotic substances for veterinary purposes from the Lists under art. 3, para. 2, items 2 and 3 of the Narcotic Substances and Precursors Control Act and changes in the entered circumstances.

The public registers of the issued permits for wholesale trade in VMPs, retail trade in VMPs, production of VMPs and licenses issued for activities with narcotic substances for veterinary purposes are updated periodically.

In connection with the surveillance of antimicrobial resistance, the BFSA annually collects and summarizes data from the holders of permits for the use of VMPs on the sold quantities of VMPs with antimicrobial activity. The data is submitted to the European Medicines Agency (EMA) and

the World Organization for Animal Health (OIE) based on formats approved by the ESVAC (European Surveillance of Veterinary Antimicrobial Consumption) and OIE.

The BFSA enters into the EU EudraGMDP database information on the authorizations granted for the production/import of VMPs and the certificates for Good Manufacturing Practice (GMP) and participates in the exchange of information under the international rapid alert system for the blocking and withdrawing of VMPs from the commercial network due to product quality deviations.

The Agency participates in the single point of contact and exchange of information through the Alert and Cooperation Network in case of identified fraudulent practices with VMPs, as well as in the international rapid alert system for the withdrawing of medicinal products due to quality deviations.

In carrying out the laboratory control of VMPs, the BFSA carries out laboratory analysis of the qualitative and quantitative composition, physicochemical properties, safety and efficacy of VMPs under procedures for the issuing of authorization for trading in VMPs or amendments and extension of the scope of the authorization for trading in VMPs, in case of suspicion of a deviation in the quality of VMPs and in the implementation of the market surveillance program. It also carries out laboratory analysis for the specificity and sensitivity of in vitro diagnostic veterinary medicinal products under procedures for issuing registration certificates.

The BFSA participates in joint laboratory tests of veterinary medicinal products organized by the European Directorate for the Quality of Medicines and Health Care. It develops criteria, prepares a procedure and makes a proposal to the Executive Director for the designation of the laboratories that will carry out tests for official control purposes, according to their competence.

The official VMP control is carried out by BFSA employees at central and regional level.

The activities related to in vitro diagnostic veterinary medicinal products are the following:

- consideration of the applications for registration of in vitro diagnostic veterinary medicinal products;
- performing documentary verification and, if necessary, physical inspection for compliance with the conditions for registration of in vitro diagnostic veterinary medicinal products;
- preparation of statements to the Executive Director of the BFSA for compliance with the requirements of the in vitro diagnostic veterinary medicinal products applied for registration;
- preparation of certificates for registration of in vitro diagnostic veterinary medicinal products;
- keeping a register of in vitro diagnostic veterinary medicinal products.

The BFSA controls the use, production, trade, storage and advertising of VMPs. The control over the trade in VMPs, as well as the use of VMPs in livestock holdings and veterinary establishments, is carried out in accordance with the BFSA Inspection Program for State Control of Veterinary Medicinal Products, which determines the frequency and procedure for conducting inspections based on risk assessment.

When carrying out the official control over the trade and use of VMPs, the RFSD inspectors also inspect beekeeping shops, pet shops, feed trade sites and agricultural pharmacies, as risky trade sites for unregulated trade/supply of VMPs.

According to the BFSA Inspection Program for State Control of VMPs, on the basis of a risk assessment, the RFSD inspectors carry out inspections in animal breeding sites to control the use of VMPs, at least once a year at all sites for wholesale and retail trade with VMPs and on the veterinary medical facilities on the territory of the respective RFSD.

By order of the executive director of the BFSA from April 2017, a Quality Control Program for the commercially available veterinary medicinal products was approved and implemented, and based on it, a

plan was prepared and implemented for annual sampling and analysis of VMPs from the commercial network. The purpose of the program is to ensure that the commercially available VMPs after the granting of the permit for trade in VMPs are of the required quality, according to the specifications in the registration documentation and the requirements of the permit for trade in VMP.

The program applies to VMPs permitted for trade under a national procedure, a mutual recognition procedure and a decentralized procedure. The quality control of VMPs is carried out under a centralized procedure (sampling and laboratory analysis) under a program of the European Medicines Agency.

The BAfS annually drafts and executes a Good Manufacturing Practice (GMP) Inspection Plan of VMP manufacturers/importers. Each inspection complies with the risk assessment criteria for each manufacturer, taking into account the implemented Quality Management System at the site, the nature of the production process and the characteristics of the products.

The control with regard to veterinary medicinal products covers: manufacturers of VMPs, manufacturers, importers and distributors of active substances used as starting substances in VMPs, wholesale traders of VMPs, retail traders of VMPs (veterinary pharmacies), retail traders of VMPs, authorized to sell VMPs remotely, livestock establishments and veterinary practices.

The frequency of inspections is determined on the basis of a risk assessment.

In 2022, two alerts were received for non-compliance of the data on the packaging and the leaflet of VMPs with the permit for trade and Ordinance No. 62 on the requirements for data on packaging and leaflets and unregulated trade in veterinary medicinal products. In this regard, the necessary measures have been taken, ordered and the relevant inspections have been carried out.

Most often non-conformities with the requirements of the Veterinary Medicine Acts and the by-laws regarding the trade and use of VMPs are established during inspections of livestock farms and veterinary outpatient clinics.

The established non-conformities directly increase the risk of:

- Application of unauthorized for trade VMPs to animals;
- Inability to fully trace the origin of the purchased/applied VMPs and to identify the treated animals;
- Unregulated use of VMPs in animals from which food for consumption is obtained, by persons without the necessary qualifications;
- Non-compliance with the withdrawal periods after the use of VMPs, for which such are required;
- Use of VMPs with an expired expiration date or with deviations in quality;
- Use of VMPs in violation of the conditions under which the permit for use was issued, as well as in violation of the requirements of Ordinance No. 62 of 09.05.2006 on the data on the packaging and usage leaflet of the veterinary medicinal products;
- Storage of VMP in breach of the manufacturer's requirements.

As a result of non-conformities found during the inspections of the sites for trade and use of VMPs in 2022, 243 precepts were issued and 51 citations for established administrative violations were drawn up.

In relation to the implementation of the quality control program for commercially available VMPs, 12 samples have been tested in 2022, out of 13 planned (one sample was tested in 2023).

The inspections which detected non-conformities and where precepts were issued were about 7% of the total number, which represents a preservation of the 2021 level. Acts for establishing an administrative violation were drawn up in about 1.5% of the inspections (compared to 0.3% in 2021).

The number, frequency and sequence of on-site inspections are not always based on a preliminary risk assessment for each site, which reduces the effectiveness of inspections.

With regard to the control activity over the trade and use of VMPs in 2022, the following has been done: 4 permits for production/import of VMPs were issued; changes to 13 permits for VMP production were approved; 2 activities related to permits for production/import of VMPs were temporarily suspended; 17 certificates for Good Manufacturing Practice were issued after inspection; 13 scheduled inspections and 5 inspections at the request of VMP production sites for compliance with the Good Manufacturing Practice requirements were performed; 45 certificates of origin and free sale were issued; 37 certificates of pharmaceutical product were issued.

During the year, there were no terminations of approvals for the production of VMPs and no suspensions of approvals for the production/import of VMPs.

In 2022, the inspections carried out by the RFSD in connection with the official control over the trade, storage and use of VMPs amounted to 3,338, of which: 163 inspections of wholesale trade sites; 213 inspections of retail outlets; 197 inspections of veterinary medical establishments; 1,522 inspections of livestock sites and 343 inspections of pet stores, beekeeping shops, etc. A total of 243 precepts were issued and 51 citations for establishing administrative violations were drawn up.

6.3.2.3. Border control

Official control is carried out at border control points (BCPs) located on the territory of Bulgaria, which are approved in accordance with the requirements of Art. 59 of Regulation (EU) 2017/625, as well as Regulation (EU) 2019/1014, as follows: Kapitan Andreevo BCP; Varna Port BCP; Burgas Port BCP; Gyueshevo BCP; Zlatarevo BCP; Kalotina BCP; Sofia Airport BCP; Bregovo BCP.

The BFSA, via the BCP departments, carries out official control upon entry into EU territory of animals and goods falling within the scope of art. 47 (1) of Regulation (EU) 2017/625. This includes carrying out official controls upon the entry of consignments of animals and goods from third countries containing: live animals; animal products, germ products, animal by-products, hay and straw and foods containing both plant products and processed animal products; plants, plant products and other objects; food and feed of non-animal origin to which measures under enhanced official control of the BCPs are applied and those to which emergency measures are applied; materials and objects in contact with food.

In addition to the eight approved border inspection posts, BFSA carried out official control of the following points of entry into the EU: Malko Tarnovo, Lesovo, Logodazh, Strezimirovtsi, Varna Airport, Burgas Airport for: goods that are part of the personal luggage of passengers within the meaning of the requirements of Regulation (EU) 2019/2122; checks of compliance with the animal health requirements for the non-commercial movement of pets in accordance with Regulation 2013/576.

The official control of the border control points at the introduction of consignments of animals and goods from third countries on EU territory is carried out by official veterinarians, official phytosanitary inspectors and other official inspectors and includes the performance of documentary, identification and physical inspections, including taking samples for laboratory analysis in compliance with the requirements of the directly applicable European law and national legislation.

In 2022, the BCPs, through the official inspectors of the BFSA, carried out official control of consignments of animals and goods falling within the scope of art. 47 (1) of Regulation (EU) 2017/625 as follows: live animals - 740 shipments; products of animal origin - 11,057 shipments; food and feed of non-animal origin - 110,116 shipments; plants, plant products and others - 93,850 shipments.

During the year, a total of 421 notifications were created, of which 252 were for shipments rejected at the border and 169 for non-conforming shipments, which were notified in the RASFF system.

6.3.2.4. Feed control

In 2021, the strategic goals set in the Unified Multi-Annual National Control Plan of the Republic of Bulgaria for food, feed, animal health, welfare and plant protection (January 2021 - December 2023) were put in place to achieve the strategic goal "Effective functioning of the feed control system".

In order to achieve a high level of protection of human and animal health, environmental protection and protection of consumers from deception, regular risk-based control was carried out during the year of

each stage of production of the various types of feed, processing, storage, transportation, distribution, including feed feeding.

Feed control in 2022 follows the following priorities:

- Achieving a high level of protection of human health, animal health and the environment via effective controls at all stages of production, processing, storage, import, transport, distribution, including animal feeding, by implementing and enforcing European law and national feed legislation;
- Protecting consumers from fraud, deception and illegal feed practices;
- Performing a regular and risk-oriented control of processes at feed business operators - at each stage of feed production, processing, storage and distribution, including animal nutrition;
- Control of feed, regarding the content of unwanted and prohibited substances, as well as control of their compliance with the information provided to customers;
- Effective control of genetically modified feed, control of the placing on the market, tracing and labeling of feed containing or produced from GMOs. The purpose of these controls is to ensure informed consumer choice;
- Control of the production, marketing, transport and use of medicated feed in order to minimize the risk of placing on the market of raw materials and/or food of animal origin for human consumption, containing concentrations of pharmacologically active medicinal substances above the maximum admissible levels, set in the applicable legislation;
- Control of the compliance with the feed prohibition related to transmissible spongiform encephalopathies in order to avoid risks to human and animal health;
- Control of the intra-species feed ban in relation to the feeding of terrestrial animals of a species with processed animal protein derived from animals of the same species.

Registration and approval of facilities in the feed sector

In accordance with the requirements of the Feed Act and in conjunction with Regulation (EC) No. 183/2005 on feed hygiene, the activities performed in the Feed sector are carried out at sites and by operators approved or registered by the Bulgarian Food Safety Agency.

As of 31 December 2022, the total number of registered and approved sites/operators on the territory of the country is 11,178, which are distributed by activities as follows:

Table V.11. Number of registered and approved facilities/operators in the Feed Sector in accordance with the requirements of Art. 9 and Art. 10 of Regulation (EC) No. 183/2005 (as at 31.12.2022)

Declared activity	Number of sites
I. Registered sites under Art. 9 of Regulation (EC) No. 183/2005, exercising activities according to Art. 5 (2) of the Regulation	4,142
1. Manufacturers of supplements	5
2. Manufacturers of premixtures of supplements	2
3. Manufacturers of compound feed	240
4. Operators performing activities of cutting, packaging, repackaging and sale of compound feed and feeding materials	59
5. Packaging, labeling, storage and marketing of feeds	16
6. Grinding, packaging, labeling, storage and marketing of feeds	8
7. Manufacturers of feed materials	351

Declared activity	Number of sites
8. Feed traders	2,480
9. Feed transport operators	885
10. Warehouse leasing operators	96
II. Registered operators at the level of primary production of agricultural crops intended for feed, exercising activities under Art. 5 (1) of Regulation (EC) No. 183/2005	6,890
1. Registered sites of farmers producing primary forages at the location of the property	4,914
2. Registered sites of farmers producing silage using silage additives, as feed is intended only for the needs of their own farm	423
3. Registered sites of farmers mixing feed exclusively for their own farm, without the use of additives and premixtures, using supplementary feed	1,536
4. Registered sites of farmers, mixing feed and producing silage, intended only for the needs of their own farm	17
I III. Approved sites under Art. 10, exercising activities under Art. 5 (2) of Regulation (EC) No. 183/2005	136
1. Manufacturers of feed additives	7
2. Manufacturers of premixtures, based on feed additives	4
3. Manufacturers of compound feed	40
4. Traders in feed additives and premixes	78
5. Feed detoxication operators	1
8. Operators, engaged in the processing of raw vegetable oil, except for sites registered under the Food Act, and/or production of fatty acids through the processing of vegetable oils and animal fats, production of biodiesel and blending of fats and/or engaged in the blending of fats and/or the manufacturing of products, obtained in the production of biodiesel	6
IV. Approved sites under Art. 55 of the Feed Act	10
1. Manufacturers of medicated feed	10
Total registered and approved sites/operators in which activities under Art. 9 and Art. 10 of Regulation (EC) 183/2005 are performed	11,178

Source: BFSA and MAF

The BFSA maintains and updates 7 national registers of the registered and of the approved sites/operators in the feed sector for the activities specified in Art. 9 and Art. 10 of Regulation (EC) No. 183/2005. They are public and available to consumers on the BFSA website, as well as on the website of the European Commission's Directorate-General for Health and Food Safety:

Pursuant to signed bilateral agreements between the People's Republic of China (PRC) and the Republic of Bulgaria, the BFSA maintains 6 lists in 2022:

- List of approved representatives for export of corn to the PRC;
- List of approved representatives for export of alfalfa to the PRC;
- List of producers of crop-based compound feed approved for export to the PRC;
- List of manufacturers of feed additives approved for export to the PRC;
- List of sunflower meal producers approved for export to the PRC;
- List of producers of dried distillers with solubles (DDGS) approved for export to the PRC.

The operators in the Feed sector are registered and/or approved for all sites under their control, for each activity performed by them. The registration and approval of sites in the Feed sector is a dynamic process.

Table V.12. Number of registered and approved sites in the Feed Sector in 2021 - 2022

Item No.	Type of operator	Number of sites as of 31.12.2021	Number of sites as of 31.12.2022	Change in %
1.	Registered operators according to art. 15 (1) of the Feed Act	4,002	4,142	+3.5%
1.1.	Manufacturers of compound feed	259	240	-7.3%
1.2.	Operators performing activities of cutting, packaging, repackaging, labeling and marketing of compound feed and feed materials	56	59	+5.4%
1.3.	Packaging, labeling, storage and marketing of feeds	13	16	+23.1%
1.4.	Grinding, packaging, labeling, storage and marketing of feeds	1	8	+700%
1.5.	Manufacturers of supplements	4	5	+25%
1.6.	Manufacturers of premixtures of supplements	2	2	0.0%
1.7.	Manufacturers of feed materials	377	351	-6.9%
1.8.	Feed traders	2,405	2,480	+3.1
1.9.	Feed transport operators	800	885	+10.6%
1.10.	Warehouse leasing operators	80	96	+20%
2.	Approved operators according to art. 15 (3) and (4) of the Feed Act	133	136	+2.3%
2.1.	Manufacturers of compound feed	40	40	0.0%
2.2.	Manufacturers of feed additives	7	7	0.0%
2.3.	Manufacturers of premixtures of supplements	3	4	+33.3%
2.4.	Traders in feed additives and premixes	76	78	+2.6%
2.5.	Operators performing: processing of raw vegetable oil, except for sites registered under the Food Act, and/or production of fatty acids through the processing of vegetable oils and animal fats, production of biodiesel and blending of fats and/or – engaged in the blending of fats and/or – producing biodiesel	6	6	0.0%
2.6.	Feed detoxication operators	1	1	0.0%
3.	Approved producers of medicated feed according to art. 55C (1) of the Feed Act	10	10	0.0%
4.	Registered farmers exercising activities under Art. 5 (1) of Regulation (EC) No. 1831/2003	7,328	6,890	-6.0%
4.1.	Registered farmers producing primary feed	5,246	4,914	-6.3%
4.2.	Registered farmers producing silage using silage additives, as feed is intended only for their own farm	449	423	-5.8%
4.3.	Registered farmers mixing feed exclusively for their own farm without the use of additives and premixtures, using complementary feed	1,591	1,536	-3.5%
4.4.	Registered farmers mixing feed and producing silage, intended only for the needs of their own farm	42	17	-59.5
	Total	11,463	11,178	-2.5%

Source: BFSa and MAF

As of 31 December 2022 the total number of operators falling within the scope of Art. 9 of Regulation (EC) No. 183/2005 decreased by 265 or by 2.5% compared to the previous year. The number of deleted registrations, at the request of the operator, on the basis of Art. 16 (10.1) or Art. 17d (2.1) of the Feed Act increased on an annual basis by 32 or by 13.6%, to 235. The number of revoked registration certificates, based on Art. 16 (10.2) or art. 17 (2.2) of the Feed Act and application of Art. 15 of Regulation (EC) No. 183/2005 as of 31.12.2022, was 28, which was less by 14 or 33.3% compared to 2021. The most common reason for registration revokes on this basis is the temporary suspension of the operator's activity for a period longer than one year.

During the year, 6 new sites were approved, in which activity is carried out in accordance with the feed legislation, which was 4 less compared to 2021.

As of the end of 2022, 3 approvals of sites were revoked at the request of the operator - in accordance to art. 19 (18.1) of the Feed Act. During the previous year 2021, no approved sites have been revoked.

As of 31 December 2022, the total number of sites where the activity "production of medicated feed" is carried out, falling within the scope of art. 10 of Regulation (EC) No. 183/2005, was unchanged on an annual basis.

Production of compound feed

According to data from the producers of compound feed, provided in pursuance of art. 14b of the Feed Act, in 2022 the country produced a total of 1,244,648.77 tons of compound feed, which is a decrease of 56,494.14 tons or 4.3% compared to 2021.

Table V.13. Production of compound feed in 2022 by animal species, tons

Type of animals	For the market	For own farms	Total
Ruminants	140,901.321	54,695.492	195,596.813
Pigs	224,946.103	153,462.700	378,408.803
Poultry	485,060.939	111,277.650	596,338.589
Other animals	71,356.646	2,947.920	74,304.566
Total	922,265.009	322,383.762	1,244,648.771

Source: BFSA

Production of medicated feed

As in previous years, in 2022 the country produced medicated feed only for pigs. The amount produced was 19,315.3 tons, 30.5% less than in 2021. The share of medicated feed production for the needs of own livestock farms in 2022 was 65.1% of the total amount produced, and the amount produced for the market was 34.9% (compared to 73.9% and 26.1% respectively in 2021).

Table V.14. Production of medicated feed in 2022 by districts, tons

District	For the market	For own farms	Total
Varna	12.0	3,955.0	3,967.0
Veliko Tarnovo	214.0	-	214.0
Razgrad	-	207.0	207.0
Ruse	144.0	5,936.8	6,080.8
Stara Zagora	-	144.0	144.0
Shumen	6,372.0	2,330.5	8,702.5
Yambol	-	-	-
Total	6,742.0	12,573.3	19,315.3

Source: BFSA

Official feed control

The feed control covers both sites in the feed sector and livestock sites, including establishments that produce feed or only feed animals that are kept for food production and their products are intended for human consumption.

In 2021, the feed control followed the defined main specific operational objectives, related to the strategic objectives set in the SMNCP of the Republic of Bulgaria for 2021 - 2023, namely: to ensure that the feed meets the safety requirements and the requirements of Regulation (EC) No. 767/2009 in regards to the information to be provided on the label or the document accompanying the batch, including the information to be provided when trading by means of distance communication.

In accordance with Art. 17 of Regulation (EC) No. 178/2002 and recital (6) of Regulation (EC) No. 183/2005, feed business operators are responsible for the safety of their feed, the protection of animal health and the prevention of risks for the environment.

The official feed control is scheduled and ongoing. The scheduled control is based on country-wide risk assessment criteria. In 2022, the "Feed Control Framework Plan for 2022" was implemented and guidance for work on its implementation were applied. It covers feed control on all levels, including animal feed in farms.

Ongoing controls include follow-up checks, checks in case of suspicions and investigations (alerts, complaints, RASFF/AAC system notifications, etc.), checks on applications for feed exports to third countries, TRACES checks and others.

The feed control framework plan covers three control systems: "Animal feed and nutrition", "Transmissible spongiform encephalopathies and animal by-products" and "Veterinary products and residues of veterinary medicinal products". The inspections carried out in 2022 and the samples taken from feed for analysis were evenly distributed over the period and cover all groups of operators.

Results of control activities under the Animal Feed and Nutrition Control System

The overall progress in achieving the strategic and specific objectives of the Animal Feed and Nutrition Control System is assessed as positive. In 2022, a total of 3,651 audits and inspections were performed, including 3,220 - scheduled inspections, 344 - follow-up, 75 - investigative and 12 - on signal. Inspections and audits were carried out at all stages of feed production, processing, distribution and feeding.

In 2022, the performed scheduled inspections were 411 or 11.3% less compared to 2021. The number of inspections set in the Framework Control Plan for 2022 were 82.4% completed, which was due to the deletion/temporary suspension of registration/approval of establishments/operators in the sector that were scheduled for inspection in the period, as well as insufficient human resources in some RFSDs during the calendar year.

The inspections revealed non-conformities with the requirements of the legislation applicable in the sector, in relation to which 1,223 precepts for their elimination were issued (with specific deadlines) - 168 or 15.9% more than in 2021.

No serious non-conformities were observed with regard to feed tested which would result in animal or public health hazards. The type of non-conformities found did not pose a potential risk to animals.

According to the type of the site where the non-conformities were found, the largest number of precepts were given during inspections in livestock farms - 709, which is 32.8% less than in 2021. The identified discrepancies were mainly related to compliance with the requirements for hygiene, self-control of operators and traceability of feed. Non-conformities with regard to hygiene requirements mainly concerned deficiencies in the cleaning procedures and their implementation. Non-conformities in self-control were mainly related to non-sampling of feed for self-control. Incomplete/irregular record keeping was the main part of the non-conformities found in terms of compliance with traceability requirements.

The most common reasons for the non-conformities are: the unawareness of the operators' liability in accordance with Regulation (EC) No.178/2002; insufficient knowledge of the legislation requirements; insufficient financial resources on the part of feed business operators.

In 2022, during the inspections of the sites in the feed sector, samples were taken for analysis on indicators declared by the manufacturer for compliance, as well as for compliance with the permissible safety values defined in the legislation.

The total number of analyses of samples taken for official control in 2022 was 3,690 (including 242 analyses for moisture content), of which:

- 674 for nutritional value (4 non-compliant results were received - 2.1% from performed analyses, unlike 2021, when there were no non-compliant results obtained);
- 222 samples for feed additives, with fixed maximum content, including permitted coccidiostats (non-compliance was found in 9 analyses - 4.1% of the performed analyses, which is 6 analysis less compared to 2021);
- 1,207 samples for undesirable substances (for presence of heavy metals, mycotoxins, active residues of pesticide, dioxins, ambrosia) - 14 non-compliant results were obtained - 1.2% of the analyses, remaining unchanged on an annual basis.

In 2022, in implementation of the Framework Plan for Feed Control, a total of 127 feed samples were analyzed for mycotoxin content., analyzed by six indicators each.

In 2022, the following were also taken:

- 23 samples of feed for dioxins and dioxin-like polychlorinated biphenyls, in implementation of the framework control plan. During the performed analyses it was established that all samples comply with the legislation. Although the maximum levels as well as the thresholds laid down in Directive No. 2002/32/EC were not exceeded, the presence of dioxins and dioxin-like polychlorinated biphenyls from 0.15 to 0.28 ng/kg was detected in the samples analyzed. A decrease is observed in the range in which dioxins and dioxin-like polychlorinated biphenyls are detected compared to 2021 (0.16 to 0.41 ng/kg);
- 40 analyzes for prohibited medicinal substances, such as feed additives and for inevitable transfer of coccidiostats in non-target feeds;
- 181 samples for microbiological contamination - presence of salmonella (1 non-compliant analysis - 0.6% of the analyzed samples was identified). There is a decrease in the number of non-compliant analysis by 8 compared to 2021, or by 88.9%);
- 24 samples of feed for the presence of GMOs in implementation of the framework control plan, in which presence of unauthorized genetically modified feed was not detected.

A total of 36 analyzes have been carried out on the mycotoxin content indicator at import of feed and no non-compliances were found.

For export of feed, a total of 1,370 analyzes have been carried out on the following indicators: heavy metals, pesticides, mycotoxins, dioxins, salmonella, ambrosia, GMOs, radioactivity (caesium 134 and caesium 137), melathion, cyanides, ethylene dibromide, phosphides.

The effectiveness of the official feed control performed is proven by the fact that cases of feed non-compliance with the requirements of the applicable legislation in 2022 decreased to 31, compared to 44 in 2021.

Control of feed under the control system "Transmissible spongiform encephalopathies and animal by-products"

The observance by the operators from the feed sector of the feed prohibitions, defined in art. 7 and Annex IV to Regulation (EC) No. 999/2001 and in Art. 11 of Regulation (EC) 1069/2009, is controlled.

During the performed documentary and physical inspections in 2022, no infringement of the

requirements of Art. 11 of Regulation (EC) No. 1069/2009 on the intra-species feed ban were found.

During a laboratory control in 2022, non-compliance with the requirements of Art. 7 and Annex IV of Regulation (EC) No. 999/2001 was established and all necessary administrative penalties and actions were taken for the violation.

The feed samples taken in 2022 for the presence of ingredients of animal origin in the implementation of the Feed Control Framework Plan are 282, including 265 samples in the implementation of the Feed Control Framework Plan, 4 samples at the discretion of the inspector and 13 samples of feed intended for export.

Proteins of animal origin are at risk for contamination with microorganisms (*Salmonella* spp. and other bacteria from the Enterobacteriaceae), which is why feed samples are taken for the presence of microbiological contamination. In 2022, 89 feed samples were analyzed for presence of *Salmonella* spp., incl. 21 samples in implementation of the Feed Control Framework Plan under the TSE and by-products control system and 68 samples of feed intended for export.

In 2022, 86 feed samples were analyzed for presence of enterobacteria, incl. 18 samples in implementation of the Feed Control Framework Plan under the TSE and by-products control system and 68 samples of feed intended for export. In the laboratory control performed during the year, no positive results of laboratory analysis for the presence of salmonella and enterobacteria have been established.

Feed control under the "Veterinary medicinal products and residues of veterinary medicinal products" control system

As of 31.12.2022, 10 sites for production with medicinal feed and/or intermediate products under Art. 55 c (1) of the Feed Act were approved.

In 2022, a total of 20 inspections were carried out of approved operators engaged in the production of medicated feed (15 less than in 2021), of which 14 were scheduled inspections, 4 were follow-up inspections and 2 were investigative inspections. During the inspections, 3 precepts were given to 2 operators, representing 20% of the 10 sites checked. (Compared to 6 precepts to 4 operators in 2021). Compared to 2021, there has been a decrease in both the number of prescriptions issued and the number of medicated feed manufacturers issued with prescriptions for identified non-compliances.

In 2022, a total of 15 feed samples were taken and analyzed under the control system (incl. 6 samples of medicated feed analyzed for the presence of medicinal substances unauthorized for use as feed supplements; 5 samples to quantify the active medicinal substance incorporated in the production of medicated feed and 4 samples for inevitable transfer of the same into non-target feed). According to the results of analysis in 3 of the samples from medicated feed, analyzed to quantify the active medical substance, a non-compliance was established between the expected quantity of the active substance and the one found during the laboratory analysis. In connection with the obtained non-compliant results of the analyses, all necessary measures and actions have been taken in accordance with the legislation.

Audits of Feed Business Operators

According to the requirements of Art. 6 and Art. 7 of Regulation (EC) No. 1831/2003 and in connection with Art. 26 (2) of the Feed Act, feed business operators carrying out activities other than those at the primary feed production level are obliged to have developed and implemented procedures based on the principles of HACCP (Hazard Analysis and Critical Control Point).

In 2022, 241 audits of feed business operators and 20 follow-up audits to check the implementation of the audit recommendations were carried out.

It can be concluded that the operators have developed, introduced and implement the relevant procedures, thus fulfilling the requirements of Art. 6 and Art. 7 of Regulation (EC) No. 1831/2003. For some operators, it was found that procedures based on HACCP principles were not relevant at the time of the audit. For all identified non-conformities, recommendations were given and the operators have taken corrective action. Their implementation has been inspected and they were closed.

Although 16 fewer audits were carried out in 2022 compared to 2021, the number of recommendations made increased by 57, which proves the objectivity of the official feed control performed.

During the year, 35 citations for established administrative violations were drawn up (7 more than in 2021), most often related to non-compliance with the requirements of Art. 6, para. 7 and para. 2; Art. 7, para. 1; Art. 15, para. 1; Art. 16, para. 7; Art. 17c, para. 1; Art. 19, para. 15; Art. 48, para. 1, item 1 and Art. 55f, item 6 of the Feed Act. The analysis shows that the imposed penalties have an effect on the observance of the requirements of the feed legislation by the operators in the sector.

6.4. Analysis of the food chain risks

One of the main functions of the Food Chain Risk Assessment Center (FCRAC) is to protect and strengthen consumer confidence in the safety and security of the entire food chain by conducting independent scientific risk assessments, scientific opinions and information related to the food chain on issues that directly or indirectly affect food safety, animal and plant health, plant products, plant and animal propagating material.

Another key priority is the evaluation of plant protection products (PPPs) in accordance with the requirements of Regulation (EC) No. 1107/2009, Regulation (EC) No. 396/2005, as well as the collection, processing and provision of information to EFSA on approved Good Agricultural Practices of permitted PPPs in Bulgaria in connection with the review of maximum residue limits.

Through its independent, scientifically based assessments, the FCRAC helps consumers to make informed decision on the one hand and the competent control authorities to assess the impact of risk management measures in the food chain on the other. In addition, the risk assessments prepared by the FCRAC provide a basis for further analysis and assessment of the benefit/risk balance in the future.

In 2022, the Center fulfilled its main goal - preparation of scientific opinions and publication of scientific reviews/analyses and information in the field of health, reproduction and animal welfare, biological and chemical hazards in the food chain, zoonoses, genetically modified organisms, materials for food contact, plant health, pesticide residues in food, supplements in food, food additives, new foods, dietary products, nutrition and allergens. The scientific opinions prepared were at the request of MAF, the BFSA and other organizations. Some of them include timely assessments of the risk to the health of consumers in specific cases of established chemical hazards in food, in which recommendations are given for taking measures to manage the risk related to food safety. All publications are available on the FCRAC website.

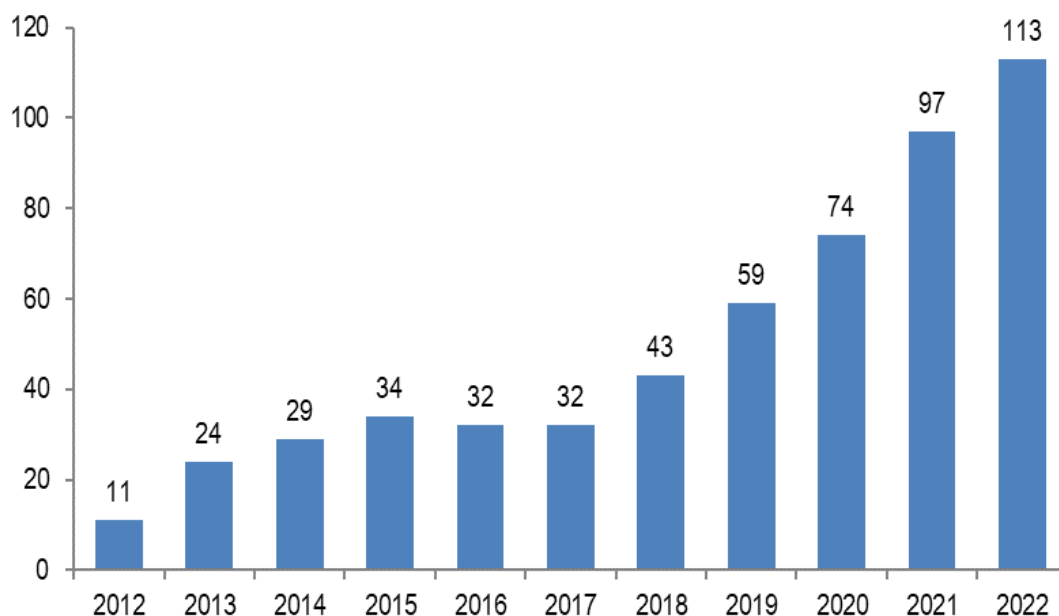
The focus of the FCRAC activity for yet another year is:

- Continuous monitoring and evaluation of information on the course of the African swine fever (ASF) disease;
- Following the development of the global epidemic situation in relation to a number of other infectious animal diseases, such as highly pathogenic Avian influenza A, Congo-Crimean haemorrhagic fever;
- Updating data on the Q fever situation in Bulgaria and human and animal health risk assessment.

It can be summarized that for the period 2012 - 2022 there is a trend towards an increase in the number of scientific opinions prepared by the FCRAC - from 11 in 2012 to 113 in 2022 (including 67 scientific risk assessments, 45 scientific reviews and analyses and 1 ex-post impact assessment of the FCRAC Act), with increased quality of the assessments prepared.

In 2022, the Center prepared: 67 opinions; 167 pieces of scientific information; 45 scientific reviews and analyses; 5 epidemiological studies; 3 annual data reports for Bulgaria for 2021 to EFSA on zoonoses, residues of chemical pollutants and pesticides in food.

Figure V.5. Number of scientific opinions prepared by the FCRAC for the 2012 - 2022 period



Source: FCRAC

With regard to the activities related to the evaluation of plant protection products, the FCRAC carried out in 2022:

- Collection of information on authorized plant protection products (PPPs) in Bulgaria, summary of the parameters of approved good agricultural practices and provision of the information to EFSA in connection with the review of the maximum residue levels (MRLs) under Article 12 of the Regulation (EC) 396/2005 – for 8 active substances;
- Review of published Regulations for amendment of the MRLs for compliance of uses permitted in Bulgaria for plant protection products - 16, including 3 confirmed as requiring national action.

During 2022, 384 applications for assessment of PPPs were received (compared to 374 in the previous year). The submission of applications for assessment of PPPs is entirely up to the applicants.

Table V.15. Applications for assessment of PPPs received by the FCRAC

	Number of received applications for assessment of PPPs
2019	316
2020	163
2021	374
2022	384

Source: FCRAC

There were 116 completed and submitted to the BFSA assessment reports of PPPs during the year.

In 2023, the FCRAC continued to prepare and update risk assessments in the following areas:

- African swine fever in Bulgaria, Europe and the world;
- Avian influenza;
- Additionally prepared materials for current animal diseases or with increased risk of entering the territory of the Republic of Bulgaria;

- Animal welfare;
- Residues from PPPs, VMPs and environmental pollutants;
- Packaging and food contact materials;
- Allergens, dietary foods, new foods and foods with health claims, allergens, nutritional supplements, new foods, safety assessment of traditional foods.

The Center's experts continue to carry out the activities of approval, renewal and review of the approval of active substances, antidotes and synergists and to carry out evaluations with assessment reports in accordance to Art. 8 (1) of the FCRAC and in accordance with the requirements of Regulation (EU) No. 1107/2009 for:

- plant protection products in their authorization for placing on the market and use, renewal, amendment and withdrawal of authorization for placing on the market and use, extension of the scope of authorization for placing on the market and use of a plant protection product for a minimum use and mutual recognition of product authorizations;
- plant protection products identity in their authorization for parallel trade;
- plant protection products that contain substances which are candidates for substitution.

6.5. Legislative changes and strategic documents in the field of food chain safety

The optimization of the regulatory framework in the field of food and feed safety, animal health and welfare and plant health continued in 2022. During the year, work was carried out on projects of the following regulatory acts and strategic documents:

- Draft Act to amend and supplement the Food Act regarding the establishment of a Food Traceability Information System, creating legal grounds for the issuance of regulations by the Minister of Agriculture;
- Draft amendment and supplement to the Ordinance on specific requirements for dairy products adopted by Decree No. 260 of the Council of Ministers of 2021 in order to raise awareness among consumers;
- Draft Ordinance on the conditions for the use of optional indications in food labeling - the Ordinance defines the conditions for the use of optional indications in food labeling and the carrying out of official control over the use of optional indications in food labeling;
- Draft Ordinance on the operation of farmers' markets, laying down the conditions and procedures for the organization and operation of farmers' food markets, as well as the safety requirements for food offered at farmers' food markets;
- Draft Ordinance on specific requirements for the production of small quantities of food at home - stimulating the production of food at home and ensuring more effective control of compliance with the defined rules;
- Draft of a new Veterinary Medicine Act, including a prepared and approved report on a comprehensive preliminary impact assessment of the draft;
- Draft amendment and supplement to the Ordinance on the terms and conditions for spending the funds for compensation of animal owners in the cases under Art. 47, para. 1 of the Veterinary Medicine Act, adopted by Decree No. 81 of the Council of Ministers in 2020 (promulgated, SG, issue 40 of 2020) and a partial preliminary impact assessment of the draft, prepared and approved by the Council of Ministers;

- Draft Ordinance amending and supplementing Ordinance No. 6 of 20 March 2007 on the conditions and procedures for the pasture breeding of pigs of the East Balkan breed and its crossbreeds as part of a national strategy to promote the East Balkan pig breed and products in Bulgaria and the EU, seeking opportunities to provide land for the breeding of pigs of the breed and updating the biosecurity requirements in accordance with the opinion of the European Food Safety Authority and the changes in EU legislation in relation to the risk of the spread of ASF in outdoor breeding;
- Updating of the draft National Action Program for Combating Antimicrobial Resistance 2022 - 2026 under the "One Health" approach, with the Ministry of Health as the leading institution and financial justification for the resources needed to implement the measures;
- Providing information and communication with the EC on a preliminary assessment of Bulgaria's progress in developing a National Plan for Combating Antimicrobial Resistance based on the "One Health" approach;
- Draft Act to amend and supplement the Plant Protection Act in order to ensure the implementation of Regulation (EU) 2019/1009 to lay down rules for making fertilizer products available on the EU market and for amending Regulations (EC) No. 1069/2009 and (EC) No. 1107/2009 and repealing Regulation (EC) No. 2003/2003.

Priority activities in 2023

In 2023, the process of drafting laws and by-laws in the field of food safety continues, with the aim of achieving a high level of consumer health protection by marketing quality and safe food and improving market access for small producers. It is planned to amend and supplement and/or issue new by-laws related to the implementation of the Food Act and the Agri-Food Chain Management Act.

The activities that continue to be a priority are related to the preparation of a draft of a new Veterinary Medical Activity Act, fully compliant with the framework and provisions of Regulation (EU) 2016/429 of the European Parliament and of the Council of 9 March 2016 on transmissible animal diseases and amending and repealing certain acts in the area of animal health and delegated acts thereto (applicable from 21 April 2021) and Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC.

The work of the Coordination Council established at the Ministry of Agriculture and Food, coordinating the implementation of the measures for prevention and control of the spread of infectious diseases on the territory of the Republic of Bulgaria, continues.

Another priority is the drafting of a Plan for control and prevention of the spread of the African swine fever disease in the Republic of Bulgaria during the period 2024 - 2026 on the basis of the results from the measures implemented so far according to the 2020 plan and the current plan for the 2021 - 2023 period, taking into account the new guidelines and regulatory requirements at EU level to combat the disease.

It is necessary for the Council of Ministers to adopt the draft National Action Program for Combating Antimicrobial Resistance 2023 - 2027, prepared under the "One Health" approach (with Ministry of Health as the leading institution) and to work on the implementation of the set measures in order to achieve the objectives of the Green Deal to reduce the use of antimicrobials and meet the requirements of the new legislation on veterinary medicinal products related to ensuring the collection of information on the quantities of antimicrobials used and raising awareness among farmers regarding good practices to reduce the use of antimicrobials.

A draft amending and supplementing Ordinance No. 42 of 2008 on the requirements for veterinary medical facilities and the type and scope of veterinary medical activities that may be carried out in them is to be adopted, setting out the requirements regarding the distances between a veterinary clinic and an inpatient facility and the requirements for university hospitals with clinics, and work is to begin on drafting an ordinance to implement in the national legislation the requirements of Commission Directive 82/475/EEC of 23 June

1982 regarding the categories of ingredients which may be used for the purposes of labeling compound food for pets.

The European Commission's proposal for a Regulation of the European Parliament and of the Council on the sustainable use of plant protection products and amending Regulation (EU) 2021/2115, published in June 2022, remains a priority.

7. Livestock Selection and Reproduction

7.1. Livestock Selection and Reproduction

The Executive Agency for Selection and Reproduction in Animal Breeding (EASRAB) assists the Minister of Agriculture and Food in pursuing the state policy in the field of breeding and management and conservation of genetic resources. The Agency monitors the state of national genetic resources and coordinates the activities related to their management.

The EASRAB participates in the management of national genetic resources in animal husbandry through management, organization and participation in the activities of the National Council for Management and Conservation of Genetic Resources. In 2022, 8 meetings of the Council by Sections for the individual directions in animal husbandry were held, where the problems of the respective branch were discussed and proposals for improving the breeding activity were made.

The EASRAB coordinates the creation of new breeds and hybrids of animals by administering the activities of the State Commission on Animal Breeds (SCAB) and performs the necessary expert assessment on the merits at all levels. One meeting of the commission was held in 2022, a substantive examination was carried out and a report on the proposal for the recognition of the Bulgarian Sport Horse breed was prepared. As a result, the Patent Office has issued a certificate for recognition of the breed. During the year, in the SCAB no applications were received by the Patent Office for the performance of substantive examinations.

The Agency makes annual monitoring of the breeds in connection with the maintenance and periodic updating of the Register of Breeding herds of the National Gene Fund under Article 18 (6) of the Animal Breeding Act.

EASRAB experts determine the breed affiliation according to the prepared detailed breed characteristics of the cattle, buffaloes, sheep and goats bred in the country. In 2022, the breeds of 233 sheep was determined. All animals have been registered as breeders in the BFSA Vetis Integrated Information System. During the year, the risk status and change trend was determined of the following: 29,319 cattle (of three autochthonous and three commercial breeds); 17,043 buffaloes (of one commercial breed); 129,250 sheep (of nineteen autochthonous and three commercial breeds); 27,928 goats (of four autochthonous and one commercial breed); 803 pigs (of one autochthonous and one commercial breed) and 11,241 horses (of one autochthonous and four commercial breeds).

In 2022, the breeding organizations in the country and the EASRAB control 28 autochthonous and 13 commercial breeds, which are the subject of support under the Program for the Development of Rural Areas, measure 10 "Agroecology and climate in the direction "Protection of endangered local breeds".

Due to the African swine fever disease, from the end of 2019 to 31.12.2022, 1,056 pigs of the autochthonous East Balkan pig breed were destroyed, as a result of which its status was already changed to breed becoming extinct. The Pleven Horse and Bulgarian Red Cattle breeds can also be identified as endangered breeds. Of the autochthonous breeds, the condition of the Local Stara Zagora sheep, Byala Marishka, Local Karnobat sheep and the Sakar sheep is alarming, and of the commercial breeds - Karnobatska and Trakiyska fine-wooled sheep, of the East Bulgarian horse, Danube horse and Danube white pig. During the year, measures for restoration of two national breeds - the Bulgarian brown cattle and the Bulgarian red cattle - continued to be implemented. A breeding program has been developed for the Bulgarian Brown Cattle, and the breeding activity with the breed is undertaken by two breeding organizations. A breeding plan has been developed for the development of the Bulgarian red cattle and it was implemented in 2022 as well.

The EASRAB maintains an information database on the state of genetic resources, based on the EFABIS model of the European Regional Focal Point. The national system is linked to EFABIS, and the latter

to the DAD-IS information system of the World Food Organization (FAO). This integration enables the transfer of data from national to European and global information systems. The information in the system was also updated in 2022.

The EASRAB manages and maintains a National Genetic Bank with two repositories (Sofia and Sliven), which store cryopreserved semen from different species and breeds of animals.

As of the end of 2022, the National Genetic Bank stored a total of 1,563,908 doses of deep-frozen semen from 339 breeders, as follows: of 288 cattle breeders, 24 buffalo breeders, 17 goats, 7 rams and 3 stallions of 23 breeds of cattle, 4 breeds of buffalo, 8 breeds of sheep, 4 breeds of goats and 3 breeds of horses, which increases the variety of genetic material offered for sale.

As a separate part of the National Genetic Bank, the Agency also maintains a National Genetic Reserve that guarantees the national sovereignty of the country with regard to genetic resources, conservation, restoration and sustainable management of biodiversity, as well as limiting its loss.

As of 31.12.2022, the National Genetic Reserve of the country kept in stock 410,638 doses of frozen seed material from: 463 cattle and 32 buffalo breeders, 58 rams, 13 he-goats and 39 stallions. The doses are from 28 breeds of cattle, 4 breeds of buffalo, 21 breeds of sheep, 6 breeds of goats and 10 breeds of horses.

To ensure higher biosecurity, the frozen semen from the National Genetic Reserve is stored in two cryo-storage facilities - Sofia and Sliven.

The EASRAB manages and maintains the two State Artificial Insemination Stations (SATIS) in Sofia and Sliven, ensuring the breeding activity and the conservation of genetic resources in the country. The stations also receive and store long-lasting breeding material from valuable highly productive breeds from threatened with extinction and endangered local autochthonous breeds of animals.

At the end of 2022, 10 breeders of the following breeds were bred in Sliven SATIS: Bulgarian Red Cattle, Holstein Black, Aberdeen Angus Black and Red, Limousin, Montbéliarde and Bulgarian Murrah.

During the year, 51,855 doses of deep-frozen semen were produced from the available cattle and buffalo breeders in Sliven SATIS.

A horse breeding depot is maintained in the Sofia SATIS, where the EASRAB's own horses are bred and provided under contracts. In 2022, 94 ejaculates were obtained and 6,431 doses of deep-frozen semen were produced from the stallions bred at the station.

In the implementation of the ten-year Conservation Program for "ex situ" management of genetic resources in Bulgaria 2015 - 2024, from the middle of 2018 rams and he-goats are bred at Sofia SATIS. The rams and he-goats received in the SATIS are under contracts for joint activity with the respective breeding organizations. By the end of 2022, 2 rams, 2 he-goats, 1 goat, 4 kids and 2 lambs were being bred at Sofia SATIS.

The Agency has taken preventive measures for the protection and conservation of the East Balkan pig breed in connection with African swine fever. In order to prevent the risk of loss of valuable genetic resources, a response system has been set up in the event of natural disasters, epidemics, industrial accidents or other unforeseen causes, with severe consequences for animal populations. A clinical examination of a pig farm, which is under the selection control of the Association for Breeding and Storage of the East Balkan Pig, was carried out. As a result, in the two facilities of the Agency (Artificial Insemination Station in the town of Sliven and livestock farm, owned by EASRAB in the town of Kyustendil) there are six breeding groups of 4 sows and one boar each, participating in two genealogical schemes.

EASRAB assists with the activities of breeding organizations in the implementation of their breeding programs, ensuring proper assessment of selection traits and assessment of breeding value through: providing an opportunity for research of the quality indicators of controlled traits in its laboratories; breeding of male animals and production and storage of semen; proving the origin of breeding animals in its laboratory.

To this end, the Agency manages and maintains a laboratory for control of milk productivity and a laboratory for control of wool productivity.

In 2022 in the state laboratory for determining the physico-chemical composition of milk in the town of Sliven a total of 12,917 samples of cow milk were analyzed, which is 213 less than in the previous year. Of these, 12,622 samples were provided by Association for Bulgarian Rhodope Cattle and Jersey - Smolyan, 236 by Jersey Bulgaria Breeding Association - Sofia and 59 were from animals controlled by EASRAB.

The laboratory for testing rams on own productivity (town of Shumen), servicing the selection in fine-wool sheep breeding, makes it possible to determine the size of some selection traits and the quality of wool in terms of physical and mechanical properties, yield and the amount of pure fiber. In 2022, 738 wool samples were tested in it, 73 less than in the previous year.

EASRAB provides breeding organizations with various options for joint activities, cooperation and partnership in breeding male breeding animals, production and cryopreservation of semen from them. In 2022, 10 beef breeders, 8 male calves, 2 female buffaloes, 2 rams, 2 he-goats, 1 goat, 3 lambs, 4 kids and 30 stallions, mares and growing horses were bred under contracts for joint reproductive activity in the EASRAB facilities.

In 2022, the activity of the National Genetic Laboratory continued, ensuring reliable, scientifically based determination of the animal breed at a modern level, recognized by the international community and allows the performance of reference DNA analyzes. This provides an opportunity to control both the activities of breeding organizations and the implementation of coupled support schemes in the field of animal husbandry. The performed DNA analyses also reveal new regularities necessary for the development of breeding strategies and programs for the conservation of national genetic resources in animal husbandry. During the year, DNA was isolated from 4,904 samples at the National Genetics Laboratory.

The realization of seed material of breeders from the national gene pool is carried out by 9 licensed sperm storage centers, two of which ceased operation during the reporting period. An organization has been created in five centers for the operation of 11 mobile lines covering the areas with closed sperm storage centers over the years.

In 2022, a total of 25,706 doses of semen were sold (72.1% of dairy breeds, 26.3% of meat-producing breeds, and only 1.6% of buffaloes), which is 8,134 more than in the previous year. Out of the sold 18,533 doses of semen from dairy breeds of cattle, the largest share belongs to Holstein-Friesian cattle - 25.9%, followed by Bulgarian Rhodope cattle - 21.1% and Simmental - 19.3%. Of the meat-producing breeds, the largest share of doses belongs to Aberdeen Angus - 64.9% and Limousin - 28.9%.

In recent years, there has been a growing interest in preserving the genetic diversity of animals used for agricultural purposes. With the approval of the FAO Global Plan of Action for the Conservation of Genetic Resources in Animal Husbandry, the EASRAB has taken concrete steps for the effective management and long-term conservation of genetic diversity in animal husbandry. To this end, a ten-year Conservation Program for ex situ management of genetic resources in Bulgaria has been developed. It stipulates that breeders of commercial and autochthonous breeds of cattle, buffaloes, sheep, goats and horses, from which genetic material is preserved, shall enter the State Stations for artificial insemination. With the implementation of the cryopreservation program, the National Genetic Reserve and the National Genetic Bank will be enriched with potentially useful genes from 11 breeds of cattle, 1 breed of buffalo, 26 breeds of sheep, 4 breeds of goats and 13 breeds of horses.

In implementation of the program, over the last years the EASRAB has undertaken activities for restoration of the Bulgarian Red Cattle breed. In this regard, 13 typical animals, matching the breed descriptions of the breed were found and seed material from high-class bulls was provided. As a result of a fire in February 2022 on one of the two Bulgarian Red cattle farms, all the animals of the breed died. By the end of 2022, 12 animals of the Bulgarian Red cattle breed were bred. The main goal of the breeding work with the Bulgarian red cattle is to preserve and increase the available gene pool and to strengthen the biological qualities, ensuring the typicality, productivity and survival of the breed. Due to the narrow genetic diversity and the impossibility of further breeding of the breed in its pure state, a refined cross with bulls from the Angler and Danish Red Cattle breeds was initiated, as they were involved in the breeding process.

In implementation of the programs for rescue from extinction and restoration of the Danube, Pleven Horse and Bulgarian Heavy Horse breeds, the concluded contracts of EASRAB with the Association for

Restoration and Development of the Pleven Horse and Hydran breeds and the Association of Horse Breeders in Bulgaria were still in force in 2022. The aim is to obtain and store semen from stallions of the three breeds, to make embryo transfer, as well as to naturally cover mares of the Danube and Pleven horse breeds. In 2022, 9,751 doses of equine semen were stored in the National Genetic Bank and the National Genetic Reserve, which is 931 doses more than the same period in 2021.

In order to promote the national genetic resources and the breeding activity, EASRAB organized and conducted exhibitions financed by the State Fund Agriculture under the state aid schemes. In 2022, only one event was held in the city of Sliven: National Livestock Exhibition

In 2022, the EASRAB continued to represent Bulgaria in international bodies and organizations related to the management and conservation of European and global genetic resources in animal husbandry and to participate in working groups, meetings and various projects.

7.2. Control and coordination of breeding activities

In 2022, the EASRAB carried out control by conducting an inspection of the activities of breeding organizations that received support under the state aid scheme "Aid for keeping a herd book and determining the productivity and genetic traits of animals" for animals applying for 2021. In accordance with the requirements of the scheme, the inspections carried out cover animal breeding as follows: 1,623 farms with 125,641 cattle, 259 farms with 16,248 buffaloes, 1,989 farms with 333,629 sheep, 364 farms with 27,836 goats, 32 farms with 43,980 animals, 6 farms with 1,022,224 poultry, 383 owners with 8,341 horses, 19,529 bee colonies, 14 owners with 362 dogs and 3 farms with 794 rabbits.

The inspections revealed non-compliance with declared activities under the state aid scheme aid for the creation and maintenance of a herd book and for determination of the productivity and genetic traits of animals. The breeding organizations have reimbursed the subsidy received from State Fund Agriculture in the amount of BGN 32,127.

17 breeding organizations with organized depots for testing their own productivity were inspected. Field inspections were carried out for breed affiliation and eligibility for breeding in depots on 710 young male animals.

The EASRAB has carried out control over the activities of organizing and holding exhibitions by the Breeding Organizations under State Aid Schemes - "Assistance for participation in exhibitions" in 2022 of the Agriculture State Fund.

In 2022, the Agency carried out inspections at nine dog shows, two national horse shows with animals presented by the Association of Horse Breeders in Bulgaria, two sheep breeding shows organized by United Bulgarian Breeders and the Ile de France Breeding Association in Bulgaria, as well as an inspection of the National Association of Milky Sheep Breeders - town of Veliko Tarnovo and the Association for Breeding Dairy Goat Breeds - town of Ruse for the presentation of animals at the National Festival of Sheep Breeders in the town of Lyaskovets.

The EASRAB has carried out inspections on compliance with breeding programs by beneficiaries subsidized under Measure 10 "Agri-Environment-Climate" of the RDP. 16 beneficiaries out of 1,785 inspected were sanctioned for non-compliance with breeding programs in 2022.

The Agency controls the state breeding farms, carrying out one spring and one autumn inspection of horse herds at Kabiyuk State Enterprise during the year.

During the year, the EASRAB carried out planned inspections of 43 breeding organizations (13 in cattle and buffalo breeding, 23 in sheep and goat breeding, 2 in horse breeding, 1 in rabbit breedings, 1 in beekeeping, 1 in pig breeding and 2 in dog breeding). No organizational and administrative violations were found in the inspected breeding organizations. As a result of the inspections, 1,257 animals from the following breeds were excluded from the selection control and removed from the BFSA Vetis system: cattle, buffaloes, sheep and goats.

A new element in the control of the activities of breeding organizations in 2022 was the verification of the functionality and completeness of the data in the herd book of the controlled animals. The purpose of the

inspection is to monitor the digitalization of the electronic herd book and maintaining it with a specialized software product for breeding purposes. Digitalization in animal breeding allows the integration of modern technologies that allow more operations to be carried out in terms of volume and quality, and allows the EASRAB to effectively manage and control breeding activities.

An unplanned inspection was carried out following a report for violations submitted by the BFSA. As a result of the omissions found at the inspected livestock site, the Agency has initiated a full inspection of the Breeding Association of Aboriginal Sheep Breeds in Western Bulgaria, during which non-compliance with the activities set out in the breeding program was established. A report has been prepared proposing the withdrawal of the breeding permit.

Complaints received from individuals were followed up with one field and one documentary inspection to establish the credibility of the allegations made in the complaints.

Following complaints and signals submitted by legal entities, an inspection was carried out of the Bulgarian National Organization of Zootechnicians for Breeding of Farm Animal Breeds.

In 2022, inspections were carried out of the Bulgarian Milky Sheep Breeders Association, the Bulgarian Brown Cattle Breeders Organization and the Bulgarian Horse Breeders Association. The results of the on-site inspections regarding the declared circumstances were submitted to the Commission for Recognition of Breeding Organizations and Approval of Breeding Programs.

During the year, 3 organizations were recognized as breeding organizations with 8 breeding programs approved by breed.

Due to the lack of approved breeding organizations in the country for certain breeds, in 2022 EASRAB continued to carry out selection activities by species and breeds, as follows: cattle breeding - with 12 cattle, sheep breeding - with 609 sheep and goat breeding - with 527 goats. This activity enables farmers breeding the said breeds, for which no breeding organizations have been established, to apply for coupled support schemes for animals under selection control.

In connection with the implementation of coupled support schemes in the Livestock sector for animals under selection control, inspections were carried out to identify the animals under selection control, as well as to record the approved animals in the VetIS system of the BFSA. In 2022, the EASRAB entered in the VetIS system: 135,102 cattle of 18 breeds; 15,506 buffaloes of one breed; 356,926 sheep of 34 breeds; 34,897 goats of 10 breeds; 12,266 horses of 18 breeds.

The quality of the breeding material produced, entering and distributed on the territory of the country is controlled by the EASRAB, through the maintenance of a national register of male breeding animals and a Register of breeding herds from the national gene pool.

As of 31.12.2022 the Register of male breeding animals included: 2,506 beef bulls, 236 buffalo bulls, 9,110 rams, 1,282 he-goats, 328 stallions, 300 boars, 122 dogs and 67 rabbits.

Information is entered in the Register of Breeding Herds as follows: cattle breeding - 1,746 herds with 140,270 animals, buffalo breeding - 292 herds with 15,875 animals, sheep breeding - 2,109 herds with 348,145 animal, goat breeding - 366 herds with 33,492 animals, pig breeding - 33 herds with 42,216 animals, horse breeding - 896 owners with 12,033 animals, poultry farming - 15 herds with 1,791,811 birds. The register also includes 169 apiaries with 21,213 bee colonies, 33 owners of dogs of breeds of economic importance with 413 dogs, as well as 3 owners of rabbits with 719 animals.

In 2022, 1 importer was registered in the register of importers of organic products, with 5 notifications submitted for intra-community trade, and 1 for import from third countries. Doses of deep-frozen semen from 96 cattle breeders of 12 breeds were imported: Holstein, Brown Cattle, Simmental, Jersey, Wagyu, Hereford, Limousin, Aberdeen Angus, Blonde d'Aquitaine, Charolais, Salers and Belgian Blue.

8. Agricultural Science, Training and Advisory Activities

8.1. Agricultural Scientific Research and Scientific Service Activities Provided by the Agricultural Academy

8.1.1. Main research priorities in the AA

The research activity of the Agricultural Academy (AA) is related to the development of projects of national and pan-European importance in the field of agriculture, agroecology and food industry, aimed at achieving sustainable Bulgarian agriculture, food security and quality, safe and healthy food for society.

The AA carries out its activities within the framework of the state agricultural policy, the Common Agricultural Policy of the European Union and the National Strategy for the Development of Scientific Research (2017-2030).

In 2022, scientific-applied studies were focused primarily on scientific fields related to the development of innovation, economy, and society, namely:

- Health and quality of life. Prevention, therapy, green, blue and ecological technologies, biotechnologies, ecological foods;
- Environmental protection. Environmental monitoring. Utilization of raw materials and bioresources. Purification and waste-free technologies;
- Socio-economic development and management.

During the year, the structural units to AA developed a total of 250 scientific and research projects. Of these, 114 projects were funded by the Academy's budget subsidy; 78 by the Scientific Research Fund (SRF); 5 by the Ministry of Education and Science (MES) and 53 by the national and international organizations and agencies.

The leading researches were aimed at: conservation, restoration and sustainable management of soil resources and agroecosystems; assessment and mitigation of the impact of climate change, technology and innovation in conventional and organic farming.

In the field of genetic and selection research, experiments to create new varieties with increased productivity and quality, adapted to the market and climate change, as well as to reproduce the genetic diversity of local varieties as a valuable national treasure, have been conducted.

Research projects have been developed for: research, maintenance and increase of the diversity of animal species and aquaculture; strategies for the management of national genetic resources in animal husbandry; feed quality and animal nutrition innovations.

The scientific and research projects in the directions of traditional and new foods and beverages, durability and quality storage of food products were also developed with the participation of international partner organizations. Based on analyzes, strategies for viable rural areas have been developed, monitoring and evaluation of the implementation of various MAF programs and schemes covering rural areas are carried out.

AA and its structural units continue to maintain a gene fund that includes 105,976 plant specimens and 19,559 animals of various breeds.

AA scientists continue to work on the priorities set out in the Green Deal, such as the strategies "Farm-to-Fork" and "Biodiversity", the Zero Pollution for Air, Water and Soil Plan, the circular economy, the ecosystem restoration, and Digitalization of agriculture in line with the European Digital Decade (2020-2030).

A key aspect of the activity of the AA in 2022 was its participation in 4 projects: for modernization of the scientific infrastructure, which will increase the quality of scientific research and the prestige of the Academy as a scientific organization.

During the year, AA took part in 6 national scientific programs (NSP): NSP "Protecting the environment and reducing the risk of adverse phenomena and natural disasters"; NSP "Healthy foods for a strong bioeconomy and quality of life"; NSP "Intelligent plant breeding"; NSP "Intelligent animal husbandry";

NSP "Young scientists and postdoctoral scholars" and NSP "Stimulating publication activity in reputable international scientific journals and open access to scientific information".

Within these programs, the AA scientists create new varieties and hybrids of economically important agricultural crops, through which the aim is to improve the varietal structure in the country and to introduce into production crops with high adaptive potential to climatic changes, resistance to diseases and pests, high agronomic and nutritional qualities. They investigate the impact of land uses responsible for groundwater quality change in highly stressed agro-ecosystems, as well as forms of water and soil pollution caused by industry and energy. They study the impact of reduced irrigation on crop yield and quality. They construct demo fields to present varieties that are suitable for cultivation under biotic and abiotic stress associated with climate change. They create and maintain field collections of major crops. They conduct expeditions to search for, identify and preserve wild fruit species and old local varieties.

In 2022, AA scientists were actively involved in the development of the Program for local traditional and regional traditional products for the 2021-2031 period. The program looks at promoting local production and resources as a measure to reduce transport-related pollution and ensure food security.

8.1.2. Created scientific products, implemented in production

The creation and improvement of varieties is one of the most important tasks of AA. 307 certificates for cultivars of cultivated plants, distributed in list A and list B, are included in the Official Variety List of the country in 2022, issued annually by EAPVTASC. List A (cereals - 156, industrial crops - 48, fodder crops - 23) includes 227 varieties. List B includes 80 varieties (vegetables - 35, vines - 39, medicinal and aromatic plants - 6).

The certificates maintained for animal breeds are 8 (7 for silkworm breeds and 1 for carp breeds).

The scientific products that received legal protection in 2022 were 17 (16 for cereals and 1 for industrial crops). The tendency to create varieties with good adaptability and plasticity to changes in agro-climatic conditions, good productivity and quality, allowing the development of sustainable and competitive agriculture in Bulgaria continues.

AA has been involved in more than 100 licensing, distribution and trade agreements with Macedonia, Moldova, Turkey, Russia, Romania and Ukraine. Bulgarian varieties are listed in the variety lists of Serbia, Turkey, Romania, Northern Macedonia and China.

More than 30 contracts for the sale of certified silkworm eggs and livestock have been completed with countries in Europe, the UK, Australia and America.

In 2022, the Academy has implemented innovative scientific developments in cooperation with the Institute of Cryobiology and Food Technologies - Sofia and the Institute of Animal Sciences - Kostinbrod.

8.1.3. Transfer of knowledge and scientific products

In the scientific departments of the Academy, 54 demonstrative fields and farms were created with production and educational purpose. In 2022, AA maintained 31 demonstration fields and organized 31 open days to acquaint farmers with new varieties of cultivated plants and breeds of livestock, with innovative selection, plant protection, agrochemical and technological solutions and practices.

During the year, 4 permanent and temporary stores were opened. AA scientists have delivered 341 lectures and reports, taken part in 153 radio and television broadcasts, published 175 pieces in the press related to giving recommendations to farmers and explaining scientific facts. Surveys were conducted to gather opinions among the different stakeholder groups (breeders, producers, processors, traders, culinarians and consumers). Academy specialists have consulted farmers on issues related to the varietal structure of crops grown in their respective regions, the fight against diseases and pests, the competitiveness and profitability of different types of production. 650 opinions and expert conclusions have been prepared for farmers, cooperatives, departments, and commercial companies. The Professional Training Center of the AA has conducted 63 training courses in various specialities of the farming profession. 56 scientific-practical conferences and round tables on modern agriculture, economics and marketing were held. The AA departments have participated in 41 exhibitions and fairs of national and local nature.

8.1.4. Qualification structure of scientists and training of doctorate students

In 2022, 482 scientists worked in the AA, which unfortunately continues the downsizing trend of the last decade.

During the year, 41 PhD students were trained in the structural units of the Academy. There were 10 newly enrolled PhD students. 8 doctorate students received diplomas for educational and scientific degree "Doctor". The training of doctoral students takes place in 21 scientific institutes of the AA under 31 doctoral programs (a total of 56 accreditations), from 8 professional fields in 4 scientific fields, approved by the National Agency for Training and Accreditation (NEAA).

8.1.5. Specialized scientific journals

In 2022, 1,185 scientific papers were published, of which 257 publications in impact factor and impact rank journals and 323 articles in the common database of Web of Science (All databases). The articles in peer reviewed foreign and Bulgarian journals with scientific review were 600, and the published monographs and book chapters - 5. The number of quotations was over 2,500, of which 1,930 were in journals from the Web of Science and Scopus lists.

8.2. Advisory activities

The National Agricultural Advisory Service (NAAS) assists farmers by providing advisory services from experts with appropriate education and experience. Farmers receive consultations and advice on issues related to their support under various schemes and measures with EU and national funding, as well as on various technological and specialized issues, especially agricultural innovation. The Service supports young farmers through training to improve their knowledge and qualifications. Improved knowledge and skills lead to increased competitiveness and viability on small farms and the development of the business management skills of the managers of these farms.

NAAS supports the transfer and application of scientific and practical achievements in the field of agriculture and thus helps to improve the "research - advice in agriculture - agricultural business" relation. In 2022, the activities related to the organization of demonstration events were increased in order to improve mutual learning and exchange of knowledge between farmers and to strengthen the link between them. Conducting online trainings/seminars continues to be a common practice.

The Service conducts vocational training, courses, seminars, information activities and key competency trainings for farmers through the licensed Professional Training Center at NAAS.

Remote reception (consultation days) are organized and held in different settlements, which are far from the regional centers, in order to facilitate the access of farmers to consulting services.

The NAAS disseminates useful information to farmers and promotes good practices in applying for and implementing Rural Development Program (RDP) projects. All consultations provided by the NAAS are free of charge for farmers.

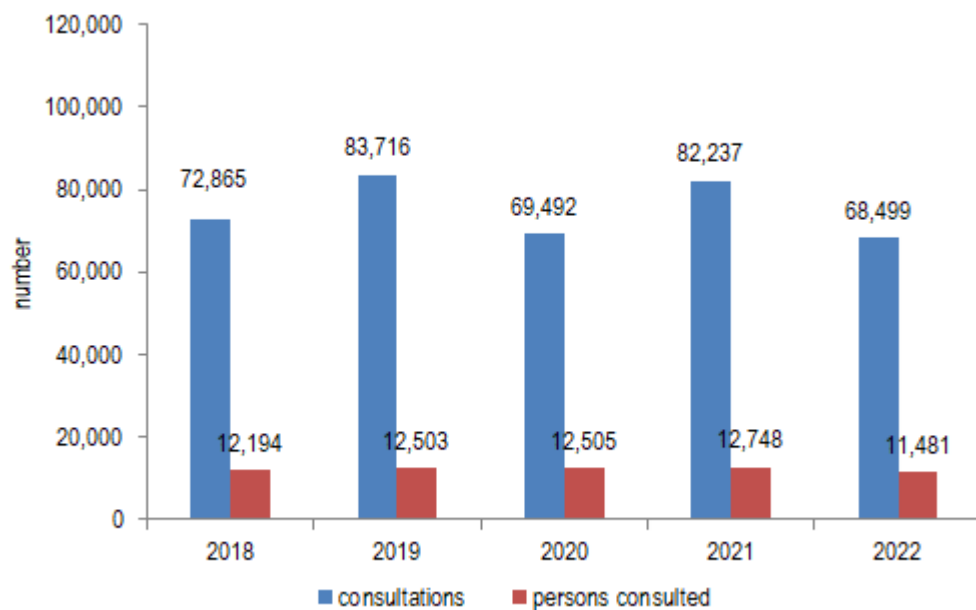
In 2022, the experts from the Territorial Regional Offices (TRO) of NAAS have provided free consultations to candidates for support under RDP 2014-2020 - under sub-measure 6.3 "Start-up aid for the development of small holdings" and under sub-measure 6.1 "Start-up aid for young farmers". The consultancy assistance includes the preparation of project proposals, the completion of the documents accompanying the project proposals, as well as technical assistance in their submission to UMIS 2020.

In October 2022, 28 mobile municipal centers/offices (MMOs) were established under the advisory service, covering 96 municipalities in the country. The establishment of the MMOs aims to facilitate the access of small farms to specialized advisory services, as well as to improve the capacity of the organization's participants to transfer knowledge and to innovate.

In 2022, a total of 11,481 individuals received 68,499 consultations from NAAS experts. Compared to 2021, a decrease is observed in the number of consulted individuals by 10% and of consultations by 17%. The decrease in the number of consulted individuals was due to an increase in the volume and duration of each consultation.

The NAAS activities are mainly focused at the following target groups: farmers who have already started their agricultural activity (this group is dominated by small farms); persons who want to start an agricultural activity; persons living in rural areas, including forest owners.

Figure V.6. Total number of consultations made and persons consulted for the 2018-2022 period.

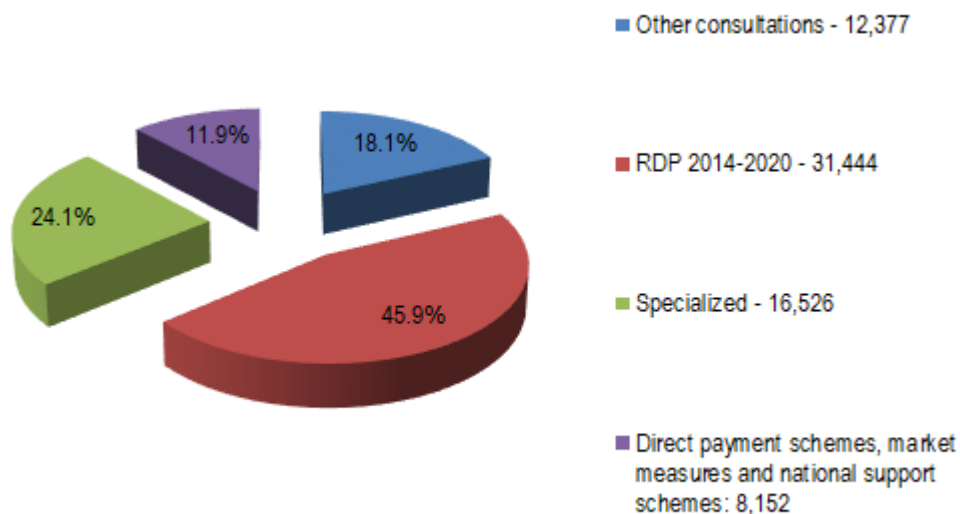


Source: NAAS

In 2022, experts from the Service made 2,397 on-site visits to agricultural holdings, which is over 10% more than in 2021. During the on-site visits to their farms, the farmers received specific advice and an assessment of the conditions in which agricultural crops were grown and animals reared. This helps to increase the quantity and quality of products in compliance with European norms and standards.

In 2022, NAAS experts provided 5,788 consultations on topics related to the third National Action Plan on Climate Change (NAPCC) for the 2013-2020 period. 3,871 persons were consulted on topics related to different activities with direct or indirect effect on the reduction of greenhouse gas emissions - 33% less compared to 2021.

Figure V.7. Provided consultations by type in 2022



Source: NAAS

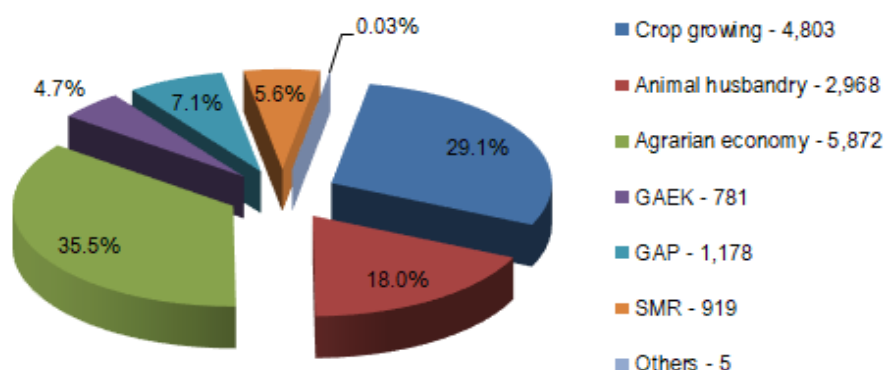
Top position during the year was occupied by consultations under the RDP 2014-2020 - 31,444 (about 46% of all consultations). Compared to 2021, they went down by 16%. This type of consultations is mainly related to the opportunities for support under sub-measure 6.3 "Start-up aid for the development of small holdings", sub-measure 6.1 "Start-up aid for young farmers", sub-measure "Support for investments in agricultural holdings", measure 9 "Creation of producer groups and organizations" and measure 11 "Organic farming" of the RDP 2014-2020.

The 16,526 specialized consultations came second and they also reported a decrease by 18% compared to a year prior. The topics of the specialized consultations provided in 2022 can be summarized in the following main areas: agrarian economy - 5,872; crop growing (incl. organic plant growing) - 4,803; animal husbandry (incl. organic animal husbandry) - 2,968; rules for good agricultural practice (GAP) - 1,178; statutory management requirements (SMR) - 919; conditions for maintaining the land in good agricultural and ecological condition (GAEC) - 781; others (agrostatistics, fisheries and aquaculture, forest management) - 5.

The number of consultations regarding the Direct Payment Schemes, Market Measures and National Support Schemes group in 2022 was 8,152. The greatest interest in this group was shown towards consultations regarding: Single area payment scheme; Coupled support scheme for fruit and vegetables; National Beekeeping Program; National support schemes and state aids and payment for climate and environmentally friendly agricultural practices.

Consultations provided by the "Other" group were 12,377 in total. About 38% of them were regarding the registration and re-registration of farmers under Ordinance 3 of 1999. Most often, these consultations are of interest to people for whom agriculture has been an ancillary activity in recent years or do not have the necessary experience and want to turn agricultural production into a main activity. Next in this group were consultations regarding "Other registration, permit and license regimes related to agriculture", "Consultations on other registration, permit and license regimes related to agriculture", "Registration with the BFSA (plant protection), keeping logbooks and issuing documents".

Figure V.8. Distribution of specialized consultations provided in 2022



Source: NAAS

8.2.1. Vocational training

The Vocational Training Center (VTC) at the NAAS is licensed by the National Agency for Vocational Education and Training (NAVET). It provides high-quality, practice-oriented training in the field of agriculture to support the professional and individual development of farmers. The training programs were developed by NAAS experts in accordance with the requirements of ongoing vocational training. VTC organizes trainings for farmers at a time and place convenient for them, without having to be absent from their farms. All trainings are free of charge for farmers registered under Regulation 3/1999.

In 2022, a total of 117 people (farmers and experts) were trained at the VTC in the following areas: "Statutory Management Requirements (SMR) and Standards for Good Agricultural and Environmental

Condition of the Land", "Compliance with Labor Legislation, including Occupational Health and Safety for Agricultural Workers", "Innovative Technologies in Beekeeping and Production of Bee Products" and "Agroecology".

The offered professions and specialties are from the educational field of "Agriculture, Forestry and Fisheries" under the professional fields: "Crop Growing and Animal Husbandry"; "Horticulture (Parks and Gardens)" and "Forestry", according to the List of Vocational Education and Training Professions of the Vocational Education and Training Act.

8.2.2. Improving the "research - advice in agriculture - agricultural business" link

NAAS closely cooperates with various organizations to support the transfer of scientific knowledge and achievements, including the scientific institutes of the Agricultural Academy, Agricultural University - Plovdiv, Thrace University - Stara Zagora, University of Economics - Varna, Angel Kanchev University of Ruse, Forestry University - Sofia, Bulgarian Academy of Sciences - Institute of Biodiversity and Ecosystem Research, Regional Food Safety Directorates of the Bulgarian Food Safety Agency, Labour Inspectorates of the General Labour Inspectorate, territorial directorates of the National Revenue Agency, etc.

In 2022, a total of 105 joint information and training events were held (some of which online), with over 3,300 registrations. 174 lecturers other than the NAAS experts took part in the seminars.

At the seminars, specialized topics were presented, related to information about the activities of the Service, the opportunities to support farmers under the RDP 2014-2020 and through direct payments, as well as the Strategic Plan for the Development of Agriculture and Rural Areas of Bulgaria for the 2023-2027 period.

8.2.3. Information support

In 2022, NAAS experts organized 219 informational events (not including remote receptions), including: 170 seminars and information meetings, 29 seminars with demonstrations and 20 events in the form of information stand, round table, workshop. The total number of participants in the information events was 5,719.

During the year, a total of 860 remote receptions were held (21% more compared to 2021), with 2,503 persons consulted in this way. The aim of the extended reception days is to expand and facilitate access to the consultancy services for farmers whose farms are located far from regional cities. At the remote receptions, farmers received up-to-date information and advice in the field of agriculture and about the possibilities for support under measures from the RDP 2014-2020, the direct payment schemes, and the national support schemes.

149 pieces of Information materials (information leaflets, brochures, bulletins, farmer's calendar) on current topics and issues were prepared and disseminated to support their work with farmers.

Useful information for farmers was also provided through the NAAS website and social media.

8.2.4. Agrochemical analyses

The areas of laboratory activity of the Center for Testing and Assessment of Soil Suitability and Quality (CTASSQ) are related to the requirements for improving the activity and increasing the competitiveness of farms. The Center assists small farms in receiving advisory packages from NAAS experts.

The CTASSQ performs agrochemical analyses of soil samples for acidity, digestible phosphorus and potassium, mineral nitrogen (ammonia and nitrate), total nitrogen in soils, determination of active calcium, determination of humus and determination of the norm for liming acid soils.

In 2022, the laboratory received 748 soil samples from 384 persons, on the basis of which 793 samples were made for 4,031 determinations (analyses). Based on the performed analyses, 496 recommendations for fertilization were prepared. The received soil samples were mainly in connection with the provision of the consulting packages under sub-measure 2.1.2 "Consulting services for small farms" under measure 2 "Consulting services, farm management services and farm replacement services" under RDP 2014-2020.

8.2.5. NAAS activity under sub-measure 2.1.2 "Consultancy services for small farmers"

In 2022, implementation started of the project "Provision of consultancy package to young farmers by NAAS" under sub-measure 2.1.1 "Consultancy services for farmers and forester holders" of measure 2 "Consulting services, farm management services and farm replacement services" under RDP 2014-2020. The implementation of the project proposal facilitates the process of entry of young farmers into the agricultural sector, as well as the possibility for potential applicants to apply under sub-measure 6.1 "Start-up aid for young farmers" of measure 6 "Development of farms and enterprises" under RDP 2014-2020. NAAS experts support young farmers in submitting their project proposals and developing a business plan. They provide information and advice on the requirements, conditions and activities that young farmers must follow and carry out during the implementation of project proposals.

During the application period (02.11.2022 - 30.01.2023), 363 applications from young farmers were accepted for receiving an advisory package under sub-measure 2.1.1. Based on those, the Service's experts have prepared 362 business plans.

Of all the project proposals prepared under sub-measure 6.1, 258 or 71% were for crop farms, 79 for livestock farms and 25 for mixed farms.

8.2.6. NAAS activity under sub-measure 2.1.2 "Consultancy services for small farmers".

At this stage, NAAS is the only advisory organization approved by the EC to provide consulting services to small farms under the launched in 2016 sub-measure 2.1.2 "Consulting services for small farms" under measure 2 "Consulting services, farm management services and farm replacement services" of RDP 2014-2020.

Under sub-measure 2.1.2, the NAAS provides six main advisory packages entirely free of charge, contributing to the economic development and the strengthening of small farms through modernization and technological renewal, as well as to improving environmental protection and combating climate change.

The total number of submitted applications for receiving a consulting package under the sub-measure in 2022 was 1,419, on the basis of which 1,454 written reports were prepared. Over 99% of the submitted applications were closed by providing the requested advisory packages to the farmers.

8.2.7. Activity of the NAAS under measure 6 "Development of farms and enterprises" under RDP 2014-2020

In November 2021, a selection procedure was launched under sub-measure 6.3 "Start-up aid for the development of small farms" from measure 6 "Development of farms and enterprises" of the RDP 2014-2020. In this regard, the NAAS conducted a procedure for accepting applications for receiving a consulting package, including preparation of a business plan and basic information about the project proposal, for applying under sub-measure 6.3.

During the application period (01.12.2021 - 25.02.2022) under sub-measure 6.3 in UMIS 2020, 1,629 applications were registered, some of which were repeated. From the submitted projects, the Office's experts prepared 1,223 project proposals under the sub-measure.

Under sub-measure 6.3, 669 (54%) applicants were engaged in only in crop production, 400 (33%) only in livestock production and 154 (12%) were engaged in both. Regarding the specialization of the farms, 346 (28%) were highly specialized in the area of beekeeping, 313 (26%) mainly grew perennial crops and 132 (11%) grew vegetables.

8.2.8. Common Agricultural Policy 2021 - 2027

One of the highlights of the Common Agricultural Policy after 2022 and the new programming period 2023-2027 is to promote and support activities aimed at making greater use of modern technologies, knowledge and innovations. These activities will be supported in the Member States through the Agricultural Knowledge and Innovation Systems (AKIS), aimed at interaction between people and organizations, promotion of mutual learning, generation, sharing and use of knowledge and information related to agriculture. The systems should include a wide variety of participants - farmers, advisers, researchers, educational and training institutions, raw material suppliers, retailers, media representatives, ministries,

brought together in national or regional AKIS systems to generate and/or exchange knowledge. Communication between these is carried out by the advisory organizations in each Member State. In Bulgaria, this role is performed by the NAAS.

In 2022, the Strategic Plan for Agricultural and Rural Development of Bulgaria was prepared in relation to the EU's strategic decisions regarding the new CAP for the 2023-2027 period. It reflects the ten main goals set by the EU in regard to the CAP in the social, environmental and economic field, including the goal of stimulating knowledge and innovation.

The main challenges to overcome under the Green Deal aim to increase the contribution of EU agriculture to climate change action, improve the management of natural resources, ensure a fair economic return for farmers and strengthen biodiversity conservation.

In 2022, NAAS worked actively on the preparation and implementation of the Agricultural Knowledge and Innovation Systems (AKIS) as consulting services, data, knowledge and skill sharing are of key importance for all participants in the food system to remain sustainable.

8.2.9. International activity

NAAS is a member of the European Association of Agricultural and Rural Advisory Service Organizations (European Forum of Agricultural and Rural Advisory Services (EUFAS) and South Eastern Europe Advisory Service Network (SEASN)).

In 2022, the Service took part in the following projects and programs:

- project "Networking European Farms to Enhance Cross Fertilization and Innovation Uptake through Demonstration" (NEFERTITI) under the Horizon Program 2020. The project was successfully completed in September 2022. In it, the NAAS participated in Work Package 7 "Communication and dissemination of practice-oriented results for demonstration activities". As a result, a web-based platform and training kit for organizing on-farm demonstration events was created;
- project "Connecting advisers to boost interactive innovation in agriculture and forestry" (i2Connect), launched in November 2019. The project's main objective is engaging farmers and forest users in interactive innovation processes. The project's website contains useful information on AKIS systems and interactive innovation practices;
- task "Ensuring communication on social media", with the activities of the NAAS being related to the collection and processing of relevant information about the project and subsequent publication of messages on social media;
- project "Protection of Waters against Agricultural Pollution through Establishment of a Monitoring and Reporting Methodology for the Nitrate Action Plans" under the IPARD Program for the Republic of Turkey. The aim of the project is to improve the quality of water resources from agricultural pollution in Turkey, protect the environment and increase the resilience of farms to climate change;
- project "Technical assistance on local farm advisory services. Location - northern part of Cyprus" in consortium with NIRAS IC (Poland). A concept of a pilot research and demonstration program in the field of agriculture has been developed under the project;
- project "Support to the Operational Structure of IPARD in the Republic of Serbia (Managing Authority and IPARD Agency)". The main objective of the project is to support the Agriculture and Rural Development sector of the Republic of Serbia to implement the CAP in preparation for EU accession;
- project "European-wide network of pilot farmers implementing and demonstrating climate smart solutions for a carbon neutral Europe" (Climate Farm Demo) under the Horizon Europe program. The project supports the implementation of agricultural practices for climate-smart (precision) farming across the EU to reduce greenhouse gas emissions by up to 35%. This supports the implementation of the EU's 2030 Climate Plan;
- project "Modernization of agriculture through more effective and efficient Agricultural Knowledge and Information Systems (AKIS)" under the Horizon Europe program. The project's main objective is to

improve the capacity of the participants in the AKIS to operate the system more efficiently and to implement the transition towards sustainable management and use of natural resources in agriculture and forestry;

- project "Connecting and mobilizing the EU agricultural advisory community to support the transition to Climate Smart Farming" (ClimateSmartAdvisors). Its implementation started in April 2023. The main objective of the project is to strengthen and reinforce the agricultural advisory community in the EU, resulting in climate-smart (precision) farming practices.

9. Hail Suppression

The geographical position and orography of the country predetermine Bulgaria as one of the countries in Europe with high frequency and power of hail processes.

In recent years, there has been an increase in the frequency and severity of hazardous phenomena such as hailstorms, floods, tornadoes and lightning. Predictions based on numerical models in different climate change scenarios confirm this increase in the future. One of the geographical areas where a significant increase in extreme cases is predicted is South Eastern Europe.

Despite the observed fluctuations in the degree of urban activity over the years, Bulgaria is among the countries where the trend of increasing the frequency and strength of hail processes in general persists

The territory protected by the Hail Suppression Executive Agency (HSEA) in 2022 is approximately 52 million decares, using rockets and aircrafts.

The HSEA meteorological radar network provides monitoring of atmospheric processes over Bulgaria. Based on the information received, short-term forecasts are made for adverse weather events over the country, such as severe storms, lightning, torrents and hailstorms. Meteorological radar information is transmitted around the clock to certain structures at the Ministry of Interior, Air Force, State-Owned Enterprise "Air Traffic Management", the National Institute of Meteorology and Hydrology, State Enterprise "Management and Maintenance of Dams" and Sofia Municipality. The Agency's website constantly provides meteorological information on atmospheric processes and associated precipitation during different seasons of the year.

Joint teams of HSEA and the Regional Directorates of Agriculture conduct surveys for hail damage in protected areas after each impact. The Agency receives information on the sown areas, the condition and the phase of development of the crops, harvested areas, average yield, etc.

Season 2022 season is classified with a "high degree of hail activity" for Southern and Northern Bulgaria.

Based on weather forecasts and the phase of development of agricultural crops in the protected territories, in 2022 the active season for hail suppression with the rocket method on the territory of the country opened on 21 April and closed on 5 October.

The beginning of the active season for hail suppression with the aircraft method began on 24 May 2022 and ended on 27 September 2022.

9.1. Active impacts with a rocket method

Hail suppression with the rocket method is applied in the regions of Vidin, Montana, Vratsa, Pleven, Pazardzhik, Plovdiv, Stara Zagora, Haskovo, and Sliven, and the protected territory amounted to 22 million decares.

In 2022, 295 hail protection actions were carried out in 79 days in Northern and Southern Bulgaria using the rocket method, and 1,185 hail clouds were treated. The total treatment time was over 217 hours. The seeding was carried out using 15,171 rockets.

In April, active hail protection actions were conducted in the period between 25 and 28 April, when a series of cold atmospheric fronts passed over Bulgaria. 7 actions were conducted, treating 19 hail clouds with a total treatment duration of over 7 hours.

In May, 61 activities were carried out in 13 days. 234 cells with a total treatment time of 3,112 minutes were treated.

Characteristic for the month of June was the high frequency of formation of hail-threatening cumulus clouds. The weather situation over the country was dynamic, with frequent passage of cyclones and associated frontal systems. The hail processes that developed on 3, 9 and 14 June were characterized by greater intensity and mass. In total, for the month, 89 activities were carried out in 20 days. 339 hail hazard cells with impact time of 3,619 minutes were treated.

In July, days with pronounced atmospheric instability leading to prolonged processes with violent development of cumulonimbus clouds decreased compared to the previous month. The processes on 2 and 5 July are of note. 43 active impacts on 195 hail cloud cells were conducted, with a cumulative treatment time for the entire month of 1,842 minutes.

The month of August was distinguished by an atypically high frequency of convective processes. A total of 70 actions were conducted on 322 hail hazard cells on 18 dates, with a treatment time of 2,971 minutes. The majority of the active impact operations (45) took place in Southern Bulgaria.

Although circulation conditions in September carry the characteristics of a gradual transition from summer to autumn, 24 active impacts were conducted in 2022. 75 hail hazard cells were treated for 1,064 minutes on a total of 7 dates. The hail protection actions on 2 September stand out.

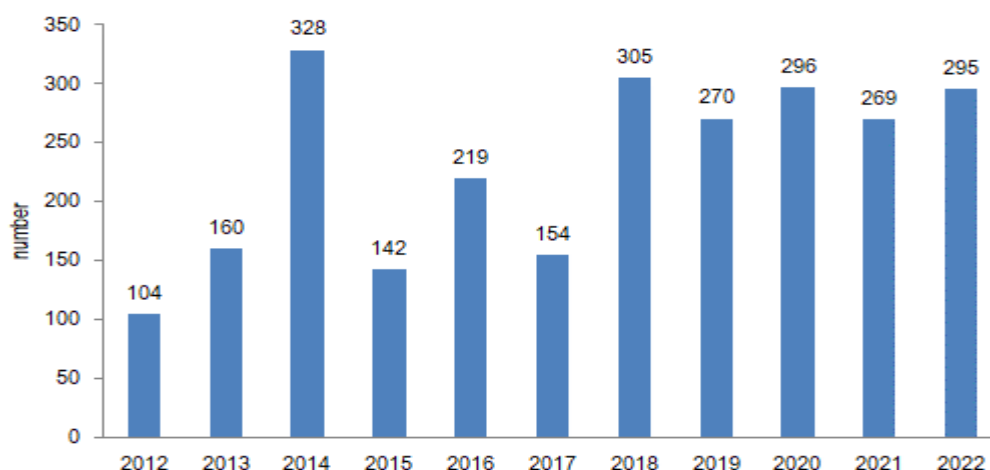
In October, only one action was conducted in the village of Popovitsa, Plovdiv Region on 2 October, treating one hail hazard cell.

Throughout the season of active impacts, crop affecting hail in the area protected by HSEA with rockets had only 11 cells treated on 6 dates in the May, June, July and August. Hail damage to agricultural production covered 7,057 decares with an average damage rate of 45.34%.

The main causes of damage in territories protected with the rocket method in 2022 were:

- insufficient sowing due to firing bans;
- reduced concentration of artificial competitive ice-forming nuclei and disruption of seeding rates due to restricted firing over settlements (sectors with prohibited firing);
- insufficient seeding and interruption of treatment due to technical problems occurring at the rocket sites or command post during operation (accidents, shortage of rockets, software problems, etc.);
- insufficient amount of reagent due to the location of the seeding area being out of reach of the rocket sites.

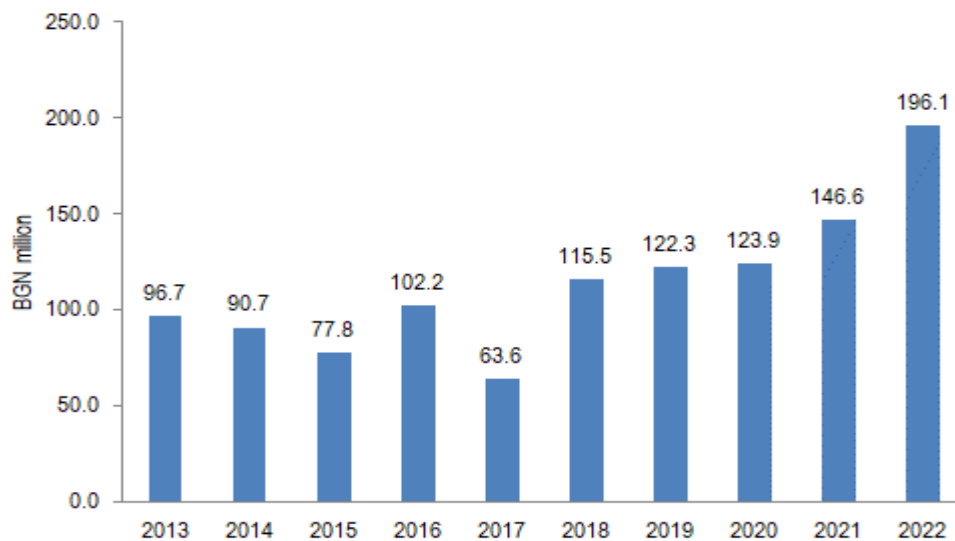
Figure V.9. Actions of the hail suppression system with rockets in the 2012 - 2022 period



Source: HSEA

According to the adopted Methodology for determining the economic efficiency of hail protection, in 2022 the value of the saved production as a result of cloud seeding carried out using the rocket method by HSEA is estimated at BGN 196 million.

Figure V.10. Value of the production saved from hail using the rocket method during the 2013 - 2022 period, BGN million



Source: HSEA

9.2. Active impacts with the aircraft method

The aircraft method is used to protect territories of about 30 million decare in North-Central and Northeastern Bulgaria. The advantage of the aircraft method is that it also protects urban areas, unlike the rocket method, where there is a ban on firing over populated areas.

The implementation of operations for seeding hail clouds is managed by the Operations Center located at Gorna Oryahovitsa Airport, the district of Veliko Tarnovo. The Unit for Technical and Line Maintenance of Aircraft (which includes engineers and technicians) and the Unit of Aircraft Pilots are also located there.

For the hail clouds aircraft seeding operations, a methodology is used, which includes:

- use of TITAN software to identify, track, analyze and make ultra-short-term forecast of thunderstorms;
- tracking the trajectory of the aircraft according to telemetry data (altitude and speed);
- use of radio communication equipment by the aircraft and the Operations Center.

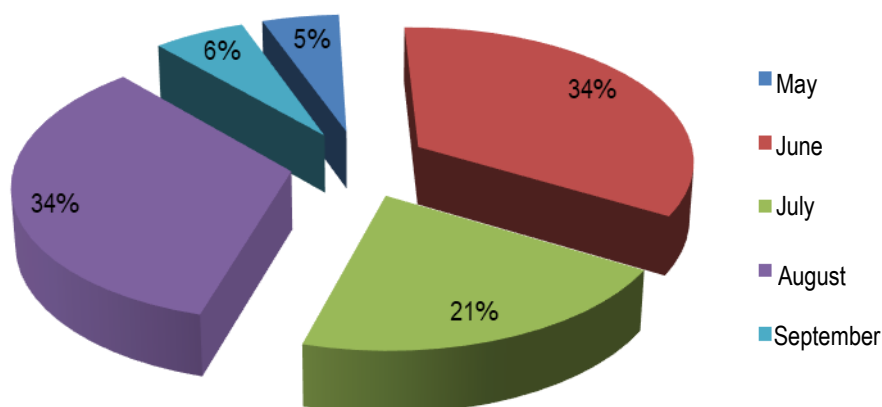
Three aircraft equipped with a system for igniting silver iodide (AgI) reagent sticks, located on the half-wings behind the engines, were used for the implementation of the project. One of the aircraft is equipped with an AgI reagent pyropatron firing system.

In the implementation of the anti-hail protection with aircraft in 2022, aircraft flights were permitted in the uncontrolled airspace up to 3,000 m, as well as the controlled airspace of the Republic of Bulgaria. After determining the viability of seeding at the cloud top with pyropatrons, it is also allowed to carry out anti-hail actions in the landing approach to Varna Airport.

During the active season, in the territory protected by aircraft, convective processes of the multicellular type are observed - linear and clusters, with clusters prevailing. In a small number of days, local convective processes or isolated unicellular cells were also observed.

Impacts with the aircraft method were carried out in 43 days and 325 hail hazards cells were treated. The days with the most impacts were in June and August, when 221 hail hazard cells were treated.

Figure V.11. Percentage distribution of the number of affected hail cells per months of 2022



Source: HSEA

A total of 4,963 sticks and 4,579 pyropatrons were used during the hail suppression period. The cost depends on the lifetime of the cloud cell in the hail-threatening stage and its power, as determined by its radar characteristics.

In 2022, hail damage to agricultural crops using aircraft protection was identified on 4 dates in June. The damage affected 11 thousand decares, with an average damage percentage of 28.66%.

The main causes of damage in territories protected with the aircraft method in 2022 were related to:

- development of convective clouds in the early morning hours, outside the working hours of Gorna Oryahovitsa Airport;
- hampered treatment due to delays or lack of seeding clearance on landing and takeoff approaches at Varna Airport;
- difficult access to the seeding area of the hail hazard cell due to flight safety requirements;
- long distance of aircraft from a new fast-growing cell and the time required to reach it;
- impossibility of changing the seeding altitude (only flight at a certain flight level is allowed).

10. Reducing the Regulatory and Administrative Burden on Business

10.1. Applied Regulatory Regimes in the MAF System

In early 2023, the Ministry of Agriculture and Food made an annual review of regulatory regimes applied in the system in 2022. The review was aimed at identifying the opportunities to reduce the regulatory and administrative burden on businesses and citizens, creating better conditions for business development by improving access and improving the quality of public services, and achieving higher efficiency of public spending.

The main mechanism for achieving this goal is the elimination of unnecessary regulatory regimes and optimization of the procedures for their implementation, introduction of electronic administrative services and increasing the volume of publicly available information for business operators and citizens.

The expected results from the reduction of the regulatory burden on business are: increasing the competitiveness of Bulgarian agriculture; providing an opportunity for the business to plan the impact of regulation; stimulating the development of economic activity; ensuring equal conditions for conducting business and creating conditions for fair competition.

In the process of identifying the current regulatory regimes in the MAF system, all special laws and regulations in the fields of agriculture, food, forests, and fisheries were analyzed.

Following the review of the regulatory regimes in the MAF system, as of 1 January 2023, 168 regulatory regimes related to the regulation of economic activity in the field of agriculture, fisheries and forests were identified, namely:

- licensing - 10;
- registration - 65;
- permits - 83;
- certificates- 3;
- notifying - 3;
- coordinating - 4.

Of the total number of regulatory regimes, 44 were administered by MAF - Central Office, and the remaining 124 - by various structures of the ministry system.

10.2. Measures Taken in 2022 to Reduce the Regulatory and Administrative Burden on Businesses

Due to the political situation in the country and the lack of a regular National Assembly during the period of the caretaker government, adopting changes to the current legislation was made difficult in 2022. As a result, some of the changes planned and prepared for 2022 to the normative and sub-normative acts related to the easing of regulatory regimes administered by MAF and its structures have not been adopted by the National Assembly and the Council of Ministers.

For example, the draft of a new Law on Wine and Spirits, providing for the easing of some of the regimes, has not been adopted by the National Assembly because the impact assessment has expired and the draft has been archived.

At the same time, by CMD No. 218 of 29.07.2022, they adopted the Tariff for the fees to be collected in the EAVW, promulgated, SG, issue 62 of 5.08.2022 r., in force from 01.09.2022, which determines the amount of fees payable when requesting services for certain regimes for which no fees have been collected so far. This led to the aggravation of the following regimes:

- Validation of the certificate issued by the Regional Vine and Wine Chambers for the origin of grapes intended for the production of wines;
- Issuing of a wine safety certificate for wine intended for export to third countries;
- Issuing of a certificate for varietal wine production.

11. Risk and crisis management in agriculture

In implementation of the measures set out in the Risk and Crisis Management Program in the Agriculture sector to limit the negative impact of the identified risks on agriculture, forestry and fisheries, in 2022 actions were taken in the following main areas:

- Limiting the consequences of the global COVID-19 pandemic crisis and the destabilization of markets for agricultural products and raw materials for their production as a result of the Russian aggression against Ukraine in order to ensure the country's food security;
- Stabilization and increase of the income of farmers and creation of conditions for development of efficient agricultural production;
- Limiting the potential hazards and managing the factors for outbreaks of infectious diseases in animals and plants;
- Limiting the potential risks of floods and forest fires;

- Overcoming the harmful influence and material damages by the occurred sanitary crises in the animal husbandry and plant growing;
- Limiting the consequences and overcoming the harmful effects and losses for farmers from natural and climatic disasters, field and forest fires;
- Preservation and restoration of the biodiversity of river and sea basins and forests.

The management of risks in agriculture, the food industry, fisheries and forests in Bulgaria, as well as the limitation of the possibilities for their eventual manifestation, are of essential importance to ensure the sustainable development of these sectors. The implementation of the measures to manage the identified risks is funded from European funds and from the state budget of the Republic of Bulgaria.

The main directions for which funds were spent in 2022 were for the implementation of measures and activities for:

- prevention against infectious diseases of animals and plants;
- limitation of the harmful influence of natural and climatic phenomena;
- income support for farmers and employed persons in the Fisheries sector;
- increasing the competitiveness of the sectors related to the primary production of agricultural products, fisheries, small and medium-sized enterprises from the food industry;
- conservation of natural resources and biological diversity;
- financial support to overcome the liquidity shortage for farmers in primary agricultural production - enterprises directly or indirectly affected by the serious economic difficulties caused by the Russian military aggression against Ukraine, the restrictive measures (sanctions) imposed by the EU or its international partners.

The measures and actions undertaken to overcome the negative impact of the identified risks in agriculture, food industry, fisheries and forests are divided into three main groups depending on their nature: sanitary risks, natural and climatic risks and economic risks. The measures to overcome the negative consequences in agricultural production caused by the global pandemic of COVID-19 and the Russian invasion of Ukraine shall be added to these, as they are essential to maintain the financial stability and profitability of farms.

11.1. Sanitary risks

11.1.1. Specific risks in the Livestock sector

The sanitary risks in the Livestock sector were managed via three tools - state aid, measures under the Rural Development Program (RDP) 2014-2020 and control during cross-border transit when importing consignments into the EU from third countries and when moving consignments between member states.

• State aid

In order to prevent the spread of infectious diseases in animals, the most used instrument in Bulgaria is support to farmers through state aid, namely: "Aid to compensate farmers for costs related to implementation of measures under the State Prophylactic Program and the Programs for the Surveillance and Eradication of Animal Diseases" and "Aid to compensate for the costs of disposing and destroying of dead animals".

The financial resources disbursed for the implementation of the measures under the State Prophylactic Program and the Programs for the Surveillance and Eradication of Animal Diseases in 2022 amounted to a total of BGN 19,125,026.17 and the users of the provided subsidized service were 2,467. Financial resources are allocated to registered veterinarians and the Bulgarian Food Safety Agency for the purchase of diagnostic kits and vaccines.

In 2022, the financial resources spent on disposing and destroying of dead animals as a prevention against the spread of contagious diseases in animals and subsequently in humans amounted to BGN 7,994,559.

- **Measures under the Rural Development Program (RDP) 2014-2020**

With the Sixth Amendment of the RDP 2014-2020, approved by EC decision of 27.04.2020, a new measure 5 "Restoration of agricultural production potential and introduction of appropriate preventive measures" was included in the RDP 2014-2020. The measure has two sub-measures - 5.1 "Support for investments in preventive measures aimed at limiting the consequences of probable natural disasters, adverse climatic phenomena and catastrophic events" and sub-measure 5.2 "Investments to restore the potential of agricultural land and agricultural production potential disrupted by natural disasters, adverse climatic events and catastrophic events".

Measure 5 was launched with a budget of EUR 31,471,690 or BGN 61,553,275 of public funds. No calls for project proposals were held in 2022 under sub-measure 5.1 "Support for investments in preventive measures aimed at limiting the consequences of probable natural disasters".

- **Control during cross-border transit when importing consignments into the EU from third countries and when moving consignments between member states**

The management of the risks of infectious diseases in animals during cross-border transit of import consignments is carried out through the implementation of animal disease surveillance and eradication programs and a plan for sampling feed and food of animal and non-animal origin.

11.1.2. Specific risks in the Crop and Forestry sectors

The identified sanitary risks in the Crop and Forestry sectors are related to the spread of quarantine pests on plants and plant products, and diseases, pests and abiotic factors in forests.

The financial resource spent for risk management in the Crop Growing and Forestry sectors in 2022 was in the amount of BGN 16,151,887, about 1.3% less compared to 2021. The relative share of financial resources spent in 2021 and 2022 on managing the risks of economically important pests on plants and plant products is about 99%, and on managing the risk of damage caused by diseases, pests and abiotic factors in forest areas is about 1% of the total amount spent on managing sanitary risks in the sectors of Crop Growing and Forestry.

The activities and measures for managing this risk were funded with public funds from the state budget of the Republic of Bulgaria and with funds from the state-owned enterprises in the Forests sector.

In order to limit the spread of quarantine pests and economically important pests on plants and plant products, in 2022 the ASF administered 4 state aid schemes for the Crop Growing sector, namely:

- Aid to compensate farmers for the implementation of measures under the National Program of Measures for Control of Tomato Leafminer - Tuta absoluta Meyrick (Lepidoptera);
- Aid to compensate farmers for the implementation of measures under the National Program of Measures for Control of Soil Pests on Potatoes from the Wireworms (Elateridae) Family;
- Aid to compensate farmers for the implementation of measures under the National Program for Pest Control in Perennials during the winter period;
- Aid for certification of holdings in the fruit and vegetables sector under the GLOBAL G.A.P. standard.

The total amount of state aid disbursed under these schemes for 2022 is BGN 8,926,645, which represents an increase of 9.5% compared to 2021 and 12.3% compared to 2020. At the same time, the trend of decrease in the number of farmers applying for support and accessing funding continued in 2022 - by 1.9% compared to the previous year 2021 and by about 58% compared to 2020.

For the past 3 years, the largest relative share of state aid funds has been granted for the control of pests in perennials, followed by those for the control of soil pests on potatoes from the Wireworms (Elateridae) family.

The management of the risks of quarantine pests in plants during cross-border transit when importing consignments is carried out through the implementation of monitoring programs for the inspection of plant pests.

The preventive activities to limit the negative impact of the spread of diseases, pests and abiotic factors on forest territories, which are carried out by EFA and the state-owned enterprises, are expressed in identifying the plantations and carrying out the necessary forestry and forest protection measures in their parts affected by biotic and abiotic damage; aerial spraying against leaf-gnawing insects; carrying out forest protection activities; carrying out sanitary and forced logging.

11.2. Natural and climatic risks

In the context of the European policy to limit the negative consequences of climate change observed in the last 15-20 years, the management of natural and climatic risks for agricultural production ranks first compared to other types of identified risks. The strong dependence of agriculture and forestry on natural factors characterizes the environmental and climatic risks as "particularly significant", having a strong impact on agricultural production and the protection of biodiversity.

One of the most common reasons for the occurrence of disasters that can be detrimental to the agricultural production were natural and climatic phenomena - hail, floods, drought, etc. Based on the need to adapt to climate change, the prevention against natural risks includes a number of activities providing adequate measures to prevent and reduce the possible harmful impact to acceptable levels. These activities are aimed at building early warning systems for emerging flood hazards, fires, activating landslide areas, cleaning riverbeds, and building protective facilities.

In order to prevent natural and climatic phenomena, activities to limit their harmful impact on agriculture are financed annually through the state budget of the country. They are aimed at:

- hail suppression;
- flood prevention measures;
- limiting the harmful impact of prolonged drought on crops;
- limiting the harmful effects of forest fires.

The amount of funds spent in 2022 for the prevention of the harmful effects of natural and climatic factors was the largest of the last three years - BGN 65,450,106, which was BGN 19.5 million or 42.5% more than in 2020.

The total amount of funds spent for the implementation of measures to prevent the negative impact of natural and climatic events in the last three years - 2020, 2021 and 2022 - was BGN 159,279,645. The largest part of the financial resources was spent on hail suppression, and the smallest - on forest fire prevention.

11.3. Economic risks

The economic risks were mainly related to the reduction of farmers' incomes, the competitiveness and limitation of the market positioning and supply of Bulgarian agricultural products. The overall result of all factors (production, market, nature and climate) influencing agricultural production was a decrease in the income of farmers and extensive development of agricultural production.

The dynamics of the market situation created prerequisites for instability and for limiting the possibility of realization of agricultural production, as a result of which fluctuations in the income of farmers were observed in some sectors. These fluctuations were more pronounced in the crop production due to the strong dependence of production on environmental and climatic conditions.

The main tools used to manage economic risks were covered in direct payment schemes, state aid, the Rural Development Program 2014-2020, the National Support Program for the Viticulture Sector 2019-2023 and the Maritime and Fisheries Program 2021-2027.

11.4. Overcoming the negative consequences caused by the global COVID – 19 pandemic and the Russian invasion of Ukraine

The COVID-19 pandemic has shown the vulnerability of the European food chain in the event of severe supply disruptions. Existing measures under the Common Agricultural Policy and other relevant EU policies have helped to mitigate the most severe cases of shortages and speed up recovery, but have also highlighted the need for rapid planning and adequate timely action to overcome future crises.

At the end of 2021 and in 2022, following the emergence of new and less virulent strains of the COVID-19 virus, both in Bulgaria and in many countries around the world, the restrictive measures in place began to be phased out. This gave the start of a process of restoring commercial and tourist flows as well as normal daily life for citizens.

However, the effects of the COVID-19 epidemic continued to impact agricultural producers and processors in 2022 as well, and their recovery process was hampered by the next major crisis - the war in Ukraine.

In order to help farmers and agri-food businesses recover from the adverse effects of the COVID-19 epidemic, schemes have been developed to support the agricultural sector through state aid and Rural Development Program (RDP) measures as follows:

- **Temporary framework for state aid to support the economy in the conditions of a COVID-19 outbreak**

To assist member states in dealing with the effects of the COVID-19 pandemic, the European Commission has given a specific opportunity through the “Communication from the Commission - Temporary framework for State aid measures to support the economy in the current COVID-19 outbreak” to develop temporary state aid measures to provide liquidity and access to financing to businesses facing sudden shortages of funds during this period to enable them to recover from the current situation.

In this regard, the support scheme "Liquidity support to farmers to overcome the negative economic impact of COVID-19" (to support large ruminants, small ruminants, bee colonies, fruit and vegetables) has been developed in 2022. The total subsidy paid amounted to BGN 143,463,861 and the total number of farmers supported was 26,674.

- **Market disruption in the pork sector as a result of the war in Ukraine, COVID-19, reduced exports to China and the spread of African swine fever in the EU**

In 2022, the pork sector is characterized by extremely difficult market conditions due to the restrictions associated with the containment of African swine fever, increased production requirements in slaughterhouses in the conditions of the COVID-19 pandemic, oversupply of pork on the European market, high feed costs, and export difficulties caused by the invasion of Ukraine. In order to achieve a balance between supply and demand, the European Commission has taken measures to provide financial assistance by introducing exceptional support for the Pig farming sector with the Implementing Regulation (EU) 2022/470 of 23 March 2022 for the provision of assistance to private storage of pork and for preliminary determination of its size. The aim of the scheme is to regulate average market prices in the European Union by restoring market equilibrium by temporarily withdrawing pork from the market.

On 1 April 2022 the call for applications for assistance under the temporary emergency scheme for assistance for private storage of pork was opened. On the basis of the applications accepted for the storage of fresh pork, 5 contracts have been concluded to the value of EUR 94,759.40, equivalent to BGN 185.330.

- **Overcoming the negative consequences for agricultural production caused by the Russian invasion of Ukraine**

As a result of the emerging geopolitical crisis triggered by the Russian military aggression against Ukraine and the sanctions imposed by the EU or its international partners against Russia, significant economic uncertainty has been created in 2022, disrupting trade flows and supply chains, leading to serious price increases for much of the agricultural input. The high dependence of EU countries on energy, fertilizer

and feed imports from Ukraine, Russia and Belarus has led to a significant increase in production costs for agricultural and food production.

In this regard, the EU has adopted a number of measures aimed at increasing the liquidity of farmers in primary production, overcoming market imbalances and creating business continuity.

In 2022, these measures are grouped under 3 areas:

- Market stabilization measures for certain agricultural sectors affected by the invasion of Ukraine and the economic crisis;
- Temporary framework of state aid measures to support the economy following Russia's aggression against Ukraine;
- Extraordinary temporary support for farmers and small and medium-sized enterprises particularly affected by the consequences of the Russian invasion of Ukraine, financed through RDP 2014-2020.

11.5. Measures to manage crises in agriculture

11.5.1. Managing the economic crisis in the viticulture sector caused by the COVID-19 pandemic

The crisis measures package includes a Green Harvesting Measure, which is the full removal of bunches while they are still green so that the yield from the area is reduced to zero. The aid is intended to compensate Bulgarian grape growers who cannot market their production due to low demand for wine grapes as raw material. Financial assistance from the European Agricultural Guarantee Fund (EAGF) amounting to BGN 945,960.19 was paid under the measure.

Another crisis measure foreseen by the EC and implemented in a timely manner in the viticulture sector in the country is the extension of the period of increase in the amount of support for all measures of the National Support Program for the Viticulture Sector. The increased amount of support for measures in the sector is as follows: under measure "Restructuring and conversion of vineyards", the aid is 90% (instead of 75%) of the eligible costs incurred; under measures "Harvest insurance", "Promotion of third country markets", "Investment in enterprises" and "Green harvesting" the aid is 70% (instead of 50%).

11.5.2. Sanitation crises and crises caused by adverse climatic and natural disasters

In 2022, the following local sanitary crises and crisis situations caused by natural disasters in the Livestock and Crop Growing sectors were declared in the country:

- For the Livestock sector, local sanitary crises were declared in several areas of the country related to avian influenza and African swine fever, as well as crises caused by natural disasters - adverse weather events;
- For the Crop Growing sector, crisis situations were declared in almost the entire territory of the country, caused by unfavorable climatic conditions and natural disasters - freezing, frosting, storm, pelting, torrential, continuous rain with hurricane force winds, flooding, overwetting of agricultural land, hail and drought - dry spells.

In order to overcome the negative impact of the crisis situations that have arisen, as well as to reduce property damage to farmers, the following measures were taken in 2022:

- controlling outbreaks of acute infectious animal diseases;
- limiting the spread of contagious animal diseases;
- provision of financial means to farmers as state support through additionally provided funds from the state budget of the Republic of Bulgaria;
- state aid to compensate material damages for dead animals and destroyed beehives as a result of natural disasters;
- state aid to compensate for damage to crops caused by adverse climatic events that can be equated to natural disasters;
- de minimis aid, according to Regulation (EU) No. 1408/2013.

VI. FORESTRY

1. Characteristics of Forest Areas

The total area of forests and forest territories in Bulgaria as of 31.12.2022 amounted to 4,273,126 ha, of which 3,926,058 ha were forested area (including dwarf pine).

The area of the forest territories were 3,955,790 ha, of which 2,889,748 ha (73.1%) were forest territories - state property, managed by the state enterprises under Art. 163 of the Forest Act, 172,362 ha (4.4%) state forests managed by the MoEW (including reserves and maintained reserves - 33,386 ha, Rila National Park - 53,480 ha, Pirin National Park - 40 332 ha and Central Balkan National Park - 45,164 ha), 11,269 ha (0.3%) state forest territories provided for management of Training and Experimental Forestry Units, 441,858 ha (11.2%) forest territories - property of municipalities, 381,068 ha (9.6%) forest territories - property of individuals and 59,485 ha (1.5%) forest territories - property of legal entities (including 17,062 ha forest territories - property of religious communities).

The area of agricultural territories possessing the characteristics of a forest within the meaning of Art. 2 of the Forest Act (forests on agricultural territories) was 317,336 ha, including: 30,943 ha (9.8%) forests on agricultural territories - state property, 186,720 ha (58.8%) forests on agricultural territories - municipal property, 76,519 ha (24.1%) forests on agricultural territories - property of natural persons, 11,637 ha (3.7%) of forests on agricultural territories - property of legal entities (including 2,232 ha of forests on agricultural territories - property of religious communities) and 11, 113 ha (3.5%) forests temporarily managed by the municipality. The remaining 0.1% are agricultural areas with unclear ownership.

The total forest area is 2,857 ha more compared to 2021. The afforested area has increased by 4,668 ha, to 3,926,058 ha, mainly due to the inventory of previously undeveloped forested areas. The afforested area in the forest territories 3,610,429 ha, 7,864 ha more compared to a year prior.

The area of forest territories is 3,955,790 ha, 6,264 ha more than in 2021.

The area of forests on agricultural territories decreased by 3,407 ha to 317,336 ha.

An increase in the area of state forest territories by 2,993 ha was reported, which is mainly due to the inventory of newly forested territories, purchases by state enterprises of forests owned by individuals, as well as administrative proceedings to change the intended use from agricultural to forest territory. The area of the Training and Experimental Farms decreased by 2 ha, as a result of the granting of four properties from TEFF "Georgi St. Avramov" to the Ministry of Energy for the Yadenitsa dam.

The area of the municipal forest territories increased by 3,935 ha, which was mainly due to procedures carried out to change the intended use from agricultural to forest territory. The forests on agricultural territories - municipal property increased by 2,929 ha.

The area of the state forests managed by the MoEW was 175 ha less compared to a year prior due to corrected duplication of areas.

The non-timber-producing area decreased by 214 ha to 306,586 ha. The unforested forest area shrank by 2,698 ha - from 44,777 ha to 42,079 ha, as a result of a reassessment of bare lands and clearings, as well as more accurate mapping during forest and forest territories inventory. The unforested forest area decreased by 1,597 ha to 40,482 ha, as a result of new afforestation in 2022.

Despite the emergence of self-afforested areas, the afforested area of coniferous forests was 2,364 ha less than the previous year. This was due to the fellings made in connection with biotic attacks of bark beetles and mass drying of pine crops outside the area, which were subsequently reforested with native deciduous species, to the continuing increase in mixed coniferous-deciduous plantations obtained after the creation and subsequent management of coniferous stands, as well as the policy pursued in recent years for the transformation of coniferous plantations and stands created outside their natural range. This trend will continue in the future.

Deciduous high-stemmed forests were 2,165 ha more, due to the conversion of shoot stands to high stem ones, afforestation of post-fire areas, windfalls, self-afforestation of unforested forest areas,

reassessment of coniferous stands and low-productivity plantations and transformation of coniferous forests into deciduous.

The coppice forests for conversion increased by 5,089 ha after the addition to the forest territories of plantations, until now included in the category of the so-called "undeveloped forests" and the revaluation of coniferous stands mixed with deciduous shoots.

Low-stemmed forests decreased by 222 ha, due to the reassessment of some of the acacia and hornbeam plantations, in which other coppice and/or high-stem tree species predominated.

The general use of regeneration loggings and thinnings for the forest territories, carried out in 2022, amounted to 7,644,163 cubic meters of standing mass, which is equal to 94.5% of the foreseen under the forestry plan (forest development project) 8,091,492 cubic meters of standing wood.

Of these, 3,880,949 cubic meters were from regenerative felling. The implementation of the regenerative felling compared to the planned ones according to the forestry plan (4,623,648 cubic meters) was 83.9%.

3,763,214 cubic meters were harvested from thinnings, which was 108.5% of the one envisaged in the forestry plan (3,467,844 cubic meters).

The annual use in the forest territories - state property amounted to 5,943,365 cubic meters of standing mass or 94.7% of the 6,278,419 cubic meters of standing mass envisaged in the forestry plan (forest management project).

The sold annual use of the forests, provided to training experimental forestry units, amounted to 62,755 cubic meters of standing mass (219.3% of the planned); from the municipal forest territories - in the amount of 722,186 cubic meters of standing mass (70.7% of the planned); and that of forests - property of individuals and legal entities - in the amount of 909,810 cubic meters of standing mass (119% of the planned).

The annual use of forests on agricultural territories is in the amount of 94,139 cubic meters of standing mass.

2. Changes of Forest Areas

In 2022, the following changes took place in the forest territories of the country:

- 12 administrative orders for change of the purpose of land properties in forest territories pursuant to art. 14 of the Forest Act (repealed), with a total area of 7.50 ha, with a price for the change of BGN 781,632, were issued. The allocated funds for compensatory afforestation were BGN 86,642.92. Three administrative orders were issued to terminate administrative proceedings for a change of intended usage. There is one administrative order with extinguished rights due to unpaid debts in the statutory period;
- 32 administrative orders were issued for preliminary approval of a change in the intended usage of land properties in forest territories, with a total area of 86.97 ha, pursuant to Art. 75 (3) of the Forest Act; 1 administrative order was issued under which administrative proceedings on the change of the intended use were terminated and 2 administrative orders were issued with which preliminary approval of a change in the intended usage of land were denied;
- 45 administrative orders for the change of the intended usage of land properties in forest territories pursuant to art. 77 of the Forest Act, with a total area of 128.43 ha, with a price for the change of BGN 4,127,570, were issued. Funds for compensatory afforestation in the amount of BGN 1,243,201.80 were allocated. The purpose of 13.56 ha of forest territories was changed free of charge pursuant to art. 73, para. 5 of the Forest Act for the construction of 3 national sites and 5 municipal sites of primary importance, and 8 administrative acts establishing already existing rights and obligations, were issued;
- 5 administrative orders were issued for acquisition of the right of ownership over 0.16 ha of forest territories - private state property, representing built-up and normatively determined adjacent area of

buildings, structures, networks and facilities, by the order of § 123, para. 3 of the TFP to the Act amending and supplementing the Forest Act, with a total sale price of the land properties of BGN 21,416.10 and overheads in the amount of BGN 335.32. 1 administrative order for refusal of acquisition of the right of ownership over the built-up and normatively determined adjacent area of buildings, constructions, networks and facilities by the order of § 123 (3) of the TFP to the Act amending and supplementing the Forest Act was issued;

- 128 administrative orders for the change of the intended usage of land properties (with total area of 5,388.89 ha) from agricultural to forest territory pursuant to art. 81 of the Forest Act were issued. The change is free of charge; 1 administrative order was issued to terminate administrative proceedings and 1 administrative order was issued to amend and supplement an already issued and enforced administrative order to change the intended usage of land properties from agricultural to forest territory;
- 4 administrative orders were issued for preliminary approval for granting the right to build on state-owned forest territories, with a total area of 0.10 ha, pursuant to Art. 55 of the Forest Act;
- 8 administrative orders were issued for establishing the right to build, pursuant to art. 56 of the Forest Act, on state-owned forest territories, with an area of 0.468 ha, with a total price for the real right of BGN 144,521.50 and BGN 2,890.44 for overheads. The present value of the standing wood at the current age for the estimated plantations amounted to BGN 2,122.65. The allocated funds for compensatory afforestation were BGN 1,875.20;
- 29 administrative orders were issued for preliminary approval for establishing an easement on state-owned forest territories, with a total area of 8,033 ha, pursuant to Art. 62 of the Forest Act;
- 34 administrative orders were issued for establishing an easement under Art. 63 of the Forest Act on state-owned forest territories, with an area of 13.42 ha, with a total price for the real right of BGN 440,587.40 and BGN 8,849.29 for overheads. The present value of the standing wood at the current age for the estimated plantations amounted to BGN 54,700.09. The allocated funds for compensatory afforestation were BGN 89,055.31;
- 15 administrative orders were issued for establishing the right of use pursuant to art. 70 of the Forest Act on state-owned forest territories, with an area of 2.56 ha, with a total price for the real rights of BGN 3,969.45 and BGN 79.40 for overheads. The present value of the standing wood at the current age for the estimated plantations amounted to BGN 12,533.35. The allocated funds for compensatory afforestation were BGN 31,366.72;
- 8 administrative orders were issued, pursuant to the Administrative Procedure Code, for the termination of the administrative proceedings for establishing limited real rights on state-owned forest territories.

3. Management of Forest Areas

The management, use and protection of forests is aimed at the formation and maintenance of living and multifunctional forest ecosystems, creating conditions for their natural regeneration and improving their sustainability.

3.1. Afforestation and Protection against Erosion and Torrential Rains

In 2022, EFA's activities in this area were focused mainly on the following areas:

- Implementation of the goals and indicators set in the EFA program and budget;
- Fulfillment of Bulgaria's obligations arising from the membership in the European Union in the field of forest reproductive materials (FRM);
- Approval and registration of basic sources for FRM, registration of FRM suppliers, testing and qualification of seeds and improving the condition of the forest seed production base;

- Maintaining a database of the performed inventories of the created forest crops; of fires, unrenewed fellings and forests destroyed by other natural impacts; of large-scale fortifications; the compensatory afforestation activities and register of forest nurseries in the country;
- Performing control activities;
- Coordination of projects for biological reclamation in forest areas, preparation of answers and opinions;
- Preparation of drafts of normative documents.

Table VI.1. Implemented activities for creation of forests in 2022

No.	Types of activities	Measure	Implementation for 2022
1.	Collected and harvested seeds by TD SF/SH	kg	50,531
2.	Produced saplings in state forest nurseries	thousand	7,636.2
3.	Afforested areas, including	ha	1,393.2
	- State-owned enterprises	ha	1,275.0
	- municipalities	ha	112.6
4.	Developing stands in state forest territories	ha	760.6
5.	Growing stands in state forest territories	ha	9,968.6
6.	Average percentage of survival of planted trees		
	a) state-owned property		
	- annual	%	66.19
	- biennials	%	68.94
	- triennials	%	71.41
	b) municipal-owned property		
	- annual	%	74.52
	- biennials	%	80.29
	- triennials	%	82.04
	c) private property		
	- annual	%	69.70

Source: EFA

The following activities were performed in 2022:

- Reports with a database regarding the conducted inventories of the created forest stands; of existing post-fire areas, unrestored clearings and forests destroyed by other natural impacts; the available large-scale strengthenings were prepared and recommendations to eliminate the omissions and errors were given;
- The price of the compensatory afforestation was determined and orders were issued by the Minister of Agriculture and the Executive Director of the EFA;
- 8 projects for reclamation of disturbed terrains in forest territories were approved;
- The public register of forest nurseries in the country was updated;

- The National list of approved and registered sources for production of FRM was updated;
- 2 information documents were prepared for the movement of forest reproductive materials for trade from the Republic of Bulgaria to the Republic of Austria;
- 28 new basic sources in category "selected" for the production of FRM, meeting the minimum requirements of Directive 1999/105/EU were approved and registered and 24 basic sources were revoked;
- 633 control checks of the condition and the conducted activities in the registered basic sources for FRM were performed by FSCS experts;
- 175 certificates for identification of the FRM origin were issued by RDFs and FSCS;
- In the seed control laboratories of the FSC stations in Sofia and Plovdiv 229 seed control certificates were issued for batches of seeds of deciduous and coniferous species;
- 986.53 kg of seeds from 225 batches of coniferous and 9 batches of deciduous species were stored in the long-term seed storage facility in Plovdiv FSCS;
- Sofia FSCS kept 220.62 kg of seeds of different origins from 44 tree and shrub species as a seed collection for its bank. 18.5 kg of 7 tree species were stored in Plovdiv FSCS;
- Specialists from Plovdiv FSCS conducted soil surveys of 8 forest nurseries throughout the country, and prepared dossiers with precepts for improving soil fertility in the surveyed nurseries;
- Specialists from Plovdiv FSCS have helped the construction of a vegetative seed production garden made of black pine on the territory of Panagyurishte SHU. In 2022, garden expansion events were carried out over an area of 0.7 ha, and cuttings from 42 origins were grafted onto 340 saplings.

475.75 ha of anti-erosion afforestation was carried out to protect the forest territories from erosion and torrential rains.

BGN 18.1 million was spent on afforestation measures in state forest territories.

3.2. Logging in Forests

In 2022, thinnings were carried out on an area of 46,085.3 ha in state forests, which represents 71.9% of the FEP/FMP projections, to regulate the tree composition and to improve the growing conditions. Of the performed thinnings, 45.8% were in coniferous forests, 33.8% in deciduous high stem forests and 20.4% in coppice forests for conversion to seed. The execution of thinnings without material extraction on an area of 2,409 ha was 67.8% of the FEP/FMP projections. By types of thinnings, the implementation of FEP/FMP was 62.5% for clearing, 56% for pruning, 62.4% for spacing and 80.2% for selective cutting.

During the year, selective felling was carried out on an area of 735.5 ha, thus fulfilling the FEP/FMP projections at 54.2%.

Two control inspections of the marking and selection fellings in seed production plantations on a total area of 1,443 ha were carried out by FSCS experts;

Within the framework of 2021, thinnings were carried out in non-state-owned forests on an area of 8,785.2 ha, of which: 5,516.7 ha in municipal forests, 2,670.3 ha in forests - owned by individuals, 380.9 ha in forests - property of legal entities and 217.3 ha in forests - property of religious organizations.

Pruning of standing trees was carried out in state forests to improve the wood produced and to support the process of natural self-pruning of the stands on 1,203 ha, which was 66 ha more than the activity reported in 2022. The natural regeneration on an area of 8,956.8 ha (84.8% of the foreseen of the forest management plans) was supported, which was 3,288.5 ha more than the implementation in the previous year. A logging fund in the amount of 5,404,251 cubic meters of standing wood or 275,753 cubic meters less than in 2021 was marked.

4. Use of Wood and Non-wood Forest Products

4.1. Use of Wood

In 2022, the EFA and the Regional Forest Directorates carried out constant control of the issued felling permits and the drawn up protocols for certification of felling sites through the EFA information system. During the year, felling permits were issued for 8,497,327 cubic meters of lying wood, and protocols were drawn up to certify the felling areas for 6,416,753 cubic meters of lying wood.

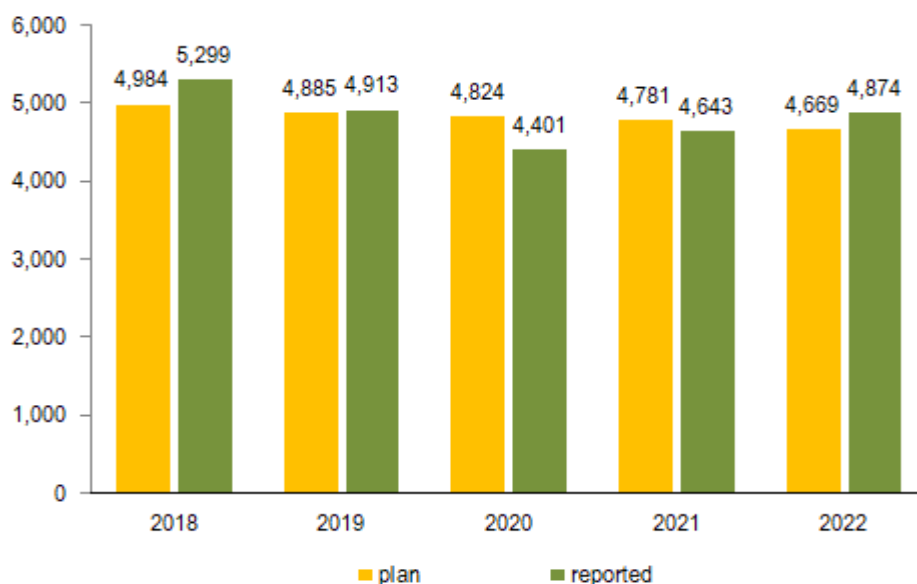
The wood from forest areas acquired in 2022 was 4,930,914 cubic meters of lying wood, which was 96% of the planned under the Forestry Plans (5,160,108 cubic meters). In 2022, the state enterprises under Art. 163 of the Forest Act have sold a total of 4,874,378 cubic meters of wood from forest areas - state property or 104% of the planned amount under financial plans. The sold wood was 232 thousand cubic meters, or 5% more than in 2021.

The sold wood, affected by abiotic and biotic factors, amounted to 411 thousand cubic meters, or 8% of all sales - 30 thousand cubic meters less than in 2021.

The total revenues from the sale of wood in 2022 amounted to BGN 391.3 million, 46% more on an annual basis. The total costs for the use of wood amounted to BGN 100.4 million, 27% more than the reported in 2021, and they included deductions from the selling price of wood to the fund "Investments in Forests" in the amount of BGN 21.7 million.

In 2022, 45.4% of the total quantities of wood were sold through warehouse wood. The remaining 54.6% was sold through the sale of standing wood to individuals for personal use and to legal entities after tendering. In order to meet the needs of individuals, a total of 571 thousand cubic meters of wood, mainly firewood, were sold according to a price list, which was 65 thousand cubic meters, or 12.8% more than in 2021.

Figure VI.1. Planned and reported wood sold from the forest territories - state property for the 2018 - 2022 period, thousand cubic meters



Source: MAF

The volume of wood provided in 2022 under long-term contracts concluded by state enterprises was 347 thousand cubic meters of standing wood and 126 thousand cubic meters of harvested wood, and the total amount was 10% of sold wood, remaining at the same level from the previous year.

After electronic tendering, sales for a total of 1,518 thousand cubic meters of wood from state forests were realized during the year, 689 thousand cubic meters more than in 2021.

The weighted average reported selling prices of wood from the forest territories - state property, from warehouses and as standing wood, were respectively 108.26 BGN/cubic meter and 58.50 BGN/cubic meter, increasing by 36% (28.64 BGN/cubic meter) and by 35% (15.08 BGN/cub.m.), respectively. Average costs for wood extraction increased by 4.48 BGN/cubic meter.

According to the financial plans of the state-owned enterprise for 2023, the total use of wood is expected to be 4,601,561 cubic meters.

Table VI.2. Use of wood from forest areas provided for management by the State Enterprise and sales revenues in 2022

Method of use and sale	2021		2022			
	Quantity (cubic meters)	Value (BGN thousand)	Quantity		Value	
			cubic meters	Change versus 2021 (%) (%)	BGN thousand	Change versus 2021 (%)
I. Income from the sale of wood (1+2+3+4):	4,642,628	267,803	4,874,378	5%	391,299	46%
1. Sale of standing wood	2,705,656	117,481	2,659,938	-2%	155,601	32%
1.1. including. according to a price list to individuals for personal use	192,848	3,053	268,257	39%	4,726	55%
2. Sale of harvested wood	1,865,425	148,529	2,138,843	15%	231,546	56%
2.1. including. according to a price list to individuals for personal use	312,654	22,584	522,220	67%	43,894	94%
3. Use of wood under Art. 116b of the FA	4,815	x	5,587	16%	x	x
4. Use of wood under Art. 193 of the FA	66,731	1,863	70,010	5%	2,401	29%
II. Total costs, quantity (I.1.+ II.1.), value II.(1+2+3):	x	79,029	x	x	100,419	27%
1. Costs for wood harvesting - total:	1,874,435	47,426	2,262,196	21%	67,373	42%
2. Costs for construction of roads and current repairs of forest roads	x	10,988	x	x	11,693	6%
3. Deductions for the Forest Investment Fund	x	20,760	x	x	21,678	4%

Source: MAF

4.2. Auxiliary Activities and Use of Non-Wood Forest Products

For 2022, state-owned enterprises report a total of BGN 21.1 million in revenues from side activities and non-timber forest products and corresponding costs of BGN 13.9 million. Compared to 2021, there was an increase in revenues by nearly BGN 6 million and in expenses - by BGN 4.16 million.

5. Protection of Forest Territories

5.1. Protection of Forest Territories from Diseases, Pests and Other Damages

In 2022, forest protection measures were planned on 42% of the forest health problems recorded in the EFA electronic system at the end of November 2021. The overall execution of the forecast is within 104%. It was also planned to carry out aerial application on a total area of 2,710.4 ha, including 670 ha against pine processionary moth and 2,040.4 ha against rusty pine leaf wasp.

Over the year, ground chemical treatment was carried out on a total area of 577.8 ha in forest nurseries and poplar crops, which was 57% more than planned. The over-execution was due to damage

caused by insect pests and diseases on poplars, willows and alders in the area of Forestry Protection Station Plovdiv and health problems in forest nurseries located in the area of Forestry Protection Station Sofia.

The performance of the intended mechanical treatment was 2.4 times more than the one planned in 2022. Of the 155.9 ha reported, 40% were against disease and insect damage in poplar, willow and alder and other deciduous forests and plantations, 35% against damage by game, rodents and domestic animals, 21% against pine processionary moth in forest crops and 4% in forest nurseries.

Sanitary and forced fellings were carried out on an area of 19,707.2 ha. Of these, 75% were in coniferous forests and 25% in deciduous forests. The largest share of the sanitary and forced fellings were conducted in forests damaged by phytopathogenic fungi (53%), abiotic factors (39%), stem insects (6%) and fires (2%).

The costs for performing the activities for protection against diseases, pests and other damages in the forest territories, managed by the state enterprises under art. 163 of the Forest Act, amounted to BGN 240 thousand.

Table VI.3. Conducted forest protection measures in 2022

Measure	Forecast 2022 (ha)	Report 2022 (ha)	Implementation (%)
Air combat	2,710.4	2,508.0	93%
Biological warfare	0	0	-
Ground chemical treatment, including:	367.0	577.8	157%
<i>in forest nurseries</i>	55.4	444.0	801%
<i>in cultures</i>	311.6	133.8	43%
Mechanical treatment	64	155.9	244%
Integrated treatment	0	0	-
Sanitary felling	19,010.7	19,707.2	104%
Total:	22,152.1	22,948.9	104%

Source: EFA

5.2. Forest Fire Protection

In 2022, a total of 516 fires occurred in the forest territories of the country, affecting 8,126 ha. Of these, 644.6 ha were burned by crown fires.

The number of forest fires recorded in 2022 is 268 less than the average for the past 10 years, and the burned forest areas are 595 ha more than the average for the past 10 years.

The main causes of forest fires continue to be related to human negligence - over 62% of fires in forest territories, unknown - 31% of fires in forest territories, but in all cases they are related to anthropogenic actions and/or inactions, which indicates that forest fires in Bulgaria in about 93% of cases occur due to human negligence, combined with high average daily temperatures and long periods without precipitation. A little over 3% of fires in forest territories in Bulgaria in 2022 were intentionally caused and only 4% were natural (lightning).

The largest forest fire occurred during a non-traditional period - October 2022, in the area of Dolno Kapinovo village, Kirkovo TD SFU. More than 877 ha of forest areas of Kirkovo TD SFU were burned, located on heavily rugged and inaccessible terrains.

Large forest fires in 2022 were also registered in the regions of Elhovo TD SFU, Svilengrad TD SFU, Karbobat TD SFU, Panagyurishte TD SFU and others.

In 2022, the State Enterprises spent funds in the amount of BGN 1.2 million for the implementation of the activities for protection of the forest territories from fires. The main part of the reported costs were for the

implementation of preventive activities, including the construction and maintenance of 1,916,463 meters of mineralized strips, 1,106,632 meters of forest barriers and 17,985 meters of barrier walls.

6. Protected Areas

According to the Protected Areas Act (PAA), there are 6 categories of protected areas in the country, and for 3 of them (nature park, natural landmark and protected area) management is shared between MAFF - EFA, MoEW and municipalities, and for the remaining 3 (reserve, maintained reserve and national park) - the administration and management is conducted by MoEW and its respective regional subdivisions, including the national parks directorates (Central Balkan NPD, Rila NPD and Pirin NPD) and regional environmental and water inspections.

The Ministry of Agriculture and Food, the Forestry Executive Agency, as well as natural and legal persons and municipalities - owners of forests, lands and water areas in the protected territories of the categories: "nature park", "natural landmark", and "protected area" carry out their management, preservation, and protection, as per the provisions of the Environmental Protection Act and other special laws.

11 directorates have been established for the management of the nature parks - specialized territorial units at EFA: Belasitsa Nature Park, Bulgarka Nature Park, Vitosha Nature Park, Vrachanski Balkan Nature Park, Golden Sands Nature Park, Persina Nature Park, Sinite Kamani Nature Park, Strandzha Nature Park, Rusenski Lom Nature Park, Rila Monastery Nature Park and Shumen Plateau Nature Park.

The MoEW and its regional bodies conduct and carry out control in the protected areas in relation to the activities of the owners or users of forests, lands and water areas and in compliance with the regimes established under the order of the Environmental Protection Act, the declaration order and the management plan of the respective protected area.

The control on the compliance with the regimes in the protected areas is also carried out by the directors of the regional forest administrations, state forestry farms, state hunting farms, and directorates of nature parks, as well as the mayors of municipalities.

The activities for the management of forest territories in protected areas and natural landmarks were carried out by the state forestry and hunting farms, depending on their territorial scope.

In 2022, the directorates of nature parks and state-owned enterprises carried out joint activities on the basis of concluded cooperation agreements and plans for joint activities. Such agreements have been concluded between Blagoevgrad SWSE and Belasitsa NPD, Vitosha NPD and Rila Monastery NPD. The purpose of joint action agreements is to resolve issues of mutual interest in the following areas: sustainable management and protection of natural resources; protection of ecosystems and biodiversity; environmentally friendly land management in protected areas and protected areas under the Biodiversity Act; staff training; preparation, application and implementation of projects related to forests and protected areas.

Repair and restoration activities were carried out on the existing tourist infrastructure - bridges, interpretive routes, shelters, gazebos, recreation areas, fountains, etc. Information boards, marking of tourist routes, etc. have been updated and restored. All directorates of the nature parks actively worked with volunteers, with whose help a number of measures were implemented to restore and maintain the tourist infrastructure, clean the park areas, renew the tourist markings, reforestation measures, etc.

On the territory of Rusenski Lom NPD, in cooperation with Sports Tourism and Conservation Company Academic Ruse and volunteers, a part of the large route from the city of Ruse to Orlova Chuka cave was marked. Throughout the year, routes were marked and 70 signposts were placed. The reintroduction of endangered and rare species and maintaining their populations continued. Food was regularly placed at the bird feeder sites.

In 2022, activities were carried out on the territory of Vitosha Nature Park, related to the cleaning and renovation of the tourist infrastructure, installation of information boards and signs, Vitosha type tables, etc. Many of the activities were carried out with the help of volunteers. A total of 45 volunteer actions were organized, involving more than 650 people. With the help of volunteers, illegal landfills were cleaned and removed, park infrastructure was refreshed (over 200 bridges, grills, wooden railings), more than 4,000

meters of ditches/gutters along tourist paths were cleared. 8 new wooden bridges, 7 new information boards and 9 Vitosha type tables and benches were made and installed.

In 2022, in the visitor center of Persina Nature Park, a reading corner was built, equipped by the Danube Parks Association within the Danube Volunteers Day 22.

The employees of the Sinite Kamani NPD carried out repair work on elements of the infrastructure on the territory of the nature park. Directional and warning signs have been placed at some of the places most visited by tourists.

Within the long-standing project "Restoring the rock partridge population", Vrachanski Balkan NPD relocated (autumn) 52 birds and a spring survey was conducted of the population status (transect method), an autumn survey (telemetry), and a winter survey (phototraps and feeders). Currently, there are 42 birds in the parks for the main flock in 2023. A methodology and technology for the production and resettlement of birds was developed. The park continued its activities to feed the Egyptian vulture and to reintroduce the griffon vulture. In 2022, about 70-80 griffon vultures were observed monthly in the area. At the aviary in Gorno Ozirovo, 10 black vultures were introduced and during the year a pair of black vultures made a nest and raised a chick. From the 16 pairs formed, 14 griffon vultures were successfully hatched and raised.

Monitoring under a project for reintroduction of a European ground squirrel was also carried out. More than 60 active holes have been identified and their coordinates have been taken. More than 15 animals were observed.

9 interpretive routes were repaired on the territory of Vrachanski Balkan NPD, the markings on 12 tourist routes were renewed, 32 information points and 4 recreation areas were repaired.

On the territory of Golden Sands NP, rehabilitation of the tourist infrastructure was carried out, including the repair of wooden barriers and information signs, repair of the wooden floor of the viewing platform of the "Gorski Kat" water mirror, repair of 8 fence panels of an ornamental wooden fence on the road to "Gorski Kat". 10 km of the tourist markings along the Blue Route and Yellow Route were renewed. A new "Talking Oak" has been constructed and installed along the "Song of the Forest" route.

In the reproduction base for rare and endangered plant species of the Bulgarka NPD in Potok village and in the gene bank for orchard species, activities were carried out throughout the year on maintaining the material base, collecting seeds, preparing the grounds, planting activities, care during vegetation, pruning and pest control for fruit species. Together with Gabrovo NCSE, stocking with Balkan trout was carried out for another year in 7 river basins - Levicharka, Panicharka, Borushtitsa, Sivek, Byala Reka, Beliiska, and Yantra.

Stocking was also carried out on the territory of the Rila Monastery Nature Park, with the Iliyna and Eleshnitsa rivers and the Smradlivoto Lake being stocked.

Bulgarka NPD held a competition under the title "To plant a tree, to raise hope!" Children from all over the country participated in the competition in the field of visual arts and literature. The team of the park also participated in the Tryavna Urban Festival "Outdoor Fun". During the "Week of the Forest", the park experts and representatives of the North-Central State Enterprise, the Regional Governor of Gabrovo District, children - representatives of the "Gabrovo Regional Center for Supporting the Process of Inclusive Education" and sports club "Equal Start" launched together the "Special Children's Forest".

In 2022, Strandzha NPD implemented activities to support the natural regeneration of local species and the reintroduction of flora and fauna species (trout, relic plant species from the specialized nursery). Measures were also taken to limit the spread of invasive species by mechanical removal. The Park Directorate also conducted a regular survey of the most sensitive and damaged coastal dune habitats and riparian wetlands.

Rusenski Lom NPD carried out regular bird monitoring, which included checking known occupied nests of birds of prey, locating new territories occupied by birds of prey and scavengers and searching for new nests (Lesser spotted eagle, Egyptian vulture, Long-legged buzzard, Booted eagle), the occupancy of artificial nests for Lesser spotted eagle was checked, all known nests of Black storks were checked and inspections of new ones were conducted. On the platform for attracting nesting pelicans, a record was registered in 2022 - 30 baby pelicans were raised.

The activities of NPDs in the field of Public Relations include the organization of traditional celebrations, events, celebration of dates in the conservation calendar and anniversaries related to the history of the parks. Publications are prepared for local and national media to promote its activities and biodiversity.

The traditional competition "Nature - My Inspiration", organized in four sections - children's drawing, essay, applied artwork and presentation, included over 300 works from all over the country. The traditional Green Suns Festival, dedicated to Enyovden (the Nativity of John the Baptist), was also held. Thematic lessons on the herbs of the plateau were conducted with children. A city-wide celebration with quizzes, games and activities on the occasion of Enyovden was organized in cooperation with the Center of Natural Sciences of Shumen University and the Shumen Plateau NPD.

The Directorate of Golden Sands NP conducted environmental games guided tours of children's educational routes "Song of the Forest" and "House of the Jay", as well as talks about herbs at the "Herbal and Rock Garden" school. In addition, 4 video lessons were prepared, aimed at children from the youngest age group.

Golden Sands NPD organized and held the First National Online Children's Drawing Contest under the slogan of "The forest - home of our future". A total of 907 children from 23 districts in the country participated in the competition.

The Directorate of Persina NP organized the second edition of the Dalmatian Pelican Conservation Festival on 3 and 4 June 2022. The forum has a full-day program filled with open workshops from various organizations, lectures on biodiversity and conservation, films, exhibitions, interactive activities for children and much more. Handmade souvenirs and products from local producers in the region were presented.

As part of a project with external funding, a new module depicting a colony of nesting pelicans was made and installed in the park's visitor center as a 3D model with birds and nests in real size. The module also had sound added and 3 adult birds, 3 young birds and nests with eggs were made.

The visitor center of Belasitsa NP hosted "The Living Exhibition", presented by the Green Balkans conservation organization. The exhibition promotes the conservation of rare bird species in the cross-border areas of the three neighboring Balkan countries - Bulgaria, Greece and Turkey. It presented life-size models of rare birds and coloring.

The traditional "Chestnut Festival", organized by the Belasitsa NPD, gathered many guests from all over Bulgaria and abroad. The "Podgorie Celebration" presented the Bulgarian identity, promoted the chestnut forests of Belasitsa and the municipality of Petrich. In addition, in cooperation with Slow Food in Bulgaria and SWSE Blagoevgrad, the "Terra Madre - Belasitsa" international forum was organized. The event included a conference, exhibition, bazaar, talks and local food tasting.

In 2022, in addition to the regular activities to maintain the diversity of ecosystems and biodiversity conservation in the park, the Directorate of the "Blue stones" park has continued its activities to provide first aid to wild birds, turtles and others, after which it moves them to the "Wildlife Rescue Center" in Stara Zagora.

All directorates of the nature parks have continued to fulfill their obligations related to the monitoring of conservation significant species of plants and animals included in the National Biodiversity Monitoring System, as the necessary forms have been filled out and sent for entry into the Environment Executive Agency system.

Vrachanski Balkan NPD worked on the DiGiPARKS project "Creating an innovative and integrated cross-border tourist product between 'Vrachanski Balkan' and 'Iron Gate' natural parks", aimed at creating an innovative integrated tourism product between the Vrachanski Balkan and Iron Gate Nature Parks. The project was financed within the framework of the INTERREG V-A Romania-Bulgaria Program. The Park Directorate is also implementing a "Conducting an information campaign on Natura 2000 on the territory of the district of Vratsa" project.

Persina NPD implemented and reported 4 projects as their implementation will continue in 2023.

In 2022, the EFA has agreed on the following proposals for the designation of 24 protected areas and 16 natural landmarks at the MoEW.

- "Churika-Perelik" Protected Area on the territory of the villages of Mugla, Solishta, Stoykite and the town of Smolyan, Smolyan Municipality, Smolyan District;
- "Miladinitsa" Protected Area on the territory of the village of Lebnitsa, Sandanski Municipality, Blagoevgrad District;
- "Localities of Alpine Newt in Ruy Mountain" Protected Area on the territory of the village of Rani Lug and the village of Nasalevtsi, Tran Municipality, Pernik District;
- "Raynovska Koriya" Protected Area, located in the region of the village of Raynovo, Dimitrovgrad Municipality, Haskovo District;
- "Timok Island" Protected Area on the territory of the village of Vrav, Bregovo Municipality, Vidin District;
- "Polovrak" Protected Area on the territory of the village of Lozen, Stolichna Municipality, Sofia District;
- "Red-flowered Viper's Grass" Protected Area on the territory of the village of Lozen, Stolichna Municipality, Sofia District;
- "Esetrite-Vetren" Protected Area on the territory of the village of Vetren, Silistra Municipality;
- "Kaloyanovo Dam" Protected Area on the territory of the village of Kaloyanovo, Kaloyanovo Municipality, Plovdiv District;
- "Sadiilishteto Area" Protected Area on the territory of the Rudozem Municipality and Madan Municipality;
- "Propada" Protected Area on the territory of the town of Malko Tarnovo, Malko Tarnovo Municipality, Burgas District;
- "Dolno Cherkovishte" Protected Area on the territory of the village of Dolno Cherkovishte, Stambolovo Municipality, Haskovo District;
- "Ahinora" Protected Area on the territory of the village of Malak Porovets, the village of Sveshtari, Isperih Municipality and the town of Zavet, Zavet Municipality, Razgrad District;
- "Nanevska Tuzla" Protected Area on the territory of the village of Sveti Nikola, Kavarna Municipality, Dobrich District;
- "Deposit of Rhodope Mullein - village of Drangovo" Protected Area on the territory of the village of Drangovo, Kirkovo Municipality, Kardzhali District;
- "Vodenitsata" Protected Area on the territory of the town of Radnevo, Radnevo Municipality, Stara Zagora District;
- "Basarbovski Steni" Protected Area on the territory of the village of Basarbovo, Ruse Municipality, Ruse District;
- "Deposit of Bulgarian saw-wort" Protected Area on the territory of the village of Hadzhidimitrovo, Svishtov Municipality, Veliko Tarnovo District;
- Four protected areas on the territories of the village of Mitrovtsi, the village of Prevala, Chiprovtsi Municipality, the village of Dolni Lom and the village of Varbovo, Chuprene Municipality;
- "Koznik Area (Kichik Kaya)" Protected Area/Natural Landmark on the territories of the Rudozem Municipality and Madan Municipality;
- "Horse Head Rock Formation" Protected Area/Natural Landmark on the territories of the Rudozem Municipality and Madan Municipality;

- "Bezden Springs" Natural Landmark on the territory of the village of Bezden, Kostinbrod Municipality, Sofia District;
- "Bazov Dol" Natural Landmark on the territory of the village of Zvezdets, Malko Tarnovo Municipality, Burgas District;
- "Stolo" Natural Landmark on the territory of the village of Dobravitsa, Svoige Municipality, Sofia District;
- "Babu" Natural Landmark on the territories of the village of Guyrgich, Ruzhintsi Municipality and the village of Sredogriv, Chuprene Municipality, Vidin District;
- "Fossil Finds" Natural Landmark on the territories of the villages of Popovitsa, Bogdantsi, Seltsi, Ahmatovo, Sadovo Municipality and the villages of Ezerovo, Byala Reka and Pravoslaven, Parvomay Municipality, Plovdiv District;
- "Yablanitsa Gorge" Natural Landmark on the territories of the town of Tran and the village of Bankya, Tran Municipality;
- "Vrabcha Waterfall" Natural Landmark on the territory of the village of Vrabcha, Tran Municipality, Pernik District;
- "Earth Pyramids" Natural Landmark on the territory of the village of Banishte, Breznik Municipality, Pernik District;
- "Melnik Pyramids" Natural Landmark on the territory of the town of Melnik, Sandanski Municipality, Blagoevgrad District;
- "Dokuzak Waterfall" Natural Landmark, located in the region of Dokuzashki Dol and on the territory of the village of Stoilovo, Malko Tarnovo Municipality, Nature Park Strandzha;
- Six natural landmarks in Kardzhali District - Waterfall of Creation, Boyalak Waterfall, Dyusheme Kaya Waterfall, Marf Waterfall, Hole Waterfall and Chukov Waterfall.

7. Forest certification

The certified forest areas in Bulgaria have a FSC (Forest Stewardship Council) certificate. According to the official data of the FSC, the area of certified forest territories as of 27.02.2023 is 2,315,234.4 ha, which represents 58% of the total forest territory in the country, and the certified units are 28. 429 certified units have a FSC - Chain of custody certificate.

The area of the certified state forest territories managed by the state-owned enterprises was 2,299,375.7 ha, equal to 80% of the total territory managed by them in the country, and the certified units were 26.

According to the electronic information portal of PEFC (Program for Endorsement of Forest Certification), 65 certified units have a PEFC - Chain of custody.

8. Inventory and planning in forest areas

In 2022, the following major activities were carried out in this direction:

- Meetings of the commissions under Art. 34, para. 1 of Ordinance No. 18/07.10.2015 on inventory and planning in forest areas in connection with the inventory of forest areas and development of forest management plans, forest management maps, hunting management plans and plans for protection of forest areas from fires, in 2022/2023 for territorial divisions of State Forest Units (SFU): Razlog, Batak, Vidin, Seslav-Kubrat, Omurtag, Byala, Bolyarka, Cherni Osam, Stara Reka, Ivaylovgrad, Nevistino and for territorial divisions of SHUs: Chepino (excluding the areas adjacent to the former SFU Chehlyovo), Aramliets, Vitinya, Izvora, Voden-Iri Hisar, Zhenda and Topolovgrad;
- Expert consultations were held and assignments were approved in relation to the forthcoming inventory of forest territories in 2023/2024 and the joint development of forest management plans, forest management maps, hunting management plans and plans for protection of forest areas from

fires for territorial divisions of State Forest Units (SFU): Yakoruda, Belitsa, Karlovo, Ardino, Haskovo, Karnobat (only for the part of the merged territorial division of SFU Sadovo), Burgas, Kotel, Vratsa, Lesidren, Lovech, Botevgrad, Samokov, the forestry management of Borovets to the territorial division of Samokov SFU, Elena, Tutrakan, Provadia, Tundzha, Kipilovo and for the territorial division of Iskar SHU and the hunting district of Trankovo to territorial division Mazalat SHU. The procedures will be carried out by the respective state-owned enterprises under Art. 163 of the Law on Forestry and RFD in 2023;

- Expert consultations were held on the acceptance of the economic classes and the amount of annual use for 2021/2022 for territorial divisions of State Forest Units (SFU): Montana, Chiprovtsi, Eleshnitsa, Buynovtsi, Preslav, Shumen, Novi Pazar, Razgrad, Teteven, Tran, Mihalkovo, Elin Pelin, Panagyurishte, Rozino, Kazanlak, Sliven and for territorial divisions of SHUs: Palamara, Dunav-Ruse and Ropotamo;
- Meetings of the commissions under Art. 37 (3) of Ordinance No. 18/07.10.2015 on the inventory and planning in forest areas for acceptance of the implemented inventory of forest areas and the developed forest management plans, forest management maps, hunting management plans, and plans for protection of the forest areas from fires in 2021/2022 for territorial divisions of the following state forest units (SFUs): Montana, Chiprovtsi, Eleshnitsa, Buynovtsi, Preslav, Shumen, Novi Pazar, Razgrad, Teteven, Tran, Mihalkovo, Elin Pelin, Panagyurishte, Rozino, Kazanlak, Sliven and for territorial divisions of SHUs: Palamara, Dunav-Ruse and Ropotamo;
- Expert consultations were held for acceptance of the minutes of the meetings of the commissions under Art. 37 (3) of Ordinance No. 18/07.10.2015 for inventory and planning in forest areas, for acceptance of the carried out inventory of forest areas and prepared forest management plans, hunting management plans and plans for activities to protect forest areas from fires in 2020/2021 for territorial divisions of the following SFUs: Elhovo, Tvarditsa, Dobrinishte, Blagoevgrad, Rila Monastery, Smolyan, Sredets, Silistra, Smyadovo, Varbitsa, Ihtiman, the carried out inventory of forest areas for Akademik Nikolay Haytov for the part of the merged Chepelare and for the territorial divisions of the SHUs: Trakiya, Sherba and Cherni Lom;
- A report was approved by the Minister of Agriculture on the sites for inventory in 2024/2025 and the creation of forest management maps, forest management plans, plans for hunting activities and for the activities to protect forests from fires, for territorial divisions of the SFUs: Pleven, Breznik, Zlatograd, Belovo, Etropole, Svoje, Gorna Oryahovitsa, Svilengrad, Gabrovo, General Toshevo, Suvorovo, Ticha, Dobrich, for the territorial division of Karakuz SHU and training and experimental forestry unit Petrohan;
- A digital orthophoto map was provided to the companies performing the inventory of forest territories and producing forest management plans, forest management maps, hunting management plans and plans of activities for protection of forest areas from fires for the period 2022/2023;
- A digital model was provided of the map of the restored property and the cadastral map for the territorial scope of activity of the state forestry and hunting units;
- 9 orders were issued under Art. 83, Para. 9 of the Forest Act for the inclusion in forest territories of 350.3 ha of land unsuitable for agricultural use. Pursuant to § 17 of the TFP to the Act amending and supplementing the Agricultural Land Protection Act, 96 orders of the Minister of Agriculture were issued for inclusion in the state forest areas of 3,129.9 ha of agricultural territories possessing the characteristics of a forest within the meaning of the Forest Act.

9. Hunting Units

In 2022, the following important activities, related to the management and use of game in the country, were carried out with the participation of EFA:

- Expert consultations were held for consideration and adoption of the "Methodology for monitoring the stock of wild boar and big game in the Republic of Bulgaria" and "Methodology for rearing and

resettling fallow deer and farm pheasants, semi-wild mallards and partridges in the Republic of Bulgaria";

- Work has been carried out on the preparation of a draft amendment to the Regulations for the Implementation of the Hunting and Game Preservation Act;
- A National Meeting was held in the town of Panagyurishte related to the future management of wild boar in the country, as well as the implementation of "Methodology for monitoring the stock of wild boar and big game in the Republic of Bulgaria";
- A "Concept for the development of the hunting industry in the Republic of Bulgaria" was prepared;
- Participation was taken in interdepartmental working groups together with the Ministry of Environment and Water and NGOs regarding: use of the turtle dove in the country and preparation of an adaptive mechanism for its sustainable use; amendment and addition of the Action Plan for the protection of the Balkan wild goat; update of the Bear Management Plan; adoption of the Action Plan for the protection of the wolf in the country;
- Draft amendments and additions to Ordinance No. 2 of 2009 on the conditions for keeping furred and feathered game in livestock holdings, in accordance with its physiological and behavioral characteristics and Ordinance No. 6 of 2007 on the conditions and procedures for pasture breeding of pigs of the East Balkan breed and its crossbreeds were developed;
- Participation was taken in an international meeting in the town of Sarajevo regarding the conservation of large carnivores in Europe;
- Joint trainings were conducted with the RFD and BFSA among hunters on limiting the spread of African swine fever and compliance with biosecurity measures;
- 4 meetings of the Hunting Council were held;
- Checks were carried out on the implementation of the contracts, providing the management and use of the game to the hunting associations, the allotted game breeding areas and the concluded contracts for joint activity in SHUs;
- Analyses and reports were prepared with results of inspections on the implementation of contracts for joint hunting activities in 20 state hunting units and for the management and use of game in 9 game breeding sections to the SFUs;
- 4 hunting permits for research activity were issued;
- Tests for acquiring the right to hunt in hunting associations and tests for acquiring the right to selectively hunt in hunting associations were held;
- 46 hunting bases in SHU, SFU and game breeding grounds were categorized;
- 93 permits for the use of wood grouse have been issued;
- 5 permits for shooting a brown bear, 2 permits for catching and moving and 1 permit for capture and marking with a collar equipped with a radio transmitter and a device for global geographical positioning were issued;
- Thematic and specialized inspections on the implementation of hunting activities and the implementation of contracts in hunting associations were carried out;
- Field inspections and expert consultations for admission of Hunting Development Projects were carried out.

The hunting activities carried out by the state-owned enterprises under Art. 163 of the Forest Act in the forest territories - state property granted to them for management, had the following guidelines: creation and maintenance of a feed base; game feeding; construction and maintenance of biotechnical facilities - waiting spots, feeders, traps, mud pits, construction and repair of bases for intensive game management.

The total revenues from hunting activity in the forest territories - state property, reported in 2022, amounted to BGN 8.9 million, which is 13.4% more compared to 2021. The revenues from organized hunting and other types of tourism amounted to BGN 4.5 million, about BGN 450 thousand above the level of the previous year. Revenues from contracts concluded under HGPA in the form of annual installments for game management in game breeding areas and annual rental prices of hunting tourism facilities of SHU amounted to BGN 3.4 million, an increase of BGN 214 thousand compared to 2021. BGN 18 million were spent for implementation of the planned hunting and fishing activities during the year.

10. Protection of Forest Territories and Control

In 2022, the employees of RDF and SE under Art. 163 of the Forest Act performed a total of 620,964 inspections, including of: 25,807 of timber production sites, 126,796 of sites under Art. 206 of the Forest Act, 189,763 of vehicles, 144,682 of hunters, 13,028 of fishermen, and 120,888 of other persons.

Based on an analysis of the activity of the RDF, instructions were given aimed at improving and increasing the control activities on the protection of forest areas on which timber production is carried out.

Inspections of incoming timber were carried out on sites under Art. 206 of the Forest Act which process more than 20,000 cubic meters of timber per year, including by providing 24-hour duty.

The software for issuing transport tickets from sites under Art. 206 of the Forest Act was updated.

Automated data processing mechanisms have been introduced in the EFA information system to monitor the issuance of subsequent tickets in violation of the order for determining the model of transport tickets, transport of timber without vehicle tracking devices, issuance of transport tickets with tree species not included in the felling permit, etc. A mandatory attachment of photo material of the vehicle and the timber transported with it has been introduced in the software product for issuing transport tickets, and free access to the photo material has been made available through the publicly accessible EFA website.

Cross-checks between RDFs were carried out in 2022. Inspections were carried out on 217 sites under Art. 206 of the Forest Act, 222 timber production sites, 422 motor vehicles and 153 individuals. 235 statements of findings and 34 CEAVs were drawn up and 6 carts, 6 horse harnesses, 5 chainsaws, 3 vehicles and 12.5 m³ of firewood.

Established violations

In 2022, a total of 17,571 violations of forest legislation were detected, 747 more than in 2021. 12,596 citations for administrative violations were drawn up, 1,382 more than in 2021. The perpetrators of 2,469 violations were not found, and for some of the established violations, in accordance with the terms of the Administrative Offenses and Penalties Act, CEAVs will be drawn up in 2023.

The most violations established with citations were registered in Berkovitsa RDF - 1,369, followed by Ruse RDF - 1,199, Kardzhali RDF - 1,163, Sofia RDF - 1,041, Stara Zagora RDF - 1,008 and Burgas RDF - 1,002. The regional directorates with the least number of citations were Smolyan RDF - 181, Kyustendil RDF - 395, Plovdiv RDF - 414, Blagoevgrad RDF - 433 and Pazardzhik RDF - 437.

According to the ownership of the forest territories, 3,806 violations in state-owned property, 537 violations in municipal property, 1,462 violations in property of individuals and legal entities were established. The remaining 6,791 violations mainly concern the transport or storage of wood unaccompanied by a transport ticket and not marked with a forest mark, where its origin cannot be established. Violations related to the lack of a vehicle tracking device, violations of the requirements for permanent video surveillance in the sites under Art. 206 of the Forest Act, etc.

The RDF employees drew up 139 citations for violations by employees of the territorial units of SFR/SHU, 369 citations to foresters practicing private forestry practices, and 42 citations to people involved in management and protection of municipality-owned forest areas.

In 2022, 46 coercive administrative measures were imposed pursuant to Art. 253 from the Forest Act, 53 less than 2021.

Activity of the regional forestry directorates

In 2022, the forest inspectors in the RDFs carried out 314,863 inspections, of which 36,047 in sites for timber extraction, 25,300 in sites under Art. 206 of the FA, 113,010 of motor vehicles, 41,431 of hunters, 12,287 of fishermen and 86,788 of individuals. 6,857 citations were drawn up.

Illegally cut wood and disposal actions with wood, without documents proving its legal origin, in the amount of 8,818 cubic meters, were found.

Activity of the teams at EFA

In 2022, a total of 5,508 inspections were carried out, of which 503 at sites under Art. 206 of the Forest Act, 829 in timber extraction sites, 2,202 of motor vehicles, 1,007 of hunters, 41 of fishermen and 926 of individuals. 192 acts were drawn up and 243 prescriptions to the RDFs for undertaking additional actions and drawing up acts were made.

Illegally cut wood and disposal actions with wood, without documents proving its legal origin, in the amount of 9,319 cubic meters, were found.

Activity of the state-owned enterprise under Art. 163 of the Forest Act

In 2022, a total of 284,616 inspections were carried out by employees of the state-owned enterprise and their divisions, of which 83,870 were carried out at logging sites, 68,921 of motor vehicles, 102,136 of hunters, 586 of fishermen and 29,103 of individuals. 4,975 CEAVs, 1,808 statements of findings to an unknown perpetrator, and 571 statements of findings without CEAVs were drawn up.

Illegally cut wood and disposal actions with wood, without documents proving its legal origin, in the amount of 14,872 cubic meters, were found.

Implementation of Regulation 995/2010

In 2022, EFA participated in three meetings of the FLEGT/EUTR Committee on issues related to the implementation of Regulation (EU) No. 995/2010.

For implementation of effective control, during the year the RDFs carried out 1,076 inspections, 56 less than in 2021.

Interaction with other institutions

In 2022, EFA improved its cooperation with the institutions involved in the prevention and detection of illegal encroachments on forests and game.

As a result of the concluded agreements for cooperation and interaction and the annual plan of the Ministry of Interior for counteracting the violations related to forest, game and fish resources, in 2022 a total of 14,925 joint inspections were carried out, which is 4,031 more than in 2021. Inspections were carried out on 695 sites under Art. 206 of the Forest Act, 586 sites for timber extraction, 2,447 vehicles, 6,569 hunters, 31 fishermen and 3,763 individuals.

118 statements of findings and 1,239 citations were drawn up, of which 1,225 under the Forest Act, 12 under HGPA and 2 under other laws.

38 inspections with EAFA employees, 12 with employees of the Executive Agency "Labor Inspection", 73 with employees of the National Revenue Agency, 6 with employees of RIA, 32 with employees of the MoEW, 8 with representatives of NGOs and 37 with other institutions, were carried out.

11. Strategic Planning, Improvement of the Regulatory framework and International Activities

The following regulatory documents were prepared in 2022:

- A draft of the Amendment Act of the Forest Act, providing for logging on the basis of plan extract with a legal definition in the law, in order to ensure stable and sustainable management and use of wood from forest areas;
- Resolution of the Council of Ministers amending and supplementing the Regulations for the Implementation of the Hunting and Game Preservation Act (promulgated, SG, issue 18 of 2023);

- A draft for amending and supplementing Ordinance No. 18 of 2015 on the inventory and planning in forest territories;
- A draft for amending and supplementing Ordinance No. 1 of 2012 on control and protection of forest territories;
- A draft for amending and supplementing Ordinance No. 9 of 2020 on determining the type, distinguishing signs, conditions and procedure for obtaining, terms for wearing out the representative uniform and field uniform clothing by the EFA employees, its structures and state enterprises under Art. 163 of the Forest Act.

Implementation of strategic activities and priorities in the forest sector through projects funded by the EU and other international donors

In 2022, at the meetings of the Commission and the Standing Working Group to discuss project ideas and project proposals in EFA, a total of 8 project ideas were considered, of which 6 were in the process of evaluation, 1 was approved and 1 was not approved.

Three projects of the Berkovitsa, Blagoevgrad and Burgas RDFs related to the construction of automatic observation stations from the unified national system for monitoring, early detection and notification of forest fires have been successfully implemented as well as two projects of Forest Protection Stations in Sofia and Varna to improve the material base and increase the technical capacity, financed under sub-measure 8.3 of the RDP 2014 - 2020.

The implementation of projects of the state forest enterprises under the LIFE program of the EU was supported, including LIFE FORHAB, LIFE REFOREST, LIFE IASHAB.

The EFA participated in the joint development of the "Restoration of key climate ecosystems in implementation of the EU Biodiversity Strategy and the objectives of the European Green Deal" project as part of the National Plan for Restoration and Sustainability, with a forest budget of nearly BGN 48 million.

In 2022, the following projects are currently being implemented:

- "Measures for the protection of the Lesser Spotted Eagle and its habitats in Bulgaria" under the LIFE program of the European Union;
- "Empowering the Central and Eastern European Countries to Develop Bioeconomy Strategies and Action Plans" - CEE2ACT under the Horizon Europe program of the European Union in the field of bioeconomy;
- "Harnessing forest genetic resources for increasing options in the face of environmental and societal challenges", funded by the EU Horizon Europe program, OptForests No 101081774.

12. Financing and investments in forest areas

12.1. Executive Forest Agency

In 2022, the Executive Forest Agency reported revenues with a total amount of BGN 9,513,822.

The expenditures of the EFA for the implementation of the Budget Program "Forest Sector Management" set for 2022 by CMD No. 31/17.03.2022 amount to BGN 29,674,300.

The approved final budget of EFA for 2022 amounts to BGN 36,475,047, with total expenditure of BGN 36,474,576 being reported.

During the year, investments (capital expenditures) in the amount of BGN 890,060 were made as follows:

- Overhaul of tangible fixed assets - BGN 20,680;
- Acquisition of computers and hardware - BGN 481,002;
- Acquisition of other equipment, machines and facilities - BGN 127,943;
- Acquisition of vehicles - BGN 215,940;

- Acquisition of software products and licenses for software products - BGN 44,495.

12.2. State-owned forest enterprises

The reported revenues from the overall activity of the state-owned enterprises for 2022 are BGN 473,341 thousand, and the total expenses - BGN 444,603 thousand. Compared to 2021, the revenues of enterprises increased by BGN 153,339 thousand and the expenses - by BGN 127,619 thousand.

The total financial result of SEs from their operating activities in 2022 was positive in the amount of BGN 23.5 million before taxation, increasing several times compared to 2021.

The investments made by the six SEs in 2022 amounted to BGN 37.8 million, 16.5% more than the previous year. Of these, BGN 24.2 million (64%) were implemented with funds from the Forest Investment Fund - BGN 0.7 million more than in 2021, for the implementation of the following activities:

- design of 12.95 km construction of new roads and overhaul of existing forest roads - BGN 54.6 thousand;
- construction and overhaul of forest roads and transport technical infrastructure - BGN 16.3 million;
- design and construction of one technical and fortification facility - BGN 106 thousand;
- for afforestation activities - BGN 7.2 million;
- purchase of forest territories– BGN 0.5 million.

72 means of transport and 41 pieces of specialized equipment were purchased with funds from the economic activity and overhauls of buildings and technical facilities were carried out worth BGN 1.5 million.

In 2022, a procedure was launched for the purchase of land properties in forest territories owned by individuals, with state-owned enterprises purchasing properties with a total area of 300 ha.

In relation to § 2, Para. 2 of the Transitional and Final Provisions of the Public Enterprises Act and item 2 of Decision No. 1045 of the Council of Ministers of 2022, discussions are currently taking place at the institutional level and options are being discussed regarding the legal and organizational form of management of the state forest enterprises under Art. 163 of the Forest Act.

13. Administrative service

In 2022, 21 meetings of the Commission for consideration of applications for entry of individuals and traders in the public registers of EFA under Art. 235 and Art. 241 of the Forest Act, as a result of which certificates were registered and issued to 222 individuals for forestry practice. Certificates of 409 traders for carrying out activities in the forest territories have been registered and issued.

During the year 47 merchants were deregistered from the public register under Art. 241 (1) of the Forest Act, and 33 natural persons were deregistered under Art. 235 of the Forest Act. 8 natural persons and 3 merchants were refused entry in the public registers of EFA.

As of 31.12.2022, the total number of natural persons registered for forestry practice is 12,327, and of registered traders - 4,658.

40 tests were organized and conducted in accordance with Art. 236a of the Forest Act in connection with the registration of natural persons for the exercise of forestry practice, for which a total of 337 candidates appeared, of which 128 passed.

Numerous consultations were held with owners, private foresters and other interested persons by phone, e-mail, in the reception of the MAF, and during the field inspections.

VII. FISHERIES AND AQUACULTURE

1. Catch and production of fish and other aquatic organisms

Catch of fish and other aquatic organisms

According to data from the Executive Agency for Fisheries and Aquaculture (EAFA), in 2022 the total catch of fish and other aquatic organisms from commercial fishing in the country amounted to 5,594.3 tons - 37.9% less on an annual basis, of which 5,546.5 tons in the Black Sea and 47.8 tons in the Danube River. Compared to 2021, the catch in the Black Sea decreased by 37.8%, and that in the Danube River by 46.7%.

The total amount of saltwater species caught in 2022 amounted to 2,812.6 tons, 3,062.4 tons less compared to 2021. Traditionally, the most significant was the catch of sprat, amounting to 1,561 tons, which decreased by 55.1% (or by about 1,917.8 tons) compared to a year prior. Among the other Black Sea fish species, significant catches were reported for bluefish - 513.2 tons, common scad - 194.5 tons, Black Sea mullet - 181 tons and anchovy - 152.8 tons. The catch of turbot amounted to 54.9 tons, which is 21.9% less on an annual basis. A serious decrease compared to the previous year was also observed in the catches of anchovy - by 87%, common scad - by 29% and Black Sea mullet - by 59.4%.

Table VII.1. Total catch of fish and other aquatic organisms in the country per water basins, tons

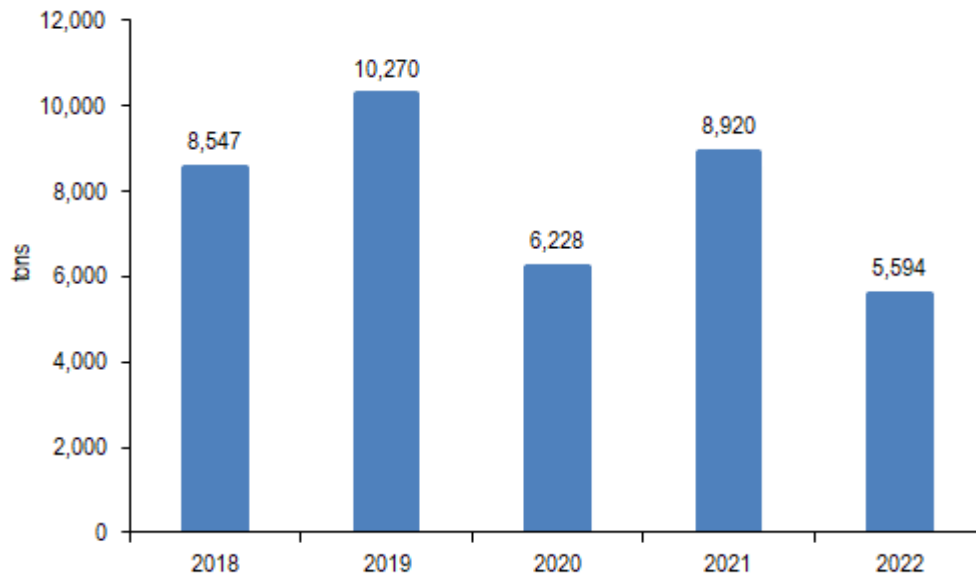
	2019	2020	2021	2022	Change 2022/2021
Catch in the Black Sea - total, including:	10,269.7	6,228.1	8,920.5	5,546.5	-37.8%
- saltwater species	5,513.3	3,418.7	5,875.1	2,812.6	-52.1%
- diadromous fishes, Pontic shad	25.6	15.8	22.6	6.8	-69.7%
- veined rapa whelk, mussels and shrimps	4,222.9	2,794.5	3,022.3	2,727.0	-9.8%
Catch in the Danube River - total, including:	60.75	69.21	89.8	47.8	-46.7%
- freshwater fish	57.4	67.2	86.4	47.0	-45.6%
- diadromous fishes, Pontic shad	2.6	0.7	1.9	0.8	-55.9%
- other aquatic organisms	0.7	1.4	1.5	0.02	-98.7%
Total catch of fish and other aquatic organisms	10,330.4	6,297.3	9,010.3	5,594.3	-37.9%

Source: EAFA

In 2022, the catches of rapana, which account for the bulk of catches of aquatic organisms in the Black Sea, amounted to 2,165.2 tons, which is around the same level of the previous year. Catches of white sand mussel reported a decrease of 55.6% on an annual basis to 336.8 tons, while black mussel doubled to 224.7 tonnes.

Catches of diadromous fish species (Pontic shad) in the Black Sea in 2022 amounted to 6.8 tons, 69.7% below the level of the previous year.

Figure VII.1. Catch of fish and other aquatic organisms in the Black Sea, tons



Source: EAFA

The economic situation of the fleet during the year was significantly affected by the temporary suspension of fishing activities due to the war in Ukraine, which threatened the security of fishing operations. This leads to lost revenue and additional unforeseen costs due to disruptions in the supply chain of fishery products.

The total catch in the Danube in 2022 includes 46.98 tons of freshwater fish, 0.85 tons - diadromous fish species - shad and 0.02 tons - other aquatic organisms.

Catches of freshwater fish in the Danube decreased by 45.6% compared to the previous year. The largest catches were Prussian carp - 10.1 tons, common carp - 6.6 tons, white barbel - 5.5 tons, common bream - 4.2 tons and European catfish - 3.7 tons. Significantly less compared to the previous year were the caught quantities of common carp - by 44.2%, grass carp - by 42% and European catfish - by 35.1%, common bream - by 31.7%, Prussian carp - by 31.3% and white barbel - by 29.4%.

The catch of diadromous fish (shad) in the Danube in 2022 decreased by 55.9% compared to 2021, and that of other aquatic organisms - by 98.7%.

Table VII.2. Catch of fish and other aquatic organisms from commercial fishing bodies in 2022

	Type of fish/aquatic species	Quantity (tons)
A. The Danube River		
1	Danube bleak / <i>Chalcalburnus chalcoides</i> /	0.511
2	Grass carp / <i>Ctenopharingodon idella</i> /	1.647
3	Silver carp / <i>Hypophthalmichthys molitrix</i> /	3.372
4	White barbel / <i>Barbus barbus</i> /	5.462
5	Zander / <i>Sander lucioperca</i> /Stizostedion lucioperca/	2.472
6	Crayfish (<i>Astacus leptodactylus</i>)	0.070
7	Crucian carp / <i>Carassius carassius</i> /	0.135
8	Pontic shad, Danube mackerel / <i>Caspialosa pontica</i> /Alosa pontica/	0.848
9	Common roach (<i>Rutilus rutilus</i>)	0.005
10	Vimba bream / <i>Vimba vimba</i> /	1.890

	Type of fish/aquatic species	Quantity (tons)
11	Ide / <i>Leuciscus idus</i> /	0.008
12	Pound-scaled barbel / <i>Barbus cyclolepis</i> /	0.848
13	Common bream / <i>Abramis brama</i> /	4.152
14	Bighead carp / <i>Aristichthys nobilis</i> /	3.430
15	Goby / <i>Gobiidae</i> /	0.021
16	Asp / <i>Aspius aspius</i> /	0.767
17	Chub / <i>Leuciscus cephalus</i> /	0.025
18	European perch / <i>Perca fluviatilis</i> /	0.022
19	Common nase / <i>Chondrostoma nasus</i> /	0.920
20	European catfish / <i>Silurus glanis</i> /	3.682
21	Sabrefish / <i>Pelecus cultratus</i> /	0.005
22	Prussian carp / <i>Carassius sp.</i> /	10.128
23	Bleak / <i>Alburnus alburnus</i> /	1.418
24	Common rudd / <i>Scardinius erythrophthalmus</i> /	0.024
25	Carp / <i>Cyprinus carpio</i> /	6.622
26	Pike / <i>Esox lucius</i> /	0.154
27	Other	0.020
	Total for the Danube river	47.849
	B. Black Sea	
28	Atherina / <i>Atherina spp.</i> /	15.926
29	White sand mussel / <i>Mya arenaria</i> /	336.842
30	Deep sea worm	0.004
31	Garpiki (<i>Belone belone</i>)	1.158
32	Leaping mullet / <i>Liza saliens</i> /	2.077
33	Turbot / <i>Psetta maxima</i> /	54.921
34	Pontic shad, Danube mackerel / <i>Caspialosa pontica</i> /Alosa pontica/	6.834
35	So-iuy mullet / <i>Mugil soiyu</i> /	0.223
36	Sea bass / <i>Dicentrarchus labrax</i> /Morone labrax/	0.032
37	Bluefish / <i>Pomatomus saltatrix</i> /	513.232
38	Common stingray / <i>Dasyatis pastinaca</i> /	0.675
39	Thornback ray / <i>Raja clavata</i> /	16.840
40	Monkfish / <i>Lophius piscatorius</i> /	0.167
41	Snouted sole / <i>Solea nasuta</i> /	0.005
42	Flathead mullet / <i>Mugil cephalus</i> /	5.563
43	Common prawn / <i>Leander spp.</i> /	0.295
44	Yellow crab / <i>Eriphia verrucosa</i> /	0.027
45	Atlantic bonito / <i>Sarda sarda</i> /	44.816
46	Flounder / <i>Platichthys flesus luscus</i> /	0.123
47	Golden grey mullet / <i>Liza aurata</i> /	0.285
48	Family Goby / <i>Gobiidae</i> /	17.273
49	Sand shrimp / <i>Crangon sp.</i> /	0.856
50	Rapa whelk / <i>Rapana spp.</i> /	2,165.19

	Type of fish/aquatic species	Quantity (tons)
51	Scad / <i>Trachurus mediterraneus ponticus</i> /	194.497
	European pilchard	4.22
	Spicara	0.012
52	Anchovy / <i>Engraulis encrasicolus ponticus</i> /	152.795
53	Sprat / <i>Sprattus sprattus sulinus</i> /	1,560.979
54	Black mussel / <i>Mytilus galloprovincialis</i> /	224.70
55	Black Sea Mullet / <i>Mullus barbatus ponticus</i> /	181.00
56	Spiny dogfish / <i>Squalus acanthias</i> /	17.129
57	Black Sea whiting / <i>Merlangius merlangus euxinus</i> /	27.665
58	Black Sea mackerel	0.01
59	Other	0.114
	Total for the Black Sea	5,546.49
	Total for the Black Sea and the Danube River	5,594.33

Source: EAFA

In the first five months of 2023, the reported total economic catch of fish and other aquatic organisms amounted to 1,919.1 tons, 17.3% less compared to the same period in 2022. Catches in the Black Sea decreased by 17.3% on an annual basis to 1,901.4 tons, and that in the Danube River - by 20.8%, up to 17.7 tons.

Production of fish and other aquatic organisms

According to EAFA data, by the end of 2022, the total number of active fish farms in the country was 714. Of these 692 were for freshwater aquaculture and 22 - for marine aquaculture.

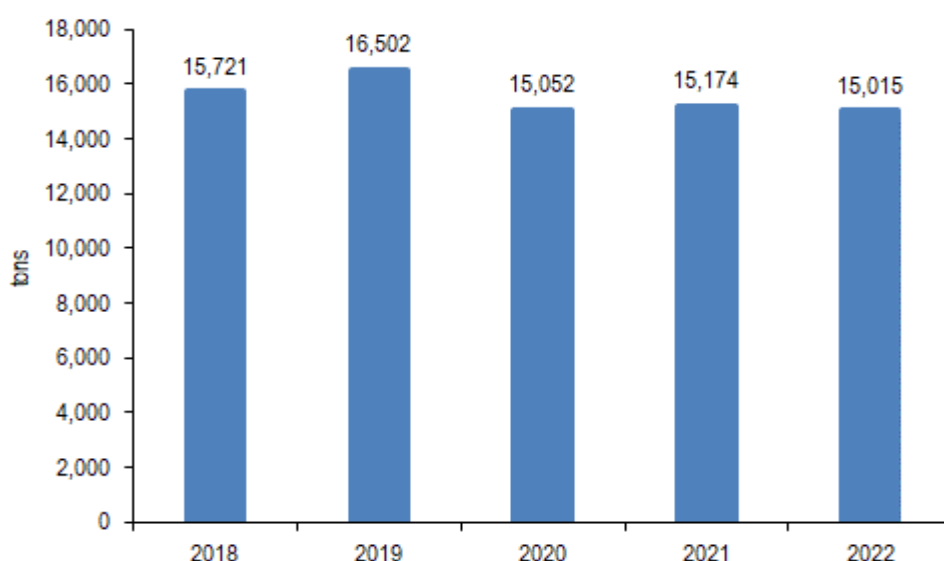
In 2022, the total production of aquaculture (stocking material, fish and other aquatic organisms for consumption) in specialized fish farms was 15,015 tons - 1% less compared to the previous year.

The total production of stocking material in fish farms was 2,415.9 tons, which represents a growth of 9.8% compared to the previous year. This was mainly due to the increased production of stocking material from some of the main fish species grown in fish farms - carp - by 39.2%, African catfish - nearly triple, silver carp - four times, brown (Balkan) trout - by 67.5%, paddlefish - by 35.0%, pike - by 40.2%. At the same time, production of stocking material of rainbow trout fell to 764.4 tons and that of zander - to 7.5 tons, compared to 891.5 tons and 43.3 tons respectively in 2021.

In 2022, the production of fish and other aquatic organisms for consumption amounted to 12,598.7 tons - 2.8% less on an annual basis. Traditionally, the production of fish for consumption from the rainbow trout, carp and bighead carp species was the largest. Compared to 2021, the production of carp decreases by 5.7%, of rainbow trout - by 6.1% and of bighead carp - c 18.7%. On the other hand, the production of Russian sturgeon for consumption increased almost sevenfold on an annual basis, and that of paddlefish more than doubled.

In 2022, the production of fish species that are by-catches in extensive and semi-intensive hot water farms - bream, bleak, perch and red perch was reported. These species are not subject to targeted breeding and rearing in aquaculture.

Figure VII.2. Production of fish and other organisms in specialized fish farms for the 2018 – 2022 period, tons



Source: EAFA (data for 2022 as of 30.06.2023)

The main species of marine aquaculture grown in the coastal waters of the country is the black mussel. In 2022, its yield for consumption decreased by 5.9% compared to the previous year, to 2,422.1 tons.

Table VII.3. Production of fish stocking material, fish and aquatic organisms in fish farms, tons

No.	Common and local names	Fish stocking material		Fish for human consumption		Total weight	
		2021	2022	2021	2022	2021	2022
1	Brown (Balkan) trout	22.17	37.13	14.90	9.87	37.06	47.00
2	Rainbow trout	891.49	764.4	4,535.72	4,259.31	5,427.20	5,023.71
3	Brook trout	2.76	1.18	0.92	0.1	3.68	1.28
4	Pike	3.56	4.99	13.12	11.99	16.67	16.98
5	Tench	0.07	0.09	0.55	0.69	0.61	0.77
6	Bleak (Danube bleak)	0.00	0.00	4.88	7.84	4.88	7.84
7	Bream	0.00	0.00	0.00	6.13	7.37	6.13
8	Nase	0.00	0.00	1.45	0.91	1.45	0.91
9	Carp	689.12	959.53	3,198.49	3,016.36	3,887.62	3,975.89
10	Crucian carp	0.00	0.00	0.00	2.25	2.16	2.25
11	Prussian carp	11.14	2.65	234.44	258.6	245.58	261.25
12	Silver carp	16.17	61.12	173.06	107.8	189.23	168.92
13	Bighead carp	274.02	262.98	1223.54	994.71	1,497.56	1,257.69
14	Grass carp	149.64	164.44	260.99	211.41	410.62	375.85
15	Black carp	0.00	0.75	0.00	0.52	0.0	1.27
16	Catfish	32.30	28.87	107.94	136.22	140.25	165.09
17	Channel (American) catfish	0.00	0.000	8.02	11.05	8.02	11.05
18	Zander	43.31	7.5	33.42	43.74	76.72	51.24
19	European perch	0.10	0.00	3.09	1.86	3.19	1.86

No.	Common and local names	Fish stocking material		Fish for human consumption		Total weight	
20	Sterlet	0.00	0.00	4.91	0.41	4.91	0.41
21	Beluga sturgeon	0.00	0.00	39.89	59.28	39.89	59.28
22	Starry sturgeon	0.00	0.00	0.27	0.25	0.27	0.25
23	Russian sturgeon	2.43	1.54	87.05	595.03	89.48	596.57
24	Black mussel	0.00	0.00	2,573.69	2,422.11	2,573.69	2,422.11
25	Other hybrids of the Sturgeon family	1.81	0.71	68.80	59.57	70.61	60.28
26	Lake salmon	0.96	0.00	0.00	0.00	0.96	0.00
27	Paddlefish	32.71	44.15	54.21	126.25	86.91	170.39
28	Other	0.00	0.00	0.00	1.6	0.00	1.6
29	Green algae	0.00	0.00	9.80	10.32	9.80	10.32
30	Rudd	0.20	0.00	4.86	12.15	4.88	12.15
31	Common Roach	0.00	0.00	2.30	2.4	2.30	2.4
32	African catfish	26.57	73.78	165.21	168.75	191.78	242.52
33	Siberian sturgeon	0.10	0.00	106.08	31.02	106.18	31.02
34	Crayfish	0.22	0.01	0.00	5.30	6.64	5.31
35	Bester	0.20	0.00	6.24	0.3	6.44	0.3
36	Common prawn	0.00	0.00	18.42	22.51	18.42	22.51
37	Tilapia	0.00	0.06	0.12	0.25	0.12	0.31
	Total	2,201.05	2,415.88	12,970.46	12,598.66	15,173.67	15,014.71

Source: EAFA (data for 2022 as of 30.06.2023)

In 2023, an increase in the number of fish farms and, accordingly, in aquaculture production is expected. The construction of new farms, as well as the modernization and increase of production capacities contribute to the development of the sector.

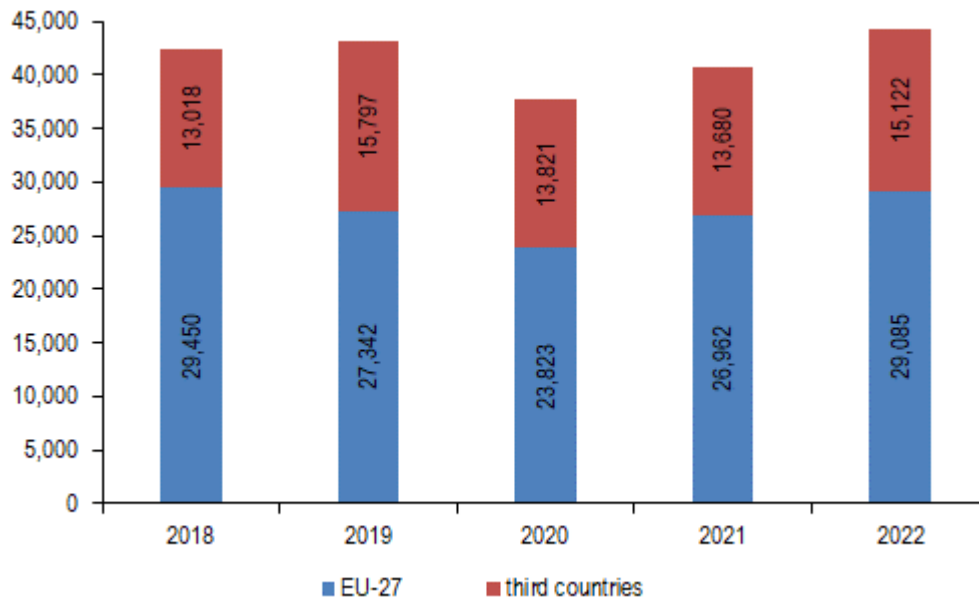
2. Import and export of fish and fish products Import

According to NSI data, in 2022 a total of 44,208 tons of fish and fish products were imported into the country. 8.8% above the level of the previous year. An increase is observed in the imports of live and frozen fish, frozen fish fillets, salted and dried fish, mollusks (live, fresh, chilled, frozen and dried), ready foods and canned fish and canned crustaceans and mollusks, and a decrease in imports of fresh and chilled fish, crustaceans and aquatic invertebrates.

About two-thirds of the total imported quantities of fish and fish products in 2022 were from EU member states. Deliveries from the EU increased by nearly 8% on an annual basis, amounting to 29, 085 tons, with the main partners being Spain (5.2 thousand tons), the Netherlands (4.9 thousand tons), Greece (3.8 thousand tons) and Denmark (3.6 thousand tons), followed by Romania (2.5 thousand tons), Poland (1.8 thousand tons), Germany (1.2 thousand tons) and others.

The import of fish and fish products from third countries is 15,122 tons, 10.5% more compared to 2021. During the year, the most significant import was from Morocco (2.4 thousand tons), Canada (2.3 thousand tons), Norway (2 thousand tons), Turkey (1.7 thousand tons), Ecuador (1.4 thousand tons) and Spain (1.2 thousand tons).

Figure VII.3. Import of fish and fish products from the EU and third countries, tonnes



Source: NSI

Table VII.4. Import of fish, other aquatic organisms and fish products, tons

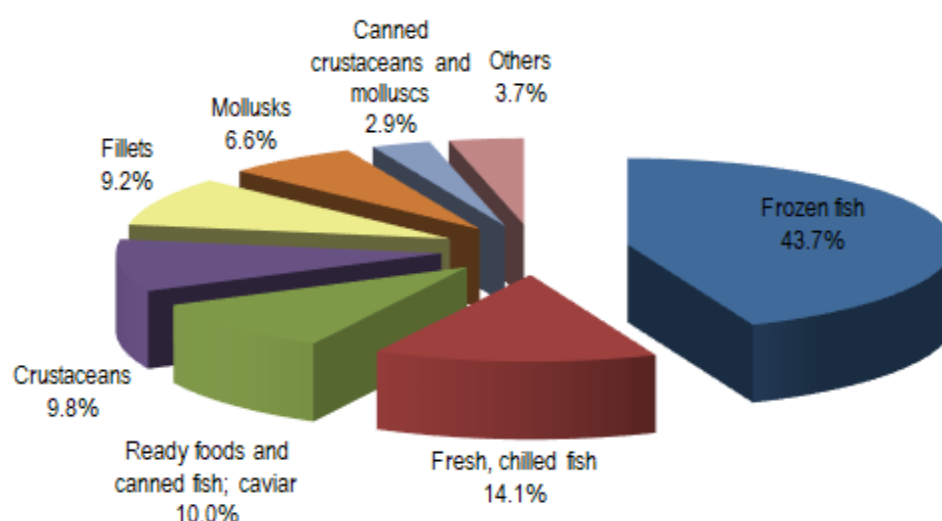
Products	2021	2022	Change 2022/2021
Fish, other aquatic organisms and fish products - total, including:	40,642	44,208	8.8%
Live fish - freshwater and saltwater	407	534	31.3%
Fish, fresh or chilled, excluding fillets	6,784	6,219	-8.3%
Fish - frozen, excluding fillets	16,261	19,333	18.9%
Fish fillets and other fish meat, fresh or chilled, frozen	2,924	4,053	38.6%
Fish - dried, salted, smoked	442	470	6.2%
Crustaceans	5,189	4,323	-16.7%
Mollusks*	2,789	2,905	4.2%
Aquatic invertebrates other than crustaceans and molluscs	890	639	-28.3%
Ready foods and canned fish; caviar	3,925	4,430	12.9%
Crustaceans and mollusks, tinned	1,032	1,302	26.2%

Source: NSI data processed by the MAF.

*Also includes some terrestrial mollusks that cannot be distinguished.

Traditionally, frozen fish had the largest share in total imports of fish, aquatic organisms and fish products. In 2022, 19,333 tons of frozen fish, excluding fillets, were imported, which is nearly 19% more on an annual basis. The import of frozen mackerel remained the most significant - 8,926 tons, which is 5.2% less than the previous year. The deliveries of frozen fish of the following varieties were also relatively large: hake - 2,073 tons, sardines - 1,482 tons, cod - 751 tons, herring - 659 tons, salmon - 155 tons, common scad - 287 tons and trout - 143 tons.

Figure VII.4. Structure of import of fish and fishery products in 2022



Source: NSI and MAF calculations

Among the other groups of products, a serious increase on an annual basis was observed in the import of fish fillets - by 38.6%, live fish - 31.3% and canned crustaceans and mollusks - by 26.2% and a more moderate increase in the import of mollusks, dried and salted fish and ready foods and canned fish - between 4.2% and 12.9%. On the other hand, the import of aquatic invertebrates other than crustaceans and mollusks shrank by 28.3%, and that of crustaceans and fresh and chilled fish by 16.7% and 8.3%, respectively.

According to preliminary data, in the first six months of 2023, a total of 19,133 tons of fish, other aquatic organisms and processed fish products were imported, which was 9.9% less compared to the same period a year prior. There was a decrease in supplies both from the EU - by 7.8% to 12,154 tons, and from third countries - by 13.3% to 6,979 tons.

Export

According to NSI data, in 2022 the total export of fish, other aquatic organisms and fish products was 14,928 tons. The amount is 9.2% less than the previous year, showing a decrease in export of most types of products, except for ready foods and canned fish and fish fillets.

Table VII.5. Export of fish, other aquatic organisms and fish products, tonnes

Products	2021	2022	Change 2022/2021
Fish, other aquatic organisms and fish products - total, including:	16,434	14,928	-9.2%
Live fish - freshwater and saltwater	1,257	982	-21.9%
Fish, fresh or chilled, excluding fillets	2,929	2,212	-24.5%
Fish - frozen, excluding fillets	2,039	1,539	-24.5%
Fish fillets and other fish meat, fresh or chilled, frozen	537	657	22.4%
Fish - dried, salted, smoked	1,177	949	-19.4%

Products	2021	2022	Change 2022/2021
Crustaceans	99	85	-14.3%
Mollusks*	2,000	1,471	-26.4%
Aquatic invertebrates other than crustaceans and molluscs	37	-	-
Ready foods and canned fish; caviar	3,440	4,987	45.0%
Crustaceans and mollusks, tinned	2,920	2,046	-29.9%

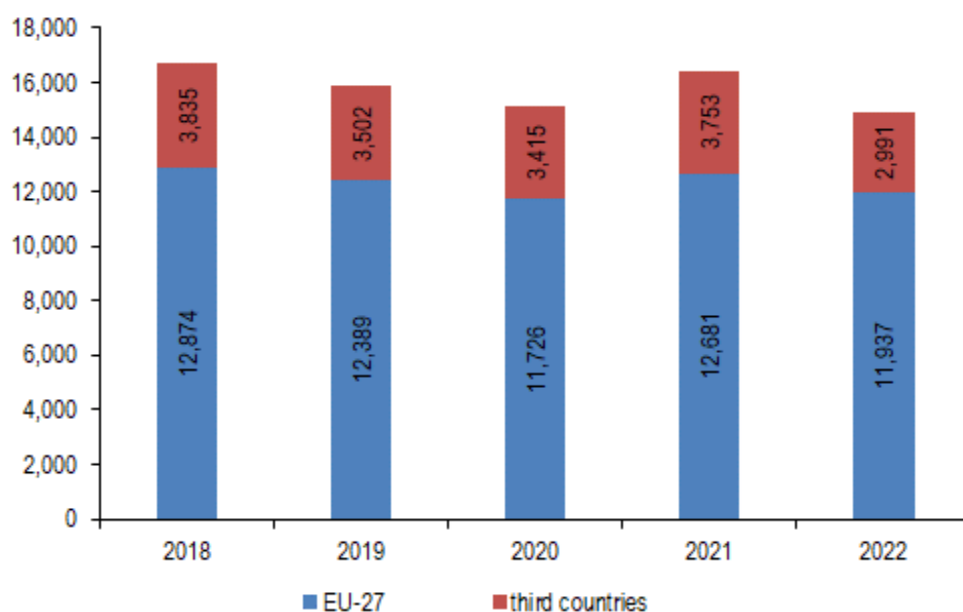
Source: NSI and MAF calculations.

*Also includes some terrestrial mollusks that cannot be distinguished.

About 80% of total fish and fishery product exports in 2022 were formed by shipments to the EU, which shrank by 5.9% on an annual basis to 11,937 tons. The most significant quantities were towards Romania (6.4 thousand tons) and Sweden (2.3 thousand tons), followed by those for Poland (0.5 thousand tons), Belgium (0.5 thousand tons), Greece (0.4 thousand tons), etc.

The decrease in the export of fish and fish products to third countries was 20.3% to 2,991 tons, mainly exported to Serbia (1,266 tons), Bosnia and Herzegovina (366 tons), South Korea (334 tons), Japan (290 tons), the United Kingdom (189 tons), Ukraine (187 tons), North Macedonia (159 tons) and USA (115 tons).

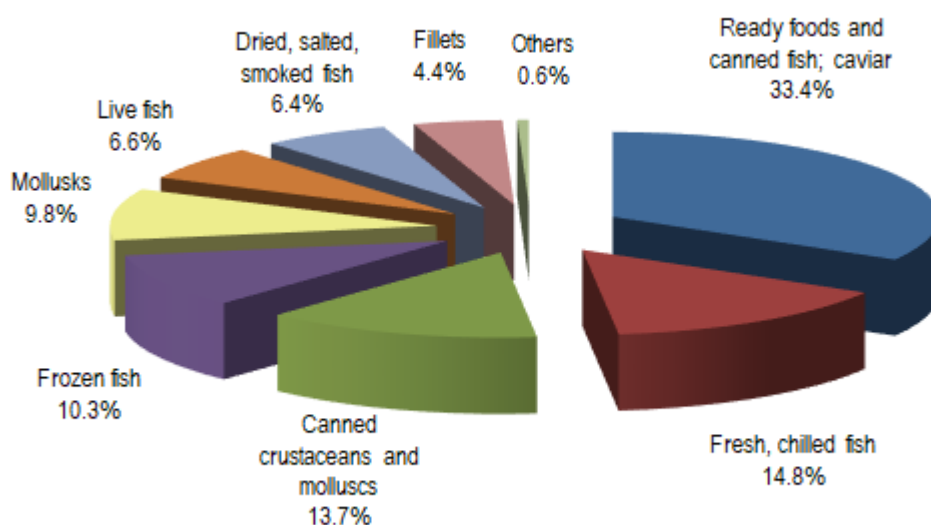
Figure VII.5. Exports of fish, other aquatic organisms and fishery products to the EU and third countries, tons



Source: NSI

In 2022, exports of ready foods and canned fish and caviar increased by 45.0% on an annual basis, and that of fish fillets - by 22.4%. For the other types of fishery products, there was a decrease in exported quantities by between 14.3% (crustaceans, fresh and chilled) and 29.9% (canned crustaceans and mollusks).

Figure VII.6. Structure of exports of fish and fishery products in 2022



Source: NSI and MAF calculations.

According to preliminary data, in the first half of 2023, a total of 6,656 tons of fish, aquatic organisms and processed fish products were exported from the country, which is 16.8% less compared to the same period of 2022. Shipments to the EU decreased by 23.0% to 4,952 tons, whereas export to third countries increased by 8.6% to 1,703 tons.

3. Maritime and Fisheries Program 2014 - 2020 and Maritime, Fisheries and Aquaculture Program 2021 - 2027

Despite the imposed restrictions and economic consequences on the Fisheries sector as a result of the COVID-19 pandemic and the war in Ukraine, in 2022 the loss off funds under the Maritime and Fisheries Program 2014 - 2020 (MFP) in relation to the N+3 rule was avoided for the fourth year in a row. The pace of implementation of the Community-Led Local Development (CLD) approach was strengthened.

In 2022, events organized by the National Fisheries Network (NFN) were being actively implemented, some of them being held online in order to reach more participants.

The Partnership Agreement with the Republic of Bulgaria for the 2021-2027 period was approved by EC decision of 06.07.2022.

In March 2022, a public discussion was held on the environmental assessment report and the second draft of the Maritime, Fisheries and Aquaculture Program 2021 - 2027 (MFAP). The Interdepartmental Commission - Specialized Composition of the High Expert Ecological Council under the Minister of Environment and Water has reviewed and approved the documentation of the Environmental Assessment Report of MFAP on 21.09.2022. The opinion of the Environmental Assessment on the MFAP was issued on 27.10.2022.

On 23 November 2022, the Maritime, Fisheries and Aquaculture Program 2021 - 2027 was officially approved by the European Commission.

The highest interest in 2022 under the Maritime and Fisheries Program 2014 - 2020 was registered for the measure for overcoming the consequences of the war in Ukraine under Union Priority (UP) 1. Under UP 4, the interest in the measures of the Community-Led Local Development strategies is of note.

Under the Maritime and Fisheries Program 2014 - 2020, 152 contracts were concluded in 2022, and the implementation of the Program according to EU priorities is as follows:

Union priority 1: Promoting environmentally sustainable, innovative, competitive and knowledge-based, resource-efficient fisheries

Main achievements under UP 1 - 64 administrative contracts for granting financial aid (AGC) were concluded.

Calls announced under measures:

- 1.2 "Health and safety";
- 1.7 "Added value, product quality and use of unwanted catches";
- 1.8 "Fishing Harbors, Landing Wharves, Fish Markets, and Marinas", sector "Investments aimed at construction and/or modernization of marinas";
- 1.9 "Temporary cessation of fishing activities due to the Russian war in Ukraine that threatens the security of fishing activities or impedes the economic viability of fishing operations".

Under Measure 1.2, a total of 3 contracts were concluded with a total amount of BGN 23,619 (EUR 12,076.31) in grants.

Under Measure 1.8, the current budget under the measure is BGN 27,420,157 (EUR 14,019,919). with a total amount of BGN 25,928,166 (EUR 13,257,064) in grants were concluded.

In 2022, under the measure, a call with a budget of BGN 1,898,071 (EUR 970,483) in grants was announced. The call is only aimed at construction and/or modernization of marinas.

During the year, a call was announced under Measure 1.9 "Temporary suspension of fishing activities due to the Russian war of aggression against Ukraine that threatens the security of fishing activities or impedes the economic viability of fishing operations". The MFP MA, following an audit of the available residual resources under the individual measures of the program, has transferred funds from the measures that cannot generate interest to the newly created compensatory measures to mitigate the consequences of the military aggression of Russia against Ukraine in 2022. The budget of the measure is BGN 7,267,534 (EUR 3,715,888) in grants. A total of 58 project proposals were received, while their number in 2022 was 41.

The agreed funds in 2022 amounted to BGN 4,551,843 (EUR 2,327,356) in grants or 12% of the priority budget.

The total progress under UP 1 in terms of public expenditure paid to the beneficiaries in 2022 amounted to BGN 9,848,364 (EUR 5,035,466.00) in grants or 26% of the priority budget.

The certified funds in 2022 amounted to BGN 6,140,021 (EUR 3,139,391) EMFF or 17% of the priority budget (the amount of certified expenditure includes contracts concluded in previous years).

Union priority 2: Fostering environmentally sustainable, innovative, competitive and knowledge-based resource-efficient aquaculture

Main achievements under UP 2 in 2022 - 6 AGC were concluded.

Measures opened for calls:

- 2.2 "Productive investments in aquaculture";
- 2.2 "Productive Investments in Aquaculture - Major Projects Sector"

Under Measure 2.2 "Productive investments in aquaculture", budget surpluses were identified due to terminated contracts and reduced contract amounts. The identified EMFF funds amounting to EUR 226,261 were redirected to Measure 1.9 "Temporary cessation of fishing activities due to the Russian war of aggression against Ukraine". As the last calls under the measure ended in September 2022 for both the Small Projects and Major Projects sectors, the measure will no longer be open until the end of the program period, as a result of which the MA has redirected the available unused financial resources to measure 1.9.

The certified funds in 2022 amounted to EUR 1,277,064 EMFF or 5% of the priority budget (the amount of certified expenditure includes certificated contracts in previous years).

Union Priority 3: Promoting the implementation of the Common Fisheries Policy

2 measures are set at Program level under Union Priority 3.

The implementation of the approved project proposals, which are implemented by a specific beneficiary, the Executive Agency for Fisheries and Aquaculture (EFAA), continues to be a priority.

Main achievements under UP 3 in 2022 - 6 AGC were concluded.

Measures opened for calls:

- 3.1 "Control and enforcement" (the call started in 2017 and has a deadline in 2023);
- 3.2 "Data collection under the National Program for Data Collection and Management of the Fisheries Sector 2017 - 2019" (the started in 2017 and has a deadline in 2023).

The current budget under Measure 3.1 "Control and enforcement" is BGN 14,542,701 (EUR 7,435,679) in grants.

1 contract worth BGN 429,852 (EUR 219,783) in grants was concluded in 2022. A total of 28 contracts were concluded under the measure worth BGN 14,700,945 (EUR 7,516,589) in grants or 101% of the measure's budget.

The current budget under Measure 3.2 "Data Collection" is BGN 8,149,156 (EUR 4,166,661) in grants.

2 contracts worth BGN 1,004,653 (EUR 513,679) in grants were concluded in 2022. So far, 5 contracts were concluded worth BGN 5,857,003 (EUR 2,994,684) in grants or 72% of the measure's budget.

The disbursed funds in 2022 were BGN 1,623,220 (EUR 829,952) in grants or 7.2% of the priority budget.

The certified funds in 2022 amounted to BGN 824,564 (EUR 421,599) EMFF or 4% of the priority budget.

Union Priority 4: Increasing Employment and Territorial Cohesion

Despite the difficulties caused by the COVID-19 pandemic in 2021 and the economic consequences of Russia's military aggression against Ukraine, the trend of accelerating the implementation of the Community-Led Local Development approach has been retained. In 2022, the town of Burgas held capacity building training of potential LAGs under EMFF for the 2021-2027 program period. The event was organized by FAMENET (Fisheries and Aquaculture Monitoring, Evaluation and Local Support Network).

Main achievements under UP 4 - 68 AGC were concluded in 2022 with a value of BGN 8,287,706 (EUR 4,237,502) in grants.

The total budget for the announced procedures under the CLLD strategies for 2022 amounted to BGN 36,338,246 (EUR 18,579,735) in grants.

By the end of the reporting period, 367 project proposals were submitted under the open 124 procedures of the strategies for the CLLD of the local initiative fishing groups (LIFG).

In 2022, 25 procedures for receiving project proposals from the approved 9 strategies for CLLD of LIFG were opened.

The certified funds in 2022 amounted to BGN 5,918,575 (EUR 3,026,166) EMFF or 16% of the priority budget.

Union Priority 5: Fostering marketing and processing

The interest in Measure 5.4 "Processing of fishery and aquaculture products" was the greatest. Under Measure 5.1 "Plans for production and marketing", there are so far two recognized producer organizations that can implement a production and marketing plan.

Main achievements under PS 5 - 6 AGC were concluded in 2022.

Measures opened for calls:

- 5.1 "Plans for production and marketing";
- 5.4 "Processing of fishing and aquaculture products".

In 2022, a call was announced under 5.1 "Plans for production and marketing" with a budget of BGN 51,160 (EUR 26,158) in grants, for which no project proposals have been received. In 2022, 1 contract was concluded under a procedure for accepting proposals, announced in 2021, with a value of BGN 77,250 (EUR 39,498) in grants or 63% of the procedure budget.

A call under Measure 5.3 "Measures for market supply" was announced in 2022. The current budget under the measure is BGN 12,339,578 (EUR 6,309,223) in grants. The budget under the measure has been increased due to the introduction of exceptional compensatory measures to support the sector in relation to the military situation in Ukraine. 1 project proposal was received worth BGN 797,391 (EUR 407,706) in grants. So far, 12 contracts were concluded under the measure worth BGN 1,569,174 (EUR 802,318) in grants or 13% of the measure's budget.

Under measure 5.4 "Processing of fishery and aquaculture products", there was also a call announced in 2022 with a budget of BGN 4,168,025 (EUR 2,131,110). The current budget under the measure is BGN 25,951,544 (EUR 13,269,017) in grants. 64 contracts have been concluded under the measure with a value of BGN 21,352,703 (EUR 10,917,631) in grants or 82% of the measure's budget.

The calls under UP 5 for 2022 amounted to BGN 4,431,911 (EUR 2,266,035) in grants, which was 12% of the total budget of the program.

BGN 1,709,466 or EUR 3,343,374 of public expenditure were disbursed to beneficiaries in 2022 under 4 contracts concluded in previous years or 9% of the priority budget.

The certified funds in 2022 amounted to BGN 1,151,779 (EUR 588,904) EMFF or 3% of the priority budget.

Union Priority 6: Integrated Maritime Policy

Main achievements under UP 6 - a total of 8 contracts are being implemented under UP 6.

Measures opened for calls:

In 2022, a call was announced under Measure 6.3 "Raising awareness of the marine environment" under UP 6 with a budget of BGN 615,000 in grants.

The current budget under Measure 6.1 "Integrated maritime surveillance" is BGN 3,015,519 (EUR 1,541,834) in grants. 1 contract was concluded with a total value of BGN 3,017,091 (EUR 1,542,638) in grants or 100% of the measure's budget.

The current budget of measure 6.3 "Raising awareness of the marine environment" amounts to BGN 3,015,667 (EUR 1,541,909) in grants. 7 contracts were concluded with a total value of BGN 2,655,684 (EUR 1,357,850.5) in grants or 88% of the measure's budget.

In 2022, funds were disbursed to the amount of BGN 1,390,200 (EUR 710,809) in grants under Measure 6.1, which was 23% of the priority budget. The certified funds in 2022 amounted to BGN 1,042,650 (EUR 533,107) EMFF.

There were no contracts concluded under Measure 6.3 in 2022. In 2022, funds were disbursed to the amount of BGN 1,158,328 (EUR 592,253) in grants under Measure 6.3, which was 19% of the priority budget. The certified funds in 2022 amounted to BGN 868,746 (EUR 444,190) EMFF.

Pursuant to the Agreement for Delegation of Functions for Implementation of the 2014-2020 MFP, the SFA - Paying Agency, as the Intermediate Body of the Managing Authority, verifies the expenditures upon submission of a request for payment.

In 2022, payment requests according to the table below were accepted, verified and paid through UMIS 2020.

Table VII.6. Projects paid under measures of MFP 2014 - 2020 in 2022 (BGN)

Measure	Number of projects	Amount paid	National funding	European funding
1.1. Diversification and new forms of income	1	131,027.34	35,036.72	95,990.62
1.6. Conservation and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities	2	112,800.00	30,162.72	82,637.28
1.8. Investments for improvement of the infrastructure in the fishing ports, investments for improvement of unloading berths. Construction or modernization of boat docks	1	2,929,281.02	783,289.75	2,145,991.27
1.9. Support for owners of fishing vessels and fishermen to overcome the economic consequences of the outbreak of COVID-19 due to temporary cessation of fishing activities	61	2,243,994.08	600,044.03	1,643,950.05
2. 2. Productive investments in aquaculture	6	1,198,891.18	299,722.81	899,168.37
2.3. Fostering new aquaculture producers, developing sustainable aquaculture	4	1,624,223.33	406,055.84	1,218,167.49
2.5. Aquaculture providing environmental services	5	370,959.36	92,739.84	278,219.52
2.6. Support to producers of fish and other aquatic organisms to address the economic consequences of the COVID19 pandemic	2	3,103.10	775.77	2,327.33.
3.1. Control and enforcement	2	-573,555.53	-57,355.54	-516,199.99
3.2. Data collection	3	1,373,899.47	274,779.89	1,099,119.58
4.2. Implementation of community led local development strategies	105	7,258,086.02	1,088,712.95	6,169,373.07
5.3. Establishment of producer organizations, associations of producer organizations or interbranch organizations. Search for new markets and improvement of the conditions for placing fishery and aquaculture products on the market	2	92,025.60	23,006.40	69,019.20
5.4 "Processing of fishing and aquaculture products".	4	1,485,695.68	371,423.91	1,114,271.77
6.1. Integrated maritime surveillance	2	1,390,200.00	347,550.00	1,042,650.00
6.3. Raising awareness of the marine environment	5	1,105,938.33	276,484.59	829,453.74
7.1. Technical assistance	13	2,031,541.06	507,885.27	1,523,655.79
Total:	218	22,778,110.04	5,080,314.95	17,697,795.09

Source: SFA

Overall progress in the implementation of the Maritime and Fisheries Program 2014 - 2020 as of 15.06.2023

Priority 1: Promoting environmentally sustainable, innovative, competitive and knowledge-based, resource-efficient fisheries

Measure 1.1. "Diversification and new forms of income" - one payment has been made with a total value of the grant of BGN 131,027.

Measure 1.2. Investments for improvement of hygiene, health, safety and working conditions on board or of individual equipment, provided that those investments exceed the requirements under Union or national law. Payments made - 2 with a total value of the grant of BGN 15,762.40.

Measure 1.3. "Permanent cessation of fishing activities" - payments made - 8 with a total value of the grant of BGN 483,173.09.

Measure 1.6. "Conservation and restoration of marine biodiversity and ecosystems and compensation regimes" - payments made - 5 with a total value of the grant of BGN 512,041.88.

Measure 1.7. "Added value, product quality and use of unwanted catches" - payments made - 4 with a total value of the grant of BGN 359,673.00.

Measure 1.8. "Investments for improvement of the infrastructure in fishing ports, investments for improvement of the unloading berths. Construction or modernization of boat docks" - payments made - 22 with a total value of the grant of BGN 24,147,436.21.

Measure 1.9. "Support for owners of fishing vessels and fishermen to overcome the economic consequences of the outbreak of COVID-19 due to temporary cessation of fishing activities" - payments made - 136 with a total value of the grant of BGN 4,187,210.85.

Priority 2 "Fostering environmentally sustainable, innovative, competitive and knowledge-based resource-efficient aquaculture"

Measure 2.2. "Productive investments in aquaculture" - payments made - 94 with a total value of the grant of BGN 18,204,139.58.

Measure 2.3. "Fostering new aquaculture producers, developing sustainable aquaculture" - payments made - 21 with a total value of the grant of BGN 5,648,137.31.

Measure 2.5. "Aquaculture providing environmental services" - payments made - 10 with a total value of the grant of BGN 774,343.49.

Measure 2.6. "Support for producers of fish and other aquatic organisms to address the economic consequences of the COVID-19 pandemic" - payments made - 105 with a total value of the grant of BGN 3,598,249.03.

Priority 3 "Fostering the implementation of the CFP"

Measure 3.1. "Control and enforcement" - payments made - 36 with a total value of the grant of BGN 10,347,383.47.

Measure 3.2. "Data collection" - payments made - 10 with a total value of the grant of BGN 5,042,379.12.

Priority 4 "Increasing employment and territorial cohesion"

Measure 4.1 "Preparatory support for CLLD strategies, including the establishment of a National Fisheries Network". 13 payments have been made with a total value of the grant of BGN 506,393.76.

Measure 4.2. "Implementation of community-led local development strategies" - payments made - 329 with a total value of the grant of BGN 18,685,969.71.

Priority 5 Fostering marketing and processing

Measure 5.1. "Plans for production and marketing" - one payment has been made with a total value of the grant of BGN 49,920.00.

Measure 5.3. "Establishment of producer organizations, of associations of producer organizations or of interbranch organizations. Searching for new markets and improving marketing conditions for fisheries and aquaculture products" - 9 payments have been made with a total value of the grant of BGN 1,276,202.73.

Measure 5.4. "Processing of fishery and aquaculture products" - payments made - 40 with a total value of the grant of BGN 15,965,268.83.

Measure 5.4. "Support for processing enterprises of fishery and aquaculture products to address the economic consequences of the COVID-19 pandemic" - 35 payments have been made with a total value of the grant of BGN 2,650,961.47.

Priority 6 "Fostering the implementation of the Integrated Maritime Policy"

Measure 6.1. "Integrated maritime surveillance" - payments made - 3 with a total value of the grant of BGN 2,295,327.18.

Measure 6.3. "Raising awareness of the marine environment" - payments made - 6 with a total value of the grant of BGN 1,293,982.62.

Priority 7 "Technical Assistance"

74 payments have been made with a total value of the grant of BGN 10,779,389.37.

Table VII.7. Projects paid under measures of the MFP 2014 - 2020 for the period 01.01.2023 - 15.06.2023 (BGN)

Measure	Number of projects	Amount paid	National funding	European funding
1.8. Investments for improvement of the infrastructure in the fishing ports, investments for improvement of unloading berths. Construction or modernization of boat docks	2	559,966.43	149,735.02	410,231.41
1.9. Support for owners of fishing vessels and fishermen to overcome the economic consequences of the outbreak of COVID-19 due to temporary cessation of fishing activities	5	127,840.43	34,184.54	93,655.89
2.3. Fostering new aquaculture producers, developing sustainable aquaculture	1	78,933.53	19,733.39	59,200.14
2.6. Support to producers of fish and other aquatic organisms to address the economic consequences of the COVID-19 pandemic	1	66,311.86	16,577.97	49,733.89
4. 2. Implementation of community-led local development strategies	27	2,267,654.97	340,148.26	1,927,506.71
5.4. Processing of fishing and aquaculture products	2	168,240.00	42,060.00	126,180.00
7.1. Technical assistance	5	224,677.85	56,169.47	168,508.38
Total:	43	3,493,625.07	658,608.65	2,835,016.42

Source: SFA

Monitoring

According to Art. 2 of the Agreement for Delegation of Functions for Implementation of the 2014-2020 MFP, the inspections started for the implementation of the beneficiaries' production programs, for the use of the financed assets for their intended purpose, as well as inspections for the implementation of the monitoring result indicators for the previous year 2021. In 2022, 103 projects falling under a monitoring period after the final payment of the grant were selected for administrative and on-site inspections on the basis of risk analysis. The results of the inspections were summarized and reported to the MA of the MFP.

Financing of VAT costs of municipalities with approved projects under the MFP

As of 31.12.2022, VAT costs of municipalities with approved projects under MFP have been authorized and reimbursed in the amount of BGN 1,110,768. The funds are provided by Decree of the Council of Ministers No. 45 of 07.04.2022 on the approval of additional expenditures for 2022 under the budget of the State Fund Agriculture for the financing of value added tax expenditures of municipalities on projects approved for support under the Rural Development Program for the 2014 - 2020 period and under the Maritime and Fisheries Program for the 2014 - 2020 period.

Financing with interest free-loans of the expenditure of municipalities with approved projects under the MFP

As of 31.12.2022, expenses for interest-free loans to municipalities with approved projects under the MFP in the amount of BGN 492,461.34 have been authorized and reimbursed. The funds are provided by Decree of the Council of Ministers No. 221 of 20.08.2020 on the conditions and procedure for granting temporary interest-free loans from the central budget to the budgets of the municipalities for financing expenses for interim and final payments for projects approved for support under the Maritime and Fisheries Program for the 2014 - 2020 period.

Expected data for 2023

Table VII.8. Forecast for payments under the MFP 2014 - 2020 for 2023 (BGN)

Union priorities	Measures under the Union priorities	EMFF	National co-financing	Total financial resources
Priority 1: Promoting environmentally sustainable, innovative, competitive and knowledge-based, resource-efficient fisheries	Measure 1.1. Diversification and new forms of income	0.00	0.00	0.00
	Measure 1.2. Health and safety	0.00	0.00	0.00
	Measure 1.6. Conservation and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities - - 73.2633125515726%	452,365.33	165,086.05	617,451.38
	Measure 1.7. Added value, product quality and use of unwanted catches";	2,429.27	886.54	3,315.81
	Measure 1.8. Investments for improvement of the infrastructure in the fishing ports, investments for improvement of unloading berths. Construction or modernization of boat docks - -73.2633125515726%	1,082,579.07	395,076.02	1,477,655.09
	Measure 1.9. Temporary cessation of fishing activities, COVID-19	363,201.72	132,546.71	495,748.43
	Measure 1.9. Temporary cessation of fishing activities, Ukraine	1,757,839.99	641,505.50	2,399,345.49
Priority 2: Fostering environmentally sustainable, innovative, competitive and knowledge-based resource-efficient aquaculture	Measure 2.2. Productive investments in aquaculture - 75% sector "Small projects" and sector "Recycling systems and construction of new ones, as well as expansion and modernization of existing aquaculture farms"	2,684,272.69	894,757.56	3,579,030.25
	Measure 2.3. Fostering new aquaculture producers developing sustainable aquaculture - 75%	884,617.28	294,872.43	1,179,489.70
	Measure 2.5. Aquaculture providing environmental services	592,665.05	197,555.02	790,220.07

Union priorities	Measures under the Union priorities	EMFF	National co-financing	Total financial resources
Priority 3 "Fostering of the implementation of CFP"	Measure 3.1. Support for monitoring, control and implementation, increasing institutional capacity	2,079,986.81	231,109.65	2,311,096.45
Priority 4 "Increasing employment and territorial cohesion"	Measure 4.2. Implementation of community led local development strategies - 85%	5,187,165.13	915,382.08	6,102,547.21
Priority 5 Fostering of marketing and processing	Measure 5.1. Plans for production and marketing	57,937.50	19,312.50	77,250.00
	Measure 5.3. Measures for market supply	138,681.74	46,227.25	184,908.98
	Measure 5.3. Measures for market supply - Financial compensation for operators from Russia's war of aggression against Ukraine	8,003,889.38	2,667,963.13	10,671,852.51
	Measure 5.4. Processing of fishery and aquaculture products - 75%	1,106,617.57	368,872.52	1,475,490.09
Union Priority 6: Integrated Maritime Policy	Fostering the implementation of the IMP - Art. 80, item 1, para. 1 of Reg. 508/2014 IMP	517,963.64	172,654.55	690,618.19
	Fostering the implementation of the IMP - Art. 80, item 1, para. 3 of Reg. 508/2014 Knowledge of the marine environment	991,337.04	330,445.68	1,321,782.72
Technical assistance	75%	1,162,046.82	387,348.94	1,549,395.76
Total:		27,065,596.02	7,861,602.11	34,927,198.13

Source: MAF, Maritime and Fisheries Directorate

Table VII.9. Forecast for payments under the MFP 2021 - 2027 for 2023 (BGN)

Union priorities	Measures under the Union priorities	EMFF	National co-financing	Total financial resources
Priority 3 "Creating the prerequisites for the growth of a sustainable blue economy and stimulating the development of communities engaged in fisheries and aquaculture in coastal and inland areas"	Capacity building and preparatory activities to support the development and future implementation of Community-led local development strategies	486,016.30	208,292.70	694,309.00
Technical assistance	Technical assistance	1,120,000.00	480,000.00	1,600,000.00
Total:		1,606,016.30	688,292.70	2,294,309.00

Source: MAF, Maritime and Fisheries Directorate

Table VII.10. Calls under the MFP 2014 - 2020 for 2023 (BGN)

Item No.	Name of the procedure	Objectives of the grant provided under the procedure	Total amount of the grant under the procedure	Date of announcement of the procedure
Priority 5: Measures for market supply				
1	Measure 5.3 "Measures for market supply"	Financial compensation for commercial fishing operators, aquaculture farms and processing enterprises for the additional costs they have incurred due to the market disruption caused by Russia's war of aggression against Ukraine and the consequences of this aggression on the supply chain of fisheries and aquaculture products, Art. 68, Para. 3	2,467,506.41	1st quarter
2	Measure 5.3 "Measures for market supply"	Financial compensation for commercial fishing operators, aquaculture farms and processing enterprises for the additional costs they have incurred due to the market disruption caused by Russia's war of aggression against Ukraine and the consequences of this aggression on the supply chain of fisheries and aquaculture products, Art. 68, Para. 3	4,693,920.00	1st quarter
3	Measure 5.3 "Measures for market supply"	Financial compensation for commercial fishing operators, aquaculture farms and processing enterprises for the additional costs they have incurred due to the market disruption caused by Russia's war of aggression against Ukraine and the consequences of this aggression on the supply chain of fisheries and aquaculture products, Art. 68, Para. 3	3,510,426.10	1st quarter

Source: MAF, Maritime and Fisheries Directorate

Table VII.11. Calls under the MFP 2021 - 2027 for 2023 (BGN)

Item No.	Name of the procedure	Objectives of the grant ² provided under the procedure	Total amount of the grant under the procedure	Date of announcement of the procedure
Priority 1 "Promoting sustainable fisheries and the restoration and conservation of aquatic biological resources"				
1	Permanent cessation of fishing activities	Support for permanent cessation will contribute to the adaptation of the fishing fleet to fish stocks. The aim is to achieve a balanced fleet for sustainable use of the available resources.	961,236.58	4th quarter
2	Control and enforcement	The support is aimed at achieving the objectives of the CFP in accordance with applicable national and European legislation	23,733,549.18	3rd quarter
3	Collection and processing of data for fisheries and aquaculture management and scientific purposes	Increasing scientific knowledge and the socio-economic situation of the sector and helping to take correct and effective decisions for the management of the Fisheries sector.	11,866,774.59	3rd quarter
Priority 2 "Promoting sustainable aquaculture activities and the processing and marketing of fisheries and aquaculture products"				

Item No.	Name of the procedure	Objectives of the grant ² provided under the procedure	Total amount of the grant under the procedure	Date of announcement of the procedure
4	Aquaculture providing environmental services - compensation for Natura 2000 farms sector	To help promote aquaculture production that ensures a high level of environmental protection, animal health and welfare, as well as public health and safety. The aim is to increase the number of supported farms and consequently expand the area within NATURA 2000 and preserve biodiversity and species habitats.	460,714.92	3rd quarter
5	Productive investments and innovations in aquaculture	The investments will increase competitiveness and achieve sustainable growth of aquaculture in Bulgaria. The new jobs created and the raised qualifications of the employed will support the economic development of the sector and its associated areas.	11,434,595.88	3rd quarter
6	Processing of fishing and aquaculture products	The aim is to establish and modernize the country's processing plants by improving their energy efficiency and decarbonization, which will lead to a reduction in the negative environmental impact associated with the Green Transition	061,646.72	3rd quarter
Priority 3 "Creating the prerequisites for the growth of a sustainable blue economy and stimulating the development of communities engaged in fisheries and aquaculture in coastal and inland areas"				
7	Capacity building and preparatory activities to support the development and future implementation of Community-led local development strategies	Building administrative capacity at local and national level for the development and implementation of the CLD through the formation of working partnerships.	694,309.00	2nd quarter
8	Implementation of Community-led local development strategies	Increasing the quality of life of people in communities dependent on fisheries and aquaculture through a sustainable blue economy, using and strengthening environmental, cultural, social and human resources.	35,079,592.02	3rd quarter
9	Running costs and promotion activities in the territory	Provision of activities for the functioning of LAGs under EMFF and promotion of the territory	11,693,197.34	3rd quarter

Source: MAF, Maritime and Fisheries Directorate

4. Common Fisheries Policy

The Common Fisheries Policy (CFP) aims to create the conditions for the sustainable development of the Fisheries sector, including commercial and recreational fisheries, aquaculture production, trade and processing of fisheries and aquaculture products.

One of the elements of the CFP is the Common Market Organization (CMO) for fisheries and aquaculture products, which aims to protect producers and ensure the environmental sustainability and economic viability of the fisheries and aquaculture market. A major factor in achieving the CMO objectives is fishery and aquaculture producer organizations, associations of producer organizations, and interbranch organizations.

In 2022, in connection with the exercise of control over professional organizations in the fisheries sector, recognized under the Fisheries and Aquaculture Act (FAA), and Regulation No. 7 of 2018 on the conditions and procedure for recognition of fishery and aquaculture producer organizations, associations of producer organizations and interbranch organizations in the fisheries sector, and the approval of production plans and marketing (Regulation No. 7 of 2018), regular inspections were carried out to establish their compliance with the regulatory requirements. Inspections were also carried out to establish the degree of

implementation of the approved Plans for Production and Marketing of the two recognized producer organizations - the Black Sea Sunrise Association and the Organization of Black Sea Clam Producers. The Standing Committee under Art. 7 of the FAA (Standing Committee for the recognition of producer organizations of fishery and/or aquaculture products, associations of producer organizations and interbranch organizations in the fisheries sector and to exercise control over their activity) conducted a total of 11 inspections and held 5 meetings in 2022.

During the activities of the Standing Committee and the implementation of the statutory inspections, it has been established that some of the provisions of Regulation No. 7 of 2018 cause difficulties in their interpretation and application by the professional organizations in the Fisheries sector, which is why their reformulation and refinement is necessary. Also identified was the need to ease the conditions for recognition and the requirements for the content of production and marketing plans, as well as to bring the by-law into full compliance with the requirements of the relevant EU law. Due to this, action has been taken to draft an Ordinance amending and supplementing Ordinance No. 7 of 2018.

In order to protect the populations of fish and other aquatic organisms, a number of restrictions and temporary prohibitions on fishing in natural and artificial water bodies throughout the country were introduced in 2022. Conditions were created for protection of aquatic organisms during their breeding season and in certain reservoirs and/or areas thereof. Measures have been introduced to regulate the use of fishery resources during the dark hours of the day and for stocking in certain reservoirs.

In September 2022, the regular meeting of the Fisheries Advisory Council (FAC) was held with the participation of representatives of branch organizations in the sector, research institutes and public administrations pertaining to the fisheries sector. Topics discussed include the current status of Fish Resources EOOD and a vision for its development, and the classification of production areas for bivalve harvesting.

At the international level, during the 15th annual session of the Committee on Compliance (CoC) of the General Fisheries Commission for the Mediterranean (GFCM), it was agreed to allow the transfer of Bulgaria's unused amount of turbot catch quota in 2021 to the fishing opportunities for 2023.

During the 45th GFCM Annual Meeting, various topics were discussed in relation to the conservation of marine biological resources and the management of marine fisheries and aquaculture in the Mediterranean and the Black Sea. A number of recommendations and resolutions on the identified problems, threats or scientific advice have been adopted. Of essential importance for Bulgaria are the adopted recommendations to amend the multi-annual management plan for the Black Sea turbot fishery by extending its application through 2023 at the set total allowable catches levels and species quotas (150 tons for the EU), to extend the regional research program for rapa whelk in the Black Sea, to establish minimum management standards for restricted fishing areas, for transshipment at sea, a resolution on the regional action plan for small-scale fisheries in the Mediterranean and the Black Sea, etc.

In 2022, the MAF continued to actively cooperate with industry representatives and the European Commission (EC), with a view to identifying and taking actions to mitigate and overcome the consequences of the COVID-19 crisis, the difficulties related to the contracted market and demand, increased prices of electricity, fuels, feed, oxygen, and raw materials. In this regard, conditions are provided for support to operators, both under the European Maritime and Fisheries Fund and by using the possibilities of Commission Regulation (EU) No. 717/2014 of 27 June 2014 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid in the fisheries and aquaculture sector. In order to ensure the sustainability of aquaculture production and maintain the competitiveness of producers, freshwater fish farmers were supported in 2022 by de minimis state aid to mitigate the effects of the significant increase in feed prices in 2021.

In order to support the operators carrying out commercial fishing in the Black Sea to overcome the consequences of the COVID-19 crisis, the increase in fuel prices and the complicated political situation resulting from the war in Ukraine, which has led to a sharp decrease in fishing activity, a transfer of Bulgaria's unused amount of turbot catch quota from 2021 and maintaining the set total allowable catches levels has been initiated.

The Decree of the Council of Ministers adopted an amendment to the Ordinance on the employment and directly related relationships between crew members and support staff of the ship and the shipowner, in order to ensure the correct implementation of para. 1, item 1 of the Annex to Council Directive 2014/112/EU of 19.12.2014 implementing the European Agreement on certain aspects of the organization of working hours in the inland waterway transport sector concluded by the European Barge Union (EBU), the European Skippers Organization (ESO) and the European Transport Workers' Federation (ETF) (OJ, L 368 of 2014).

Active communication with the Black Sea Advisory Council (BSAC) continued in 2022. It is the prerogative of the BSAC to make various recommendations and proposals to the EC and the Member State concerned on issues related to management of fisheries, socio-economic and conservation aspects of fisheries and aquaculture and in particular recommendations for simplification of the rules for the management of fisheries.

Participation was taken in a meeting of the Committee on Fisheries (COFI) of the Organization for Economic Co-operation and Development (OECD) held in November 2022, at which the draft document "OECD Fisheries Review 2022" was presented for endorsement and declassification. An informal exchange of opinions was held on the World Trade Organization Fisheries Subsidies Agreement and in particular on the possible consequences of this agreement, the opportunities it presents and the challenges it raises for the future. Opportunities for the development of new COFI legal instruments were also discussed - an OECD recommendation based on the findings of the "Eliminating State Support for Illegal, Unreported and Unregulated Fishing" report and a proposal to develop a transparency instrument for vessel ownership.

Planned activities in 2023

The following is foreseen in 2023:

- Designation of fishery sites permitted for recreational fishing during the dark part of the day;
- Designation of water bodies for stocking, according to Art. 22a (5) of the Fisheries and Aquaculture Act;
- Introduction of a ban on fishing at the fisheries sites under Art. 3 (1.1) and (1.2) of the Fisheries and Aquaculture Act during the breeding period of fish;
- Introduction of a catch retention ban for recreational fishing in Pancharevo Dam;
- Publishing of Ordinance amending and supplementing Ordinance No. 7 of 2018 on the conditions and procedure for recognition of fishery and aquaculture producer organizations, associations of producer organizations and interbranch organizations in the fisheries sector, and the approval of production plans and marketing;
- Approval of Annual Reports on the implemented activities under the Plans for production and marketing of the recognized producer organizations in the fisheries sector;
- Approval of a new Production and Marketing Plan of the producers' organization - Black Sea Sunrise Association;
- Following the EC's review of the implementation of the CFP in the EU to identify the need to reform fisheries legislation and outline the way forward for the sector in the context of recent topical policy initiatives such as the European Green Deal, the "Farm to Table" strategy, the Biodiversity Strategy, the REPowerEU plan on the energy transition in the EU economy, etc.;
- Participation in technical meetings with the EC and in meetings at the GFCM in order to maintain in 2024 the levels of total allowable catches and quotas for catching turbot (for the Republic of Bulgaria - 75 tons) and to transfer the amount of turbot not used in 2022 to our country's fishing opportunities for catching the species in 2024, as well as to prevent the adoption of new fishing restrictions in 2023 in relation to other economically valuable species fished by Bulgarian vessels in the Black Sea;
- Carrying out an in-depth technical review in the field of fisheries in Bulgaria in connection with the application for membership in the COFI of the OECD, including a mission by the COFI Secretariat in

Bulgaria, during which interviews will be conducted with the competent administrative structures, representatives of the sector and NGOs in the field of fisheries.

- Participation in the 16th meeting of the GFCM Compliance Committee and the 46th annual meeting of the GFCM in order to protect Bulgaria's interests in decision-making on the management of fisheries in the Black Sea;
- Carrying out annual checks to establish the compliance of the recognized professional organizations in the fisheries sector with the conditions for recognition;
- Conducting an information campaign on good practices for the release of cetaceans in incidental by-catch in fishing gears in the Black Sea;
- Implementation of activities related to the accession of Bulgaria to the OECD - participation in the meetings of the Fisheries Committee of the OECD, preparation of an initial memorandum on the starting position of our country in the fisheries part, assistance to the teams of the OECD secretariat to carry out a technical review of the status and legislation in the sector and other activities related to the preparation for membership;
- Undertaking activities to implement measures set out in the Package of measures to improve the sustainability and resilience of the EU fisheries and aquaculture sector, including activities to develop a roadmap for the implementation of the EU Action Plan: Conserve and restore marine ecosystems for sustainable and resilient fisheries;
- Updating of the national list of commercial designations for fisheries and aquaculture products published on the EC's website pursuant to Art. 37 of Regulation (EU) No. 1379/2013 of the European Parliament and of the Council of 11 December 2013 on the common organization of the markets in fishery and aquaculture products, with the active involvement of a wide range of stakeholders.

SECTION B

PROGRAM FOR AGRICULTURAL DEVELOPMENT IN 2024

The state policy in the agricultural sector is aimed at increasing the competitiveness of Bulgarian agriculture, sustainable development of the fisheries and forestry sectors, improving working conditions and quality of life in rural areas, effective use of European funds, sustainable management of natural resources and compliance with high safety standards in the food production and supply chain. The priorities and objectives of the policy in the agricultural sector and the measures for their achievement in 2024, set in this section, are in compliance with the Governance Program of the Republic of Bulgaria for the period June 2023 - December 2024 and the National Development Program BULGARIA 2030. In 2024, the Strategic Plan for Development of Agriculture and Rural A 2023-2027 (CAP Strategic Plan) and the Maritime, Fisheries and Aquaculture Program 2021-2027 (MFAP), which provide for interventions in support of the sector financed by European agricultural and fisheries funds, will be implemented. Activities will be carried out to implement the National Plan for Restoration and Sustainability of the Republic of Bulgaria, including investments to increase the sustainability and competitiveness of the sector and its readiness to meet the challenges of the green and digital transition.

PRIORITY 1: STRUCTURAL AND SECTORAL BALANCE OF AGRICULTURE

AREA OF IMPACT 1 - PLANT GROWING:

OBJECTIVE: INCREASING THE SUSTAINABILITY OF VULNERABLE SECTORS AND CONTINUING THE POLICIES OF BALANCED AND DIVERSIFIED DEVELOPMENT OF THE PLANT SUBSECTION

MEASURES:

1. Improving the competitiveness and sustainability of vulnerable crop sectors through coupled support schemes (for fruit, vegetables, protein crops and special payment for cotton) under the CAP Strategic Plan financed by the European Agricultural Guarantee Fund
2. Support for tobacco producers' incomes through transitional national decoupled tobacco aid
3. Increasing the sustainability and competitiveness of the wine-growing sector by implementing the measures of the National Program to Support the Wine-growing Sector 2019- 2023/interventions under the CAP Strategic Plan
4. Encouraging investments and stimulating the production of high-quality products in crop production with funds from the national budget
5. Improving relations in the field of ownership, use, management and protection of agricultural land by preparing legislative changes

AREA OF IMPACT 2 - ANIMAL HUSBANDRY:

OBJECTIVE: IMPROVING THE SUSTAINABILITY, EFFICIENCY AND PROFITABILITY OF LIVESTOCK FARMS

MEASURES:

1. Improving the competitiveness and sustainability of vulnerable livestock sectors through coupled support schemes (dairy cows, beef cows, ewes and she-goats, buffaloes) under the CAP Strategic Plan
2. Income support for farmers in the livestock sector through transitional national aid (for cattle, buffaloes, ewes and she-goats)

3. Improving the competitiveness of the Beekeeping sector through interventions set out in the CAP Strategic Plan
4. Stimulation of the investment activity in livestock breeding with support from the national budget
5. Promoting animal welfare and the conservation of genetic resources in livestock husbandry with funds from the national budget and the CAP Strategic Plan

AREA OF IMPACT 3 - ECONOMIC POTENTIAL OF SMALL AGRICULTURAL HOLDINGS:

OBJECTIVE: INCREASING SUSTAINABILITY AND IMPROVING THE COMPETITIVENESS OF SMALL AGRICULTURAL HOLDINGS TO REDUCE DISPROPORTIONS IN THE DEVELOPMENT OF ECONOMIC STRUCTURES IN AGRICULTURE

MEASURES:

1. Supplementing the incomes and increasing the competitiveness of small farmers through payments for small farmers under the CAP Strategic Plan financed by the EAGF
2. Increasing the efficiency of small and medium-sized farms and a fairer distribution of support for them through additional redistributive income support for sustainability under the CAP Strategic Plan
3. Support for sustainable development and viability of small agricultural holdings under Sub-measure 6.3 "Start-up aid for development of small holdings from the RDP 2014-2020 / an intervention under the CAP Strategic Plan, financed by the EAFRD

AREA OF IMPACT 4 - AGE STRUCTURE OF FARMERS:

OBJECTIVE: ATTRACTING AND RETAINING YOUNG PEOPLE IN AGRICULTURE

MEASURES:

1. Facilitating the renewal of generations in agriculture through additional income support for young farmers under the CAP Strategic Plan, financed by the EAGF
2. Encouraging young farmers with support under sub-measure 6.1 "Start-up aid for young farmers" under the Rural Development Program 2014- 2020/intervention under the CAP Strategic Plan, financed by the EAGF

AREA OF IMPACT 5 - AREAS WITH NATURAL OR OTHER CONSTRAINTS:

OBJECTIVE: PRESERVATION OF AGRICULTURAL ACTIVITIES AND HOLDINGS IN AREAS WITH NATURAL AND OTHER CONSTRAINTS

MEASURE:

1. Applying intervention under the CAP Strategic Plan to support the activities of farms in areas with natural and other restrictions

PRIORITY 2: GUARANTEEING FAIR AND STABLE INCOME FOR AGRICULTURAL PRODUCERS:

SCOPE 1 - DIRECT SUPPORT MECHANISMS

OBJECTIVE: MAXIMUM UTILIZATION OF THE OPPORTUNITIES FOR DIRECT SUPPORT TO GUARANTEE THE ECONOMIC SECURITY OF AGRICULTURAL HOLDINGS AND SUSTAINABILITY

MEASURES:

1. Preparation of an intervention under the Strategic Plan for Agricultural and Rural Development for basic income support for sustainability

SCOPE 2 - RISK MANAGEMENT IN AGRICULTURE:

OBJECTIVE: MITIGATING THE IMPACT OF RISKS IN AGRICULTURE ON THE ACTIVITY AND INCOME OF EMPLOYEES IN THE INDUSTRY

MEASURES:

1. Support for risk and crisis management in agriculture through funds from the national budget
2. Expanding and strengthening the capacity of the hail protection system by implementing a diversification of the hail prevention methods

PRIORITY 3: AGRICULTURAL COMPETITIVENESS

AREA OF IMPACT 1 - MODERNIZATION, INNOVATION AND DIGITAL TECHNOLOGIES IN AGRICULTURAL HOLDINGS

OBJECTIVE: MODERNIZED AND TECHNOLOGICALLY RENOVATED FARMS AND ENTERPRISES. ACCELERATED INTRODUCTION OF INNOVATION AND DIGITALIZATION IN AGRICULTURAL PRACTICE

MEASURES:

1. Fostering the investment processes in agricultural holdings by financing projects under Sub-measure 4.1 "Investments in agricultural holdings" of the RDP 2014-2020/interventions under the CAP Strategic Plan
2. Fostering the investment process for modernization and technological renewal in the processing and marketing of agricultural products to create higher added value of the industry by financing projects under Sub-measure 4.2 "Investment in processing/marketing of agricultural products" of the RDP 2014- 2020/interventions under the CAP Strategic Plan
3. Increasing the innovation capacity of the Agriculture sector by stimulating cooperation between business and science - implementation of Sub-measure 16.1 "Support for establishment and functioning of operational groups within the EMI" of the RDP 2014-2020 / applying interventions under the CAP Strategic Plan
4. Applying schemes for investment support under the National Recovery and Resilience Plan through the Fund for Promotion of the Technological and Ecological Transition of Agriculture

OBJECTIVE: INCREASING THE INNOVATIVENESS OF SCIENTIFIC RESEARCH IN THE AGRICULTURAL SECTOR

MEASURES:

1. Creation of new scientific products related to sustainable development of competitive agriculture, conservation and efficient use of natural and genetic resources for mitigation and adaptation to climate change, transition to bioeconomy, and circular economy
2. Building partnerships, incl. public-private, for the transfer of scientific knowledge, implementation of good practices and innovations in the Bulgarian agriculture.
3. Sustainable development of scientific potential in the agricultural sector

OBJECTIVE: ENSURING TRANSPARENT, ACCESSIBLE, OBJECTIVE AND EFFICIENT MANAGEMENT OF ADMINISTRATIVE PROCESSES THROUGH THEIR ELECTRONIZATION TO REDUCE THE ADMINISTRATIVE BURDEN AND IMPROVE THE BUSINESS ENVIRONMENT IN THE AGRICULTURAL SECTOR

MEASURE:

1. Development of electronic management and improvement of administrative services in the system of the Ministry of Agriculture and Food through:
 - Creating conditions for electronic data exchange between the public administration and farmers to monitor the progress in implementing the objectives of the Green Deal - implementation of activities under the Digitization of the Farm-to-Fork Processes project of the NRRP
 - Expanding the range of administrative services provided by the structures of the Ministry of Agriculture and Food electronically
 - Improving the access to information collected and summarized in the system of the Ministry of Agriculture and Food
 - Publication of information and datasets on the Open Data Portal
 - Development of the Integrated Information System of the BFSA, VetIS, with the aim of increasing the awareness of farmers and facilitating their activities, assisting veterinarians in the implementation of the National Program for the Prevention, Control, and Eradication of Animal Diseases and Zoonoses and reflecting the results of their practice
 - Implementation of systems for additional identification and traceability of animals through electronic or GPS identifier linked to an information collection and reading device and processing software. Optimizing controls for the different interventions of the CAP Strategic Plan for Animal Support.

AREA OF IMPACT 2 - MARKET POSITION OF AGRICULTURAL PRODUCERS:

OBJECTIVE: STRENGTHENING THE ROLE OF AGRICULTURAL PRODUCERS IN THE FOOD SUPPLY CHAIN

MEASURES:

1. Improving the functioning of the supply chains of agricultural products and foods by stimulating the cooperation between the economic entities under Sub-measure 16.4. Support for horizontal and vertical cooperation between the participants in the supply chain of the RDP 2014-2020 / interventions under the CAP Strategic plan

2. Improving market access conditions for small farms producing fruit, vegetables, milk and dairy products by supporting operational programs of recognized producer organizations and associations of producer organizations in the Fruit and Vegetables and Milk and Dairy products sectors under the CAP Strategic Plan.
3. Increasing the market stability and competitiveness of small and medium-sized agricultural holdings by preparing a legislative act regulating cooperation in the agricultural sector
4. Developing, in dialog with all stakeholders, a new draft law on branch organizations in order to regulate the representation of national and regional branch organizations in agriculture, to improve the interaction of the agricultural community with state institutions and to strengthen the importance of branch organizations in the implementation of national policies in the agricultural sector
5. Development of by-laws for organizing collective markets (providing administrative support for farmers' cooperation. Organization of collective markets and farmers' markets)

AREA OF IMPACT 3 - QUALIFICATION AND KNOWLEDGE OF AGRICULTURAL PRODUCERS:

OBJECTIVE: DEVELOPMENT AND STRENGTHENING OF THE AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEM (AKIS) TO GENERATE INNOVATIVE POLICIES IN THE AGRICULTURAL SECTOR AND AN INTELLECTUAL CENTER OF BULGARIAN AGRICULTURE ACCESSIBLE TO BUSINESS

MEASURES:

1. Organizing and conducting specialized trainings for farmers and other persons involved in the agricultural and forestry sector, including organizing and conducting: courses for the acquisition of qualifications in a profession or part of a profession, in accordance with the requirements of the Vocational Education and Training Act; courses for the improvement of qualifications, in accordance with the requirements of the Higher Education Act; specialized courses for acquiring qualification to operate agricultural and forestry machinery
2. Organizing and conducting information seminars to increase the knowledge of those involved in the agriculture and forestry sector on specific topics aimed at achieving the specific objectives and identified needs in the CAP Strategic Plan
3. Supporting the transfer of innovative technologies and practices by disseminating the outputs of research projects and developing new products and techniques
4. Dissemination of important agricultural information and innovations in the field of agriculture among farmers through the organization of information and training events of the National Agricultural Advisory Service with the participation of scientific institutes, applied research organizations and other institutions and experts
5. Providing specialized advice to farmers in various areas - technologies in crop and livestock production, establishment and management of the farm, implementation of national legislation and EC standards, integrated plant protection, climate and environment, etc.
6. Successful implementation of projects under the Horizon 2020 and Horizon Europe programs, contributing to increasing and improving the exchange of knowledge and skills between researchers, advisors, farmers and food processing enterprises, including dissemination of results and good practices
7. Launch of activities to create an interactive online information platform with a database of available innovations, scientific developments and other knowledge in agriculture, forestry and the food industry
8. Increasing the activity and contribution of the established "farmers' circles" to the regional offices of the NAAS, with the participation of active farmers, in the process of disseminating useful

information in the field of agriculture and promoting good practices in applying for and implementing RDP projects

9. Active functioning of the regional advisory councils for advice in agriculture with the participation of representatives of the NAAS, regional structures of the MAF, universities, research institutes, NGOs, food processing enterprises and farmers, in order to establish them as regional centers of AKIS
10. Active use of different communication channels for the provision of advisory services, including the organization and conducting of information meetings/consultation days (remote receptions) in settlements and municipalities in the relevant region, especially in settlements remote from district centers
11. Enhancing the use of electronic services, social media and the use of various digital tools for providing advisory services, incl. for conducting online information meetings, seminars, demonstrations, and other trainings for farmers
12. Facilitating access to agricultural advice for farmers, especially those in settlements remote from district centers, by increasing the capacity of the National Agricultural Advisory Service, including at municipal level, by improving the capacity of the newly established mobile municipal offices
13. Identification of the main elements and creation of a database with information on the activities of the participants in AKIS, related to the sharing of knowledge and innovations. Processing of information and preparation of analyzes on the state of AKIS in Bulgaria
14. Creation of an advisory body for the AKIS, including with the participation of agricultural scientific organizations and universities, NAAS, farmers, agricultural companies, organizations of farmers and food processing enterprises, public bodies related to knowledge and innovations in agriculture
15. Improving interconnections at AKIS by organizing and conducting thematic working groups, round tables, conferences, seminars, workshops and others, within which to involve farmers, scientific representatives, food processing enterprises, training and branch organizations, etc.
16. Establishing agreements for internship programs with universities for the provision of free student internships in veterinary medicine, zooengineering, plant protection and agronomy in order to increase the capacity and abilities of young people to achieve higher economic activity, increase employment, improve vocational education
17. Preparation of an analysis of labor market needs in cooperation with branch organizations and in collaboration with universities and institutes in relation to admission in specialties

PRIORITY 4: ROLE OF THE AGRICULTURAL INDUSTRY FOR ENVIRONMENTAL PROTECTION

AREA OF IMPACT 1 - AGRI-ENVIRONMENTAL COMMITMENTS:

OBJECTIVE: AGRICULTURAL COMMITMENTS AND SERVICES, RELATED TO THE ENVIRONMENT AND CLIMATE

MEASURES:

1. Applying interventions under the CAP Strategic Plan contributing to European and national goals in the field of climate, environment and biodiversity
2. Assigning the preparation of a long-term strategy for the development of agriculture in the aspect of climate change and demographic trends, including an up-to-date agri-environmental map of the country to guide support measures in the sector and soil fertility conservation - in cooperation with the Agricultural Academy

AREA OF IMPACT 2 - ORGANIC PRODUCTION:

OBJECTIVE: INCREASING THE PRODUCTION AND SUPPLY OF ORGANIC AGRICULTURAL PRODUCTS

MEASURES:

1. Stabilizing the income of organic farmers through the implementation of the direct payment system
2. Development of bottom-up local economic initiatives and improvement of cooperative attitudes among organic producers with support under the Rural Development Program / CAP Strategic Plan
3. Creating more favorable conditions for the development of the farms of very small, small and medium-sized enterprises/producers - improving the production environment, optimizing costs through new energy-saving machines, increasing mobile processing facilities (slaughterhouses, mills, copper mining equipment etc.) with support under the Rural Development Program/CAP Strategic Plan
4. Creating better conditions for access to markets by encouraging the creation of associations to organize, conduct, and participate in markets, exhibitions and fairs for organic products
5. Stimulating the consumption of organic products in kindergartens and schools through the implementation of market support schemes "School Fruit" and "School Milk"
6. Promoting the use of varieties and breeds suitable for organic production, increasing yields, developing effective plant protection measures and innovative solutions to improve the environmental well-being and biodiversity.
7. Encouraging local processing of organic products by providing support for investment in enterprise modernization, including for innovation, and the use of digital technologies
8. Raising awareness (conducting information campaigns on the benefits of consuming organic products) and consumer confidence in the quality of Bulgarian organic products in order to expand their consumption
9. Creating more favorable conditions for increasing knowledge and skills to establish, develop and maintain organic farming, through appropriate training, exchange of information on research and innovation in organic farming, stimulating research and innovation under Horizon Europe to promote the development of a smart organic industry.

AREA OF IMPACT 3 - IRRIGATED AGRICULTURE

OBJECTIVE: IMPROVING THE USE OF WATER RESOURCES IN AGRICULTURE

MEASURES:

1. Implementation of investment projects for irrigation in agricultural holdings under sub-measure 4.1 "Investments in agricultural holdings" of the RDP 2014-2020/intervention under the CAP Strategic Plan
2. Improving the management of water resources through investments in the national hydro-ameliorative fund under sub-measure 4.3 "Investments in infrastructure" under measure 4 "Investments in tangible assets" of the RDP 2014-2020
3. Preparation of regulatory framework and opening of a call for projects for rehabilitation of existing irrigation infrastructure managed by Irrigation Systems EAD under the Strategic Plan
4. Support for investments in agricultural holdings for efficient use of waters in agricultural activities under the project "Fund for Promotion of Technological and Ecological Transition of Agriculture", NRRP - "Investments related to efficient water management in agricultural holdings"

AREA OF IMPACT 4 - FOREST RESOURCES MANAGEMENT

OBJECTIVE: SUSTAINABLE USE OF WOOD BY IMPLEMENTING THE PROVISIONS OF FORESTRY PROGRAMS AND PLANS, IN ACCORDANCE WITH THE OBJECTIVES AND MANAGEMENT REGIMES AND INCREASING THE CARE OF YOUNG PLANTATIONS

MEASURE:

1. Maintaining sustainable forest ecosystems by:
 - Transition from short-term-incremental to long-term-incremental fellings
 - Increasing the volume of thinning to improve the condition of young forests
 - Improving the exercised control over the fellings, including those without material extraction
 - Achieving maximum implementation of the use planned by forestry plans and programs in order to meet market needs
 - Taking action to conduct a National Inventory of forest areas, in accordance with Art. 17 of the Forest Act
 - Inventory of forest territories, preparation of forest management maps, plans for hunting management activities, plans for protection of forest territories from fires under the Forest Act

OBJECTIVE: IMPROVING AND PROTECTING THE HEALTH CONDITION OF FORESTS, CONTROLLING THE USE OF WOOD AND NON-WOOD PRODUCTS FROM FORESTS

MEASURES:

1. Maintaining the health of forests:
 - Making a reliable forecast of expected disease and pest attacks
 - Timely issuance and implementation of guidelines for the implementation of sanitary and forest protection measures and activities
2. Overall implementation of the planned annual forest management activities according to the forest management plans
3. Increasing the effectiveness of prevention and combating illegal activities in forests through:
 - Reviewing and, if necessary, updating the existing agreements for joint activities with the Ministry of Internal Affairs, EAFA, the National Revenue Agency, the Main Labor Inspectorate, the Road Infrastructure Agency, and other institutions for the control and prevention of illegal actions in the forest territories
 - Adopted and signed Instructions for interaction and exchange of information between the National Revenue Agency and the Forestry Executive Agency
 - Conducting an information campaign to introduce wood users to the legal requirements regarding the need to have and store the transport tickets for the purchased wood, as well as the ways to verify the authenticity of the submitted documents
 - Strengthening the control of incoming wood in large users
 - Planning specific actions with the interested institutions to effectively counter the crimes committed in the areas with a high concentration of crimes
 - Continuing the establishment of an electronic system for the authorization, control and tracking of the extraction, trade and transport of non-timber forest products (NTFPs), as well as

improving controls, including joint inspections on the legal origin and storage of NTFPs purchased at the relevant points.

- Launch of activities for the establishment of an information system on forest areas and activities in them, in accordance with Art. 19 of the Forest Act
 - Monitoring of the use of wood and biomass from wood for energy production, as well as exercising control by the EFA and its structures on compliance with forest legislation in relation to the origin of woody biomass used for energy production, including the obligation to build a video surveillance system under the amendments to Art. 260, para. 1, item 3 of the Forest Law, in force since 02.02.2023.
4. Increasing the investment and forestry care to restore the vulnerable and damaged forest areas by launching the activity of logging for the transformation of 9,300 ha of coniferous crops and turning them into broad-leaved natural forests of local species within the framework of a submitted project under the National Plan for Recovery and Resilience

OBJECTIVE: ENSURING AND MAINTAINING THE SOCIAL FUNCTIONS OF FOREST AREAS

MEASURES:

1. Increasing publicity and transparency of forestry and hunting activities in state forests managed by state enterprises
2. Provision of firewood to individuals for personal use through direct sales by state forestry and hunting units, territorial divisions of state enterprises under Art. 163 of the Forest Act
3. Increasing the investments of the state forest enterprises for the development of new and the maintenance of the existing forest road network

OBJECTIVE: INCREASE OF AFFORESTED FOREST AREAS - STATE PROPERTY

MEASURES:

1. Increasing the investment and forestry care to restore the vulnerable and damaged forest areas and supporting the processes of difficult natural regeneration of forests through afforestation
2. Increasing forest territories - state property by purchasing land properties owned by individuals

OBJECTIVE: INCREASING TRANSPARENCY IN THE WORK OF THE FOREST SECTOR AND PUBLIC AWARENESS OF THE IMPORTANCE AND ACTIVITIES OF FORESTS

MEASURES:

1. Raising public awareness of important forest-related issues through:
 - Implementation of an information campaign for awareness regarding the role of forestry in the protection of forest territories, nature in general and the rich Bulgarian biological diversity
 - Starting work on the implementation of activities for educating the younger generation (54,000 children) in relation to forests, their protection and management (the so-called Forest pedagogy) within a project under the National Recovery and Resilience Plan
2. Active public and stakeholder participation in regard to forest activities by updating and expanding the established geographic portal for forests and providing levels of access to increase public and institutional involvement in monitoring forest activities

OBJECTIVE: UPDATE OF THE STRATEGIC DOCUMENTS AND THE CURRENT REGULATIONS IN FORESTS

MEASURES:

1. Adoption of the National Strategy for the Development of the Forestry Sector in the Republic of Bulgaria for the period until 2030
2. Adoption of a Plan for the Restoration of Traditional Forest Landscapes and a Program for Forest Pedagogy
3. Preparation of amendments to the Forest Act
4. Changes in the by-laws, development of a draft amendment to Ordinance No. 8 of 2011 on logging in forests

PRIORITY 5: HIGH LEVEL OF PROTECTION OF HUMAN HEALTH AND CONSUMER INTERESTS RELATING TO FOOD AND SUSTAINABLE DEVELOPMENT OF THE FOOD SECTOR

OBJECTIVE: INCREASING THE PROTECTION OF HUMAN HEALTH AND CONSUMER INTERESTS RELATING TO FOOD BY IMPLEMENTING A SINGLE OFFICIAL FOOD SAFETY AND QUALITY CONTROL COVERING ALL UNITS AND STAGES OF THE FOOD CHAIN

MEASURES:

1. Using high standards in the control of the field of food safety and quality, food additives and beverages, veterinary medicine and animal welfare, plant protection and fertilizers, phytosanitary control, feed, border control, etc.
2. Implementation of a consistent policy for cooperation with branch organizations in the country to develop standards that aim to increase the quality of basic food products
3. Implementation of a systematic policy to limit the spread of genetically modified organisms throughout the food chain "farm to fork"
4. Improving the quality of the services offered by the administration, by preparing information materials, introducing good practices, developing procedures, instructions and manuals, oriented to the authorities of official control and business, by introducing electronic registers
5. Continuous cooperation with the European Food Safety Authority, with all European Union structures pertaining to the activities related to food safety, plant and animal health, and the food safety authorities in EU Member States and third countries
6. Conducting an in-depth scientific analysis of problems related to the risks in the agri-food chain and to provide this information to stakeholders (producers, processors, traders, consumers, scientific organizations under Art. 36 of Regulation (EU) No. 178/2002, the competent risk management bodies, ministries, parliament)
7. Strengthening state laboratory control - expanding its scope, including GMO analyses and improving the capacity for carrying out laboratory control
8. Conducting a national campaign to increase the consumption of Bulgarian food. Encouraging food in kindergartens and educational institutions to be locally sourced and environmentally friendly as a priority, and food for public facilities to be locally sourced
9. Activities related to the control of:
 - The quantities of actually applied products that contain substances that are hazardous to human health and aquatic organisms when released into the aquatic environment;

- • The quality of sludge from waste water treatment plants used for fertilization and control of biogenic substance concentrations, including nitrates, in soil and water in areas fertilized with sludge and the impact on the quality of produce from these areas;
 - Fertilization in nitrate vulnerable areas to reduce nitrate pressure on surface and groundwater and protect drinking water
10. Activities related to the identification of areas in Bulgaria where there would be a need for agricultural irrigation with reuse of treated wastewater from Urban Wastewater Treatment Plants and actions to justify exemptions for the application of the Regulation in certain areas, in relation to Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse.

OBJECTIVE: LIMITING THE SPREAD AND ELIMINATING ECONOMICLY IMPORTANT ANIMAL DISEASES TO GUARANTEE THEIR GOOD HEALTH STATUS AND THE SAFETY OF ANIMAL PRODUCTS PRODUCED

MEASURES:

1. Implementing a high level of control regarding the compliance with the requirements of the legislation and the implementation of the measures laid down in the National Program for the Prevention, Supervision, Control and Eradication of Animal Diseases and Zoonoses in Bulgaria 2022-2024.
2. Exercising timely and effective control of animal identification and registration and veterinary activities to ensure a high level of protection of human and animal health

OBJECTIVE: PREVENTION AND REDUCTION OF FOOD LOSS

MEASURES:

1. Implementation of the National Program for Prevention and Reduction of Food Loss (2021-2026)
2. Raising awareness on food waste prevention

PRIORITY 6: "FISHERIES AND AQUACULTURE MANAGEMENT"

AREA OF IMPACT 1 - "FISHERIES AND AQUATIC BIOLOGICAL RESOURCES":

OBJECTIVE: CONSERVATION AND RECOVERY OF FISHING RESOURCES AND AQUATIC ECOSYSTEMS

MEASURES:

1. Providing and managing reliable biological, environmental, technical and socio-economic data for the Fisheries sector with financial support under the Maritime and Fisheries Program 2014-2020 and the Maritime, Fisheries and Aquaculture Program for the next programming period
2. Implementation of the Union control, inspection and enforcement system provided for in Article 36 of Regulation (EU) No. 1380/2013 on the Common Fisheries Policy through measure 3.1 "Control and enforcement" of the MFP
3. Preparation and launching of activities for adaptation of the fishing fleet capabilities to the fishing opportunities through financial support under Measure "Final cessation of fishing activities" of the MFAP
4. Preparation and launching of activities to modernize the fishing fleet (Measure "Temporary suspension of fishing activities" of the MFAP)

5. Preparation and launching of activities to foster investment in new equipment and innovations, contributing to environmental protection and biodiversity through financial support under Measure “Specific equipment of fishing vessels, activities and innovations aimed at environmental protection and biodiversity” of the MFAP
6. Conducting an information campaign to familiarize operators in the fishing sector with the EU's vision for low-carbon and sustainable Fisheries and preparing for the implementation of projects with this focus

AREA OF IMPACT 2 - COMPETITIVENESS OF THE FISHERIES AND AQUACULTURE INDUSTRY:

OBJECTIVE: SUSTAINABLE DEVELOPMENT OF AQUACULTURE PRODUCTION AND PROCESSING OF ITS PRODUCTS

MEASURES:

1. Implementation of activities to promote investment activity and introduction of innovations in the Aquaculture sub-sector through financial support under Measures “Productive investments in aquaculture” and “Innovations in aquaculture” under MFAP
2. Implementation of activities to promote investment activity and introduction of innovations in processing of fishery and aquaculture products through financial support under Measure “Processing of fishery and aquaculture products” from MFAP

AREA OF IMPACT 3 - BLUE ECONOMY AND FISHERIES COMMUNITIES

OBJECTIVE: STRENGTHENING AND DEVELOPMENT OF COMMUNITIES IN COASTAL AND INLAND FISHERIES AND AQUACULTURE

MEASURES:

1. Implementation of activities to promote the process of establishing local fishing action groups with financial support under Measure “Preliminary preparation of fisheries local action groups” of the MFAP
2. Preparation for implementation of activities to stimulate the participation of local communities in the sustainable development of coastal and inland fishing areas with financial support under Measure “Development of communities engaged in fisheries and aquaculture in coastal and inland areas” of the MFAP

PRIORITY 7: MOBILIZING THE POTENTIAL OF RURAL AREAS TO ACHIEVE BALANCED SOCIAL AND TERRITORIAL DEVELOPMENT

AREA OF IMPACT 1 - COMMUNITY LED DEVELOPMENT:

OBJECTIVE: DIVERSIFICATION OF THE RURAL ECONOMY AND HIGH EMPLOYMENT OF THE LOCAL POPULATION

MEASURES:

1. Implementation of integrated multisectoral strategies for local development, based on the characteristics of the specific territory and developed on the basis of local needs and potential
2. Preparation for implementation of a preparatory measure for development of CLLD strategies for the new programming period under the CAP Strategic Plan

SCOPE 2 - INFRASTRUCTURE AND PUBLIC SERVICES IN RURAL AREAS:

OBJECTIVE: IMPROVING THE QUALITY OF LIFE IN RURAL AREAS MEASURE:

MEASURE:

1. Preparation of interventions under the Strategic Plan for Agriculture and Rural Development to support investments for construction and/or reconstruction of technical infrastructure, municipal road and street network, reconstruction and modernization of water supply and sewerage network and sewerage system, and other public infrastructure

A set of instruments for financial support with European and national funds will be implemented in 2024 to implement the measures and achieve the goals of the agricultural policy.

In terms of agriculture, the implementation of some of the measures financed under the General Agricultural Policy 2014-2020 will continue and part of the interventions under the Strategic Plan for the Development of Agriculture and Rural Areas 2023-2027 will be launched. Fisheries and Aquaculture Production Development will be supported under the 2014-2020 Maritime and Fisheries Program and the 2021-2027 Maritime, Fisheries and Aquaculture Program funded by the European Maritime, Fisheries and Aquaculture Fund.

Despite the limitations of the national budget, the sustainable development of agriculture will be promoted with a national resource - through schemes for transitional national aid, supplementing the support with European funds for direct support, and state aid.

The agricultural sector will be able to benefit from an additional financial resource from the National Plan for Recovery and Sustainability for investments in activities that ensure the protection of environmental components and mitigation of the consequences of climate change, the introduction of innovative production and digital technologies, the digitalization of processes in industry and communication between administration and business.

For 2024, funds in the amount of BGN 3,477.6 million will be needed to support the agricultural sector, including:

- For direct payments - BGN 1,581.2 million (for the financial year)
- For market measures - BGN 113.0 million (for the financial year)
- For transitional national aid - BGN 137.7 million
- For state aid (incl. under tax relief schemes) - BGN 362.7 million. Additional financial resources may be made available if necessary and financially feasible
- For payments under measures under the RDP 2014-2020 interventions under the CAP Strategic Plan, financed by the EAFRD - BGN 1,033.4 million (for the financial year)
- For implementation of measures in support of fisheries and aquaculture - BGN 35 million
- For activities under the NRRP - BGN 214.6 million (VAT included).

ANNEXES

ANNEX 1

GROSS AND FINAL PRODUCTS FROM THE AGRICULTURE SECTOR FOR 2022 (AT PRODUCER PRICES)

(BGN million)

Code	Products	Current prices															
		Gross output	Losses	Initial stocks	Used per unit			Processed by producers	Own use	Sales			Sales - total	Production of goods from fixed capital at own	Closing stocks	Change in stocks	Final production
					Seeds and propagatin g material	Feed supplement s	Other			in the country		abroad					
										in the sector	outside the sector						
a	b	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
01	Cereals	5,644.7	5.7	1,627.8	147.2	146.7	6.4	1.5	33.8	393.1	3,835.9	45.4	4,274.4		2,656.8	1,028.9	5,485.4
01.1	Wheat and spelt	3,785.6	3.5	892.1	132.9	64.4	4.4	0.5	23.1	271.8	2,383.4	27.8	2,683.0		1,765.9	873.8	3,644.8
01.1/1	Soft wheat	3,747.1	3.5	888.1	131.9	64.3	4.3	0.5	23.0	265.1	2,361.3	27.8	2,654.2		1,753.5	865.4	3,607.4
01.1/2	Durum wheat	38.5		4.0	1.0	0.1	0.1		0.1	6.7	22.1		28.8		12.4	8.4	37.4
01.2	Rye	9.9		2.6	0.2	2.5			2.1	0.1	5.5		5.6		2.1	-0.5	9.7
01.3	Barley	341.2	0.6	35.4	11.2	12.7	0.7	0.5	1.7	26.0	235.9	2.4	264.3		84.9	49.5	328.7
01.4	Oat and cereal mixtures	13.8		4.3	0.5	4.2	0.2		0.3	1.5	4.7		6.2		6.7	2.4	13.1
01.5	Corn for grain	1,408.7	1.6	651.2	0.3	54.6	0.9	0.3	5.7	85.0	1,138.5	15.1	1,238.6		757.9	106.7	1,405.9
01.6	Rice	53.0		37.9	1.6	0.3	0.1			7.4	55.2		62.6		26.3	-11.7	51.3
01.7	Other cereals	32.5		4.3	0.5	8.0	0.1	0.2	0.9	1.3	12.7	0.1	14.1		13.0	8.7	31.9
02	Industrial Crops	2,974.4	5.2	944.2	28.1	6.3	3.2	17.5	6.1	108.3	2,272.9	6.7	2,387.9		1,464.3	520.1	2,937.9
02.1	Oilseeds	2,784.8	3.6	875.4	25.4	5.2	1.6		3.0	101.6	2,097.3	6.3	2,205.2		1,416.2	540.9	2,754.2
02.1/1	Rapeseed	340.4	0.3	12.5	23.7	0.3	0.1			11.2	255.4	1.4	268.0		60.5	48.1	316.3
02.1/2	Sunflower	2,429.0	3.3	859.0	1.5	4.9	1.3		2.6	90.2	1,831.2	4.9	1,926.3		1,348.1	489.1	2,422.9
02.1/3	Soy	12.9		0.8	0.1		0.2			0.2	8.3		8.5		4.9	4.1	12.6
02.1/4	Other oilseeds	2.5		3.1	0.1			0.4			2.4		2.4		2.7	-0.4	2.4
02.2	Protein crops	28.9	0.8	12.4	2.7	1.1	0.2		0.2	1.1	25.9		27.0		9.3	-3.1	25.2
02.3	Tobacco	26.2		35.6				0.1		1.0	40.9		41.9		19.8	-15.9	26.2
02.4	Sugar beet																
02.5	Other industrial crops	134.5	0.8	20.8			1.4	17.4	2.9	4.6	108.8	0.4	113.8		19.0	-1.8	132.3
02.5/1	Fiber-producing crops	1.3		0.7							1.0	0.3	1.3		0.7		1.3
02.5/2	Hops	1.3									1.3		1.3				1.3
02.5/3	Other industrial crops	131.9	0.8	20.1			1.4	17.4	2.9	4.6	106.5	0.1	111.2		18.3	-1.8	129.7
03	Crops for feed	206.7	0.5	106.7		178.6	0.7	27.7	2.0	8.2	16.6	0.3	25.1		78.8	-27.9	205.5
03.1	Corn for silage	68.9	0.5			27.5		27.6	0.9	0.9	11.5		12.4				68.4
03.2	Root feed	0.1				0.1											0.1
03.3	Other feed	137.7		106.7		151.0	0.7	0.1	1.1	7.3	5.1	0.3	12.7		78.8	-27.9	137.0
04	Vegetables	485.1	0.2	5.4		0.1	0.1	3.7	0.4	10.0	375.3	3.3	388.6	84.9	12.5	7.2	484.8
04.1	Fresh vegetables	370.1	0.2	3.8		0.1	0.1	3.7	0.2	6.5	357.8	0.5	364.8		4.8	1.1	369.8
04.1/2	Tomatoes	126.7						0.2		3.6	122.9		126.5				126.7
04.1/3	Other fresh vegetables	243.4	0.2	3.8		0.1	0.1	3.5	0.2	2.9	234.9	0.5	238.3		4.8	1.1	243.1
04.2	Flowers	115.0		1.6					0.2	3.5	17.5	2.8	23.8	84.9	7.7	6.1	115.0
04.2/1	Plant nurseries	10.9		0.7					0.1	0.5	3.5	2.8	6.8		4.7	4.0	10.9
04.2/2	Decorative plants, including Christmas trees	19.2		0.9					0.1	3.0	14.0		17.0		3.0	2.1	19.2
04.2/3	Creation and growing	84.9												84.9			84.9
05	Potatoes	89.5	0.5	22.9	2.9	0.2			0.8	9.1	78.0	0.5	87.6		20.4	-2.5	86.1
06	Fruits	347.1	0.4	14.0				34.3	1.2	17.3	290.2	9.2	316.7		8.5	-5.6	346.7
06.1	Fresh fruits	240.4	0.4	14.0				21.5	0.7	14.5	199.6	9.2	223.3		8.5	-5.6	240.0
06.1/1	Apples	28.2	0.2	5.7				1.8		2.1	26.0		28.1		3.8	-1.9	28.0
06.1/2	Pears	2.6									2.6		2.6				2.6
06.1/3	Peaches	23.2								0.1	17.5	5.6	23.2				23.2
06.1/4	Other fresh fruit	186.4	0.2	8.3				19.7	0.7	12.3	153.5	3.6	169.4		4.7	-3.7	186.2
06.4	Grapes - total	106.7						12.8	0.5	2.8	90.6		93.4				106.7
06.4/1	Dessert grapes	14.1								0.6	13.5		14.1				14.1
06.4/2	Other grape	92.6						12.8	0.5	2.2	77.1		79.3				92.6
07	Wine																
07.1	Table wine																
09	Other plant crops	48.6	1.4	22.4	4.0	0.5	1.9		12.0	22.4	17.6		40.0		11.2	-11.2	41.3
09.2	Seeds	48.6	1.4	22.4	4.0	0.5	1.9		12.0	22.4	17.6		40.0		11.2	-11.2	41.3
09.3	Other plant products																
10	Crop production (from 01 to 09)	9,796.1	13.9	2,743.4	182.2	332.4	12.3	84.7	56.3	568.4	6,886.5	65.4	7,520.3	84.9	4,252.5	1,509.0	9,587.7
11	Livestock	1,076.6		378.7				33.6			915.0		915.0	130.1	376.6	-2.0	1,076.6
11.1	Cattle	201.4		236.4				0.7			100.5		100.5	100.6	236.0	-0.4	201.4

Code	Products	Current prices															
		Gross output	Losses	Initial stocks	Used per unit			Processed by producers	Own use	Sales			Sales - total	Production of goods from fixed capital at own	Closing stocks	Change in stocks	Final production
					Seeds and propagatin g material	Feed supplement s	Other			in the country		abroad					
										in the sector	outside the sector						
a	b	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11.2	Pigs	351.5		36.4				21.7			324.1		324.1	8.5	33.6	-2.7	351.5
11.3	Horses																
11.4	Sheep and goats	154.0		46.3				0.6			136.9		136.9	21.0	41.8	-4.5	154.0
11.5	Poultry	369.7		59.6				10.6			353.5		353.5		65.2	5.6	369.7
11.6	Other animals																
12	Livestock production	1,241.0		105.9		49.9	75.8	21.2	57.2	120.1	847.3	38.5	1,005.9		136.9	31.0	1,115.3
12.1	Milk	789.7				44.1		20.8	20.8	61.2	642.8		704.0				745.6
12.2	Eggs	318.6		2.8		0.2	46.9	0.4	25.5	42.4	160.4	38.5	241.3		7.1	4.3	271.5
12.3	Other livestock production	132.7		103.1		5.6	28.9		10.9	16.5	44.1		60.6		129.8	26.7	98.2
12.3/1	Unwashed wool	1.5									1.5		1.5				1.5
12.3/2	Silkworm cocoons																
12.3/3	Other livestock production	131.2		103.1		5.6	28.9		10.9	16.5	42.6		59.1		129.8	26.7	96.7
13	Livestock production (11+12)	2,317.6		484.6		49.9	75.8	54.8	57.2	120.1	1,762.3	38.5	1,920.9	130.1	513.5	29.0	2,191.9
14	Production of agricultural goods (10+13)	12,113.7	13.9	3,228.0	182.2	382.3	88.1	139.5	113.5	688.5	8,648.8	103.9	9,441.2	215.0	4,766.0	1,538.0	11,779.6
15	Production of agricultural services	595.3									595.3		595.3				595.3
16	Production from agriculture (14 + 15)	12,709.0	13.9	3,228.0	182.2	382.3	88.1	139.5	113.5	688.5	9,244.1	103.9	10,036.5	215.0	4,766.0	1,538.0	12,374.9
17	Non-agricultural inseparable secondary activities	273.2							273.2								273.2
17.1	Processing of agricultural products	273.2							273.2								273.2
17.1/1	- cereals	83.0							83.0								83.0
17.1/2	- vegetables	27.3							27.3								27.3
17.1/3	- fruit	18.1							18.1								18.1
17.1/4	- wine	41.1							41.1								41.1
17.1/5	- animals	77.1							77.1								77.1
17.1/6	- animal products	18.4							18.4								18.4
17.1/6/1	- milk	18.4							18.4								18.4
17.1/7	- other	8.2							8.2								8.2
17.2	Other inseparable secondary activities																
18	Production from the Agriculture sector (16+17)	12,982.2	13.9	3,228.0	182.2	382.3	88.1	139.5	386.7	688.5	9,244.1	103.9	10,036.5	215.0	4,766.0	1,538.0	12,648.1

Source: NSI

ANNEX 2
VALUE OF GROSS PRODUCTION AND GROSS ADDED VALUE FROM AGRICULTURE (AT PRODUCER PRICES) FOR THE PERIOD 2020-2022
(BGN million)

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
01	Cereals	2,685.9	68.7	4,532.1	24.5	5,644.7
01.1	Wheat and spelt	1,549.0	83.8	2,847.0	33.0	3,785.6
01.1/1	Soft wheat	1,538.7	83.7	2,825.9	32.6	3,747.1
01.1/2	Durum wheat	10.3	104.9	21.1	82.5	38.5
01.2	Rye	3.2	84.4	5.9	67.8	9.9
01.3	Barley	157.8	52.7	240.9	41.6	341.2
01.4	Oat and cereal mixtures	9.6	-7.3	8.9	55.1	13.8
01.5	Corn for grain	896.7	52.1	1,363.5	3.3	1,408.7
01.6	Rice	47.6	-17.0	39.5	34.2	53.0
01.7	Other cereals	22.0	20.0	26.4	23.1	32.5
02	Industrial Crops	1,641.3	56.5	2,567.9	15.8	2,974.4
02.1	Oilseeds	1,448.6	60.9	2,330.5	19.5	2,784.8
02.1/1	Rapeseed	194.0	79.6	348.5	-2.3	340.4
02.1/2	Sunflower	1,248.7	58.4	1,977.7	22.8	2,429.0
02.1/3	Soy	4.1	-39.0	2.5	416.0	12.9
02.1/4	Other oilseeds	1.8	0.0	1.8	38.9	2.5
02.2	Protein crops	19.7	53.8	30.3	-4.6	28.9
02.3	Tobacco	21.6	84.7	39.9	-34.3	26.2
02.4	Sugar beet					
02.5	Other industrial crops	151.4	10.4	167.2	-19.6	134.5
02.5/1	Fiber-producing crops	1.6	-12.5	1.4	-7.1	1.3
02.5/2	Hops	0.5	100.0	1.0	30.0	1.3
02.5/3	Other industrial crops	149.3	10.4	164.8	-20.0	131.9
03	Crops for feed	132.1	31.0	173.0	19.5	206.7
03.1	Corn for silage	49.7	3.8	51.6	33.5	68.9
03.2	Root feed	0.0		0.1	0.0	0.1
03.3	Other feed	82.4	47.2	121.3	13.5	137.7
04	Vegetables	342.9	23.3	422.7	14.8	485.1
04.1	Fresh vegetables	314.3	10.5	347.2	6.6	370.1
04.1/2	Tomatoes	93.6	17.0	109.5	15.7	126.7
04.1/3	Other fresh vegetables	220.7	7.7	237.7	2.4	243.4
04.2	Flowers	28.6	164.0	75.5	52.3	115.0
04.2/1	Plant nurseries	9.5	0.0	9.5	14.7	10.9
04.2/2	Decorative plants, including Christmas trees	19.1	8.9	20.8	-7.7	19.2
04.2/3	Creation and growing			45.2	87.8	84.9
05	Potatoes	76.2	-2.2	74.5	20.1	89.5
06	Fruits	292.9	10.9	324.9	6.8	347.1
06.1	Fresh fruits	192.1	10.8	212.8	13.0	240.4
06.1/1	Apples	20.9	15.8	24.2	16.5	28.2
06.1/2	Pears	2.2	13.6	2.5	4.0	2.6
06.1/3	Peaches	13.8	51.4	20.9	11.0	23.2
06.1/4	Other fresh fruit	155.2	6.4	165.2	12.8	186.4
06.4	Grapes - total	100.8	11.2	112.1	-4.8	106.7
06.4/1	Dessert grapes	10.6	26.4	13.4	5.2	14.1
06.4/2	Other grape	90.2	9.4	98.7	-6.2	92.6
07	Wine					
07.1	Table wine					
09	Other plant crops	41.1	-5.8	38.7	25.6	48.6
09.2	Seeds	41.1	-5.8	38.7	25.6	48.6
09.3	Other plant products					

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
10	Crop production (from 01 to 09)	5,212.4	56.0	8,133.8	20.4	9,796.1
11	Livestock	910.7	-2.1	891.6	20.7	1,076.6
11.1	Cattle	163.9	5.9	173.5	16.1	201.4
11.2	Pigs	319.5	-10.1	287.2	22.4	351.5
11.3	Horses					
11.4	Sheep and goats	148.0	-7.2	137.4	12.1	154.0
11.5	Poultry	279.3	5.1	293.5	26.0	369.7
11.6	Other animals					
12	Livestock production	1,008.8	3.8	1,046.9	18.5	1,241.0
12.1	Milk	702.7	0.6	706.9	11.7	789.7
12.2	Eggs	217.3	4.8	227.8	39.9	318.6
12.3	Other livestock production	88.8	26.4	112.2	18.3	132.7
12.3/1	Unwashed wool	1.1	45.5	1.6	-6.3	1.5
12.3/2	Silkworm cocoons					
12.3/3	Other livestock production	87.7	26.1	110.6	18.6	131.2
13	Livestock production (11+12)	1,919.5	1.0	1,938.5	19.6	2,317.6
14	Production of agricultural goods (10+13)	7,131.9	41.2	10,072.3	20.3	12,113.7
15	Production of agricultural services	462.0	18.2	546.3	9.0	595.3
16	Production from agriculture (14 + 15)	7,593.9	39.8	10,618.6	19.7	12,709.0
17	Non-agricultural inseparable secondary activities	204.1	-0.9	202.3	35.0	273.2
17.1	Processing of agricultural products	204.1	-0.9	202.3	35.0	273.2
17.1/1	- cereals	63.3	5.5	66.8	24.3	83.0
17.1/2	- vegetables	26.1	4.2	27.2	0.4	27.3
17.1/3	- fruit	14.0	3.6	14.5	24.8	18.1
17.1/4	- wine	34.3	2.6	35.2	16.8	41.1
17.1/5	- animals	52.8	-19.9	42.3	82.3	77.1
17.1/6	- animal products	6.6	36.4	9.0	104.4	18.4
17.1/6/1	- milk	6.6	36.4	9.0	104.4	18.4
17.1/7	- other	7.0	4.3	7.3	12.3	8.2
17.2	Other inseparable secondary activities					
18	Production from the Agriculture sector (16+17)	7,798.0	38.8	10,820.9	20.0	12,982.2
19	Intermediate consumption	4,647.6	26.1	5,862.3	24.9	7,322.8
	Losses	12.7	-8.7	11.6	19.8	13.9
19.01	Seeds and propagating material	292.8	22.0	357.2	42.2	508.0
19.01/1	supplied by other agricultural holdings	32.3	19.5	38.6	26.9	49.0
19.01/2	purchased outside the sector	184.2	12.5	207.3	33.5	276.8
	produced and consumed on the farm itself	76.3	45.9	111.3	63.7	182.2
19.02	Fuels and oils	907.5	31.3	1,191.1	9.6	1,305.7
19.02/1	- electricity	61.3	69.7	104.0	20.9	125.7
19.02/2	- gas	25.6	54.3	39.5	21.8	48.1
19.02/3	- other fuels	817.1	27.6	1,042.4	8.1	1,126.7
19.02/4	- others	3.5	48.6	5.2	0.0	5.2
19.03	Fertilizers and soil improvers	455.0	63.0	741.6	90.5	1,412.7
19.03/1	supplied by other agricultural holdings	7.4	66.2	12.3	115.4	26.5
19.03/2	purchased outside the sector	447.6	62.9	729.3	90.1	1,386.2
	produced and consumed on the farm itself	0.0		0.0		0.0
19.04	Plant protection products and pesticides	319.7	14.8	366.9	39.5	511.8
19.05	Veterinary costs	251.7	-0.4	250.7	-11.6	221.6
19.06	Feed supplements	918.4	29.6	1,190.7	24.2	1,479.3
19.06/1	supplied by other agricultural holdings	282.1	35.8	383.0	39.7	534.9
19.06/2	purchased outside the sector	436.6	-3.8	419.9	45.7	612.0
19.06/3	produced and consumed on the farm itself	199.7	94.2	387.8	-14.3	332.4

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
	Feed supplements, not included in EAA	42.8	4.4	44.7	11.6	49.9
19.07	Maintenance and repair of machinery and small inventory	338.1	15.8	391.6	6.1	415.5
19.08	Building maintenance	146.0	20.3	175.6	0.7	176.8
19.09	Agricultural services	462.0	18.2	546.3	9.0	595.3
19.10	FISIM	74.4	-6.6	69.5	-1.0	68.8
19.11	Other goods and services	426.5	23.0	524.8	7.4	563.5
	supplied by other agricultural holdings	91.0	33.5	121.5	13.4	137.8
	purchased outside the sector	266.3	20.7	321.4	5.1	337.7
	produced and consumed on the farm itself	69.2	18.4	81.9	7.4	88.0
20	Gross value added at producer prices (18-19)	3,150.4	57.4	4,958.6	14.1	5,659.4

Source: NSI

ANNEX 3
INTERMEDIATE CONSUMPTION, FACTOR EXPENDITURE, OTHER SUBSIDIES AND TAXES FOR 2022

(BGN million)

Elements of intermediate consumption	To create gross production at producer prices	To create the final production at basic prices	Produced and consumed on the farm itself	Purchase of goods and services for intermediate consumption	
				from other agricultural units	from units outside the industry
a	1	2	3	4	5
Losses	13.9		13.9		
Seeds and propagating material	508.0	325.8	182.2	49.0	276.8
Fuels and oils	1,305.7	1,305.7			1,305.7
- electricity	125.7	125.7			125.7
- gas	48.1	48.1			48.1
- other fuels	1,126.7	1,126.7			1,126.7
- others	5.2	5.2			5.2
Fertilizers and soil improvers	1,412.7	1,412.7		26.5	1,386.2
Plant protection products and pesticides	511.8	511.8			511.8
Veterinary costs	221.6	221.6			221.6
Feed supplements	1,479.3	1,479.3	332.4	534.9	612.0
Feed supplements, not included in the final production (EAA)	49.9		49.9		
Maintenance and repair	592.3	592.3			592.3
- maintenance and repair of machines and small inventory	415.5	415.5			415.5
- maintenance of buildings	176.8	176.8			176.8
Agricultural services	595.3	595.3			595.3
Other goods and services	632.3	544.2	88.1	137.7	406.5
Intermediate consumption	7,322.8	6,988.7	666.5	748.1	5,908.2
Use of fixed capital	1,135.2	1,135.2			1,135.2
- equipment	903.2	903.2			903.2
- buildings	103.7	103.7			103.7
- creation and cultivation	21.5	21.5			21.5
- others	106.8	106.8			106.8
Compensation of employees	1,482.5	1,482.5			1,482.5
Other taxes on production	20.3	20.3			20.3
Other subsidies on production	2,468.2	2,468.2			2,468.2
Rent	2,490.7	2,490.7			2,490.7
Interest paid	100.9	100.9			100.9
Interest received	42.4	42.4			42.4

Source: NSI

ANNEX 4

VALUE OF FINAL PRODUCTION, GROSS VALUE ADDED AND ENTREPRENEURIAL INCOME IN AGRICULTURE (AT CURRENT BASIS PRICES) FOR THE PERIOD 2020 - 2022

(BGN million)

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
a	b	1	2	3	4	5
01	Cereals	2,608.5	69.8	4,429.3	23.8	5,485.4
01.1	Wheat and spelt	1,484.1	86.1	2,761.3	32.0	3,644.8
01.1/1	Soft wheat	1,474.6	85.9	2,741.0	31.6	3,607.4
01.1/2	Durum wheat	9.5	113.7	20.3	84.2	37.4
01.2	Rye	3.1	80.6	5.6	73.2	9.7
01.3	Barley	152.0	54.1	234.2	40.4	328.7
01.4	Oat and cereal mixtures	8.6	-3.5	8.3	57.8	13.1
01.5	Corn for grain	893.7	52.0	1,358.4	3.5	1,405.9
01.6	Rice	46.2	-16.2	38.7	32.6	51.3
01.7	Other cereals	20.8	9.6	22.8	39.9	31.9
02	Industrial Crops	1,667.0	54.7	2,578.2	15.2	2,971.0
02.1	Oilseeds	1,444.0	60.2	2,312.8	19.1	2,754.2
02.1/1	Rapeseed	193.5	72.8	334.3	-5.4	316.3
02.1/2	Sunflower	1,244.7	58.6	1,974.4	22.7	2,422.9
02.1/3	Soy	4.0	-37.5	2.5	404.0	12.6
02.1/4	Other oilseeds	1.8	-11.1	1.6	50.0	2.4
02.2	Protein crops	47.1	20.0	56.5	-0.4	56.3
02.3	Tobacco	21.6	84.7	39.9	-34.3	26.2
02.4	Sugar beet					
02.5	Other industrial crops	154.3	9.5	169.0	-20.5	134.3
02.5/1	Fiber-producing crops	5.5	-7.3	5.1	-35.3	3.3
02.5/2	Hops	0.5	100.0	1.0	30.0	1.3
02.5/3	Other industrial crops	148.3	9.8	162.9	-20.4	129.7
03	Crops for feed	131.2	31.2	172.1	19.4	205.5
03.1	Corn for silage	49.6	3.4	51.3	33.3	68.4
03.2	Root feed			0.1		0.1
03.3	Other feed	81.6	47.9	120.7	13.5	137.0
04	Vegetables	385.8	16.8	450.6	13.7	512.5
04.1	Fresh vegetables	357.3	5.0	375.1	6.0	397.5
04.1/2	Tomatoes	93.6	20.4	112.7	19.9	135.1
04.1/3	Other fresh vegetables	263.7	-0.5	262.4		262.4
04.2	Flowers	28.5	164.9	75.5	52.3	115.0
04.2/1	Plant nurseries	9.4	1.1	9.5	14.7	10.9
04.2/2	Decorative plants, including Christmas trees	19.1	8.9	20.8	-7.7	19.2
04.2/3	Creation and growing			45.2	87.8	84.9
05	Potatoes	73.1	15.5	84.4	15.8	97.7
06	Fruits	334.3	8.0	361.2	7.0	386.4
06.1	Fresh fruits	233.5	6.2	247.9	12.3	278.3
06.1/1	Apples	20.9	35.9	28.4	14.4	32.5
06.1/2	Pears	2.2	40.9	3.1	6.5	3.3
06.1/3	Peaches	13.8	79.0	24.7	9.7	27.1
06.1/4	Other fresh fruit	196.6	-2.5	191.7	12.4	215.4
06.4	Grapes - total	100.8	12.4	113.3	-4.6	108.1
06.4/1	Dessert grapes	10.6	37.7	14.6	6.2	15.5
06.4/2	Other grape	90.2	9.4	98.7	-6.2	92.6
07	Wine					
07.1	Table wine					
09	Other plant crops	38.1	-9.7	34.4	20.1	41.3
09.2	Seeds	38.1	-9.7	34.4	20.1	41.3

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
a	b	1	2	3	4	5
09.3	Other plant products			.		
10	Crop production (from 01 to 09)	5,238.0	54.8	8,110.2	19.6	9,699.8
11	Livestock	988.3	-2.2	966.1	19.1	1,151.0
11.1	Cattle	189.0	5.2	198.8	14.4	227.5
11.2	Pigs	319.5	-10.1	287.2	22.4	351.5
11.3	Horses			.		
11.4	Sheep and goats	200.5	-6.9	186.6	8.4	202.3
11.5	Poultry	279.3	5.1	293.5	26.0	369.7
11.6	Other animals			.		
12	Livestock production	973.8	2.3	996.5	18.7	1,182.6
12.1	Milk	733.6	-0.5	729.7	11.4	812.9
12.2	Eggs	176.7	2.9	181.9	49.3	271.5
12.3	Other livestock production	63.5	33.7	84.9	15.7	98.2
12.3/1	Unwashed wool	1.1	45.5	1.6	-6.3	1.5
12.3/2	Silkworm cocoons			.		
12.3/3	Other livestock production	62.4	33.5	83.3	16.1	96.7
13	Livestock production (11+12)	1,962.1	0.0	1,962.6	18.9	2,333.6
14	Production of agricultural goods	7,200.1	39.9	10,072.8	19.5	12,033.4
15	Production of agricultural services	462.0	18.2	546.3	9.0	595.3
16	Production from agriculture (14 + 15)	7,662.1	38.6	10,619.1	18.9	12,628.7
17	Non-agricultural inseparable secondary activities	204.0	-0.8	202.3	35.0	273.2
17.1	Processing of agricultural products	204.0	-0.8	202.3	35.0	273.2
17.1/1	- cereals	63.3	5.5	66.8	24.3	83.0
17.1/2	- vegetables	26.1	4.2	27.2	0.4	27.3
17.1/3	- fruit	14.0	3.6	14.5	24.8	18.1
17.1/4	- wine	34.3	2.6	35.2	16.8	41.1
17.1/5	- animals	52.8	-19.9	42.3	82.3	77.1
17.1/6	- animal products	6.6	36.4	9.0	104.4	18.4
17.1/6/1	- milk	6.6	36.4	9.0	104.4	18.4
17.1/7	- other	6.9	5.8	7.3	12.3	8.2
17.2	Other inseparable secondary activities			.		
18	Production from the Agriculture sector (16+17)	7,866.1	37.6	10,821.4	19.2	12,901.9
19	Intermediate consumption	4,446.6	26.2	5,612.8	24.5	6,988.7
19.01	Seeds and propagating material	216.5	13.6	245.9	32.5	325.8
19.01/1	supplied by other agricultural holdings	32.3	19.5	38.6	26.9	49.0
19.01/2	purchased outside the sector	184.2	12.5	207.3	33.5	276.8
19.02	Fuels and oils	907.5	31.3	1,191.1	9.6	1,305.7
19.02/1	- electricity	61.3	69.7	104.0	20.9	125.7
19.02/2	- gas	25.6	54.3	39.5	21.8	48.1
19.02/3	- other fuels	817.1	27.6	1,042.4	8.1	1,126.7
19.02/4	- others	3.5	48.6	5.2		5.2
19.03	Fertilizers and soil improvers	455.0	63.0	741.6	90.5	1,412.7
19.03/1	supplied by other agricultural holdings	7.4	66.2	12.3	115.4	26.5
19.03/2	purchased outside the sector	447.6	62.9	729.3	90.1	1,386.2
19.04	Plant protection products and pesticides	319.7	14.8	366.9	39.5	511.8
19.05	Veterinary costs	251.7	-0.4	250.7	-11.6	221.6
19.06	Feed supplements	918.4	29.6	1,190.7	24.2	1,479.3
19.06/1	supplied by other agricultural holdings	282.1	35.8	383.0	39.7	534.9
19.06/2	purchased outside the sector	436.6	-3.8	419.9	45.7	612.0
19.06/3	produced and consumed on the farm itself	199.7	94.2	387.8	-14.3	332.4
19.07	Maintenance and repair of machinery and small inventory	338.1	15.8	391.6	6.1	415.5
19.08	Building maintenance	146.0	20.3	175.6	0.7	176.8
19.09	Agricultural services	462.0	18.2	546.3	9.0	595.3

Code	Products	2020	Coefficient of variation	2021	Coefficient of variation	2022
a	b	1	2	3	4	5
19.10	FISIM	74.4	-6.6	69.5	-1.0	68.8
19.11	Other goods and services	357.3	24.0	442.9	7.3	475.4
	supplied by other agricultural holdings	91.0	33.5	121.5	13.3	137.7
	purchased outside the sector	266.3	20.7	321.4	5.1	337.7
20	Gross value added at basic prices (18-19)	3,419.5	52.3	5,208.6	13.5	5,913.2
21	Use of fixed capital	923.8	6.4	982.9	15.5	1,135.2
21.1	- equipment	749.1	4.9	786.0	14.9	903.2
21.2	- buildings	81.5	10.9	90.4	14.7	103.7
21.3	- creation and cultivation	20.3	7.9	21.9	-1.8	21.5
21.4	- other	72.9	16.0	84.6	26.2	106.8
22	Gross value added at basic prices (20-21)	2,495.7	69.3	4,225.7	13.1	4,778.0
23	Compensation of employees	1,107.9	9.3	1,211.2	22.4	1,482.5
24	Other taxes on production	15.7	-3.2	15.2	33.6	20.3
25	Other subsidies on production	2,294.1	-15.0	1,950.3	26.6	2,468.2
26	Income by factors (22 - 24 + 25)	4,774.1	29.0	6,160.8	17.3	7,225.9
27	Operating surplus / Mixed income (22 - 23 + 25)	3,666.2	35.0	4,949.6	16.0	5,743.4
28	Rent	1,212.9	33.9	1,624.0	53.4	2,490.7
29	Interest paid	63.6	23.6	78.6	28.4	100.9
30	Interest received	24.2	15.3	27.9	52.0	42.4
31	Entrepreneurial income (27 - 28 - 29 + 30)	2,413.9	35.7	3,274.9	-2.5	3,194.2

Source: NSI

APPENDIX 5

FINAL PRODUCTS AND GROSS VALUE ADDED (AT BASIC PRICES) - 2021 - 2022 - AMOUNT AND INDICES OF THE CHANGE - 2022 COMPARED TO 2021

Code	Products	Current value for 2021 - BGN million	Volume index (previous year = 100)	Value for 2022 at previous year's prices - BGN million	Price index (previous year = 100)	Current value for 2022* - BGN million	Index of change in current value (2021 = 100)
01	CEREALS	4,429.3	83.1	3,679.9	149.1	5,485.4	123.9
01.1	Wheat and spelt	2,761.3	86.8	2,396.5	152.1	3,644.8	132.0
01.1/1	Soft wheat	2,741.0	86.6	2,373.3	152.0	3,607.4	131.6
01.1/2	Durum wheat	20.3	114.3	23.2	161.2	37.4	184.3
01.2	Rye	5.6	101.8	5.7	170.2	9.7	173.3
01.3	Barley	234.2	86.9	203.6	161.4	328.7	140.3
01.4	Oat and cereal mixtures	8.3	104.8	8.7	150.6	13.1	157.8
01.5	Corn for grain	1,358.4	73.7	1,000.9	140.5	1,405.9	103.5
01.6	Rice	38.7	109.0	42.2	121.6	51.3	132.5
01.7	Other cereals	22.8	97.8	22.3	143.0	31.9	139.9
02	INDUSTRIAL CROPS	2,578.2	99.3	2,559.3	116.1	2,971.0	115.3
02.1	Oilseeds	2,312.8	102.3	2,366.2	116.4	2,754.2	119.1
02.1/1	Rapeseed	334.3	76.7	256.5	123.3	316.3	94.6
02.1/2	Sunflower	1,974.4	106.3	2,099.4	115.4	2,422.9	122.7
02.1/3	Soy	2.5	352.0	8.8	143.2	12.6	504.1
02.1/4	Other oilseeds	1.6	93.8	1.5	160.0	2.4	150.1
02.2	Protein crops	56.5	73.3	41.4	136.0	56.3	99.7
02.3	Tobacco	39.9	56.6	22.6	115.9	26.2	65.6
02.4	Sugar beet	.	.	.	.	.	.
02.5	Other industrial crops	169.0	76.4	129.1	104.0	134.3	79.5
02.5/1	Fiber-producing crops	5.1	72.5	3.7	89.2	3.3	64.7
02.5/2	Hops	1.0	100.0	1.0	130.0	1.3	130.0
02.5/3	Other industrial crops	162.9	76.4	124.4	104.3	129.7	79.7
03	FEED CROPS	172.1	94.0	161.7	127.1	205.5	119.5
03.1	Corn for silage	51.3	111.1	57.0	120.0	68.4	133.3
03.2	Root feed	0.1	100.0	0.1	100.0	0.1	100.0
03.3	Other feed	120.7	86.7	104.6	131.0	137.0	113.6
04	VEGETABLES	450.6	91.9	414.2	123.7	512.5	113.7
04.1	Fresh vegetables	375.1	90.4	339.0	117.3	397.5	106.0
04.1/2	Tomatoes	112.7	103.6	116.8	115.7	135.1	119.9
04.1/3	Other fresh vegetables	262.4	84.7	222.2	118.1	262.4	100.0
04.2	Flowers	75.5	99.6	75.2	152.9	115.0	152.3
04.2/1	Plant nurseries	9.5	103.2	9.8	111.2	10.9	114.8
04.2/2	Decorative plants, including Christmas trees	20.8	79.8	16.6	115.7	19.2	92.3
04.2/3	Creation and growing	45.2	108.0	48.8	174.0	84.9	187.9
05	POTATOES	84.4	85.8	72.4	134.9	97.7	115.7
06	FRUITS	361.2	95.2	343.8	112.4	386.4	107.0
06.1	Fresh fruits	247.9	96.8	240.0	116.0	278.3	112.3
06.1/1	Apples	28.4	104.2	29.6	109.8	32.5	114.4
06.1/2	Pears	3.1	100.0	3.1	106.5	3.3	106.5
06.1/3	Peaches	24.7	113.0	27.9	97.1	27.1	109.7
06.1/4	Other fresh fruit	191.7	93.6	179.4	120.1	215.4	112.4

Code	Products	Current value for 2021 - BGN million	Volume index (previous year = 100)	Value for 2022 at previous year's prices - BGN million	Price index (previous year = 100)	Current value for 2022* - BGN million	Index of change in current value (2021 = 100)
06.4	Grapes - total	113.3	91.6	103.8	104.1	108.1	95.4
06.4/1	Dessert grapes	14.6	100.0	14.6	106.2	15.5	106.2
06.4/2	Other grape	98.7	90.4	89.2	103.8	92.6	93.8
07	WINE	.	.		.		.
07.1	Table wine	.	.		.		.
09	OTHER PLANT CROPS	34.4	95.3	32.8	125.9	41.3	120.0
09.2	Seeds	34.4	95.3	32.8	125.9	41.3	120.0
09.3	Other plant products	.	.		.		.
10	CROP PRODUCTION (FROM 01 TO 09)	8,110.2	89.6	7,264.1	133.5	9,699.8	119.6
11	LIVESTOCK	966.1	96.0	927.7	124.1	1,151.0	119.1
11.1	Cattle	198.8	95.0	188.8	120.5	227.5	114.5
11.2	Pigs	287.2	97.1	278.8	126.1	351.5	122.4
11.3	Horses	.	.		.		.
11.4	Sheep and goats	186.6	86.0	160.5	126.0	202.3	108.4
11.5	Poultry	293.5	102.1	299.6	123.4	369.7	126.0
11.6	Other animals	.	.		.		.
12	LIVESTOCK PRODUCTION	996.5	97.1	967.3	122.3	1,182.6	118.8
12.1	Milk	729.7	94.6	690.3	117.8	812.9	111.4
12.2	Eggs	181.9	104.7	190.4	142.6	271.5	149.3
12.3	Other livestock production	84.9	102.0	86.6	113.4	98.2	115.7
12.3/1	Unwashed wool	1.6	87.5	1.4	107.1	1.5	93.7
12.3/2	Silkworm cocoons	.	.		.		.
12.3/3	Other livestock production	83.3	102.3	85.2	113.5	96.7	116.1
13	LIVESTOCK PRODUCTION (11 + 12)	1,962.6	96.6	1,895.0	123.1	2,333.6	118.9
14	AGRICULTURAL PRODUCTION (10 + 13)	10,072.8	90.9	9,159.1	131.4	12,033.4	119.4
15	PRODUCTION OF AGRICULTURAL SERVICES	546.3	101.5	554.3	107.4	595.3	109.0
16	PRODUCTION FROM AGRICULTURE (14 + 15)	10,619.1	91.5	9,713.4	130.0	12,628.7	119.0
17	NON-AGRICULTURAL INSEPERABLE SECONDARY ACTIVITIES	202.3	111.5	225.5	121.2	273.2	135.1
17.1	Processing of agricultural products	202.3	111.5	225.5	121.2	273.2	135.1
17.1/1	- cereals	66.8	99.9	66.7	124.4	83.0	124.3
17.1/2	- vegetables	27.2	81.6	22.2	123.0	27.3	100.4
17.1/3	- fruit	14.5	100.0	14.5	124.8	18.1	124.8
17.1/4	- wine	35.2	100.0	35.2	116.8	41.1	116.8
17.1/5	- animals	42.3	152.2	64.4	119.7	77.1	182.2
17.1/6	- animal products	9.0	168.9	15.2	121.1	18.4	204.5
17.1/6/1	- milk	9.0	168.9	15.2	121.1	18.4	204.5
17.1/7	- other	7.3	100.0	7.3	112.3	8.2	112.3
17.2	Other inseparable secondary activities	.	.		.		.
18	PRODUCTION FROM THE 'AGRICULTURE' INDUSTRY (16 + 17)	10,821.4	91.8	9,938.9	129.8	12,901.9	119.2

Code	Products	Current value for 2021 - BGN million	Volume index (previous year = 100)	Value for 2022 at previous year's prices - BGN million	Price index (previous year = 100)	Current value for 2022* - BGN million	Index of change in current value (2021 = 100)
19	INTERMEDIATE CONSUMPTION	5,612.8	93.9	5,270.9	132.6	6,988.7	124.5
19.01	SEEDS AND PROPAGATING MATERIAL	245.9	113.9	280.2	116.3	325.8	132.5
19.01/1	- seeds and propagating material supplied by other agricultural enterprises	38.6	109.1	42.1	116.4	49.0	127.0
19.01/2	- seeds and propagating material purchased outside the sector	207.3	114.9	238.1	116.3	276.8	133.6
19.02	FUELS AND OILS	1,191.1	85.0	1,012.9	128.9	1,305.7	109.6
19.02/1	- electricity	104.0	93.8	97.5	128.9	125.7	120.9
19.02/2	- gas	39.5	94.4	37.3	129.0	48.1	121.8
19.02/3	- other fuels	1,042.4	83.8	874.0	128.9	1,126.7	108.0
19.02/4	- others	5.2	78.8	4.1	126.8	5.2	99.9
19.03	FERTILIZERS AND SOIL IMPROVERS	741.6	91.5	678.5	208.2	1,412.7	190.5
19.03/1	- fertilizers supplied by other agricultural enterprises	12.3	103.3	12.7	208.7	26.5	215.6
19.03/2	- fertilizers purchased outside the sector	729.3	91.3	665.8	208.2	1,386.2	190.1
19.04	PLANT PROTECTION PRODUCTS AND PESTICIDES	366.9	100.4	368.5	138.9	511.8	139.5
19.05	VETERINARY COSTS	250.7	79.8	200.0	110.8	221.6	88.4
19.06	FEED SUPPLEMENTS	1,190.7	96.2	1,145.9	129.1	1,479.3	124.2
19.06/1	- feed supplements supplied by other agricultural holdings	383.0	108.2	414.3	129.1	534.9	139.7
19.06/2	- feed supplements purchased outside the sector	419.9	112.9	474.1	129.1	612.0	145.8
19.06/3	- feed supplements produced and consumed on the holding	387.8	66.4	257.5	129.1	332.4	85.7
19.07	MAINTENANCE AND REPAIR OF MACHINES AND SMALL EQUIPMENT	391.6	96.2	376.7	110.3	415.5	106.1
19.08	MAINTENANCE OF BUILDINGS	175.6	83.8	147.2	120.1	176.8	100.6
19.09	AGRICULTURAL SERVICES	546.3	101.5	554.3	107.4	595.3	109.0
19.10	FISIM	69.5	93.2	64.8	106.2	68.8	99.0
19.11	OTHER GOODS AND SERVICES	442.9	99.8	441.9	107.6	475.4	107.4
20	GROSS VALUE ADDED AT BASIC PRICES (18-19)	5,208.6	89.6	4,668.0	126.7	5,913.2	113.5

Source: NSI