[illegible]

Kosovo Green Report 2022

Ministry of Agriculture, Forestry and Rural Development, Prishtina 2022

December, 2022

Foreword

The sector of agriculture is one of the most influential ones in our country, bearing in mind that agriculture contributes to the general GDP of our country with 7%, marking also a considerable presence in the number of employment in Kosovo. Thus, the Ministry of Agriculture, Forestry and Rural Development is working toward orientation of its policies where there is more need for improvement, in order to have further development of this sector, as well as larger support in the implementation of our policies at the service of farmers.

There are several activities to be emphasized as still being crucial and a priority for the economic development of the country. We have finalized two main Strategies of the agricultural and forestry sector, we have implemented our supportive programs by multiplying the encouragement to our farmers, we have advanced the legislation part by proceeding to the Government certain Laws that in the future would enable a greater financial aid as well as achievement of many goals so that our country shall be represented in each period of development to the agriculture sector.

The Ministry of Agriculture, Forestry and Rural Development, as part of its activities has prepared the 10th edition of Green Report. It is the only report prepared at regional level, which provides information on the general statistical situation of the agriculture, for development policies, development strategies, trade exchange and many other data that serve as an indication on the development of this sector in our country.

MAFRD endures at being committed toward implementation of its objectives, legislation, supportive programs, digitalization, technology upgrade, cooperation with all stakeholders, so that our farmer and country is offered qualitative, correct and proper service to be in line with the latest developments, as well as to have a qualitative representation in accordance with all the standards at the local and international markets.

Faton Peci

Minister



Introduction

The Ministry of Agriculture, Forestry and Rural Development, has the pleasure that this year for the 10th time in a row to publish the Green Report. During these 10 years the report has advanced and improved providing statistical data not only on the situation of the agricultural sector but also the significant developments in this country.

The Green Report for the year 2022, presents the data for the socio-economic development, agricultural production and its usage, forestry, trade, food quality and safety, agricultural policies that include direct payments/subsidies as well as support through investment grants. The chapters provide summarized and processed data in cooperation with all departments and agencies within MAFRD, as well as the institutions and other agencies out of the ministry. Furthermore, in order to strengthen the role of the report so that it can be inclusive and unbiased the MAFRD has founded the Steering Committee that has a crucial role in drafting the report.

It is worth emphasizing that this year's edition, regarding the supply balances for fruits, vegetables, grains, milk and meat, the data of trade exchange through years have been reviewed and harmonised with Customs codes. There have been also some changes in prices due to harmonisation and unification of all prices.

The Department of Economic Analysis and Agricultural Statistics consisting of **(Delvina Hana Bakija, Hakile Xhaferi, Adelina Maksuti, Skender Bajrami, Belgin Dabiqaj and Shkëlqim Duraku)** that drafts and publishes the Green Report, is grateful to all readers who for these 10 years has encouraged and supported with their suggestions, so that the report shall be structured and at the service of the sector, as the only source of the information on agricultural statistics in the country. We continue to work with maximum commitment in order for the report to remain as a guide at country level, providing the necessary information and sustainable data of the sector.

Delvina Hana Bakija



Director of Department for Economic Analysis and Agriculture Statistics

This is a translated document. For any eventual unclear cases in the document, please consult the original document in Albanian.

Table of Contents

List of tables	6
List of figures	9
List of acronyms.....	11
1 Overall economic environment.....	12
1.1 Level of socio-economic development	14
1.2 Labour and employment.....	15
1.3 Economic accounts for agriculture.....	16
1.3.1 Agricultural production	17
1.3.2 Entrepreneurial income	20
1.3.3 Agriculture inputs.....	21
1.4 Prices of agricultural inputs and products	23
1.4.1 Prices of agricultural inputs.....	23
1.4.2 Prices of agricultural products.....	25
Farm gate prices of agricultural products.....	26
Consumer prices of agricultural products	27
Import prices of agricultural products	29
Comparison of domestic prices with prices in the region and the EU countries	31
1.5 Privatization of agricultural lands	32
1.6 Agricultural businesses - Agroindustry	35
2 Agricultural production and its use	42
2.1 Use of agricultural land.....	42
2.2 Crop production.....	45
2.2.1 Cereals.....	45
2.2.2 Vegetables	48
2.2.3 Fruits	54
2.2.4 Vineyards and wines.....	59
Vineyards.....	59
Wine.....	64
2.2.5 Forage crops and green cereals.....	67
2.2.6 Industrial crops.....	68
2.3 Irrigation of agricultural land.....	69
2.4 Livestock.....	70
2.4.1 Cattle	70
2.4.2 Sheep and goats	72
2.4.3 Pigs and other animals.....	72
2.4.4 Poultry	73
2.4.5 Beekeeping	74
3 Forestry	75
4 Trade.....	83
4.1 Overall trade	83
4.2 Trade of agricultural products	83
4.2.1 Trade by country groups.....	85
Trade with CEFTA countries.....	85

Trade with the EU countries.....	87
Trade with third countries.....	90
4.2.2 Export-Import of agricultural products by chapters (1-24).....	91
Export of agricultural products by chapters (1-24).....	91
Import of agricultural products by chapters (01-24).....	92
5 Food safety, standards and quality.....	93
5.1 Greenhouse gas emission.....	97
6 Agricultural Policies, Direct Payments in Agriculture and Rural Development Support	101
6.1 Summary of objectives, programs, measures, budget, grants and subsidies.....	101
6.2 Direct payments/subsidies.....	103
6.2.1 Direct payments for agricultural crops, wine and agricultural insurance.....	108
Agricultural insurance premium.....	112
6.2.2 Direct payments for livestock and milk.....	113
6.2.3 Support for agricultural inputs.....	116
Support for seedlings.....	116
6.3 Agro loans and guarantee fund.....	117
6.3.1 Agro Loans.....	117
Kosovo Credit Guarantee Fund – KCGF.....	121
6.4 Insurance in the field of agriculture.....	123
Development and Sale of Index Agricultural Insurance Products.....	123
Damages/Losses and Compensation Payments.....	124
Traditional Agricultural Insurance Products.....	125
Public Awareness Campaigns.....	126
Agricultural Insurance Information System.....	126
6.5 Rural development projects - Investment grants.....	127
6.6 Capacity enhancement and development.....	130
Education, training and advisory service.....	130
7 Annexes	133
7.1 List of laws and sub-legal acts related to Agriculture, Forestry and Rural Development	133
7.1.2 Administrative Instructions approved by the Ministry of Agriculture, Forestry and Rural Development in 2021	133
7.2 Comparative statistics	134
7.3 Persons responsible for the Green Report, 2022.....	136

List of tables

Table 1:	Gross domestic product by economic activities at current prices (in '000 €)	13
Table 2:	Key labour market indicators by variables, 2017-2021 (in %)	16
Table 3:	Annual price index of agricultural inputs 2015-2021, (2015=100)	24
Table 4:	Annual prices for electricity and oil in €, 2016-2021	24
Table 5:	Average annual prices of agricultural products on the farm, €/kg	26
Table 6:	Average annual wholesale market prices, €/kg	27
Table 7:	Average annual retail market prices, €/kg	28
Table 8:	Import prices of agricultural products, €/kg	29
Table 9:	Value per unit of imported agricultural products, €/kg	30
Table 10:	Prices of some products in Kosovo and in some EU countries in 2021, €/kg	31
Table 11:	Sales of agricultural land in Kosovo, by regions, 2005-2021	32
Table 12:	Sale of agricultural land in Kosovo, 2005-2021	34
Table 13:	Number of registered enterprises by economic activities, 2017-2021	35
Table 14:	Registered agribusiness enterprises, 2017-2021	37
Table 15:	Share of registered enterprises in agriculture, forestry and fishing activities, 2021	39
Table 16:	Agricultural land use by categories, ha	42
Table 17:	Cereal area, production and yield, 2017-2021	45
Table 18:	Supply balance for wheat, 2017-2021	46
Table 19:	Supply balance for maize, 2017-2021	47
Table 20:	Vegetable area, 2017 – 2021	48
Table 21:	Vegetable production, 2017 – 2021	49
Table 22:	Vegetable yield, 2017 – 2021	50
Table 23:	Area, production and yield of second crops after the first harvest	51
Table 24:	Supply balance for tomatoes, 2017-2021	52
Table 25:	Supply balance for pepper, 2017-2021	53
Table 26:	Supply balance for potatoes, 2017-2021	54
Table 27:	Area and production of fruits, 2017 – 2021	55
Table 28:	Yield of fruit, 2017 - 2021	56
Table 29:	Supply balance for apples, 2017-2021	57
Table 30:	Supply balance for plum, 2017-2021	58
Table 31:	Supply balance for strawberry, 2017-2021	59
Table 32:	Grapes area, production and yield, 2017-2021	59
Table 33:	Supply balance for table grapes, 2017-2021	61
Table 34:	Table grape varieties, 2021	62
Table 35:	Wine grape varieties, 2021	63
Table 36:	Wine production 2017-2021, '000 liters	64
Table 37:	Wine production by companies, 2021	65
Table 38:	Physico-chemical analyses of wine for the period 2017 - 2021	66
Table 39:	Area, production, yield of forage crops and cereals harvested green, 2017-2021	67
Table 40:	Area and production of industrial crops, 2017-2021	68

Table 41:	Irrigation of agricultural lands in municipalities for 2021	69
Table 42:	Cattle stock and structure, 2017-2021.....	70
Table 43:	Supply balance for beef, 2017-2021	71
Table 44:	Supply balance for cow milk and dairy products, 2017-2021.....	71
Table 45:	Number of sheep and goats, 2017-2021	72
Table 46:	Number of pigs and other farm animals, 2017-2021	72
Table 47:	Number of poultry and eggs 2017-2021, in '000	73
Table 48:	Number of bee hives, 2017-2021	74
Table 49:	Consents on establishment, giving for management and MP approval	77
Table 50:	Licenses issued.....	77
Table 51:	Logging plan in state forests	78
Table 52:	Implementation of the logging plan in state forests	78
Table 53:	Plan in the cultivation and use of private forests and technical-professional works	79
Table 54:	Data on the use of private forests.....	79
Table 55:	Reports or summonses, 2021.....	80
Table 56:	Confiscation of wood material.....	80
Table 57:	Number of forest fire cases and area, 2021.....	81
Table 58:	Production of seedlings, 2021	81
Table 59:	Autumn afforestation, 2021.....	82
Table 60:	General Exports-Imports	83
Table 61:	Export-Import of agricultural products.....	83
Table 62:	Export-Import of agricultural products by groups of countries, 2021 in mil. €	85
Table 63:	Export-Import of agricultural products with CEFTA countries.....	86
Table 64:	Export-Import of agricultural products to/from CEFTA countries, in '000 €	87
Table 65:	Export-Import of agricultural products with EU countries	88
Table 66:	Exports by EU countries in '000 € (left) and Exports by EU countries in % (right).....	89
Table 67:	Import according to EU countries, in '000 €.....	89
Table 68:	Imports and Imports from Third Countries.....	90
Table 69:	Export of agricultural products 2017-2021, in '000 €.....	91
Table 70:	Import of agricultural products 2017-2021, in '000 €	92
Table 71:	Distribution of vaccines according to animal diseases	93
Table 72:	Taking blood samples for laboratory analysis.....	93
Table 73:	Extermination of animals according to infectious diseases and the amount of compensation to farmers	93
Table 74:	Issuance of import permits.....	94
Table 75:	Licensing of business entities.....	94
Table 76:	Analyzes for testing imported products and No. of samples	94
Table 77:	Table of activities of the Border Phytosanitary Sector	95
Table 78:	Taking samples and sending them to the Laboratory	95
Table 79:	Activities carried out by the Food Microbiology Sector.....	95
Table 80:	Samples tested in Food Chemistry.....	96
Table 81:	Tested parameters according to devices.....	96

Table 82:	Type and number of analyzes of the pathology sector.....	96
Table 83:	Number of samples tested, 2021.....	97
Table 84:	Overall greenhouse gas emissions in Kosovo by sectors, 2019	98
Table 85:	Main sources of greenhouse gas emissions in the sector of agriculture, forestry and land use by sectors and sub-sectors for 2019	100
Table 86:	The budget planned for direct payments, 2021	102
Table 87:	Direct payments 2017-2021, in €	104
Table 88:	Direct payments by gender in 2021, in €	106
Table 89:	Direct payments by type of farmer in 2021, in €.....	107
Table 90:	Direct payments by sector, 2017-2021	109
Table 91:	Direct payments by sectors, 2017-2021	113
Table 92:	Direct payments for seedlings by region, 2021.....	116
Table 93:	Agro-loans 2017 – 2021	118
Table 94:	Regional distribution of approved loans, 2021	122
Table 95:	Index Insurance Products for Kosovo for 2021.....	123
Table 96:	Damages reported by farmers in the period 2017-2021, in €	125
Table 97:	Projected budget of RDP, 2020-2021	128
Table 98:	Projects authorized under the RDP, 2020-2021.....	129
Table 99:	Attendance in soil analysis training.....	131
Table 100:	Activities conducted in municipal advisory centers.....	131
Table 101:	Field activities conducted by advisors.....	131
Table 102:	Companies licensed to provide advice on agriculture and rural development.....	132
Table 103:	Weather in Prishtina, number of days with rainfall and snowfall by month and year.....	134
Table 104:	The length of the main rivers within the territory of Kosovo.....	135
Table 105:	Forests of Kosovo by type and ownership, ha.....	135
Table 106:	Main lakes in Kosovo, the surface in km.....	135
Table 107:	Internet usage by age groups, 2018-2022* (%)	135
Table 108:	Type of Internet access in households by type of access and year (%).....	135

List of figures

Figure 1:	Agriculture share in Gross Domestic Product 2010-2021, (in %)	14
Figure 2:	Key labour market indicators, 2017-2021 (in %)	16
Figure 3:	Crop and livestock output in mil. €, 2017-2021	17
Figure 4:	Share of agricultural crops in total production, 2021	18
Figure 5:	Sale of meat by category (left) and livestock products (right), 2021	18
Figure 6:	Crop output in mil. €, 2017-2021	19
Figure 7:	Livestock in mil. €, 2017-2021	19
Figure 8:	Livestock in mil. €, 2017-2021	20
Figure 9:	Agricultural production, intermediate consumption and gross value added in mil. €, 2017-2021	20
Figure 10:	Aggregate revenues in agriculture in mil. €, 2017-2021	21
Figure 11:	Intermediate consumption structure, 2021	22
Figure 12:	Agriculture inputs by categories, 2021	22
Figure 13:	Annual price index of agricultural inputs 2015-2021, (2015=100)	23
Figure 14:	Average price for sold areas of agricultural land and total value of sales, 2005-2021	33
Figure 15:	Sale of agricultural land in ha, 2005-2021	33
Figure 16:	Number of enterprises registered by economic activities, 2017-2021	36
Figure 17:	Share of enterprises registered in agriculture, forestry and fishing activities (%), compared to other economic activities, in 2021	36
Figure 18:	Monetary turnover of enterprises registered in agriculture, forestry and fishing activities, 2017-2021, ('000 €)	37
Figure 19:	Number of employees in agribusiness, 2017-2021	38
Figure 20:	Number of active businesses, 2017-2021	38
Figure 21:	Turnover (mil. €), by agricultural activities, 2021	39
Figure 22:	Number of employees by agricultural activities, 2021	40
Figure 23:	Number of active businesses in, 2021	40
Figure 24:	Turnover, number of employees and number of active businesses in the agricultural sector by regions (%), 2021	41
Figure 25:	Arable land-fields and meadows and pastures	43
Figure 26:	Vegetables, gardens and nurseries, fruit tree plantations and vineyards	43
Figure 27:	Agricultural land use by categories, 2021	44
Figure 28:	Area of vineyards per ha, 2017-2021	60
Figure 29:	Grape production in tons, 2017-2021	60
Figure 30:	Wine production 2017-2021, '000 liters	64
Figure 31:	Forest extent map and forests by origin	76
Figure 32:	Seedlings used for autumn afforestation, 2021	82
Figure 33:	Export, Import and Trade Balance of agricultural products (1-24), in '000	84
Figure 34:	Share of agricultural products in total exports (left), Share of agricultural products in total imports (right)	84
Figure 35:	Export by country group (left), Import by country group (right), 2021 in %	85
Figure 36:	CEFTA share in agricultural export (left), CEFTA share in agricultural import (right)	86

Figure 37:	Exports according to CEFTA countries (left), Imports according to CEFTA countries (right)), 2020 ...	87
Figure 38:	EU share in agricultural exports (left), EU share in agricultural imports (right)	88
Figure 39:	Exports to Third Countries, (left) and Imports from Third Countries, in % (right)	90
Figure 40:	GHG emissions by sectors, 2019 (%).....	98
Figure 41:	Trend of total greenhouse gas emissions from the agricultural sector 2007-2019	100
Figure 42:	Number of beneficiaries and rejected in 2021	103
Figure 43:	Direct payments 2017-2021, in 1000 €	103
Figure 44:	Direct payments by sectors 2021, in mil. €	105
Figure 45:	Number of applicants and beneficiaries by gender in 2021	105
Figure 46:	Number of beneficiaries and rejected by gender in 2021	106
Figure 47:	Number of beneficiaries and rejected by type of farmer in 2021	107
Figure 48:	Average subsidy amount per beneficiary in 2021	111
Figure 49:	The average of subsidized units per beneficiary in 2021.....	111
Figure 50:	Average subsidy amount per beneficiary in 2021	115
Figure 51:	The average of subsidized units per beneficiary in 2021.....	115
Figure 52:	Total amount and number of agri-loans disbursed (mil. € and '000)	118
Figure 53:	The amount of agro-loans from banks and MFIs, mil. €	119
Figure 54:	Number of agri-loans from banks and MFIs, '000 €	120
Figure 55:	Interest rate on agricultural loans by banks and MFIs, %.....	120
Figure 56:	Loan distribution share, %	122
Figure 57:	Total insured area in ha and no. of insured farmers.....	124
Figure 58:	Weather in Prishtina, number of days with rainfall and snowfall 2010-2021.....	134

List of acronyms

ADA	Agency for Development of Agriculture
ADIS	Animal Disease Information System
AFK	Agency for Finance in Kosovo
AFOK	Association of Forest Owners of Kosovo
AHS	Agricultural Household Survey
AHS	Animal Health Sector
AI	Administrative Instruction
ARDP	Agriculture and Rural Development Plan
BKT	Banka Kombëtare Tregtare
BPB	Banka Private për Biznes
CBK	Central Bank of the Republic of Kosovo
CD	Coordination Directorates
CEFTA	Central European Free Trade Agreement
DAPM	Department of Agriculture Policies and Markets e
DEAAS	Department of Economic Analysis and Agricultural Statistics
DPP	Direct Payments Program
DTAS	Department of Technical Advisory Services
EC	European Commission
ERP	Economic Recovery Program
EU	European Union
FD	Forestry Department
FIN	Farm identification number
FMU	Forest Management Unit
FVA	Food and Veterinary Agency
GDP	Gross Domestic Product
Gg	Giga gram
GHG	Greenhouse gas emissions
GRK	Government of the Republic of Kosovo
IAC	Information and Advisory Center
IAL	Irrigation of Agricultural Land
IMF	Micro Finance Institutions
IPCC	Intergovernmental Panel on Climate Change
KAS	Kosovo Agency of Statistics
KCGF	Kosovo Credit Guarantee Fund
KEP	Kosovo Enterprise Program
KEPA	Kosovo Environmental Protection Agency
KFA	Kosovo Forestry Agency
KRK	Rural Credit Kosovo
LAG	Local Action Groups
LFS	Labour Force Survey
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MP	Management Plan
NEET	Neither in Education nor Employment or Training
NFI	National Forest Inventory
NLB	NLB Banka
NSARD	Kosovo's National Strategy for Agriculture and Rural Development
NWFP	Non-Wood Forest Products
OIE	Animal Health Organization
PAK	Privatization Agency of Kosovo
PCB	Procredit Bank
PFI	Partner Financial Institutions
PT	Proficiency Test
Q1	Quarter One
RASFF	Rapid Alert System for Food and Feed
RBKO	Raiffeisen Bank
RDP	Rural Development Program
SOE	Socially Owned Enterprise
TBC	Tuberculosis disease
TEB	Turkish Economy Bank
UAA	Utilized Agricultural Area
UHT	Ultra High Temperature
USAID	United States Agency for International Development

1 Overall economic environment

The economy of Kosovo has recorded a high growth during 2021, after the contraction with which it was characterized in 2020 due to the effect of the COVID 19 pandemic. The preliminary estimates of the KAS show that the economy of Kosovo has recorded an increase of 10.5% in 2021. The high growth of economic activity was attributed to the improvement of the health crisis and supportive financial and fiscal policies. The components that contributed to the high growth of economic activity during 2021 were the growth of consumption of 7.8%, the growth of investments of 10.2% but also the slower growth of the deficit of net exports (1.9%). The increase in general demand as a result of the economic recovery, as well as the dynamics in the prices of the main goods in international markets were reflected in inflationary pressures in Kosovo. The average annual inflation rate in 2021, expressed through the consumer price index, was 3.4%, with transport costs and food prices making the main contribution. As a result of the high growth of economic activity, the fiscal sector was characterized by higher growth of budget revenues compared to expenses. Budget revenues in 2021 reached a net value of €2.20 billion, representing an annual increase of 27.1%, while budget expenditures reached a value of €2.27 billion, representing an annual increase of 2.3%¹.

GDP at current prices in 2021 stood at 7,957.8 mil. €. The real growth in 2021 compared to 2020 was 10.75%. GDP per capita for 2021 stood at €4,486.

Real growth for 2021 was recorded in the following economic activities: Hotels and restaurants (34.7%), Wholesale and retail trade, repair of motor vehicles and motorcycles (18.8%), Transport and storage (14.3%), Manufacturing industry (10.6%), Construction (8.8%), Administrative and support activities (8.5%), Arts, entertainment and recreation (8.0%), Professional, scientific and technical activities (6.7%), Education (6.6%), Financial and insurance activities (6.2%), Water supply (6.1%), Information and communication (4.3%), Extractive industries (4.3%), Other services (3.6%), Real estate business (2.5%), Health and social work activities (1.1%).

Meanwhile, there was a decrease in the following activities: Public administration and defense, compulsory social security (0.9%), Electricity and gas supply (2.1%), Agriculture, hunting, forestry and fishing (2.5%).

Meanwhile, real growth according to the main components of GDP with the expenditure approach for 2021 was in: Export of services (88.8%), Export of goods (51.6%), Import of services (44.3%), Import of goods (28.8%), Gross capital formation (10.7%), Government final consumption expenditure (9.0%) and Final consumption expenditure (7.5%).

¹ CBK-Annual Report 2021

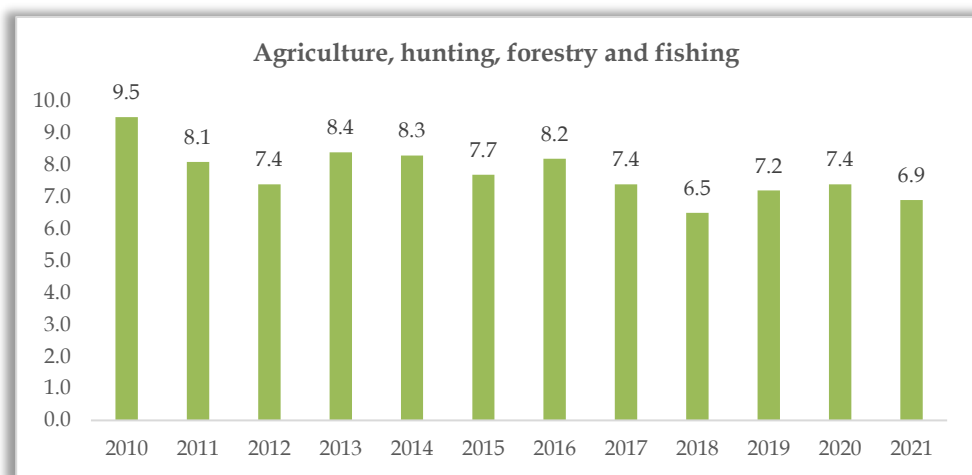
Table 1: Gross domestic product by economic activities at current prices (in '000 €)

Activity	2017	2018	2019	2020	2021
A Agriculture, hunting, forestry and fishing	470,932	435,728	510,773	498,526	550,948
B Extractive industry	140,949	145,613	141,292	134,574	148,345
C Processing industry	812,663	875,803	907,614	904,149	1,025,892
D Electricity and gas supply	230,777	233,085	238,927	264,917	288,349
E Water supply	47,710	47,734	46,478	43,089	45,905
F Construction	517,679	559,677	577,092	519,420	675,879
G Wholesale and retail trade; repair of motor vehicles and motorcycles	797,251	833,724	900,211	867,439	1,084,213
H Transport and storage	283,367	298,045	309,376	262,999	341,917
I Hotels and restaurants	116,839	129,050	146,705	110,855	163,847
J Information and communication	113,331	124,441	130,784	134,577	150,124
K Financial and insurance activities	196,229	237,273	272,558	277,337	294,751
L Real estate activities	456,679	474,820	490,441	493,438	512,555
M Professional, scientific and technical activities	96,606	97,762	99,929	107,358	113,918
N Administrative and support activities	45,070	49,338	52,125	49,589	54,486
O Public administration and defence; compulsory social security	355,515	386,556	419,183	444,284	436,988
P Education	244,820	254,655	258,019	257,380	270,776
Q Health and social work activities	129,496	143,698	154,599	180,459	184,884
R Arts, entertainment and recreation	27,157	28,855	17,284	13,228	14,228
S Other services	22,904	23,935	25,245	26,905	27,760
T Activities of households as employers	-	-	-	-	-
GVA at basic prices	5,105,974	5,379,793	5,698,635	5,590,522	6,385,766
Taxes on products	1,300,192	1,341,373	1,419,039	1,278,134	1,654,901
Subsidies on products	(49,710)	(49,644)	(61,502)	(97,055)	(82,791)
Gross Domestic Product	6,356,456	6,671,522	7,056,172	6,771,601	7,957,876

Source: KAS - Gross Domestic Product 2017-2021

Based on the publication prepared by KAS “Gross domestic product by economic activities 2008 - 2020”, we note that the largest share of agriculture in the Gross Domestic Product was in 2010 (9.5%), followed by 2013 with 8.4%, while the lowest share was in 2018 with 6.5%. Based on the data shown in the table, it follows that in 2021 this participation was 6.9%.

Figure 1: Agriculture share in Gross Domestic Product 2010-2021, (in %)



Source: KAS - Gross Domestic Product 2017-2021

1.1 Level of socio-economic development

Given the increase in global demand for food, agriculture represents a very important strategic sector of the Kosovo economy that contributes to GDP with a share of 6.9%. Despite the great importance of the development of agriculture for the provision of food in our country and the development of rural areas, there are many obstacles faced related to sustainable development of this sector, such as: undeveloped infrastructure, insufficient access in markets, insufficient application of technology and the quality of education and social service. The level of rural development is the process of improving the quality of life and economic well-being of people living in rural areas, through the use of natural resources, such as agriculture and forestry, as well as other activities. Kosovo's agriculture is characterized by medium-sized small farms, where about 90% of farms have an area of less than 5 ha, a key factor that directly affects low productivity and the increase in production costs. The total utilized area of agricultural land in 2021 was 420,327 ha. According to the categories of use, Arable land - fields, including vegetables in the open field and vegetables in greenhouses has a share of (44.8%), Tree plantations 2.4%, Vineyards 0.8%, meadows and pastures (including common land). 51.7% and gardens 0.3%.

MAFRD aims at a gradual alignment of our agricultural policies with the Common Agricultural Policies of the EU, through the drafting of agricultural policies such as the annual Program for Agriculture and Rural Development, in which the objectives and priorities for agriculture and rural development are set. In 2021, the total support through direct payments was €28.9 million and a total of 27 sectors were supported. In 2021, a total of 25,742 farmers applied under the DPP, of which 24,958 (97%) were declared beneficiaries, while 3% of applicants were rejected for not meeting the criteria or lack of documents. The following sectors were part of the direct payment program: cereals, industrial plants, vineyards and existing orchards, wines, raspberries, seedlings, vegetables, aromatic medicinal plants,

livestock, reported slaughter of cattle, aquaculture, agricultural insurance premium and cattle fattening.

As for the 2020-2021 Rural Development Program, a total of 304 projects have been authorized for a total amount of € 9.75 million.

Agriculture continues to have low access to general bank financing with only 2.1% for the year 2021 (0.1 percentage points lower than the previous year), thus, the sector that has been least credited by financial institutions in Kosovo. In Microfinance Institutions (MFIs), the situation is different; the share of agro-loans is 19.5% for 2021.

For the preservation of human and animal health, the Food and Veterinary Agency of Kosovo as the highest authority for Food and Veterinary has carried out activities that affect the protection, life and health of people by ensuring a high level of food safety, including also animal feed, animal health, plant health, animal care as well as the quality of food of plant and animal origin.

Regarding the trade exchange of Kosovo with other countries in 2021, the value of the export of agricultural products was € 92.6 million, which turns out to be an increase of 18.7% compared to 2020, while the value of the import of agricultural products reached € 965.6 million, showing an increase of 26.2% compared to 2020.

1.2 Labour and employment

According to the results of the Labor Force Survey, two thirds of the population in Kosovo are of working age². Within the working age population, the labor force participation rate is 39.5%.

The employment rate for the first quarter (Q1) 2021 is 29.3%. The highest employment was among men (42.8%), while the employment among women was 15.9%. Women are employed, mainly in the education, trade and health care sectors, 53.0% of them, while men are mainly employed in the construction, trade and production sectors, 43.1% of them.

The economic sectors leading with employment continue to be: trade with 16.8%; production with 12.4%; education with 11.1%; and construction with 9.4%. While, other sectors occupy a smaller share in employment.

As for those employed with contracts, it appears that 44.0% of employed persons have a permanent contract in their main job, while 56.0% have a temporary contract.

According to the results of the LFS, in Q1 2021, the unemployment rate is 25.8%. The most pronounced unemployment is among women with 29.7%, compared to men, 24.2%. The highest unemployment rate is among the 15-24 age group with 48.6%.

² The population of working age (age 15 to 64), who is actively engaged in the labor market (employed or unemployed).

According to the results of the LFS, in Q1 2021, the inactive labour force is quite high (60.5%), with a special focus on women with 77.3%, compared to men, 43.5%.

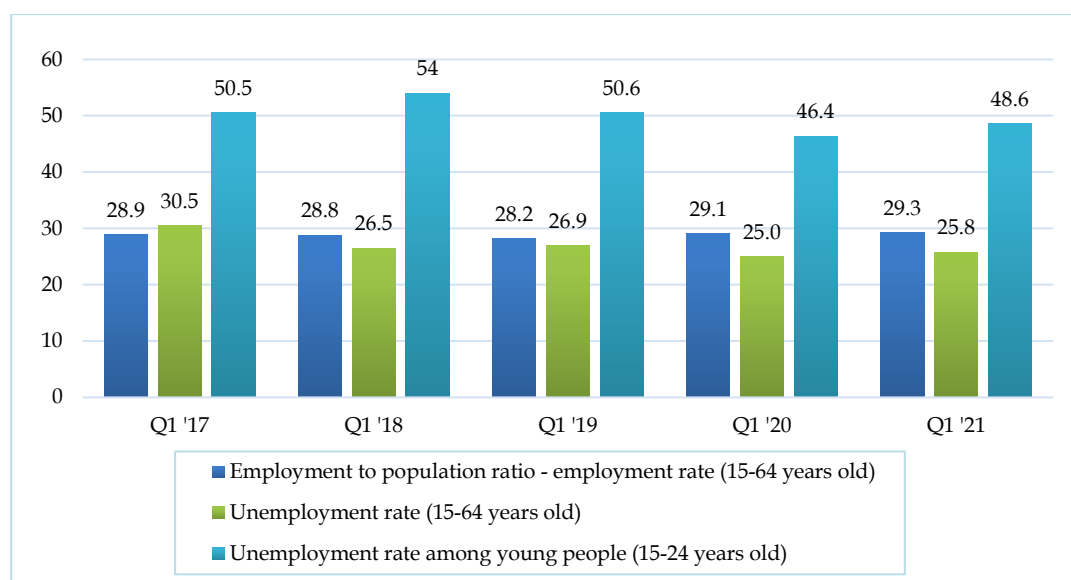
Table 2: Key labour market indicators by variables, 2017-2021 (in %)

Key labour market indicators by variables	Q1 '17	Q1 '18	Q1 '19	Q1 '20	Q1 '21
Labour force participation rate (15-64 years old)	41.7	39.2	38.7	38.8	39.5
Employment to population ratio (employment rate) (15-64 years old)	28.9	28.8	28.2	29.1	29.3
Unemployment rate (15-64 years old)	30.5	26.5	26.9	25	25.8
Unemployment rate among young people (15-24 years old)	50.5	54	50.6	46.4	48.6
Percentage of young people (NEET) among youth population (15-24 years old)	27.8	31.1	29	29	29.8
Percentage of unstable employment to total employment (15-64 years old)	24.1	19.8	16.7	16.5	14.3

Source: KAS - Labour Force Survey, Q1 '17, Q1 '18, Q1 '19, Q1 '20, Q1 '21

When analyzing the data of the main indicators of the labor market for the first quarter, it is observed that the highest employment rate was in Q1 of 2021 and 2022 (29.1% and 29.3%, respectively). As for the other indicator, which has to do with the unemployment rate, it turns out that in Q1 of 2021 it was 25.8%, while the lowest unemployment rate was recorded in the first quarter of 2020, namely 25.0%. The unemployment rate in the last two years has been lower compared to Q1 of other years.

Figure 2: Key labour market indicators, 2017-2021 (in %)



Source: KAS - Labour Force Survey, Q1 '17, Q1 '18, Q1 '19, Q1 '20, Q1 '21

1.3 Economic accounts for agriculture

The publication includes the data of Economic Accounts in Agriculture for the year 2021. The main sources of data for the compilation of Economic Accounts for Agriculture are the two surveys conducted by KAS: Agricultural Holdings Survey and Statistics of Prices in Agriculture. Other data sources are: administrative data from the Ministry of Agriculture,

Forestry and Rural Development and the Food and Veterinary Agency of Kosovo. In the absence of data sources for certain items, expert assessments were used.

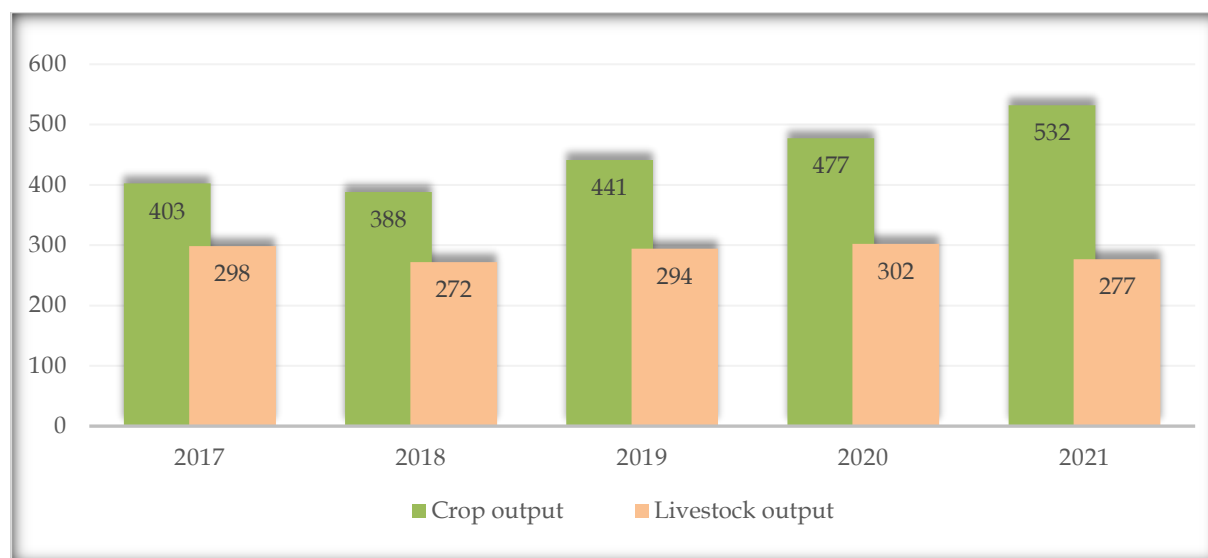
1.3.1 Agricultural production

In 2021, plant products have increased by 11.5%, compared to 2020. The increase in the value of plant products can be explained mainly by the increase in the value of the production of cereals, fodder plants, vegetables and garden products, fruits and potatoes . Meanwhile, livestock products have decreased by 8.4% in 2021, compared to 2020. This can be explained by the decrease in the value of livestock products.

Meanwhile, the total plant and livestock products have increased by 3.8% in 2021, compared to 2020. The total intermediate consumption is estimated at €339.7 million in 2021, which represents an increase of 7.4%, compared to 2020.

The following figure presents the value of plant and livestock products at current prices for the period 2017-2021, where it is observed that the value of plant products has increased continuously since 2018. The year 2021 is presented with the highest value of plant products for the period in question. Livestock production has had a different trend than crop production, marking increases and decreases over the years compared to crop production.

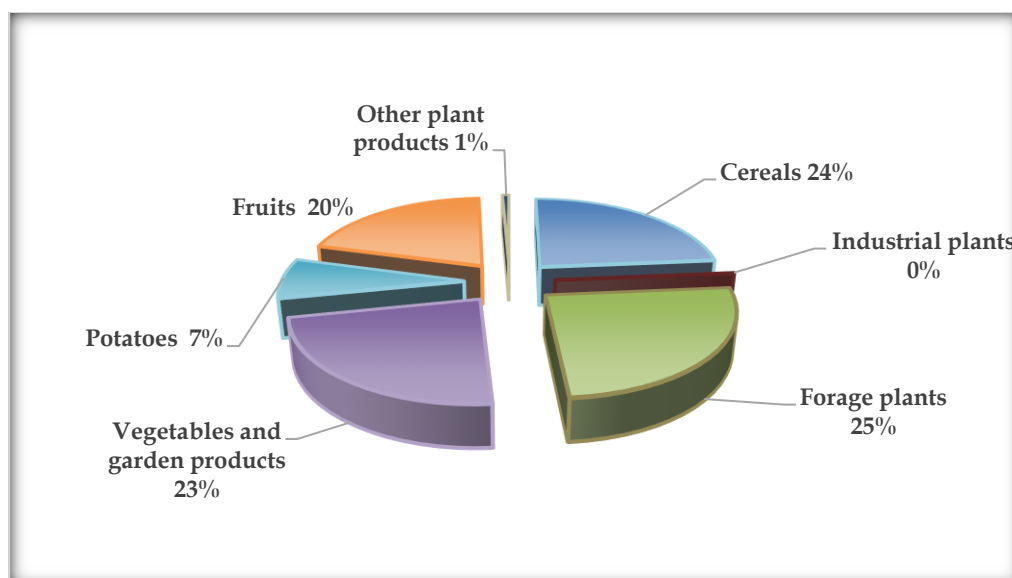
Figure 3: Crop and livestock output in mil. €, 2017-2021



Source: KAS - Economic Accounts for Agriculture '17,'18,'19, '20, '21, prepared by DEAAS-MAFRD

The following figure shows the share of agricultural crops in the total plant production for the year 2021, where forage plants lead with the highest percentage, followed by cereals, vegetables, fruits and others.

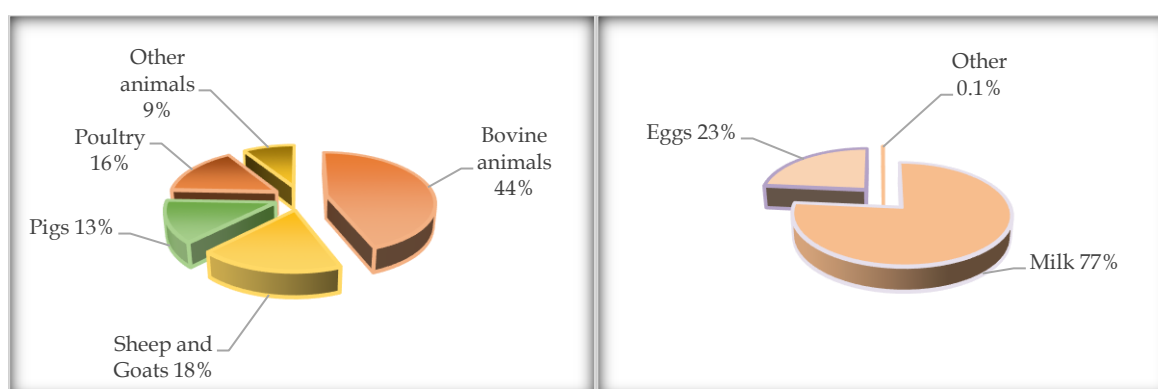
Figure 4: Share of agricultural crops in total production, 2021



Source: KAS - Economic Accounts for Agriculture 2021, prepared by DEAAS-MAFRD

The following figure shows the data related to the sale of different livestock categories, such as meat from cattle, pigs, sheep, goats, poultry and other animals as well as data on livestock products such as: milk and eggs and other with much smaller value. Compared to 2020, in 2021 the sale of beef, sheep, goat and poultry meat decreased, while that of pigs increased. As for livestock products, compared to the previous year, in 2021 the production of eggs increased, production of milk decreased, while there was no change marked for other products.

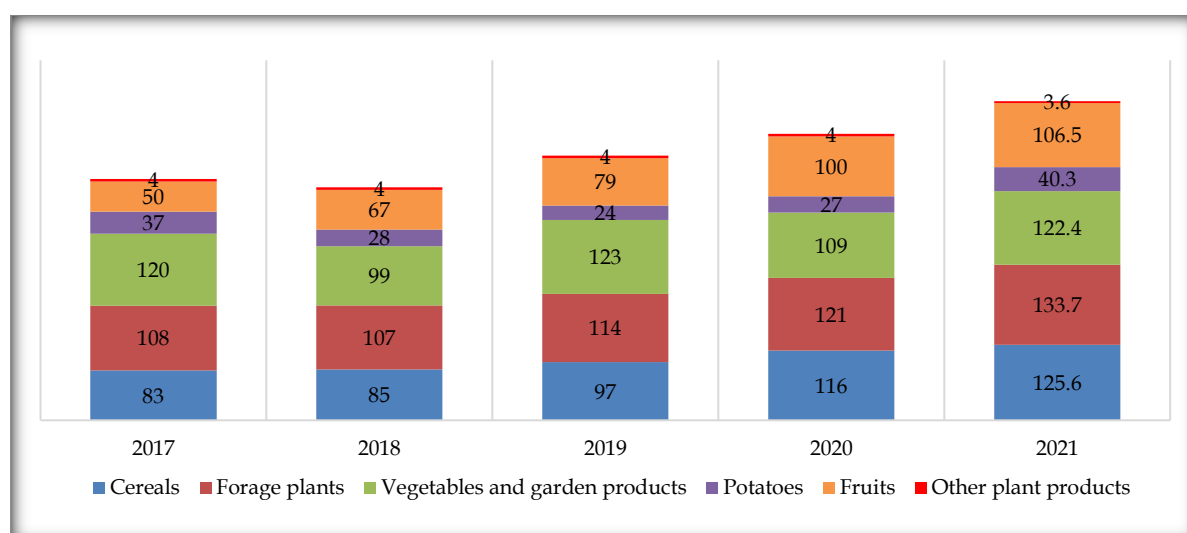
Figure 5: Sale of meat by category (left) and livestock products (right), 2021



Source: KAS - Economic Accounts for Agriculture 2021, prepared by DEAAS-MAFRD

When analyzing the data on plant products for the period 2017-2021, it is found that there were slight fluctuations in their value during these years. It can be said that in 2021, most categories recorded growth, except for other plant products, which, compared to the previous year, decreased by 1%. Cereals in 2021, compared to 2020, marked an increase in value by 10%, forage plants by 13%, vegetables and garden products by 13%, potatoes by 13% and fruits 7%.

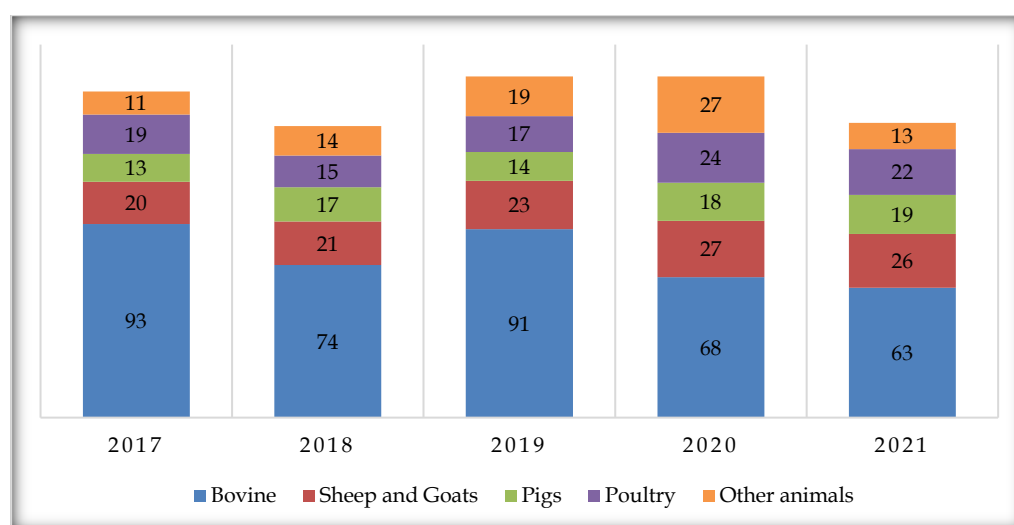
Figure 6: Crop output in mil. €, 2017-2021



Source: KAS - Economic Accounts for Agriculture '17,'18,'19,'20,'21, prepared by DEAAS-MAFRD

The value of livestock production in 2021 in most categories has decreased compared to 2020, except for the pig category, which has increased by 2.7%.

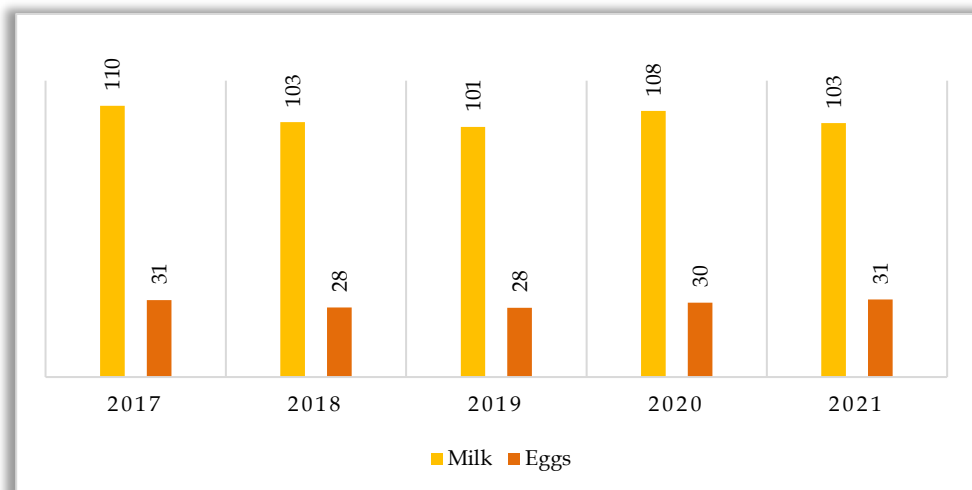
Figure 7: Livestock in mil. €, 2017-2021



Source: KAS - Economic Accounts for Agriculture '17,'18,'19,'20,'21 prepared by DEAAS-MAFRD

The following figure shows the value of livestock products at current prices. Compared to the previous year, in 2021, milk decreased in value by 4.5%, while eggs increased by 4.3%.

Figure 8: Livestock in mil. €, 2017-2021



Source: KAS - Economic Accounts for Agriculture '17,'18,'19,'20,'21, prepared by DEAAS-MAFRD

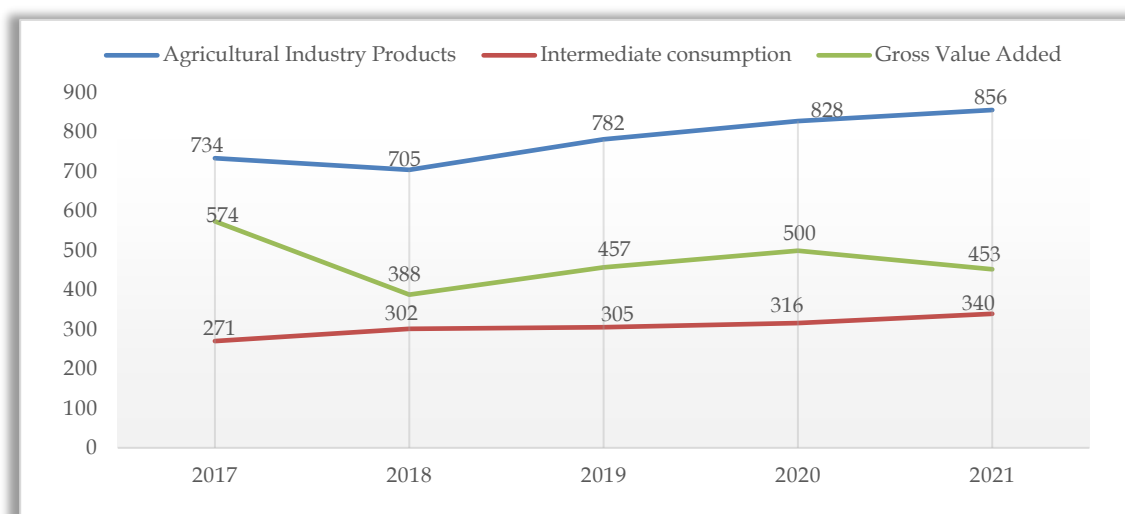
1.3.2 Entrepreneurial income

The following figure shows the data on agricultural industry production, intermediate consumption and gross value added for the period 2017-2021.

The production value of the agricultural industry in 2021 was higher during the period in question, and compared to the previous year, it increased by 3.4%, while intermediate consumption decreased by 3.5%.

The gross value added, which represents the difference between the value of the production of the agricultural industry and the value of intermediate consumption, in 2021 recorded the value of €453 million, where compared to the previous year it marked a decrease of 9.4%.

Figure 9: Agricultural production, intermediate consumption and gross value added in mil. €, 2017-2021

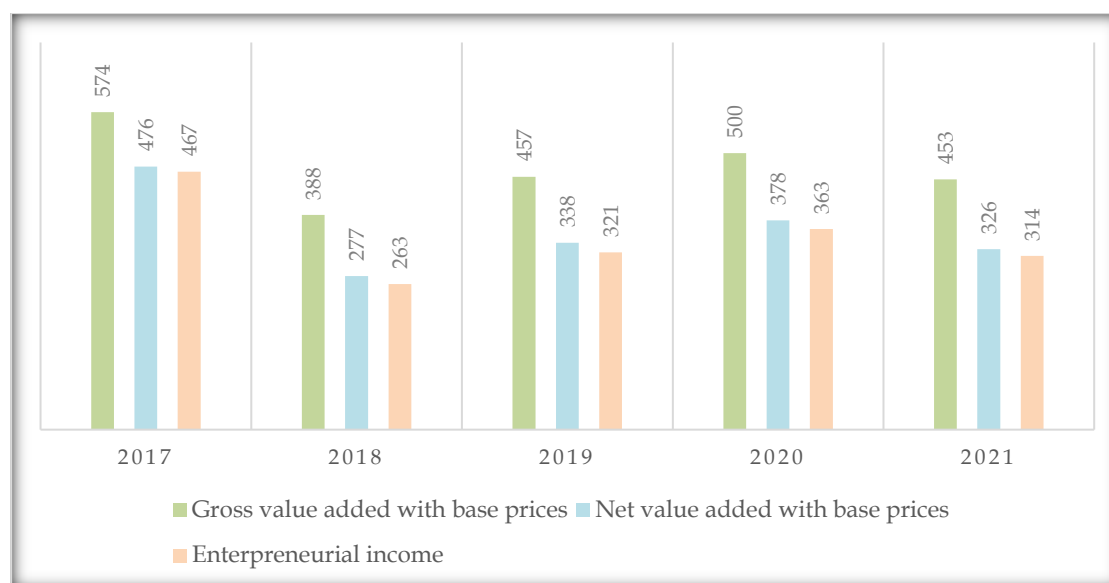


Source: KAS - Economic Accounts for Agriculture '17,'18,'19,'20,'21, prepared by DEAAS-MAFRD

The following figure contains data on gross added value, net added value and entrepreneurial income. Net value added represents the total output of the agricultural industry minus intermediate consumption expenditures and consumption of fixed capital. Entrepreneurial income represents the sum of net value added, plus subsidies on production, minus compensation for workers, taxes on production, rents and interest on loans.

The value of income in agriculture in 2021, entrepreneurial income was -13.5% lower than in the previous year. Gross value added and net value added decreased by 9.4% and 13.5% respectively.

Figure 10: Aggregate revenues in agriculture in mil. €, 2017-2021

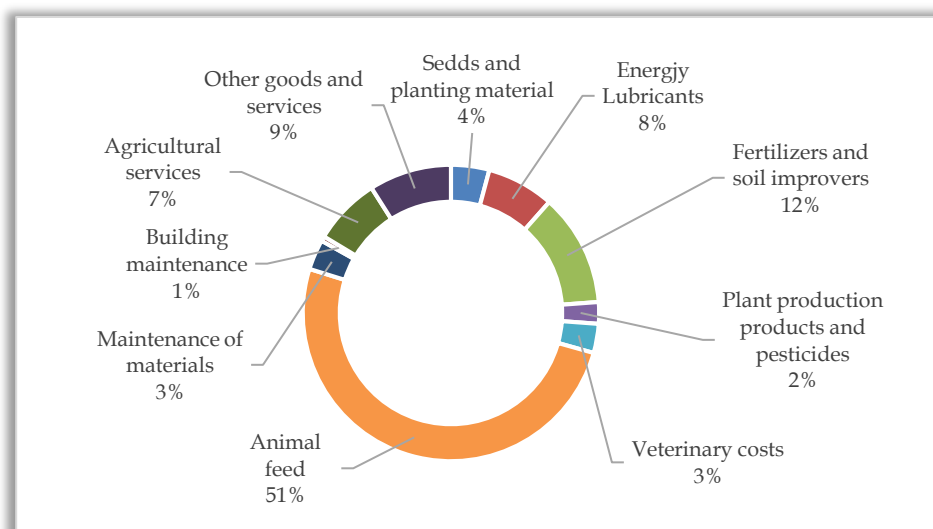


Source: KAS - Economic Accounts for Agriculture '17,'18,'19,'20,'21 prepared by DEAAS-MAFRD

1.3.3 Agriculture inputs

The following figure presents data related to the structure of intermediate agricultural consumption for the year 2021, expressed as a percentage. The category of animal feed which includes the nutritional material that the farmer buys from other farmers or the raw material and animal feed that the farmer produces on the farm, contributes with 51%, which represents half of intermediate consumption. Fertilizers, soil improvers have a share of 12%, agricultural services 7%, other goods and services 9%, energy expenses 8%, seeds and planting material 4%, veterinary expenses 3%, maintenance of materials 3%, while products for plant protection, pesticides and building maintenance recorded a lower share.

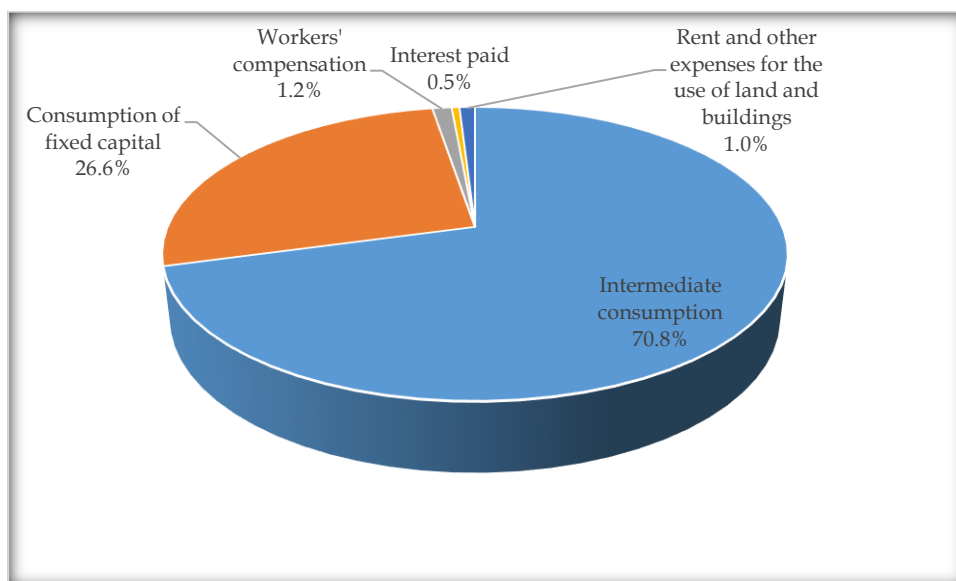
Figure 11: Intermediate consumption structure, 2021



Source: KAS - Economic Accounts for Agriculture 2021, prepared by DEAAS-MAFRD

As for agricultural inputs, according to the figure below, in 2021, intermediate consumption has a share of 70.8%, followed by the consumption of fixed capital with 26.6%, workers' compensation 1.2%, rents and other expenses for the use of land and buildings 1%, and the interest paid with 0.5%.

Figure 12: Agriculture inputs by categories, 2021



Source: KAS - Economic Accounts for Agriculture 2021, prepared by DEAAS-MAFRD

1.4 Prices of agricultural inputs and products

1.4.1 Prices of agricultural inputs

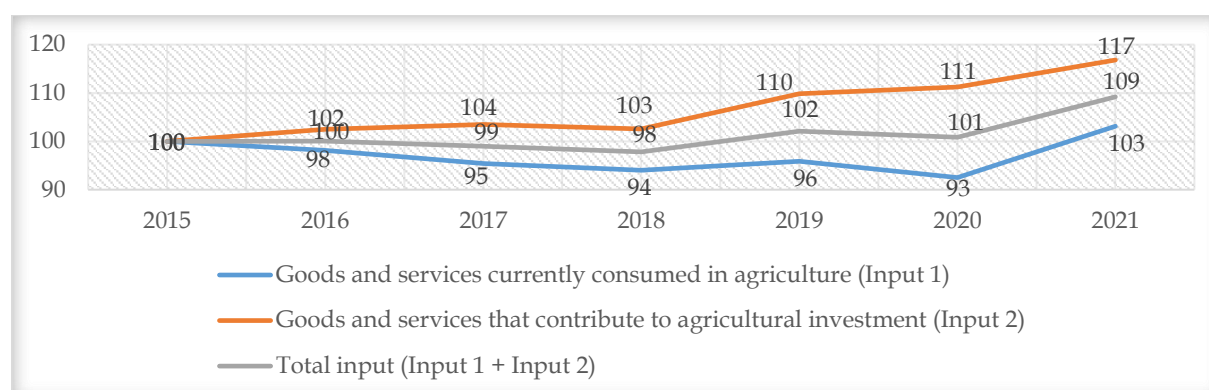
Agricultural input price index measures price changes in actual production costs within the economy. Moreover, input price index measures the difference in the purchase basket costs included as inputs into the production process, but it does not include primary inputs such as land, labour, and capital.

The following table of the annual agricultural input price index includes data on price indexes in Kosovo for the period 2015-2021. The prices of agricultural inputs are collected by KAS in agricultural pharmacies, veterinary pharmacies, companies, markets and other places where prices of agricultural input are available. Some prices of agricultural inputs are obtained from consumer prices by KAS.

Products that form the basis of the input price index fall into one of the two main groups: Goods and services currently consumed in agriculture (intermediate consumption) and Goods and services contributing to agricultural investment (formation of capital). All the categories shown in the following table have recorded an increase in price in 2021 compared to 2020, with compound fertilizers marking the highest increase in price (30.1%), followed by simple fertilizers (29.4%), which are both subcategories of the "Fertilizers and soil improvers" category. There was also a marked increase in fuels (19.1%) under the category "Energy; Lubricants" and simple food substances (9.7%) and composite food substances (8.6%) under the category "Animal feed". A low growth of below 2% was marked by: Maintenance of materials (0.3%), Electricity (0.7%), Seeds and planting material (1.0%) as well as inputs presented as "Other" with 1.6%.

The annual input index in 2021 increased by 11.5% for Input 1, compared to the same period of 2020, while the index for Input 2 increased by 5.0%. The general input price index (Input 1 + Input 2) in 2021 has increased by 8.3% compared to 2020.

Figure 13: Annual price index of agricultural inputs 2015-2021, (2015=100)



Source: KAS - Input price index and prices in agriculture 2015-2021, prepared nga DEAAS-MAFRD

Table 3: Annual price index of agricultural inputs 2015-2021, (2015=100)

Description	2015	2016	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Goods and services currently consumed in agriculture (Input 1)	100.0	98.1	95.4	94.0	95.8	92.5	103.1	11.5
Seeds and planting material	100.0	98.9	87.2	78.1	83.7	82.7	83.5	1.0
Energy; lubricants	100.0	93.7	100.9	106.5	106.3	92.0	105.2	14.4
-Electric energy	100.0	98.8	106.1	97.6	95.7	95.7	96.3	0.7
-Fuel	100.0	92.3	100.2	109.9	110.2	90.5	107.8	19.1
-Lubricants	100.0	93.8	92.7	92.7	92.8	99.0	102.1	3.1
Fertilizers and soil improvers	100.0	97.6	89.5	85.9	88.5	87.3	113.4	29.9
- Simple fertilizers	100.0	94.0	87.7	83.5	85.1	84.2	109.0	29.4
- Compound fertilizers	100.0	99.7	90.7	87.3	90.5	89.2	116.1	30.1
Plant protection products and pesticides	100.0	104.2	103.8	105.4	106.3	103.5	105.9	2.4
Veterinary expenses	100.0	98.7	98.0	97.5	99.3	98.0	100.7	2.8
Animal feed	100.0	109.5	103.6	103.2	107.6	110.1	120.5	9.4
-Simple raw food	100.0	111.5	103.4	103.0	107.9	108.9	119.4	9.7
-Compound raw food	100.0	97.9	104.9	104.7	105.7	117.0	127.1	8.6
Maintenance of materials	100.0	100.1	99.9	99.8	99.5	99.2	99.5	0.3
Maintenance of buildings	100.0	98.2	98.8	98.6	99.3	101.5	104.8	3.2
Other goods and services	100.0	99.9	100.8	100.9	101.4	101.3	105.0	3.6
Goods and services contributing to agricultural investment (Input 2)	100.0	102.5	103.5	102.6	109.9	111.2	116.8	5.0
Tractors	100.0	106.9	107.7	105.2	119.0	120.5	130.6	8.3
Other	100.0	98.5	99.8	100.3	101.8	103.0	104.6	1.6
Total Input (Input 1 + Input 2)	100.0	100.0	99.0	97.8	102.1	100.8	109.2	8.3

Source: Input price index and prices in agriculture 2015-2021, prepared by DEAAS-MAFRD

The following table contains data related to the annual prices of electricity and oil for the period 2016-2021. As for the price of electricity, in contrast to the years 2019 and 2020, when the price was the same, in 2021 this price has increased by 1.8%, while the price of oil, after the drop it suffered in 2020, in 2021 has increased by 19.0%.

Table 4: Annual prices for electricity and oil in €, 2016-2021

Energy and Lubricants	2016	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Electricity price per 100 kwh	6.1	6.4	5.8	5.6	5.6	5.7	1.8
Fuel oil - price per 100 liters	93.5	102.1	112.7	113.0	92.6	110.2	19.0

Source: KAS - Input price index and prices in agriculture 2016-2021

1.4.2 Prices of agricultural products

The MAFRD continues to support the development of the agricultural sector through grants and subsidies, influencing the increase in production and quality as well as the reduction of imports, which directly affects the prices of local products.

Despite continuous support, local production in agriculture is not able to meet all consumption needs. Based on this fact, to meet consumption needs, most of the products are imported, even though every year the export is increasing, the high amount of import continues to influence the further deepening of the negative trade balance.

In order to draw up different analyses, programs and strategies for the agricultural sector, the MAFRD has engaged the company "SIT- Center for Counseling, Social Services and Research" to collect the prices of agricultural products for years, where the prices of agricultural products from 7 regions are captured and the same are presented in annual average at the country level.

In the following, the prices of some agricultural products of the producer-farmer, wholesale and retail consumption prices, import prices and unit value of imported products for the period 2018-2021 are presented.

Farm gate prices of agricultural products

The following table shows the prices of agricultural products on the farm. Based on the data from the table below, prices in 2021 compared to 2020, have had significant fluctuations. Table grapes, honey, eggs, pumpkin and corn have seen significant decline in prices, while the largest increase in prices from the products listed in the table is marked by: raspberries, cucumbers, tomatoes, spinach, apples, etc.

Table 5: Average annual prices of agricultural products on the farm, €/kg

Products	2018	2019	2020	2021	Difference 2021/2020 (%)
Wheat	0.23	0.18	0.19	0.20	5
Maize	0.26	0.22	0.25	0.24	-4
Tomatoes	0.62	0.57	0.33	0.52	58
Beans	2.27	2.03	2.31	2.38	3
Pumpkin*	0.90	0.81	0.17	0.16	-6
Stella blue squash*	0.84	0.81	0.22	0.29	32
Cabbage	0.40	0.19	0.23	0.31	35
Potatoes	0.33	0.27	0.28	0.42	50
Onions	0.37	0.46	0.37	0.41	11
Watermelon	0.23	0.19	0.18	0.21	17
Pepper	0.91	0.76	0.54	0.62	15
Spinach	0.94	0.94	0.76	1.16	53
Cucumber	0.46	0.48	0.31	0.54	74
Walnuts	2.72	2.16	2.06	2.13	3
Pear	0.79	0.81	0.72	0.91	26
Strawberry	1.03	1.12	1.16	1.22	5
Plums	0.73	0.51	0.71	0.81	14
Raspberry	1.67	1.77	1.73	3.50	102
Apples	0.40	0.39	0.31	0.44	42
Table grapes	0.78	0.68	0.63	0.53	-16
Bulls and heifers	2.14	1.97	2.21	2.53	14
Farm chicken	1.80	1.68	1.72	1.89	10
Milk	0.25	0.21	0.23	0.31	35
Eggs**	2.10	2.07	2.26	2.12	-6
Honey	9.20	11.85	13.60	11.50	-15

Source: DEAAS-MAFRD; * The price for pumpkin and Stella blue squash from 2020 is presented per kg, while in previous years the price was per piece; ** unit of 30 pieces; The price for maize is for grain corn.

Consumer prices of agricultural products

Consumer prices of agricultural products are shown through the annual wholesale and retail market prices for the years 2018-2021.

Based on the annual wholesale market prices shown in the table below for some agricultural products we notice that during 2021 there have been fluctuations in prices compared to 2020, price increases have been noted with: raspberries, plums, honey, milk and cucumber, while the products that have decreased in price compared to the previous year are: watermelon, corn, pumpkin, onion, etc.

Table 6: Average annual wholesale market prices, €/kg

Products	2018	2019	2020	2021	Difference 2021/2020 (%)
Wheat	0.24	0.23	0.33	0.31	-6
Maize	0.39	0.48	0.53	0.39	-26
Tomatoes	0.67	0.66	0.65	0.78	20
Beans	2.42	2.35	2.44	2.50	2
Pumpkin*	0.96	0.95	0.31	0.27	-13
Stella blue squash*	0.96	1.15	0.38	0.46	21
Cabbage	0.43	0.46	0.39	0.47	21
Potatoes	0.35	0.39	0.39	0.40	3
Onions	0.38	0.53	0.54	0.48	-11
Watermelon	0.34	0.23	0.37	0.24	-35
Pepper	0.97	0.92	0.97	0.94	-3
Spinach	1.02	1.01	0.95	0.94	-1
Cucumber	0.49	0.55	0.57	0.75	32
Walnuts	2.79	2.33	2.38	2.71	14
Pear	0.83	0.96	1.20	1.32	10
Strawberry	1.64	1.33	1.82	1.67	-8
Plums	0.78	0.59	0.69	1.09	58
Raspberry	2.09	2.17	2.07	4.00	93
Apples	0.44	0.49	0.64	0.73	14
Table grapes	0.89	0.79	0.99	1.02	3
Bulls and heifers	3.25	3.31	2.93	2.65	-10
Farm chicken	1.91	1.93	1.91	2.08	9
Milk	0.45	0.43	0.29	0.42	45
Eggs**	2.26	2.19	2.36	2.29	-3
Honey	6.95	6.85	7.22	10.51	46

Source: DEAAS-MAFRD; * The price for pumpkin and Stella blue squash from 2020 is presented per kg, while in previous years the price was per piece; ** unit of 30 pieces; The price for maize is for grain corn.

Regarding the annual prices of the retail market, it can be observed that there is a reduction in half of agricultural products during 2021, there is marked a significant decline in the prices of: watermelon, corn, pumpkin, bulls and heifers and onions, while raspberries, plums, honey, cucumber and tomatoes have marked an increase in prices.

Table 7: Average annual retail market prices, €/kg

Products	2018	2019	2020	2021	Difference 2021/2020 (%)
Wheat	0.28	0.36	0.38	0.36	-5
Maize	0.48	0.54	0.62	0.46	-26
Tomatoes	0.84	0.80	0.77	0.94	22
Beans	2.64	2.66	2.60	2.67	3
Pumpkin*	1.19	1.16	0.42	0.34	-19
Stella blue squash*	1.26	1.22	0.45	0.51	13
Cabbage	0.59	0.55	0.47	0.55	17
Potatoes	0.43	0.50	0.48	0.49	2
Onions	0.47	0.65	0.64	0.57	-11
Watermelon	0.40	0.30	0.45	0.28	-38
Pepper	1.17	1.06	1.08	1.08	0
Spinach	1.12	1.18	1.07	1.08	1
Cucumber	0.61	0.67	0.65	0.86	32
Walnuts	2.89	2.61	2.56	2.96	16
Pear	0.94	1.13	1.35	1.45	7
Strawberry	1.89	1.49	1.97	1.87	-5
Plums	0.84	0.75	0.79	1.48	87
Raspberry	2.60	2.44	2.26	4.25	88
Apples	0.53	0.60	0.74	0.84	14
Table grapes	1.09	0.98	1.09	1.20	10
Bulls and heifers	3.80	3.75	3.02	2.49	-18
Farm chicken	2.37	2.33	2.13	2.38	12
Milk	0.49	0.51	0.48	0.49	2
Eggs**	2.45	2.50	2.61	2.57	-2
Honey	7.50	7.40	7.50	10.77	44

Source: DEAAS-MAFRD; * The price for pumpkin and Stella blue squash from 2020 is presented per kg, while in previous years the price was per piece; ** unit of 30 pieces; The price for maize is for grain corn.

Import prices of agricultural products

In Kosovo, usually outside the season of local agricultural products, in our market we come across imported products, the prices of which also vary significantly.

Wholesale prices, in most cases, are higher than domestic producer prices, while in the case of import prices, for products with a high share of imports, this rule may not apply because some products have high production costs in the country and consequently farm production prices may be higher than import prices.

The following table shows the import prices of agricultural products, where the prices that have declined compared to the previous year are: potatoes, cabbage, tomatoes, cucumbers, etc. while the most significant price increases have been noted for: table grapes, farm chicken, walnuts, beans, etc.

Table 8: Import prices of agricultural products, €/kg

Products	2018	2019	2020	2021	Difference 2021/2020 (%)
Wheat	0.31	0.38	0.38	0.36	-5
Maize	0.33	0.53	0.45	0.43	-4
Tomatoes	0.91	0.97	1.19	0.97	-18
Beans	2.03	1.97	2.01	2.36	17
Pumpkin*	1.18	1.12	0.28	0.31	11
Stella blue squash*	1.50	0.90	0.46	0.43	-7
Cabbage	0.39	0.56	0.64	0.52	-19
Potatoes	0.66	0.55	0.84	0.56	-33
Onions	0.39	0.52	0.61	0.55	-10
Watermelon	0.96	1.61	0.85	0.79	-7
Pepper	1.18	1.46	1.50	1.23	-18
Spinach	1.15	1.49	1.19	1.21	2
Cucumber	0.94	1.08	1.21	1.00	-17
Walnuts	2.44	2.40	2.06	2.42	17
Pear	1.28	1.34	1.47	1.48	1
Strawberry	2.96	2.69	2.94	2.63	-11
Plums	2.83	3.49	2.34	2.19	-6
Raspberry	-	1.70	-	-	-
Apples	0.83	0.78	0.82	0.77	-6
Table grapes	2.45	2.66	1.97	2.78	41
Bulls and heifers	2.90	3.05	2.87	2.98	4
Farm chicken	2.60	2.35	2.21	2.72	23
Milk	-	-	-	-	-
Eggs**	2.10	2.35	2.15	2.21	3
Honey	8.60	7.85	8.60	7.54	-12

Source: DEAAS-MAFRD; * The price for pumpkin and Stella blue squash from 2020 is presented per kg, while in previous years the price was per piece; ** unit of 30 pieces; The price for maize is for grain corn.

The table below shows the import unit value of agricultural products. Most of the products have marked a significant increase compared to 2020, such as: raspberries, corn, cabbage, etc. while price reduction compared to the previous year is seen with: pepper, beans, pears and walnuts, while other products have lower differences.

Table 9: Value per unit of imported agricultural products, €/kg

Products	2018	2019	2020	2021	Difference 2021/2020 (%)
Wheat	0.18	0.20	0.19	0.22	16
Maize	0.16	0.17	0.16	0.22	38
Tomatoes	0.36	0.38	0.35	0.35	0
Beans	0.86	0.88	0.93	0.86	-8
Pumpkin and Stella blue squash *	0.47	0.47	0.52	0.56	8
Cabbage	0.18	0.26	0.16	0.22	38
Potatoes	0.27	0.30	0.20	0.23	15
Onions	0.38	0.55	0.47	0.47	0
Watermelon	0.17	0.16	0.15	0.15	0
Pepper	0.46	0.54	0.46	0.42	-9
Spinach	0.41	0.48	0.50	0.57	14
Cucumber	0.35	0.35	0.29	0.38	31
Walnuts	1.85	1.42	1.52	1.45	-5
Pear	0.68	0.68	0.67	0.62	-7
Strawberry	0.72	0.68	0.69	0.93	35
Plums	0.37	0.33	0.31	0.39	26
Raspberry	1.49	0.51	2.21	3.55	61
Apples	0.38	0.35	0.32	0.30	-6
Table grapes	0.49	0.50	0.46	0.46	0
Bulls and heifers	1.24	1.33	1.32	1.37	4
Farm chicken	2.00	1.99	1.99	1.99	0
Milk	0.54	0.57	0.55	0.55	0
Eggs**	3.11	-	1.11	1.35	22
Honey	5.20	4.83	4.98	5.06	2

Source: KAS, prepared by DEAAS – MAFRD; * In customs data, pumpkin and stella blue squash are included in one joint customs code; ** unit of 30 pieces

Comparison of domestic prices with prices in the region and the EU countries

The comparison of prices of some countries of the European Union and Kosovo can be seen in the table below, which shows the prices for some agricultural products such as wheat, corn, potatoes, cabbage, apples, eggs and honey.

Based on the data shown in the table below, we can say that Kosovo has relatively high prices compared to EU countries. Products where Kosovo dominates with higher prices are honey, corn and potato, while the price of apple and eggs is the lowest. Wheat and cabbage have approximate prices compared to other countries.

Table 10 Prices of some products in Kosovo and in some EU countries in 2021, €/kg

Countries	Wheat	Maize *	Cabbage	Potatoes	Apples	Eggs **	Honey
Bulgaria	0.20	0.21	0.24	0.20	0.28	7.06	3.26
Czech Republic	0.20	0.19	0.27	0.16	0.58	7.22	-
Greece	0.23	0.28	0.40	0.49	0.67	19.10	5.82
Hungary	0.20	0.20	0.33	0.26	0.36	5.82	3.48
Austria	0.17	0.20	-	0.18	0.90	15.01	10.60
Romania	0.20	0.21	0.46	0.33	0.62	7.52	3.66
Kosovo	0.20	0.24	0.31	0.42	0.44	7.07	11.50

Source: Eurostat; DEAAS - MAFRD, * grain corn, ** unit of 100 pieces

The import in Kosovo continues to be very high, the price changes in the international market and in the countries of the region have an impact on the market prices in our country and taking into account the low income, the increase in prices, especially of basic products, negatively affects the standard of living of the population of Kosovo.

In conclusion, looking at the prices presented above, we can say that Kosovo as a small market with low domestic production is very dependent on imports and as a result the prices are dictated by imports and continue to remain high considering the standard of living.

1.5 Privatization of agricultural lands

The Privatization Agency of Kosovo is an independent public body and exercises its functions and responsibilities completely independently, based on Law No. 04/L-034 on the Privatization Agency of Kosovo. PAK carries out the privatization of social property in the territory of Kosovo and this mandate derives from the Constitution of the Republic of Kosovo and the Assembly of Kosovo. Based on the objectives of the work plan for 2021, PAK has continued with the process of privatization of lands and socially-owned properties.

If we compare the data of privatized lands in 2021, it can be observed that there was a symbolic increase in sales of only 0.04% in 2021 compared to 2020. The largest share in the total total sale of agricultural or privatized lands is marked in the region of Peja with 37.9%, followed by Prizren with 21.6%, Mitrovica with 20.6%, Gjilan with 10.6% and Prishtina with 9.3%.

The total area of agricultural land sold until 2021 was 30,823 ha. The largest area of land sold was in the region of Peja (11,687 ha), with a share of the total privatized land of 37.9%, Prizren (6,672 ha) 21.6%, Mitrovica (6,349 ha) or 20.6%, Gjilan (3,263 ha) 10.6% and Prishtina (2,852 ha) which had a share of 9.3%.

Table 11 Sales of agricultural land in Kosovo, by regions, 2005-2021

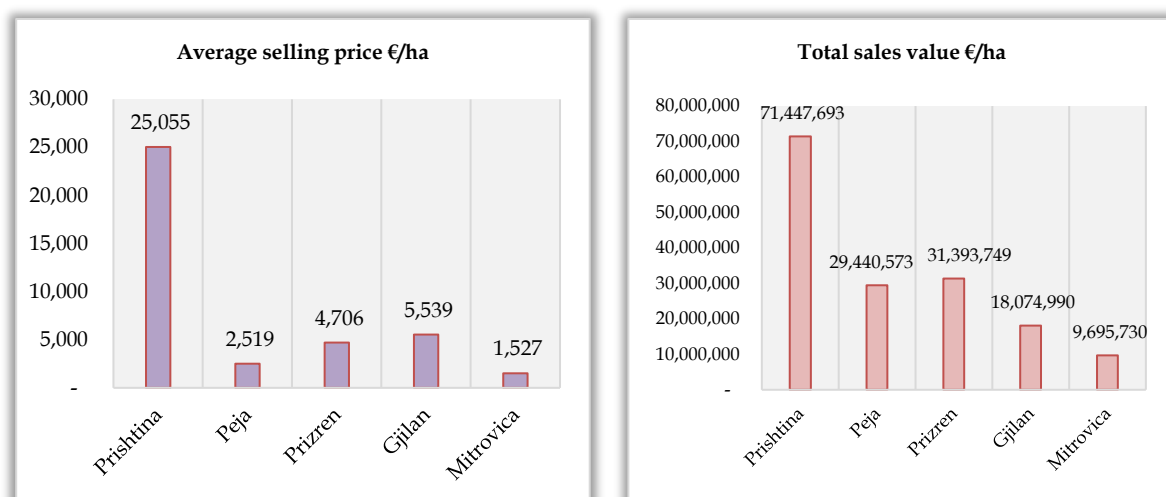
Region	Area in ares	Area in ha	Areas sold (%)	Average sales price €/are	Average sales price €/ha	Total sales value €/ha	Sales value (%)
Prishtina	285,159	2,852	9.3	251	25,055	71,447,693	45%
Peja	1,168,713	11,687	37.9	25	2,519	29,440,573	18%
Prizren	667,159	6,672	21.6	47	4,706	31,393,749	20%
Gjilan	326,317	3,263	10.6	55	5,539	18,074,990	11%
Mitrovica	634,911	6,349	20.6	15	1,527	9,695,730	6%
Total	3,082,259	30,823	100.0	52	5,193	160,052,736	100%

Source: Privatization Agency of Kosovo (PAK)

The total value of sales or privatization of agricultural land through the procedures of the Kosovo Privatization Agency in the period 2005-2021 was €160,052,736.

The highest average sale price of one hectare of agricultural land was €25,055 in the region of Prishtina, while other regions had a much lower sale price of one hectare of land. Consequently, in the total value of sales, the region of Prishtina was the leader with a value of €71,447,693/ha, followed by other regions that had a much lower value.

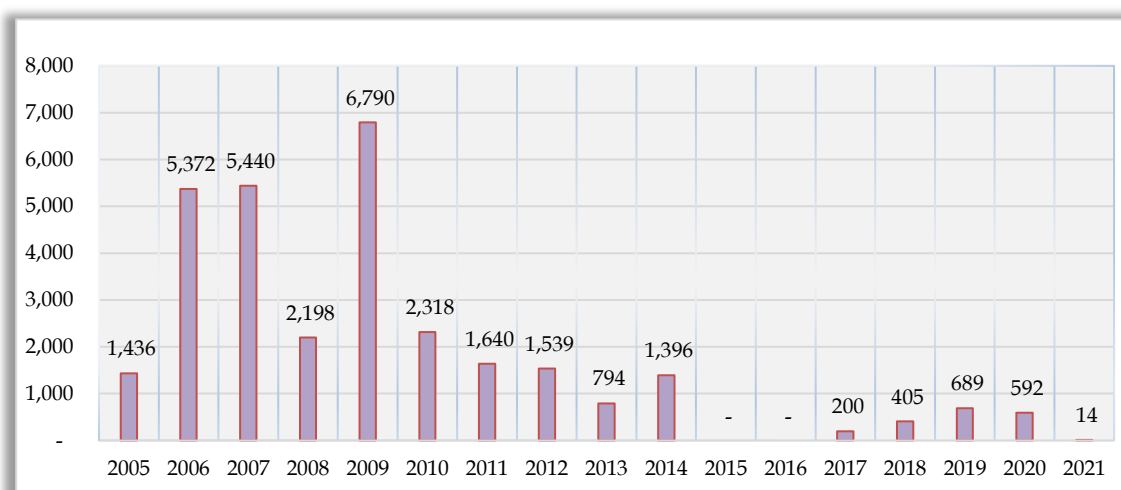
Figure 14 Average price for sold areas of agricultural land and total value of sales, 2005-2021



Source: Privatization Agency of Kosovo (PAK)

The total area of agricultural land privatized by the PAK, from 2005-2021, is 30,823 ha, which were sold for a total value of €160.05 million. In 2005, 1,436 ha of agricultural land were privatized or 4.8% of the total privatized agricultural land, followed by 2006 and 2007, where the number of hectares of privatized land was 5,372 ha and 5,440 ha, respectively, with a share of 18% each. A larger sale of agricultural lands was realized in 2009, where 6,790 ha were privatized, with a larger share compared to other years. From 2010, when the sale of agricultural land by the PAK was 2,318 ha, in the following years there were fewer sales of agricultural land. In 2020, 592 ha were privatized or 2% of the total agricultural land sold by the PAK, while in 2021 only 13.8 ha or 0.04% were sold%.

Figure 15: Sale of agricultural land in ha, 2005-2021



Source: Department of Regional Coordination - PAK

The following table shows the municipalities that have had sales of agricultural properties by the PAK, the number of ha sold, the total sale price and the price per ha in the municipality.

Agricultural land have had different prices depending on the category, where this price is determined by many factors, some of the main determining factors being the fertility of the agricultural land, the position, the proximity to water sources and the road infrastructure.

Table 12: Sale of agricultural land in Kosovo, 2005-2021

Municipality	No. of hectares sold	Total sales value	Price €/Are	Price €/ha
Deçan	731	2,028,963	27.7	2,775
Dragash	-	-	-	-
Glogoc	1,140	6,069,038	53.2	5,323
Ferizaj	1,241	8,529,043	68.7	6,872
Fushë Kosova	566	4,431,496	78.3	7,831
Gjakova	2,352	8,782,853	37.3	3,734
Gjilan	613	4,027,406	65.7	6,570
Graçanica	299	17,450,158	582.9	58,293
Hani i Elezit	-	-	-	-
Istog	1,945	6,251,595	32.1	3,215
Junik	360	1,494,545	41.5	4,152
Kaçanik	514	2,153,004	41.9	4,192
Kamenica	224	385,398	17.2	1,718
Klina	4,193	6,340,098	15.1	1,512
Klllokot	25	635,555	253.6	25,361
Leposaviq	-	-	-	-
Lipjan	679	5,120,343	75.4	7,543
Malisheva	1,590	2,101,913	13.2	1,322
Mamusha	47	896,111	190.4	19,038
Mitrovica South	2,836	1,262,087	4.5	445
Mitrovica North	-	-	-	-
Novobërdo	3	505,555	2,022.2	202,222
Obiliq	480	3,470,832	72.4	7,236
Partesh	-	-	-	-
Peja	2,106	4,540,020	21.6	2,155
Podujeva	284	1,267,282	44.7	4,469
Prishtina	394	38,649,703	981.0	98,101
Prizren	888	14,229,422	160.3	16,029
Rahovec	2,338	6,079,794	26.0	2,601
Ranillug	33	155,555	46.8	4,684
Shtërpce	94	708,365	75.1	7,506
Shtime	444	1,797,199	40.5	4,045
Skenderaj	1,937	1,604,936	8.3	828
Suhareka	1,384	6,424,098	46.4	4,642
Viti	647	1,900,701	29.4	2,936
Vushtrri	436	759,669	17.4	1,743
Zubin Potok	-	-	-	-
Zveçan	-	-	-	-
Total	30,823	160,052,736		

Source: Department of Regional Coordination - PAK

1.6 Agricultural businesses - Agroindustry

Agribusiness refers to any business related to agriculture and commercial activities related to agriculture. Agribusiness includes all the necessary steps until the delivery of the agricultural product to the market, namely production, processing and distribution. Therefore, this industry is an important segment of the economy that has a special place in the development policies of our country, considering it as a sector that provides safe food in terms of quantity and also in terms of food safety. It also enables the direct connection of the farmer with the processing industry. With the expansion of this sector, new jobs are created, on which a large number of employees depend directly or indirectly.

The data for the registered enterprises were obtained from the Statistical Business Register, which is part of KAS, which contains the basic information for all businesses operating in the territory of the Republic of Kosovo and as such serves for statistics and analysis of business demographics and other analyses.

Enterprises registered in agriculture, forestry and fisheries had the highest share in the total number of enterprises registered by sections of economic activities in 2017 with 8.9%, with a very small share compared to other years in 2019 with only 1.2%, while in 2021 this share was 2.5%.

Table 13: Number of registered enterprises by economic activities, 2017-2021

Year	Enterprises registered in Agriculture, Forestry and Fishery	Total enterprises registered by sections of economic activities	Share (%)
2017	822	9,223	8.9
2018	626	9,805	6.4
2019	121	10,004	1.2
2020	397	9,805	4.0
2021	269	10,649	2.5

Source: KAS –Statistical Business Register, prepared by DEAAS-MAFRD

The largest number of total enterprises registered according to sections of economic activities for this time period was in 2021 with 10,649 enterprises. As for enterprises registered in agriculture, forestry and fishing during this period, the largest number of them was registered in 2017 with 822 enterprises, while the smallest number was in 2019 with only 121 enterprises. In 2021, the total enterprises registered according to sections of economic activities increased by 8.6% compared to 2020, while the number of enterprises registered in agriculture, forestry and fishing shows a decrease of 32.2% compared to 2020.

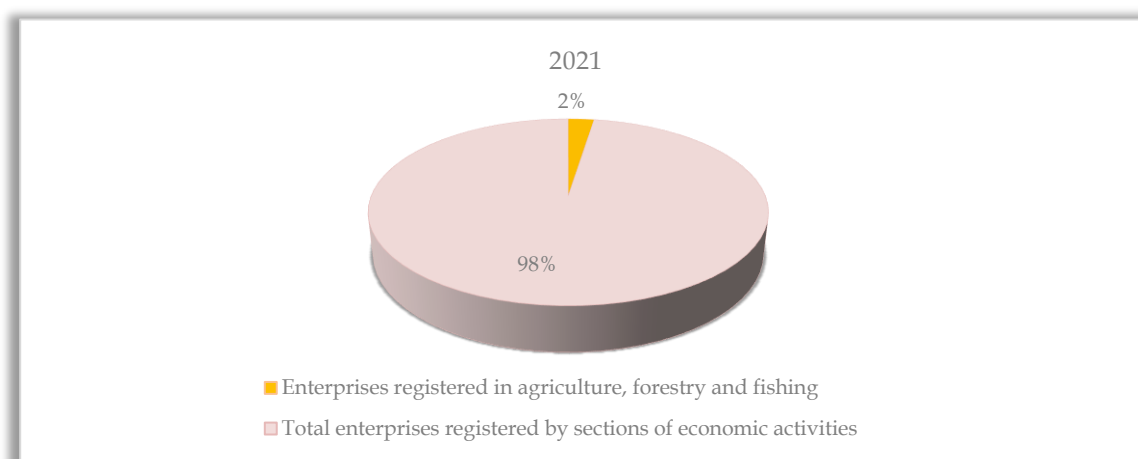
Figure 16: Number of enterprises registered by economic activities, 2017-2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

In the section of economic activities of agriculture, forestry and fisheries in 2021, 269 enterprises were registered, while the total enterprises registered according to sections and other activities were 10,649. The activities registered from agriculture had a share of 2.5% in the total of all economic activities registered during this year, while 97.5% were other economic activities.

Figure 17: Share of enterprises registered in agriculture, forestry and fishing activities (%), compared to other economic activities, in 2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

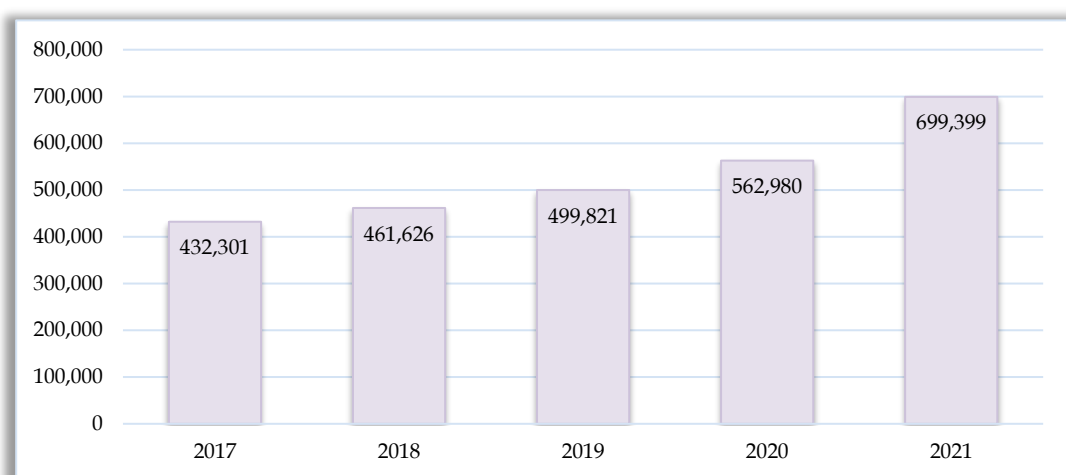
The following table presents the data on the annual turnover, the number of employees and the number of active businesses for registered agribusiness enterprises for the period 2017-2021.

Table 14: Registered agribusiness enterprises, 2017-2021

Year	Turnover ('000 €)	Number of employees	Number of active businesses
2017	432,301	10,449	2,398
2018	461,626	13,156	2,942
2019	499,821	12,467	2,405
2020	562,980	14,996	2,780
2021	699,399	17,260	3,019

Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

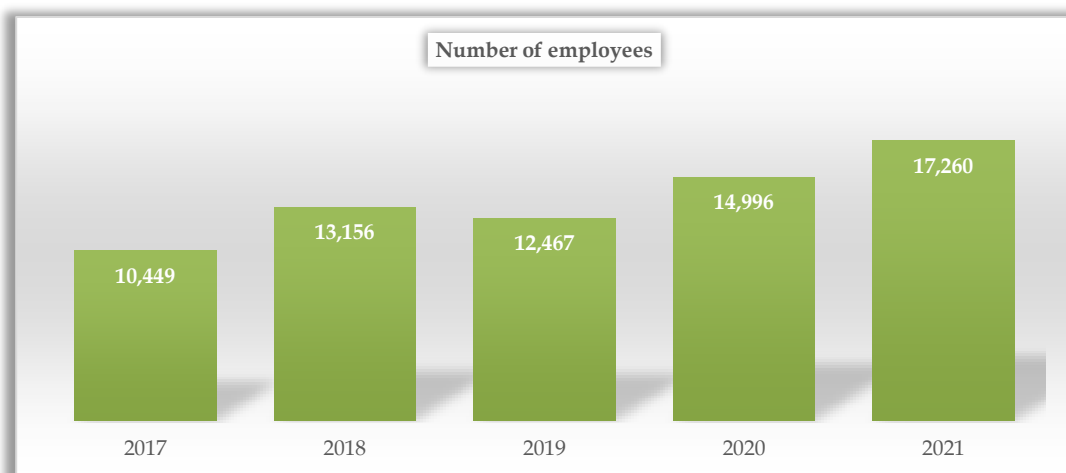
The turnover in 2017 was €432 million, marking constant increase from year to year, while in 2021 the turnover in this sector was €699 million, which compared to 2020 is an increase of 24.2%.

Figure 18: Monetary turnover of enterprises registered in agriculture, forestry and fishing activities, 2017-2021, ('000 €)

Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

The number of employees in agricultural businesses in the period 2017-2021 has increased steadily. In 2020, the number of employees in agribusiness was a total of 14,996 employees or 15.1% lower compared to 2021, where the total number of employees was 17,260.

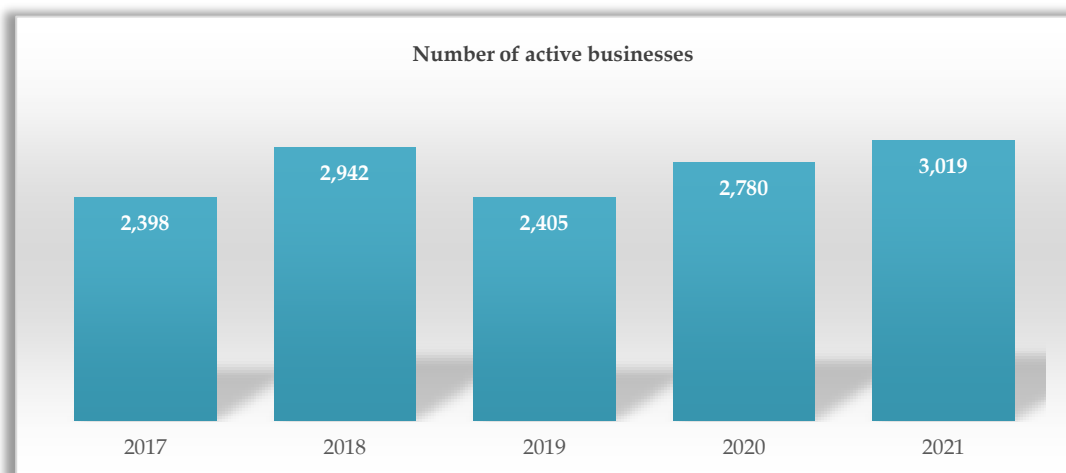
Figure 19: Number of employees in agribusiness, 2017-2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

The number of active businesses with agricultural and forest products as raw materials has marked a slight rise and fall over the years. The largest number of active businesses was in 2018, with 2,942 active businesses, while the smallest number is in 2019 with 2,405. In 2021, the number of businesses increased by 8.6% compared to 2020.

Figure 20: Number of active businesses, 2017-2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

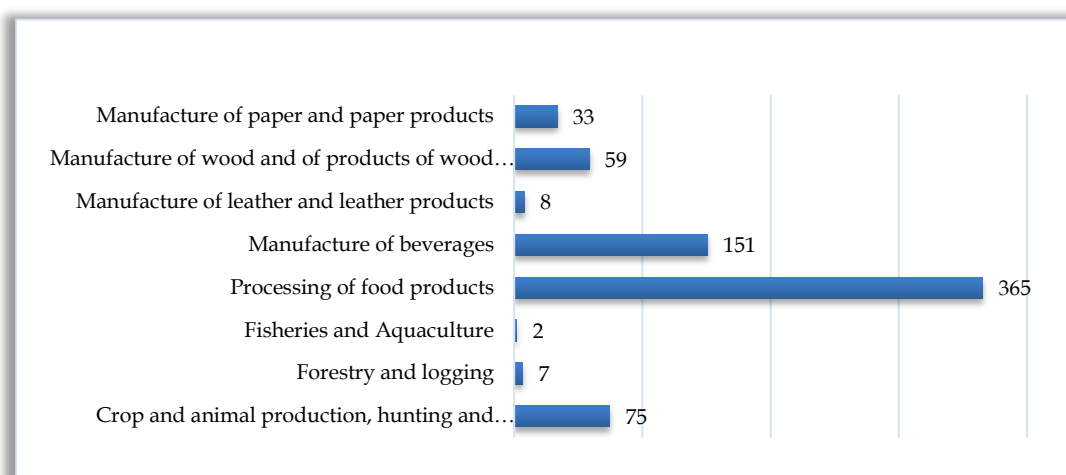
Within the agricultural businesses activities in 2021, the largest turnover was marked in the processing of food products at €365.5 million, followed by other agro-industry activities that are shown in the table. The production of beverages had a turnover of €150.9 million, and other activities with values shown in the following table.

Table 15: Share of registered enterprises in agriculture, forestry and fishing activities, 2021

Activity	Turnover ('000 €)	Number of employees	Number of active businesses
Crop and animal products, hunting and related services	74,509	2,436	814
Forestry and wood cutting	6,626	134	46
Fishing and aquaculture	1,926	90	16
Processing of food products	365,463	9,219	1,419
Manufacture of beverages	150,871	2,333	95
Manufacture of leather and its products	7,958	442	40
Manufacture of wood and of wood products, except furniture	58,557	1,994	486
Manufacture of paper and paper products	33,487	612	103
Total	699,399	17,260	3,019

Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

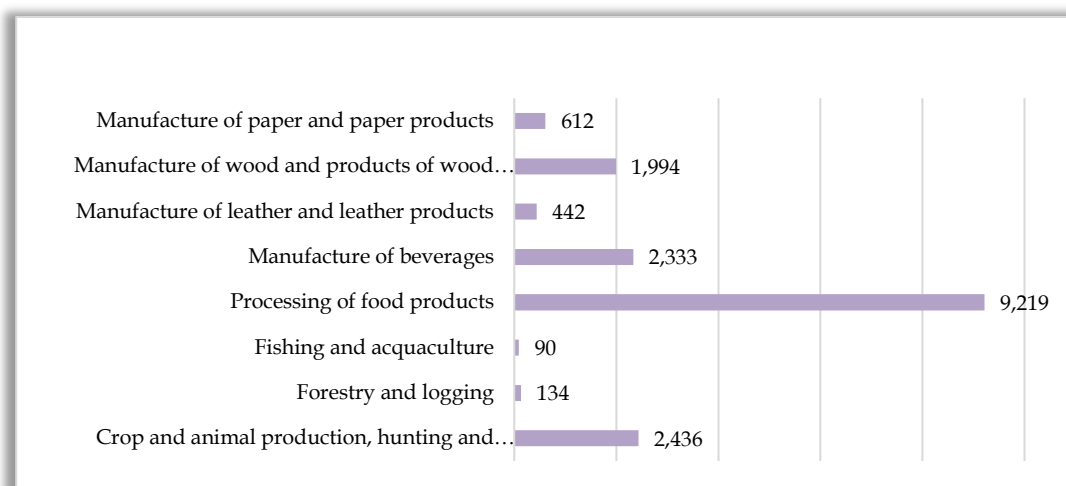
Smaller turnover was recorded in the manufacture of wood and of wood products and cork, except furniture in the amount of €58.6 million, production of paper and paper products with €33.5 million, production of leather and leather products with €8.0 million, and forestry and wood cutting with €6.6 million. A much smaller turnover can be observed in the economic activity of fishing and aquaculture marking €1.9 million..

Figure 21: Turnover (mil. €), by agricultural activities, 2021

Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

The number of employees in agricultural activities in 2021 was 17,260, where there is an increase in the number of employees compared to 2020 by 15.1%. Of this number, 9,219 employees are employed in the food processing sector, followed by the plant and animal production sector, hunting and related services with 2,436, the beverage manufacture sector with 2,333 employees, as well as the manufacture of wood and wood products with 1,994 employees. Other activities shown in the table recorded a smaller number of employees.

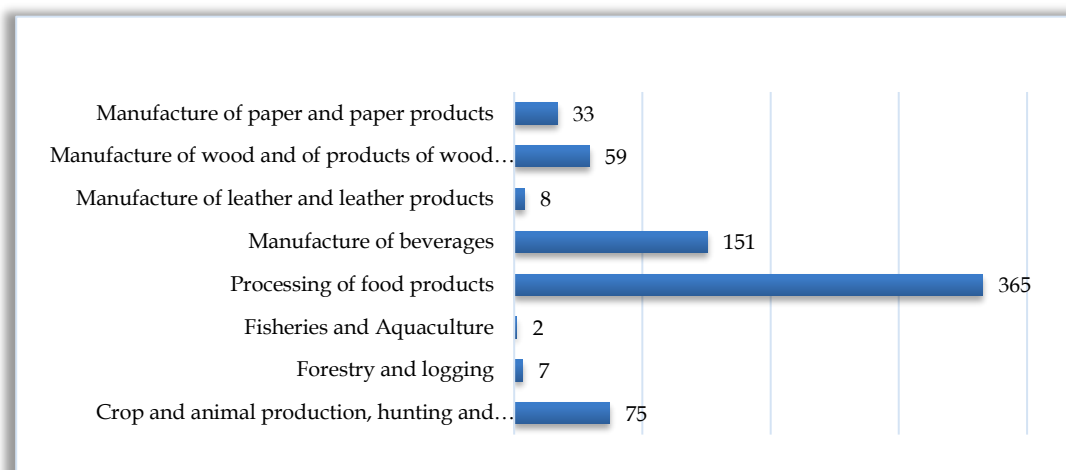
Figure 22: Number of employees by agricultural activities, 2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

The number of active businesses in 2021 was 3,019 or an increase of 8.6% compared to 2020. Out of the total number of these businesses, the largest number are businesses dealing with the processing of food products with 1,419, plant and animal production, hunting and related services with 814, and the manufacture of wood and wood products with 486 active businesses. A smaller number of active businesses was also in other activities that are presented in the following figure.

Figure 23: Number of active businesses in, 2021



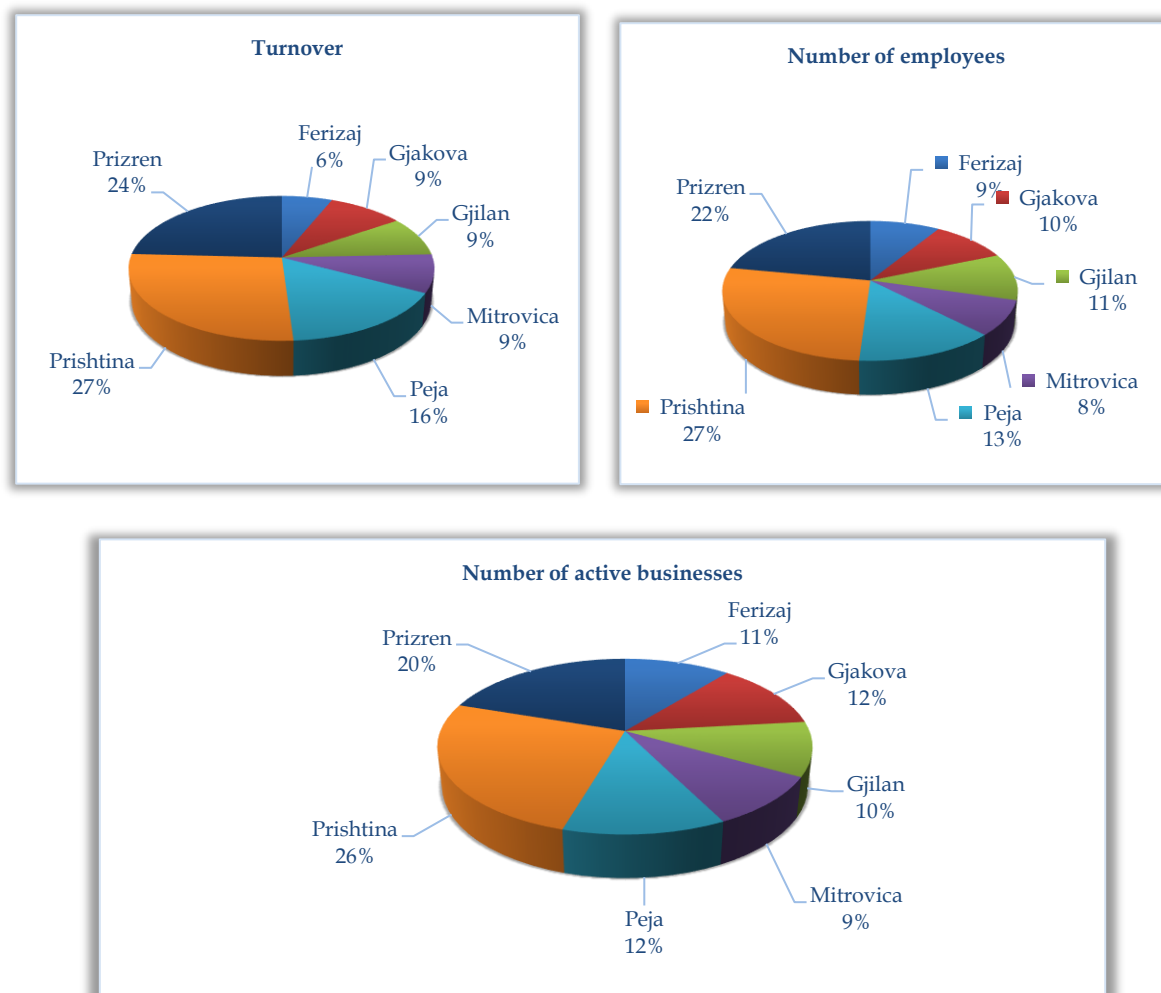
Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

The largest turnover from the agro-food industry in 2021 was in the region of Prishtina with 27%, followed by the region of Prizren with 24%, Peja with 16% and the remaining in other regions.

The largest number of employees in this sector turns out to be in the region of Prishtina with 27%, followed by Prizren with 22%, Peja with 13%, Gjakova with 10%, Gjilan with 11%, Mitrovica with 8% and the region of Ferizaj with 9%.

The highest number of active businesses in 2021 was in the region of Prishtina with 26%, followed by the region of Prizren with 20%, Gjakova and Peja with 12% each and other regions that had a smaller share.

Figure 24: Turnover, number of employees and number of active businesses in the agricultural sector by regions (%), 2021



Source: KAS- Statistical Business Register, prepared by DEAAS-MAFRD

2 Agricultural production and its use

2.1 Use of agricultural land

The recent trends of the economic development of Kosovo have also affected the arable agricultural lands, where significant areas of agricultural land have been changed from agricultural land to construction land. In general, in this period of economic development, farms, even as small as they were, have continued to be fragmented even further, affecting the reduction of the average size of the farm. The main factors in this direction can be said to be the continuous change of land use due to the growth of the rural population as well as other factors. From the Table shown below, it can be seen that there are two main categories of agricultural land use: arable land (which is land dedicated to the growth of agricultural crops) and the category that includes meadows and pastures and is used for livestock grazing.

The data on the use of agricultural land is obtained from the Agricultural Households Survey, and based on the data of this survey, the total utilized area of agricultural land has had an approximate trend of use in the time period 2017-2021. The total utilized area of agricultural land in 2021 was 420,327 ha, which was similar to the area of 2020.

Table 16: Agricultural land use by categories, ha

	2017	2018	2019	2020	2021	Difference 2021/2020 in %	Share in % 2021
Arable land – fields	186,954	188,359	188,365	188,372	188,375	0.0	44.8
- From which with vegetables in the open field (first crop)	8,033	7,818	8,319	8,435	8,491	0.7	
- From which with vegetables in greenhouses (first crop))	467	468	518	547	562	2.8	
Garden	1,199	1,003	1,122	1,133	1,089	-3.8	0.3
Fruit trees	6,247	7,687	9,244	10,029	10,144	1.1	2.4
Vineyards	3,199	3,272	3,367	3,437	3,471	1.0	0.8
Plant nursery	159	109	111	137	140	2.4	0.0
Meadows and pastures (including common land)	218,314	218,152	217,932	217,102	217,107	0.0	51.7
Total area of agricultural land in use	416,072	418,582	420,141	420,210	420,327	0.03	100.0

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

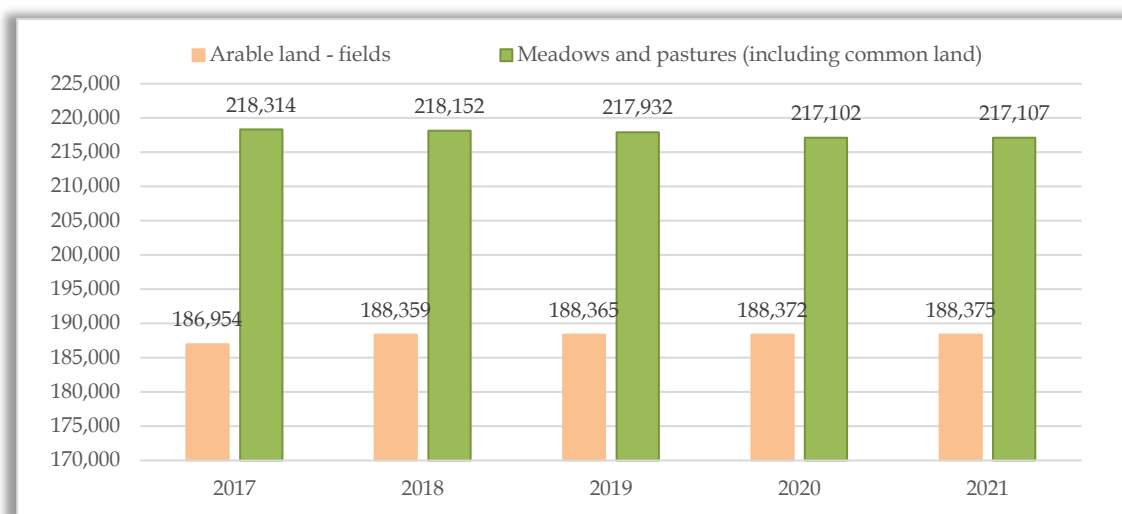
*The statistics presented in this table are presented on the basis of grouping as in AHS of KAS and there are differences with the data presented in sub-chapters 2.3.2 and 2.3.3 due to the change in grouping (e.g. strawberries in sub-chapter 2.1 according to the KAS grouping is categorized under vegetables while in sub-chapter 2.3.3 it is presented under fruit trees).

Meadows and pastures (including common land) have the largest share, which in 2021 comprise an area of 217,107 ha, constituting 51.7% of the total utilized area of agricultural land. Based on the data shown in the table above, it can be observed that there were no significant changes in this category.

The largest area, apart from meadows and pastures, is the category of arable land - fields, with a share of 44.8%, which represents the area of 188,375 ha, which also includes the area of

vegetables in the open field (as a first crop) (8,491 ha) and vegetables in greenhouses also as a first crop (562 ha), i.e. a total of 9,053 ha with vegetables.

Figure 25: Arable land-fields and meadows and pastures

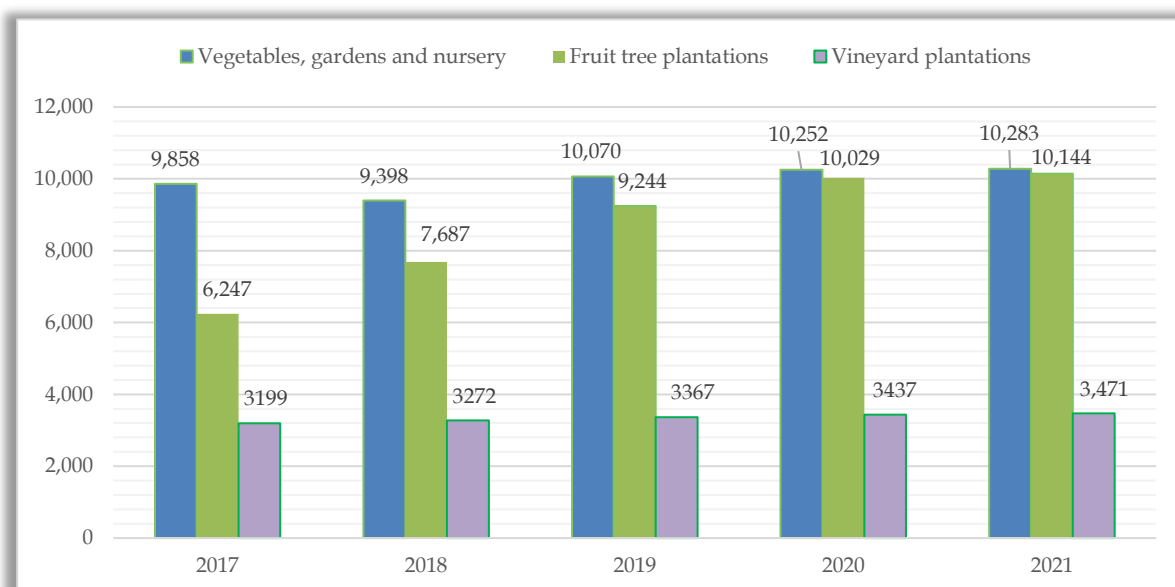


Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

The area of vegetables in the open field in 2021 has shown a slight increase compared to other years, so compared to 2020, this area has increased by 0.7%, while the area with greenhouses has increased by 2.8%. The gardens make up 1,089 ha, which shows a decrease of 1% compared to 2020.

The area of fruit trees in 2021 was 10,144 ha, where there was an increase of 1.1%, while the area of vineyards also increased by 1%.

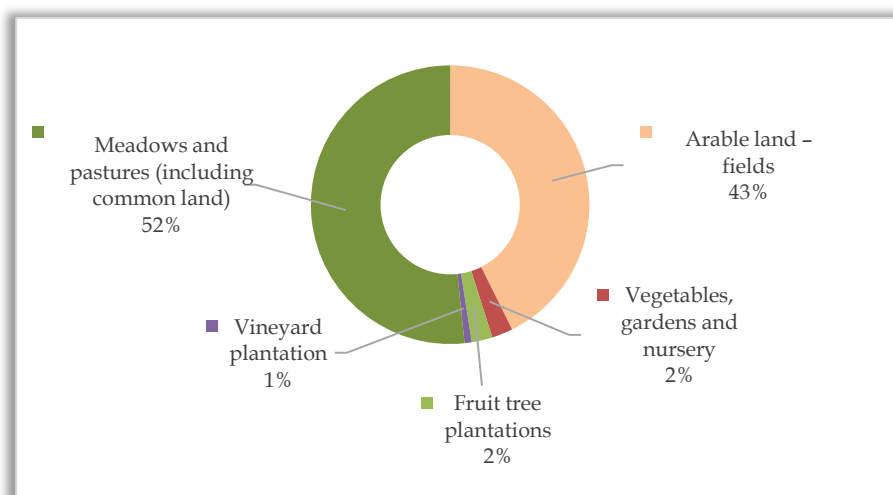
Figure 26: Vegetables, gardens and nurseries, fruit tree plantations and vineyards



Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

The use of agricultural land in 2020 according to the categories has this distribution: Meadows and pastures (including common land) with a share of 52%, arable land-fields 43%, vegetables (in open field and greenhouses as the first crop), gardens and nurseries 2%, fruit tree plantations 2% and vineyard plantations 1%.

Figure 27: Agricultural land use by categories, 2021



Source: KAS - Agricultural Households Survey, 2021

2.2 Crop production

2.2.1 Cereals

In 2021, 124,477 ha of cereals were cultivated in Kosovo, 237 ha less compared to the previous year. From the total area with cereals, the wheat crop dominates, the area of which in 2021 decreased by 0.6%, followed by the corn crop that had an increase in area by 0.1%, barley whose area increased by 3.9%, oats with 1.1% increase, rye 30.7% (130 ha) and other cereals with an 8.4% increase.

The production of cereals in 2021 marked a decrease in all crops with the exception of rye which had an increase of 22.2% and other cereals 3.3%, which despite the fact that the yield has decreased, the increase in the area affected the increase in the total production.

Table 17: Cereal area, production and yield, 2017-2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Cereals	120,746	123,869	124,199	124,714	124,477	-0.2
Wheat	80,519	81,123	80,273	80,473	79,970	-0.6
Maize	35,951	38,453	39,441	39,684	39,710	0.1
Barley	1,605	1,948	1,954	1,982	2,060	3.9
Rye	318	434	420	425	555	30.7
Oat	2,320	1,797	1,975	2,009	2,030	1.1
Other grain crops	33	113	136	141	153	8.4
Production	t					
Cereals	477,880	441,757	459,404	529,112	504,371	-4.7
Wheat	320,136	280,616	284,999	341,818	322,018	-5.8
Maize	147,200	151,921	163,930	175,180	170,393	-2.7
Barley	4,687	5,124	5,159	5,764	5,610	-2.7
Rye	866	1,049	1,010	1,153	1,409	22.2
Oat	4,862	2,751	3,954	4,769	4,500	-5.7
Other grain crops	129	296	352	427	441	3.3
Yield	t/ha					
Wheat	3.98	3.46	3.55	4.25	4.03	-5.2
Maize	4.09	3.95	4.16	4.41	4.29	-2.8
Barley	2.92	2.63	2.64	2.91	2.72	-6.3
Rye	2.72	2.41	2.41	2.71	2.54	-6.5
Oat	2.10	1.53	2.00	2.37	2.22	-6.6
Other grain crops	3.87	2.62	2.59	3.03	2.89	-4.7

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

Wheat crop accounted for 64.2% of the total area cultivated with cereals in 2021. The total domestic production was 322,018 tons which covers 69.6% of local consumption needs and the rest is covered by imports. In Kosovo, most of the wheat was used for human consumption and the rest was sold and used for animal feed. The value of domestic wheat production was

€64.4 million, while the trade balance continues to be negative, and its value has increased due to the increase in prices in the international market but also because the imported amount of wheat and wheat products has increased in 2021.

In 2021, the average per capita consumption of wheat, including wheat-containing products that have been converted into wheat through conversion coefficients, was 207 kg.

Table 18: Supply balance for wheat, 2017-2021

	Unita	2017	2018	2019	2020	2021
Area with crops	ha	120,746	123,869	124,199	124,714	124,477
Area with wheat	ha	80,519	81,123	80,273	80,473	79,970
Share of wheat	%	66.7	65.5	64.6	64.5	64.2
Yield	t/ha	4.0	3.5	3.6	4.2	4.0
Produce	t	320,136	280,616	284,999	341,818	322,018
Import of wheat and equ. of wheat*	t (p.e)	179,983	175,252	220,208	132,952	148,825
Import of wheat seed	t	7,850	6,535	5,288	8,724	7,736
Wheat import	t	120,402	116,045	149,947	74,491	93,365
Import of wheat flour	t	22,990	20,677	29,388	20,130	16,599
Import of other wheat products	t	31,044	28,409	27,131	27,352	30,645
Supply	t	500,119	455,868	505,207	474,770	470,843
Export of wheat and equ. of wheat*	t (p.e)	22,700	10,326	5,093	8,364	8,395
Export of wheat seed	t	328	130	75	298	546
Wheat export	t	0	0	0	0	0
Export of wheat flour	t	15,809	7,157	3,389	5,536	5,294
Export of other wheat products	t	1,039	684	813	856	1,029
Domestic use	t	477,419	445,542	500,114	466,406	462,448
Self-sufficiency rate	%	67.1	63.0	57.0	73.3	69.6
Wheat seed	t	24,156	24,337	24,082	24,142	23,991
Loss	t	9,604	8,418	8,550	10,255	9,661
Feed	t	51,510	45,151	45,856	54,999	51,813
Industrial use	t	8,895	7,914	8,371	10,182	9,307
Processing	t	232,041	225,176	270,938	193,729	209,452
Human consumption	t	151,213	134,546	142,316	173,100	158,225
Producer prices (on the farm)	€/kg	0.21	0.23	0.18	0.19	0.20
Production value	mil. EUR	67.2	64.5	51.3	64.9	64.4
Trade balance of wheat and equ. of wheat	mil. EUR	-76.6	-73.1	-81.0	-70.6	-91.9
Trade balance for wheat seed	mil. EUR	-2.4	-2.1	-1.8	-2.8	-2.6
Trade balance for wheat	mil. EUR	-20.4	-23.4	-29.0	-15.0	-25.4
Trade balance for wheat flour	mil. EUR	-2.2	-4.2	-8.0	-4.3	-4.8
Trade balance for other wheat products	mil. EUR	-51.6	-43.5	-42.2	-48.5	-59.1
Consumption per capita	kg	213	200	232	204	207

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS - MAFRD

Note: For all trade data (export and import), the year presented in the table includes the period July-December of that year and January-June of the following year; p.e - means product equivalents, i.e. any product containing wheat converted into wheat; *Import of wheat and equ. of wheat and Export of wheat and equ. of wheat, means the export or import of the amount of wheat as well as all other products containing wheat that are converted into wheat through conversion coefficients.

In 2021, 31.9% of the total area planted with cereals is planted with corn. With the produced amount of 170,393 tons, Kosovo covers 78% of its needs, where most of it is used as animal feed. To meet general needs, corn is also imported and the trade balance continues to remain negative in the amount of €15.6 million, which deepened due to higher prices in 2021 despite the fact that the amount imported was lower compared to 2020. The average per capita consumption of maize, including products containing maize in 2021 was 44 kg.

Table 19: Supply balance for maize, 2017-2021

	Unit	2017	2018	2019	2020	2021
Area with crops	ha	120,746	123,869	124,199	124,714	124,477
Area with maize	ha	35,951	38,453	39,441	39,684	39,710
Share of maize	%	29.8	31.0	31.8	31.8	31.9
Yield	t/ha	4.09	3.95	4.16	4.41	4.29
Produce	t	147,200	151,921	163,930	175,180	170,393
Import of maize and equ. of maize*	t (p.e)	58,329	54,071	55,498	58,741	48,595
Import of maize seed	t	661	589	635	571	521
Maize import	t	51,146	48,770	50,796	51,540	40,700
Import of maize flour	t	2,019	796	32	1,365	1,547
Import of other maize products	t	2,559	2,346	2,697	3,076	3,363
Supply	t	205,529	205,992	219,428	233,921	218,988
Export of maize and equ. of maize*	t (p.e)	277	303	328	555	445
Export of maize seed	t	91	28	81	157	54
Maize export	t	-	63	48	111	1
Export of maize flour	t	28	25	43	71	48
Export of other maize products	t	69	83	66	90	154
Domestic use	t	205,252	205,689	219,100	233,366	218,543
Self-sufficiency rate	%	71.7	73.9	74.8	75.1	78.0
Maize seeds	t	719	769	789	794	794
Loss	t	4,416	4,558	4,918	5,255	5,112
Feed	t	113,652	117,275	126,579	135,305	131,590
Industrial use	t	3,110	2,904	2,990	3,157	2,648
Processing	t	13,201	13,749	15,145	16,065	15,431
Human consumption	t	70,154	66,434	68,679	72,790	62,968
Producer prices (on the farm)	€/kg	0.23	0.25	0.24	0.25	0.28
Production value	mil. EUR	33.9	38.0	39.3	43.8	47.7
Trade balance of maize and equ. of maize	mil. EUR	-11.9	-10.8	-11.6	-13.2	-15.6
Trade balance for maize seed	mil. EUR	-1.5	-1.0	-1.4	-1.1	-1.6
Trade balance for maize	mil. EUR	-8.5	-7.8	-8.2	-9.3	-10.3
Trade balance for maize flour	mil. EUR	-0.4	-0.2	0.0	-0.3	-0.4
Trade balance for other maize products	mil. EUR	-1.5	-1.8	-2.1	-2.5	-3.3
Consumption per capita	kg	46	45	47	49	44

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - - Foreign Trade Statistics; calculations by DEAAS - MAFRD

Note: For all trade data (export and import), the year presented in the table includes the period July-December of that year and January-June of the following year; p.e - means product equivalents, i.e. any product containing maize converted into maize; *Import of maize and equ. of maize and Export of maize and equ. of maize means the export or import of the amount of maize as well as all other products containing maize that are converted into maize through conversion coefficients.

2.2.2 Vegetables

During 2021, the areas with vegetables in Kosovo cultivated in open fields, in greenhouses and in gardens are estimated to be a total of 19,399 ha. The crops that make up most of this area are: potato (3,854 ha), pepper (3,146 ha), pumpkin (2,612 ha), beans (2,914 ha), onion (1,369 ha), watermelon (1,309 ha), cabbage (923 ha), stella blue squash (918 ha), tomato (800 ha), melon (321 ha), cucumber (305 ha) and other vegetable crops which share a smaller area compared to the crops presented above.

When analyzing the difference between 2020 and 2021, in the areas with vegetable crops, it can be observed that almost all crops have recorded a slight increase in the area, except for cucumber, tomato and garlic, which have recorded a decrease in the area. Seen in general terms, the total area of vegetables has increased by 0.8% compared to 2020.

Table 20: Vegetable area, 2017 – 2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Vegetables	19,643	17,886	18,911	19,243	19,399	0.8
Potatoes	4,290	3,606	3,688	3,771	3,854	2.2
Tomatoes	862	757	794	815	800	-1.8
Eggplant	8	6	8	7	8	11.7
Pepper	3,035	3,038	3,108	3,134	3,146	0.4
Pumpkin	2,270	2,255	2,502	2,577	2,612	1.4
Stella blue squash	684	810	898	913	918	0.5
Cucumber	305	273	304	313	305	-2.7
Watermelon	1,201	1,182	1,216	1,303	1,309	0.4
Melon	388	298	313	318	321	0.9
Cabbage	917	832	906	918	923	0.5
Cauliflower	47	46	53	50	52	3.8
Spinach	161	160	197	150	154	2.8
Lettuce	92	78	88	79	82	3.7
Beet	-	9	9	7	7	2.1
Radish	-	5	5	5	5	2.7
Parsley	10	11	11	11	12	8.9
Leek	73	72	75	76	78	2.7
Onions	1,465	1,185	1,354	1,367	1,369	0.1
Garlic	138	146	234	264	263	-0.6
Beans	3,406	2,845	2,888	2,904	2,914	0.3
Peas	99	55	67	68	69	1.6
Other legumes	54	69	42	43	46	5.4
Carrots	107	112	121	126	129	2.6
Other vegetables	32	37	29	22	23	5.3

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

As for the production for 2021, the production of vegetables is estimated to be 282,734 tons for the total area of 19,399 ha, which compared to 2020, there is a decrease in production by 2.7%.

Referring to the production data of vegetable crops for 2021, we can say that crops such as potato, pumpkin, stella blue squash, pepper, cabbage and watermelon marked the highest production (over 20,000 tons), followed by other crops such as tomato, onion, cucumber, bean, melon, etc. which mark the amount of production below 20,000 tons.

Table 21: Vegetable production, 2017 – 2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Production	t					
Vegetable	358,394	265,420	300,559	290,555	282,734	-2.7
Potatoes	118,250	68,790	73,816	74,508	73,984	-0.7
Tomatoes	24,698	22,639	22,466	20,242	19,163	-5.3
Eggplant	204	107	155	137	144	5.0
Pepper	62,934	49,907	59,404	53,889	52,381	-2.8
Pumpkin	25,564	20,208	23,050	22,535	22,326	-0.9
Stella blue squash	16,220	18,376	21,570	21,712	20,896	-3.8
Cucumber	10,204	7,009	9,173	9,055	8,480	-6.4
Watermelon	28,740	22,918	25,209	26,324	25,971	-1.3
Melon	6,113	4,141	4,409	4,335	4,103	-5.3
Cabbage	25,184	21,997	25,259	24,850	24,123	-2.9
Cauliflower	911	725	1,004	905	885	-2.2
Spinach	1,546	1,348	2,053	1,452	1,408	-3.1
Lettuce	1,186	683	835	677	635	-6.2
Beet	-	73	80	56	51	-8.8
Radish	-	39	52	49	45	-7.1
Parsley	143	87	125	123	130	5.7
Leek	1,671	1,303	1,440	1,425	1,398	-1.9
Onions	22,436	16,317	19,879	18,859	17,792	-5.7
Garlic	971	873	1,628	1,588	1,471	-7.4
Beans	8,687	5,688	6,713	5,708	5,349	-6.3
Peas	348	146	169	152	138	-9.5
Other legumes	219	254	139	126	116	-8.3
Carrots	1,838	1,493	1,703	1,694	1,585	-6.4
Other vegetables	326	298	227	155	162	4.2

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

Regarding the yield of vegetables for the year 2021, compared to the previous year, a decrease in yield is observed in all crops, the same situation is also present in the production, where compared to the year 2020, the level of production is lower. These changes in yield have come as a result of differences in climatic conditions (drought and hail).

Table 22: Vegetable yield, 2017 – 2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Yield	t /ha					
Potatoes	27.56	19.08	20.01	19.76	19.20	-2.8
Tomatoes	28.67	29.90	28.29	24.84	23.95	-3.5
Eggplant	26.32	16.90	19.19	18.44	17.34	-6.0
Pepper	20.74	16.43	19.11	17.19	16.65	-3.2
Pumpkin	11.26	8.96	9.21	8.74	8.55	-2.3
Stella blue squash	23.71	22.70	24.01	23.77	22.76	-4.3
Cucumber	33.50	25.66	30.20	28.91	27.82	-3.8
Watermelon	23.93	19.38	20.73	20.20	19.84	-1.8
Melon	15.77	13.92	14.08	13.64	12.80	-6.2
Cabbage	27.46	26.44	27.88	27.07	26.13	-3.4
Cauliflower	19.19	15.93	18.84	18.00	16.96	-5.8
Spinach	9.59	8.44	10.41	9.71	9.15	-5.7
Lettuce	12.82	8.79	9.47	8.58	7.76	-9.6
Beet	-	8.43	8.99	7.97	7.13	-10.6
Radish	-	8.32	10.52	10.07	9.11	-9.5
Parsley	14.21	8.15	11.20	10.95	10.63	-2.9
Leek	23.05	18.00	19.29	18.82	17.97	-4.5
Onions	15.32	13.77	14.68	13.80	13.00	-5.8
Garlic	7.04	5.97	6.97	6.00	5.59	-6.9
Beans	2.55	2.00	2.32	1.97	1.84	-6.6
Peas	3.52	2.64	2.52	2.23	1.99	-11.0
Other legumes	4.02	3.67	3.27	2.91	2.53	-13.0
Carrots	17.21	13.35	14.09	13.46	12.28	-8.8
Other vegetables	10.23	8.12	7.79	7.05	6.98	-1.1

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

In total, the areas with second crops after the first harvest in 2021 are estimated to be 285 ha or 1.3% increase compared to 2020. The second crop after the first harvest which has marked a significant increase in area compared to the previous year is onion with 13.1%, followed by cabbage with 3%, while spinach and lettuce have decreased compared to 2020. As for production, except for onion which increased, other crops have decreased compared to 2020, referring to production and areas, the same situation is also reflected in yield.

Table 23: Area, production and yield of second crops after the first harvest

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Vegetables	208	233	278	281	285	1.3
Cabbage	92	99	81	88	91	3.0
Spinach	80	66	155	145	142	-2.4
Lettuce	9	18	4	6	6	-4.2
Onions	15	10	27	28	32	13.1
Others	12	41	11	14	15	8.8
Production	t					
Vegetables	2,406	3,451	3,000	3,008	2,992	-0.55
Cabbage	1,987	2,362	2,000	2,106	2,090	-0.75
Spinach	187	271	596	466	426	-8.72
Lettuce	81	124	14	18	17	-6.01
Onions	39	80	186	187	208	11.33
Others	113	614	204	231	251	8.63
Rendimenti	t/ha					
Cabbage	21.53	23.81	24.68	23.93	23.05	-3.6
Spinach	2.34	4.12	3.84	3.21	3.01	-6.4
Lettuce	8.67	6.75	3.46	2.98	2.93	-1.8
Onions	2.66	8.34	6.95	6.68	6.58	-1.5
Others	9.75	15.16	17.91	16.48	16.45	-0.2

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

Of the total area planted with vegetables of 19,399 ha for 2021, the area with tomatoes account for 4.1%. The area and production of tomatoes have decreased in 2021, compared to the previous year by 1.8%, respectively 5.3% and thus a total of 50.8% of consumption needs are covered. The rest is covered by import with 18,685 tons, while export marks 136 tons. The production value was €9.6 mil., while the trade balance continues to be negative.

Table 24: Supply balance for tomatoes, 2017-2021

	Unit	2017	2018	2019	2020	2021
Vegetable area	ha	19,643	17,886	18,911	19,243	19,399
Tomato area	ha	862	757	794	815	800
Share	%	4.4	4.2	4.2	4.2	4.1
Yield	t/ha	28.67	29.90	28.29	24.84	23.95
Production	t	24,698	22,639	22,466	20,242	19,163
Imports of tomatoes	t	15,554	16,900	15,663	15,547	18,685
Supply	t	40,252	39,539	38,130	35,789	37,848
Exports of tomatoes	t	80	166	532	205	136
Domestic use	t	40,173	39,374	37,598	35,584	37,713
Self-sufficiency rate	%	61.5	57.5	59.8	56.9	50.8
Loss	t	988	906	899	810	767
Processing	t	237	217	216	194	184
Own final consumption	t	4,505	4,129	4,098	3,692	3,495
Total human consumption	t	39,185	38,468	36,699	34,774	36,946
Producer prices (on the farm)	€/kg	0.54	0.62	0.57	0.33	0.52
Production value	mil. €	12.8	13.5	12.3	6.4	9.6
Trade balance of tomatoes	mil. €	-5.2	-6.0	-5.6	-5.3	-6.4

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS - MAFRD (customs code 07020000)

Pepper crop takes part with 16.2% in the total area cultivated with vegetables. Production in terms of pepper crop for 2021 reaches 52,381 tons, meeting 84.9% of consumption needs. The imported amount of pepper was 11,389 tons, while the exported amount was 2,050 tons.

Out of the total domestic use of 61,721 tons, 59,625 tons were used for general consumption and 2,095 tons were counted as losses, while 503 tons were destined for processing. The value of pepper production is €31.2 mil., and the trade balance continues to remain negative.

Table 25: Supply balance for pepper, 2017-2021

	Unit	2017	2018	2019	2020	2021
Vegetable area	ha	19,643	17,886	18,911	19,243	19,399
Pepper area	ha	3,035	3,038	3,108	3,134	3,146
Share	%	15.4	17.0	16.4	16.3	16.2
Yield	t/ha	20.74	16.43	19.11	17.19	16.65
Production	t	62,934	49,907	59,404	53,889	52,381
Imports of pepper	t	9,692	11,524	11,001	9,752	11,389
Supply	t	72,626	61,431	70,405	63,641	63,771
Exports of pepper	t	841	582	962	1,862	2,050
Domestic use	t	71,785	60,850	69,443	61,779	61,721
Self-sufficiency rate	%	87.7	82.0	85.5	87.2	84.9
Loss	t	2,517	1,996	2,376	2,156	2,095
Processing	t	604	479	570	517	503
Own final consumption	t	11,479	9,103	10,835	9,829	9,554
Total human consumption	t	69,267	58,853	67,067	59,623	59,625
Producer prices (on the farm)	€/kg	0.59	0.91	0.76	0.54	0.62
Production value	mil. €	35.6	43.6	43.3	27.9	31.2
Trade balance of pepper	mil. €	-3.8	-4.8	-5.4	-3.3	-3.3

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS - MAFRD (customs code 07096010)

The potato accounts for 19.2% of the total area planted with vegetables for the year 2021 with a total of 19,399 ha. Compared to the previous year, the potato area has increased by 2.2%, and the potato production for 2021 is calculated to be lower by 0.7% compared to 2021, but looking at the general aspect, this amount of production manages to cover 92.4% of the domestic consumption needs. The trade balance continues to remain negative in the amount of €1.8 million.

Table 26: Supply balance for potatoes, 2017-2021

	Unit	2017	2018	2019	2020	2021
Vegetable area	ha	19,643	17,886	18,911	19,243	19,399
Potato area	ha	4,290	3,606	3,688	3,771	3,854
Share	%	21.8	20.2	19.5	19.6	19.9
Yield	t/ha	27.56	19.08	20.01	19.76	19.20
Production	t	118,250	68,790	73,816	74,508	73,984
Imports of potatoes	t	3,131	3,545	5,566	5,151	10,607
Supply	t	121,381	72,335	79,382	79,659	84,591
Exports of potatoes	t	12,609	11,752	10,219	11,879	4,499
Domestic use	t	108,772	60,583	69,163	67,780	80,093
Self-sufficiency rate	%	108.7	113.5	106.7	109.9	92.4
Loss	t	5,912	3,440	3,691	3,725	3,699
Processing	t	5,617	3,268	3,506	3,539	3,514
Own final consumption	t	33,701	19,605	21,037	21,235	21,086
Total human consumption	t	102,859	57,144	65,473	64,054	76,393
Producer prices (on the farm)	€/kg	0.30	0.33	0.27	0.28	0.42
Production value	mil. €	33.7	21.6	18.9	19.8	29.5
Trade balance of potatoes	mil. €	0.7	0.7	-0.2	0.6	-1.8

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS - MAFRD (customs codes 07019050, 07019090)

2.2.3 Fruits

The area with fruits in Kosovo for the year 2021 marks 10,382 ha, compared to the year 2020 with 10,265 ha where a small increase of 1.1% is observed. Among the crops that lead by area are: apples 3,083 ha, plums 2,210 ha, raspberries 1,665 ha, walnuts 1,352 ha, followed by other crops such as pears, hazelnuts, strawberry, sour cherries, etc.

As for the production of fruits that marks 67,533 tons for 2021, this amount is 6.5% lower compared to the previous year. Most crops compared to the previous year have decreased.

Among the crops which during 2021 recorded the highest production amounts, it is worth mentioning apples (37,381 tons), plums (11,247 tons), raspberries (5,840 tons), pears (4,953 tons), walnuts (2,108 tons), followed by from other crops with a lower amount of production.

Table 27: Area and production of fruits, 2017 – 2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Fruit	6,422	7,922	9,479	10,265	10,382	1.1
Apple	2,155	2,556	3,006	3,068	3,083	0.5
Pear	456	479	610	614	618	0.7
Quince	39	64	90	91	93	2.6
Medlar	41	50	51	51	53	4.0
Plums	1,524	1,821	2,096	2,201	2,210	0.4
Apricots	11	14	22	22	24	5.9
Peach	26	34	47	48	51	5.5
Cherry	78	82	107	108	110	2.0
Sour Cherry	149	167	232	233	240	3.0
Walnuts	340	608	886	1,295	1,352	4.4
Hazelnuts	95	119	252	390	391	0.3
Strawberries	175	234	235	236	238	1.0
Raspberries	1,231	1,537	1,637	1,661	1,665	0.3
Blackberries	21	24	30	31	32	3.9
Blueberries	33	37	57	86	93	8.3
Chokeberries	-	-	88	98	98	0.4
Other fruits	48	94	31	32	30	-6.2
Production	t					%
Fruit	34,207	53,606	67,294	72,265	67,533	-6.5
Apple	13,159	26,093	33,835	38,049	37,381	-1.8
Pear	2,083	3,500	5,110	5,586	4,953	-11.3
Quince	255	925	1,283	1,264	1,266	0.2
Medlar	129	179	222	219	213	-2.6
Plums	7,393	10,643	12,745	13,147	11,247	-14.5
Apricots	59	38	100	94	94	0.2
Peach	130	199	330	288	262	-9.1
Cherry	298	410	586	538	485	-9.9
Sour Cherry	599	427	777	740	705	-4.7
Walnuts	405	761	2,028	2,591	2,108	-18.6
Hazelnuts	17	29	80	116	101	-12.7
Strawberries	1,328	1,316	1,677	1,487	1,439	-3.2
Raspberries	7,747	8,267	7,206	6,659	5,840	-13.2
Blackberries	181	246	239	233	223	-4.6
Blueberries	271	306	310	464	469	1.0
Chokeberries	-	-	666	692	656	-5.2
Other fruits	153	265	101	97	90	-7.2

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

As for the yield of trees for 2021, the crops that had the highest yield this year are: peaches, apples, pears, blackberries, chokeberries, etc. While compared to the previous year, there is a decrease in yield in all crops, these changes in yield have come as a result of differences in climatic conditions such as drought and hail, as with vegetables.

Table 28: Yield of fruit, 2017 - 2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Yield	t/ha					
Apple	6.11	10.21	11.25	12.40	12.12	-2.2
Pear	4.56	7.31	8.38	9.10	8.01	-12.0
Quince	6.51	14.47	14.24	13.94	13.61	-2.4
Medlar	3.14	3.60	4.36	4.27	4.00	-6.3
Plums	4.85	5.84	6.08	5.97	5.09	-14.8
Apricots	5.13	2.79	4.56	4.23	4.00	-5.3
Peach	4.98	5.78	6.95	6.00	5.17	-13.8
Cherry	3.83	4.98	5.46	4.98	4.40	-11.6
Sour Cherry	4.01	2.55	3.34	3.17	2.94	-7.5
Walnuts	1.19	1.25	2.29	2.00	1.56	-22.0
Hazelnuts	0.18	0.25	0.32	0.30	0.26	-12.9
Strawberries	7.58	5.62	7.14	6.30	6.04	-4.1
Raspberries	6.30	5.38	4.40	4.01	3.51	-12.5
Blackberries	8.73	10.16	7.88	7.53	6.92	-8.1
Blueberries	8.21	8.20	5.48	5.40	5.03	-6.7
Chokeberries	-	-	7.55	7.08	6.69	-5.5
Other fruits	3.21	2.81	3.24	3.03	3.00	-1.0

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

Of the total area planted with fruits, apple crop accounts for 29.7%. The area of apple marked a slight increase during 2021 by 0.5%, while production is lower by 1.8% compared to 2020. With this production, 77.6% of consumption needs are covered, while the rest is covered by imports with 10,938 tons, while the export stands at 136 tons. The production value is €14.8 million, while the trade balance continues to be negative.

Table 29: Supply balance for apples, 2017-2021

	Unit	2017	2018	2019	2020	2021
Fruit area	ha	6,422	7,922	9,479	10,265	10,382
Apple area	ha	2,155	2,556	3,006	3,068	3,083
Share	%	33.6	32.3	31.7	29.9	29.7
Yield	t/ha	6.11	10.21	11.25	12.40	12.12
Production	t	13,159	26,093	33,835	38,049	37,381
Import of apples	t	13,928	8,544	8,882	11,162	10,938
Supply	t	27,086	34,637	42,718	49,211	48,319
Export of apples	t	80	166	532	205	136
Domestic use	t	27,007	34,472	42,186	49,006	48,183
Self-sufficiency rate	%	48.7	75.7	80.2	77.6	77.6
Loss	t	1,316	2,609	3,384	3,805	3,738
Processing	t	1,184	2,348	3,045	3,424	3,364
Own final consumption	t	7,106	14,090	18,271	20,547	20,186
Total human consumption	t	25,691	31,862	38,802	45,201	44,445
Producer prices (on the farm)	€/kg	0.49	0.40	0.39	0.31	0.44
Production value	mil. €	5.8	9.4	11.9	10.6	14.8
The trade balance of apples	mil. €	-4.9	-3.2	-3.1	-3.4	-3.2

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS-MAFRD (customs codes 08081010; 08081080)

Plum has a share of 21.3% in the total area cultivated with fruits of 10,382 ha. Plum production is 11,247 tons, the amount of import is a total of 649 tons, while the export is covered by a low amount. Based on the data presented, our country covers 94.5% of consumption needs with plums.

Domestic use marks a total of 11,895 tons, 787 tons are counted as losses, while processing is a total of 2,092 tons. The production value is €8.5 million, while the trade balance continues to be negative.

Table 30: Supply balance for plum, 2017-2021

	Unit	2017	2018	2019	2020	2021
Fruit area	ha	6,422	7,922	9,479	10,265	10,382
Plum area	ha	1,524	1,821	2,096	2,201	2,210
Share	%	23.7	23.0	22.1	21.4	21.3
Yield	t/ha	4.85	4.85	4.85	4.85	4.85
Production	t	7,393	10,643	12,745	13,147	11,247
Import of plum	t	596	219	605	770	649
Supply	t	7,988	10,863	13,350	13,918	11,895
Export of plum	t	1	179	1	86	0.20
Domestic use	t	7,988	10,684	13,348	13,832	11,895
Self-sufficiency rate	%	92.6	99.6	95.5	95.1	94.5
Loss	t	517	745	892	920	787
Processing	t	1,375	1,980	2,371	2,445	2,092
Own final consumption	t	4,469	6,434	7,704	7,947	6,799
Total human consumption	t	7,470	9,939	12,456	12,911	11,108
Producer prices (on the farm)	€/kg	0.45	0.73	0.51	0.71	0.81
Production value	mil. €	3.1	7.2	6.0	8.7	8.5
The trade balance of plum	mil. €	-0.2	-0.1	-0.2	-0.2	-0.3

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS-MAFRD (customs code 08094005)

As for the strawberry crop, strawberry covers 2.3% of the total area planted with fruits of 10,382 ha.

The production of strawberry was 1,439 tons, and covers 73.4% of domestic consumption needs, while the rest is covered by imports of 726 tons.

The value of the production of strawberry stand at €1.6 mil., while the trade balance continues to remain negative, the same as in 2020.

Table 31: Supply balance for strawberry, 2017-2021

	Unit	2017	2018	2019	2020	2021
Fruit area	ha	6,422	7,922	9,479	10,265	10,382
Strawberry area	ha	175	234	235	236	238
Share	%	2.7	3.0	2.5	2.3	2.3
Yield	t/ha	7.58	5.62	7.14	6.30	6.04
Production	t	1,328	1,316	1,677	1,487	1,439
Import of strawberry	t	388	545	844	482	726
Supply	t	1,716	1,861	2,521	1,969	2,165
Export of strawberry	t	36	107	93	74	204
Domestic use	t	1,680	1,754	2,428	1,895	1,961
Self-sufficiency rate	%	79.0	75.0	69.1	78.5	73.4
Loss	t	93	92	117	104	101
Processing	t	247	245	312	277	268
Own final consumption	t	803	795	1,014	899	870
Total human consumption	t	1,588	1,662	2,311	1,791	1,861
Producer prices (on the farm)	€/kg	1.08	1.03	1.12	1.16	1.22
Production value	mil. €	1.3	1.3	1.7	1.6	1.6
The trade balance of strawberry	mil. €	-0.3	-0.2	-0.4	-0.2	-0.2

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS - Foreign Trade Statistics; calculations by DEAAS-MAFRD (customs code 08101000)

2.2.4 Vineyards and wines

Vineyards

During 2021, the areas with vineyards have increased by only 1% (34 ha). Areas with table grapes increased by 2.9%, while those with wine grapes increased by 0.3%. As for production, there was a low increase of only 0.7%, while the yield decreased by 0.2% compared to 2020. All these changes came as a result of the diseases and hail that characterized the year 2021. The following table shows data on the area, production and yield of table and wine grapes for the period '17-'21.

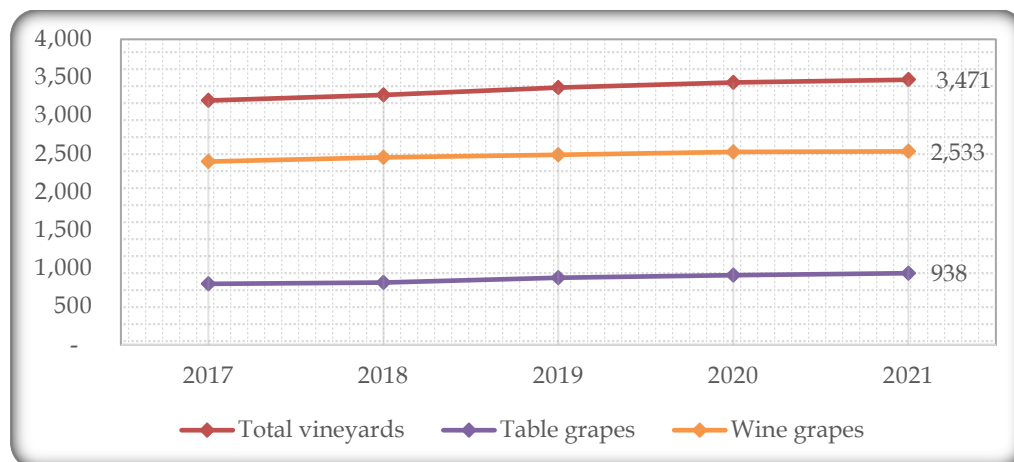
Table 32: Grapes area, production and yield, 2017-2021

Crop	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Vineyards	3,199	3,272	3,367	3,437	3,471	1.0
Table grapes	799	816	878	911	938	2.9
Wine grapes	2,400	2,455	2,489	2,526	2,533	0.3
Production	t					
Vineyards	15,364	27,322	19,318	26,330	26,527	0.7
Table grapes	3,187	4,998	4,546	6,281	7,435	18.4
Wine grapes	12,177	22,324	14,772	20,049	19,091	-4.8
Yield	t/ha					
Vineyards	4.8	8.4	5.7	7.7	7.6	-0.2
Table grapes	4.0	6.1	5.2	6.9	7.9	15.0
Wine grapes	5.1	9.1	5.9	7.9	7.5	-5.0

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

The following figure presents data from 2017 to 2021 related to the area of vineyards. During this period, a continuous increase in the area with vineyards was noted.

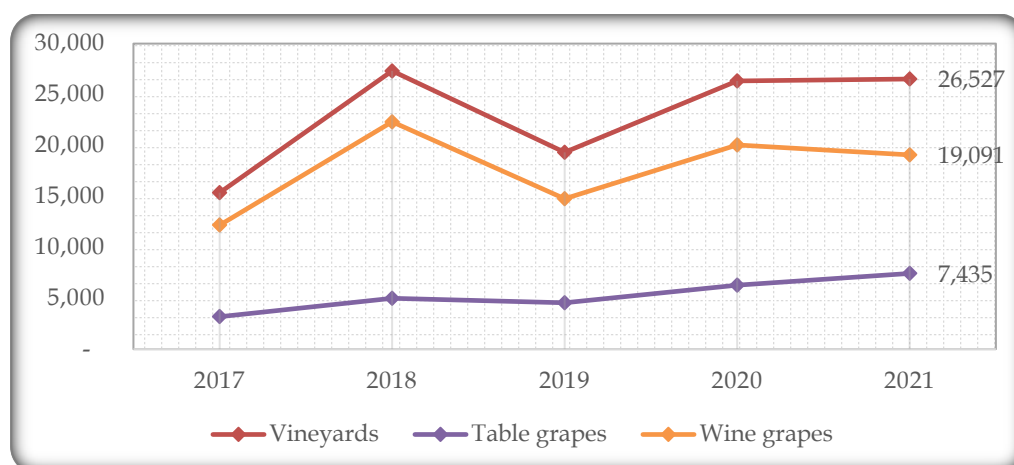
Figure 28: Area of vineyards per ha, 2017-2021



Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

The following figure shows the production of grapes for the period 2017-2021, where it can be seen that there were constant fluctuations and a decrease is noted in 2017 and 2019, while in 2020 and 2021 there was an increase in grape production.

Figure 29: Grape production in tons, 2017-2021



Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

The data related to the supply balance for table grapes are presented below. In 2021, the table grape self-sufficiency rate is 72% compared to the previous year of 71%. The remaining was covered by import with 2,970 tons, which was 12% higher than in 2020. The export of table grapes in 2021 fell significantly (68%), from 78 to 25 tons. The production value of this crop in 2021 was €3.9 mil., which is close to the year 2020. The trade balance in 2021 continues to be negative with a value of €1.4 million.

Table 33: Supply balance for table grapes, 2017-2021

	Unit	2017	2018	2019	2020	2021
Vineyard area	ha	3,199	3,272	3,367	3,437	3,471
Table grapes area	ha	799	816	878	911	938
Share	%	25	25	26	27	27
Yield	t/ha	4.0	6.1	5.2	6.9	7.9
Production	t	3,187	4,998	4,546	6,281	7,435
Import of table grapes	t	3,592	2,554	3,538	2,644	2,970
Supply of table grapes	t	6,779	7,552	8,084	8,925	10,406
Export of table grapes	t	75	173	103	78	25
Domestic use	t	6,704	7,379	7,981	8,847	10,381
Self-sufficiency rate	%	48	68	57	71	72
Producer prices (on the farm)	€/kg	0.74	0.78	0.68	0.63	0.53
Production value	mil.€	2.4	3.9	3.1	4.0	3.9
Trade balance	mil.€	-1.8	-1.2	-1.7	-1.2	-1.4

Source: KAS- Foreign Trade Statistics; Department of Vineyards and Wine; calculations by DAESB-MAFRD (customs code 08061010)

The following table contains data on table grape varieties including their area, production and yield. From the data presented, it can be observed that in 2021, the total area cultivated with table grapes was 938 ha, or 27 ha more than in 2020, which marks a low increase, while the production was 7,435 or 18% more growth compared to the previous year.

Of the table grape varieties, the largest area is cultivated with the Muscat Hamburg variety with an area of 281.5 ha, followed by the Italian Muscat variety with 199 ha, the Afuz Ali variety with 121.3 ha, the Cardinal variety with 97.5 ha and the Victoria variety with 96.3 ha. Other varieties are cultivated on a smaller area and make up 142.7 ha of the total surface cultivated with table grapes.

Table 34: Table grape varieties, 2021

Table grape varieties, 2021					
No.	Varieties	Area (ha)	Production (t)	Yield (t/ha)	Area in %
1	Muscat Hamburg	281.5	1,952	6.9	30.0
2	Muscat Italian	199.0	1,836	9.2	21.2
3	Afuz Ali	121.3	598	4.9	12.9
4	Cardinal	97.5	858	8.8	10.4
5	Victoria	96.3	975	10.1	10.3
6	Moldavian	40.3	352	8.7	4.3
7	Michele Palieri	27.7	260	9.4	2.9
8	Black Magic	14.0	118	8.5	1.5
9	Demir Kapi	11.1	116	10.4	1.2
10	Ribier	10.0	98	9.8	1.1
11	Antigona	8.4	83	9.9	0.9
12	Red Globe	5.5	45	8.2	0.6
13	"E hershmja e Rahovecit" ("the early one of Rahovec")	2.5	23	9.1	0.3
14	Regina	4.5	7	1.6	0.5
15	Crimson Seedless	6.8	53	7.8	0.7
16	Seedless grapes	2.7	2	0.6	0.3
17	Regina	1.9	24	12.9	0.2
18	Muscat July	1.1	6	5.4	0.1
19	Strashenski	0.7	0	0.0	0.1
20	Katarina	0.4	1	2.1	0.0
21	Izabella	0.4	2	4.5	0.0
22	Prima	2.2	12	5.5	0.2
23	Bardhosha	1.8	11	6.2	0.2
24	Plaiina	0.9	3	3.3	0.1
	Total	938	7,435	7.9	100.00

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

The area cultivated with wine grape varieties in 2021 was a total of 2,533 ha, or 7 ha more than in 2020, which marks a very low increase. The area cultivated with grape varieties for the production of red wine was 1,640 ha, while the area cultivated with varieties for the production of white wine was 893 ha. From the area cultivated with varieties for the production of red wine, the Vranç variety leads with 498 ha, followed by the Prokupa variety with 345 ha, the Game variety with 235 ha, Black Burgundy with 159 ha, as well as other varieties that make up the cultivated area with red varieties with a total of 403 ha.

As for the white wine grape varieties, the largest part is cultivated with the Smederevka variety with an area of 386 ha, followed by the Italian Riesling with an area of 232 ha and the Chardonnay variety with 116 ha, while the rest of the area of 159 ha is cultivated with other varieties shown in the following table.

Table 35: Wine grape varieties, 2021

No.	Varieties for red wine	Area (ha)	Production (t)	Yield t/ha	Area (%)
1	Vranç	498	4,372	9	30
2	Prokupa	345	1,473	4	21
3	Gamay	235	1,606	7	14
4	Red burgundy (Pinot Noir)	159	918	6	10
5	Zhamet	98	692	7	6
6	Cabernet Sauvignon	88	710	8	5
7	Merlot	60	393	7	4
8	Syrah	44	210	5	3
9	Frankovka	25	118	5	2
10	Gamay coloured	23	153	7	1
11	Cabernet Frank	23	20	1	1
12	Pllovdin (red grape)	18	46	3	1
13	Pinot Grigo	7	61	9	0
14	Carmenere	6	56	9	0
15	Calmet	5	4	1	0
16	Petit Verdo	3	21	8	0
17	Sorelis	2	12	6	0
18	Serbian Rubin	1	4	5	0
19	Marselan	1	5	8	0
20	Kartoshia	1	4	7	0
21	Malbec	0	1	2	0
22	Sangiovese	0	0	2	0
23	Sila	0	1	5	0
Total varieties for red wine		1,640	10,880	7	100
No.	Varieties for white wine	Area (ha)	Production (t)	Yield t/ha	Area (%)
1	Smederevka	386	3,270	8	43
2	R. Italian	232	2,647	11	26
3	Chardonnay	116	914	8	13
4	R. Rajne	60	767	13	7
5	White Prokupa (Zhuplanka)	27	177	6	3
6	White Burgundy	21	221	11	2
7	Melnik	12	31	3	1
8	Rrakacitel	11	69	6	1
9	Viogner	8	1	0	1
10	Traminer	7	30	4	1
11	Sauvignon	7	63	9	1
12	Zhillavka	4	7	2	0
13	Fleur tai	2	5	3	0
14	Tramjanka	1	9	10	0
15	Malvazia	0	4	14	0
16	Broner	0	1	5	0
Total varieties for white wine		893	8,216	9	100
Total wine grapes		2,533	19,096	7.5	

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

Wine

Wine production in 2021 has marked a decrease of 17% compared to 2020. From 9,429 thousand liters that were produced in 2020, in 2021 the amount was reduced to 7,785 liters. White wine has decreased by 7%, red wine by 30%, while rose wine has increased by 14%, compared to the previous year.

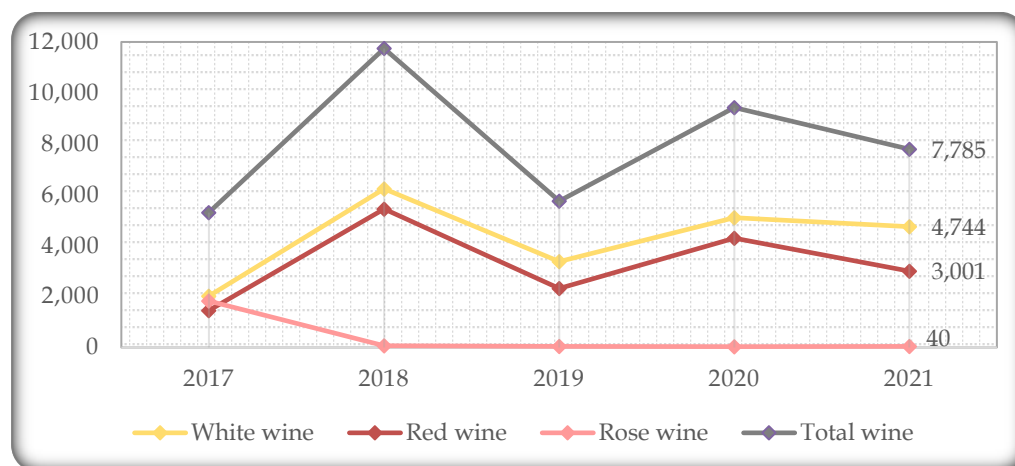
Table 36: Wine production 2017-2021, '000 liters

Production	2017	2018	2019	2020	2021	Difference 2021/2020 in %
White wine	2,024	6,234	3,380	5,100	4,744	-7
Red wine	1,455	5,441	2,325	4,295	3,001	-30
Rose wine	1,826	69	49	35	40	14
Total wine	5,305	11,744	5,754	9,429	7,785	-17

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

Below is a figure showing the total wine production, including the production of white, red and rose wine for the period 2017-21. In this figure, changes over the years in wine production can be observed, the year with the highest wine production during this period was 2018, while 2019 is characterized by a rather large decline. In 2020, a significant increase in production is marked, followed again by a decrease in 2021.

Figure 30: Wine production 2017-2021, '000 liters



Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

The following table presents the data on wine production according to the companies for 2021. The company with the most wine production in 2021 is "Stone Castle Vineyards & Winery", followed by the companies "Sunny Hills", "Biopak", "Illyrian Winery and Vineyards", "Bodrumi i vjetër" and other companies shown in the table.

Table 37: Wine production by companies, 2021

No.	Licensed production companies	White wine/hl	Red wine/hl	Rose wine/hl	Total wine/hl	Grapes for distillation/hl
1	"Stone Castle Vineyards&Winery" LLC	15,985	11,031	302	27,317	6,505
2	"Bodrumi i vjeter" LLC	4,636	5,208	40	9,884	-
3	"Sunny Hills" LLC	11,748	4,460	-	16,208	-
4	"Biopak" LLC	6,672	3,261	-	9,933	774
5	"Ilirian Winery and Vineyards" LLC	5,374	-	-	5,374	419
6	"Rahoveci" LLC	52	102	-	154	34
7	NPT "Muja"	665	1,315	-	1,980	5
8	NTP "Daka"	89	202	-	291	10
9	NPT "Bahha"	29	174	-	204	41
10	NTP "Agro-alf"	45	158	-	203	4
11	NTP "Sefa"	80	347	-	428	117
12	"Dea" Sh.p.k	24	53	-	77	3
13	Kosova Wine" LLC	93	360	56	508	16
14	N.P.SH. "Albatros"	-	12	-	12	-
15	N.P.T "Astra - Vera"	-	19	-	19	5
16	NPT "Tradita"	-	81	-	81	-
17	NTP "Rahvera AB"	20	54	-	74	-
18	"Cana Wine" LLC	-	30	-	30	-
19	N.P.T "Raho Wine"	-	31	-	31	5
20	P.T.P "Hoçanska Vina"	-	72	-	72	-
21	"Suhareka Verari" LLC	1,547	2,055	-	3,602	-
22	"Agro Vita" LLC	-	50	-	50	-
23	"Albana Shehu BI"	-	16	-	16	2
24	Noster Fructus" D.O.O.	270	43	-	313	13
25	"Risons" LLC	60	497	-	558	43
26	N.P.T "Rezidenca"	-	40	-	40	63
27	"Samiri-H&A"	51	338	-	388	10
	Total	47,442	30,007	397	77,846	8,067

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

Physico-chemical analysis of wine

In the oenology laboratory during 2021, a total of 554 physico-chemical analyzes were carried out. Of these, 131 were samples for the domestic market, 268 were samples for export, 5 samples for import, 51 for strong alcoholic beverages, 99 analyzes were performed for the needs of the companies and no analysis was requested from the inspectors.

Table 38: Physico-chemical analyses of wine for the period 2017 - 2021

Sample for/from	2017	2018	2019	2020	2021
Domestic market	111	116	128	115	131
Export	183	294	357	273	268
Import	16	-	12	4	5
Strong alcoholic beverages	27	14	6	14	51
Needs of companies	-	43	18	35	99
Inspectors	-	5	0	0	0
Total	337	472	521	441	554

Source: Department of Vineyards and Wine, prepared by DEAAS-MAFRD

2.2.5 Forage crops and green cereals

In the category of fodder crops and cereals harvested green in 2021 there was a very small increase in area, and this increase was in all crops except for the category Other green fodder. In contrast to the area, the production in all cases suffered a decrease, with the exception of green corn cultivated as a second crop. The decrease in production was the result of a decrease in yield, and the biggest decrease in yield was grass with 6.1%, hay 5.9%, clover 5.5% and others with a decrease ranging from 1.7 to 3.9%.

Table 39: Area, production, yield of forage crops and cereals harvested green, 2017-2021

Crops	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area	ha					
Forage and cereals harvested green	105,613	107,099	108,480	108,436	108,560	0.1
Green corn	8,830	7,085	7,082	7,037	7,061	0.4
Green corn (second crop)	379	212	304	205	210	2.6
Hay (meadows)	69,235	70,679	70,679	70,717	70,723	0.0
Grass	8,847	9,200	9,253	9,261	9,293	0.3
Alfalfa	15,747	17,182	18,293	18,329	18,360	0.2
Clover	798	854	901	904	931	2.9
Other green forage	1,776	1,887	1,967	1,984	1,982	-0.1
Production	t					
Forage and cereals harvested green	486,989	480,966	504,406	503,758	481,952	-4.3
Green corn	149,487	109,532	118,504	120,653	118,937	-1.4
Green corn (second crop)	4,057	2,260	4,322	2,851	2,875	0.9
Hay (meadows)	226,288	249,559	249,683	247,921	233,323	-5.9
Grass	26,707	30,786	31,689	30,584	28,819	-5.8
Alfalfa	67,748	73,754	84,257	85,503	82,330	-3.7
Clover	2,620	3,065	3,446	3,652	3,551	-2.8
Other green forage	10,082	12,010	12,506	12,595	12,117	-3.8
Yield	t/ha					
Green corn	16.93	15.46	16.73	17.15	16.84	-1.8
Green corn (second crop)	10.71	10.68	14.21	13.90	13.67	-1.7
Hay (meadows)	3.27	3.53	3.53	3.51	3.30	-5.9
Grass	3.02	3.35	3.42	3.30	3.10	-6.1
Alfalfa	4.30	4.29	4.61	4.66	4.48	-3.9
Clover	3.28	3.59	3.83	4.04	3.82	-5.5
Other green forage	5.68	6.36	6.36	6.35	6.11	-3.7

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

* Other green forage includes: Heath pea, Green Wheat, Green Oats, Green Barley, Green Rye and other green forage (vetch)

2.2.6 Industrial crops

In 2021, the area cultivated with industrial crops decreased by 16.9% compared to 2020. From a total of 885 ha cultivated, 1,022 tons of industrial crops were produced, which is a 24.1% lower production compared to the previous year.

Table 40: Area and production of industrial crops, 2017-2021

	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Area in ha	450	329	402	1,065	885	-16.9
Production in tons	514	392	576	1,347	1,022	-24.1

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

*KAS does not publish data at the level of industrial crops due to the small number of observations and in the survey under industrial crops are included: sunflower, tobacco, soy and aromatic medicinal plants.

2.3 Irrigation of agricultural land

Through formal and non-formal irrigation forms in our country, a total of 19,958 ha were irrigated during 2021. The municipalities with the largest areas under irrigation are Rahoveci, Peja, Prizren, Gjakova and Klina, followed by other municipalities with areas under irrigation below 1,000 ha.

Through formal irrigation organized through irrigation companies, a total of 14,451 ha were irrigated, while through non-formal irrigation, unorganized irrigation and individual irrigation which is done from different water sources such as rivers, wells, etc., 5,506 ha were irrigated.

The reporting of irrigation data is done by all Municipal Directorates of Agriculture in the municipalities of Kosovo, but for the period of 2021 they have not reported data on irrigation, either formal or informal from municipalities such as Leposavic, Zubin Potok, Malisheva, Klllokot, Hani i Elezit, Shterpce, Ranilluk and Partesh.

Table 41: Irrigation of agricultural lands in municipalities for 2021

Municipality	Irrigation source	Irrigated crops	Irrigated area / ha
Deçan	Drini i Bardhë	Maize, fruits, vegetables	470
Gjakova	Radoniqi, rivers, wells	Vegetables, maize, watermelon	2,186
Drenas	Ibër-Lepenci	Vegetables, maize, alfalfa	144
Gjilan	Wells, own	Vegetables, greenhouses, open field	438
Dragash	Water supply	Small fruits	10
Istog	Drini i Bardhe	Maize, fruits, vegetables	166
Kaçanik	Lumenj	Maize, beans, vegetables	415
Klina	Drini i Bardhë	Maize, vegetables, fruits	1,510
F.Kosova	R.Drenica, wells	Maize, alfalfa, vegetables	137
Kamenica	Rivers, wells	Maize, fruits, Vegetables, greenhouse	89
Mitrovica	Ibër-Lepenc	Vegetable, maize	387
Lipjan	Wells, rivers	Fruits, vegetable, maize	26
Obiliq	Ibër-Lepenc	Maize, fruits, vegetables	622
Rahovec	Radoniqi	Vegetables, maize, watermelon	3,446
Peja	Drini i bardhë	Maize, fruits, vegetables	2,685
Podujeva	River Llap, wells	Vegetables, maize, fruits	898
Prishtina	Ibër-Lepenc	Potatoes, maize	152
Prizren	Radoniqi, Dukagjini	Maize, vegetables, forage	2,352
Skenderaj	Rivers, wells	Fruits, vegetables, greenhouses	150
Shtime	Wells, rivers	Vegetables, fruits, alfalfa	260
Suhareka	Rivers, wells	Vegetables, fruits, alfalfa, arable land	940
Ferizaj	Rivers, wells	Fruits, vegetables, maize	357
Vitia	Wells	Watermelon, potatoes	430
Vushtrri	Ibër-Lepenc	Potatoes, cabbage, maize	488
Zveçan	Wells		76
Mamusha	Wells, rivers	Vegetables in greenhouses, maize, alfalfa	451
Junik	Drini i Bardhë	Alfalfa, maize, potatoes	232
Graçanica	Rivers, wells	Maize	442

Source: DAPM - MAFRD

2.4 Livestock

2.4.1 Cattle

The cattle stock in 2021 was 260,528 heads, which is a decrease of 861 heads compared to 2020. As for the age structure, the category under 1 year of age accounted for 32% (42% are females and 58% males), the category of 1 to 2 years 10% (46% are females and 54% are males), and the category over two years old which constitutes 58% of the total cattle stock, and in this category the majority are dairy cows. The categories that have increased are: other cows (17.3%), heifers 1-2 years old (7.4%), male calves under 1 year old (5.6%), bulls over 2 years old (4.8%) and foals 1-2 years old (3.1%), while there was a decrease in the number in the category of female calves under 1 year old (9%), dairy cows (1.4%) and heifers over 2 years old (0.3%). Dairy cows continue to have over 50% share in the total cattle stock, and this share in the last three years is 51%.

Table 42: Cattle stock and structure, 2017-2021

Number of animals	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Cattle stock	259,729	258,662	257,733	261,389	260,528	-0.3
Male calves under 1 year old	43,748	41,911	43,863	45,492	48,047	5.6
Female calves under 1 year old	40,731	41,263	39,263	38,653	35,191	-9.0
Foals 1-2 years old	13,449	14,627	14,852	14,080	14,513	3.1
Heifers 1-2 years old	11,356	12,335	11,297	11,478	12,323	7.4
Bulls over 2 years old	7,082	5,519	6,303	7,113	7,451	4.8
Heifers over 2 years old	9,442	9,635	8,128	8,920	8,890	-0.3
Dairy cows	132,971	132,474	131,939	133,916	132,076	-1.4
Other cows	950	898	2,088	1,737	2,037	17.3

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

The total number of cattle in 2021 was 260,528, which is a decrease of 0.3% compared to 2020. In terms of slaughter, 116,204 heads were slaughtered in 2021, which is 156 heads more than in 2020. The value of the total production was €47.1 mil., while the import value is €75.5 million. With this amount of production, the self-sufficiency rate is 43.9% and the per capita consumption is 25.5 kg.

Table 43: Supply balance for beef, 2017-2021

	Unit	2017	2018	2019	2020	2021
Cattle Stock	heads	259,729	258,662	257,733	261,389	260,528
Dairy cows	heads	132,971	132,474	131,939	133,916	132,076
Total slaughter	heads	115,459	114,149	114,318	116,048	116,204
Total domestic production in p.th.	mil. kg p.th.	19.8	19.5	19.5	19.7	19.8
Total imports	mil. kg p.th.	12.6	15.2	16.6	18.1	25.4
Supply in p.th.	mil. kg p.th.	32.5	34.7	36.1	37.9	45.2
Total exports	mil. kg p.th.	0.00	0.00	0.02	0.05	0.10
Consumption	mil. kg p.th.	32.5	34.7	36.1	37.8	45.1
Production value in p.th.	mil. EUR	41.4	42.5	45.6	44.3	47.1
Total imports	mil. EUR	32.0	40.0	43.9	49.9	75.5
Trade balance	mil. EUR	-32.0	-40.0	-43.8	-49.7	-75.1
Self-sufficiency rate	%	61.1	56.1	54.0	52.2	43.9
Consumption per capita	kg p.th.	18.0	19.3	20.1	21.0	25.5

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS, Foreign Trade Statistics; calculations by DEAAS - MAFRD; p.th – slaughter weight

Dairy cows make up 50.7% of the total number of cattle and in 2021 the number of dairy cows is lower than in 2020 by 1.4%. Of the total amount of domestic use, 79.6% was domestic production and the rest was covered by imports. The trade balance continues to remain negative with a value of €31.7 million. Per capita consumption is estimated to be 171 kg per year or about 0.47 kg per day, which is the amount consumed by one person, including dairy products..

Table 44: Supply balance for cow milk and dairy products, 2017-2021

	Unit	2017	2018	2019	2020	2021
Dairy cows	Heads	132,971	132,474	131,939	133,916	132,076
Milk production	t	277,976	277,599	277,138	281,960	278,746
Imports	t (p.e.)	68,007	70,596	76,139	71,129	72,642
Supply	t (p.e.)	345,983	348,195	353,277	353,089	351,389
Export	t (p.e.)	679	572	866	984	1,018
Domestic use	t (p.e.)	345,303	347,624	352,411	352,105	350,371
Self-sufficiency rate	%	80.5	79.9	78.6	80.1	79.6
Loss	t (p.e.)	5,560	5,552	5,543	5,639	5,575
Consumption for farm calf feed	t (p.e.)	40,862	40,807	40,739	41,448	40,976
Processing	t (p.e.)	26,606	26,848	27,340	27,172	27,090
Human consumption	t (p.e.)	272,276	274,416	278,789	277,846	276,730
Production value	mil EUR	71.8	71.7	73.9	77.5	72.0
Trade balance	mil EUR	-28.5	-30.0	-29.9	-29.4	-31.7
Consumption per capita	kg (p.e)	166	168	172	170	171

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); KAS, Foreign Trade Statistics; calculations by DEAAS - MAFRD; p.e. – product equivalent

2.4.2 Sheep and goats

The sheep and goats stock in 2021 was 241,393 heads, which constituted 43.8% of the total number of animals. The share of sheep is 87.6% and goats 12.4%. In 2021, the total stock of sheep and goats decreased by 0.1%, and divided by group, sheep decreased by 0.4%, while goats increased by 1.6%. Within sheep, sheep for breeding have a share of 74.1%, while within goats, goats for breeding have a share of 74.0%.

Table 45: Number of sheep and goats, 2017-2021

Number of animals	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Sheep and goats	210,688	209,808	216,299	241,688	241,393	-0.1
Sheep	182,278	181,105	189,102	212,131	211,354	-0.4
Sheep for breeding	136,810	139,312	145,248	159,067	156,666	-1.5
Other heads (lamb, rams, etc)	45,468	41,793	43,854	53,064	54,688	3.1
Goats	28,410	28,703	27,197	29,557	30,039	1.6
Goats for breeding	24,836	22,401	20,602	21,907	22,234	1.5
Other heads (kids, he goats, etc)	3,574	6,302	6,595	7,650	7,805	2.0

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

2.4.3 Pigs and other animals

The category of pigs constitutes only 8.6% of the total number of animals. In 2021, the number of pigs in Kosovo increased by 4.4% compared to the previous year, while compared to the average of the previous four years, the increase is 13.4%.

Of the total number of pigs, 28.0% are pigs for fattening, 28.5% sows, 23.0% piglets under 20 kg, 15.7% pigs of 20-50 kg and 4.8% breeding stock. From the category of fattening pigs, most of them weigh 110 kg or more (38.5%), followed by the 80-109 kg group (35.1%) and the 51-79 kg group (26.4%).

In the group of sows, sows that have farrowed have the largest share (56.3%), followed by sows bred for the first time (20.4%), other sows (13.2%) and unbreded sows (10.1%).

The number of horses, donkeys and mules in 2021 is 1,864 heads or 3.3% more than in 2020.

Table 46: Number of pigs and other farm animals, 2017-2021

Number of animals	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Pigs	41,086	40,164	40,533	45,394	47,384	4.4
Horses, donkeys and mules	2,326	1,944	2,037	1,804	1,864	3.3

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

2.4.4 Poultry

In 2021, the total number of poultry increased by 0.2% compared to 2020. While the number of laying hens (94.8% of the number of poultry) in 2021 increased by 2.9%, the number of broilers decreased by 9.9 %. Out of the total number of chickens, the majority are laying hens (75.5%), followed by broilers (13.1%) and the category of birds, roosters and other chickens (11.4%).

The turkeys make up 3.4% of the total number of birds and in 2021 their number increased by 25.2%, while other birds such as ducks and geese have a share of 1.9% in the total number of poultry and their number in 2021 marked a decrease of 25.6%.

Table 47: Number of poultry and eggs 2017-2021, in '000

Number of poultry (1000)	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Poultry	2,811	2,538	2,665	2,782	2,788	0.2
Chicken	2,676	2,393	2,558	2,637	2,643	0.2
Broilers	398	407	321	384	346	-9.9
Laying hens	2,051	1,728	1,947	1,939	1,996	2.9
Chicks, roosters and other chickens	227	259	289	315	301	-4.4
Turkeys	98	88	61	75	94	25.2
Other poultry (Ducks, Geese etc.)	37	56	47	70	52	-25.6
Eggs*	348,998	315,097	366,447	365,554	419,908	14.9

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21); *DEAAS - MAFRD ('17-'21)

In 2021, the total production of eggs is estimated to be 419.9 million eggs. In 2021, 4.4 million eggs were imported in the amount of €429,377. The imported quantity of eggs in 2021 compared to 2020 has increased by 8.7%. Of the total import of eggs, 99% was imported from the following countries: 46.0% from Macedonia, 32.9% from Albania, 12.6% from Slovenia, 6.0% from Bulgaria and 1.7% from Greece. The exported quantity is much smaller than the imported quantity and the whole is exported to Montenegro. In 2021, the average consumption per capita is calculated to be about 239 eggs/year and we can say that Kosovo meets about 99% of egg consumption needs.

In 2021, chicken meat production is estimated to be around 3,007 tonnes. In this year, the import of chicken meat was 40,502 tons with a value of €51.1 million. Of the total amount imported, 33.9% was imported from Brazil, 15.3% from the United Kingdom, 14.0% from the United States of America, 6.5% from Poland, 5.1% from Turkey, 5.0% from Germany and 20.2% from other countries. The average consumption per capita in Kosovo is estimated at 24.5 kg/year and with the current production, Kosovo manages to cover only 6.9% of consumption needs.

2.4.5 Beekeeping

The beekeeping sector in 2021 marked a decrease of 16.6% in the number of hives compared to 2020, while in the previous period '17-'20 it marked a continuous increase. Of the total number of beehives in Kosovo, in 2021 87.9% were subsidized as part of the support through the direct payments program. In the period '17-'20 the average percentage of the share of subsidized beehives in relation to the total number of beehives was 91.4%.

Table 48: Number of bee hives, 2017-2021

Number of bee hives	2017	2018	2019	2020	2021	Difference 2021/2020 in %
Bee hives	163,717	182,476	219,831	262,541	219,077	-16.6

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

In 2021, honey production in Kosovo was about 7.5 kg per hive resulting in a total honey production of 1,634 tons. The import of honey in 2021 was 289 tons, while there was no export at all. Local consumption turns out to be about 1.1 kg per capita and local production meets 85% of consumption needs, while the rest is met by imports. Of the total amount of honey imported, 35.6% was imported from North Macedonia, 18.7% from Turkey, 17.6% from Croatia, 9.8% from Slovenia, 9.1% from Germany and the rest of 9.2% from other countries.

3 Forestry

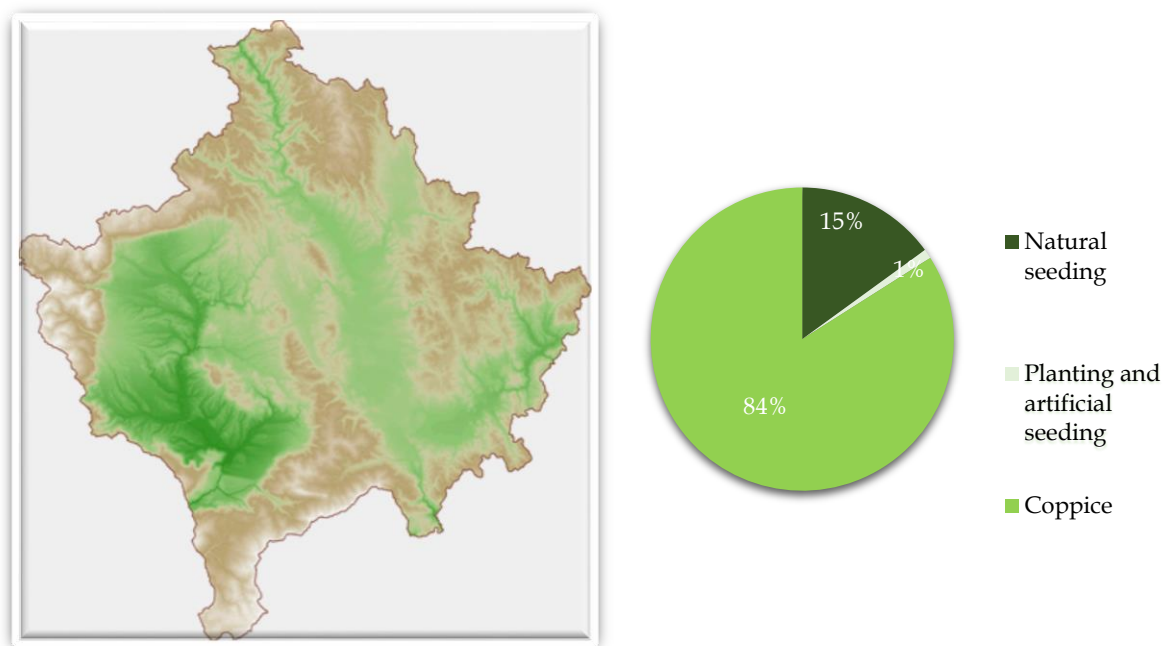
Forests are one of the important resources according to the Constitution of the Republic of Kosovo, while according to Law No. 2003/3 on Forests in Kosovo, they are considered national resources of general interest. Due to climate change, the extreme increase in temperatures, the countries of the European Union have begun to show increased interest in conservation, care and increased vigilance in the sustainable management or use of forests through awareness of the multidimensional function, focusing on multi-purpose services of forests. Therefore, future policies will be focused on this basis in order to preserve, increase and use these resources as rationally as possible through generations.

At the end of 2021, the new strategy for forestry as a sector was approved. This strategy considers environmental challenges in terms of climate change, diversity loss and land degradation based on sustainable forest management. Also, it is based on the EU Forest Strategy of 2021, which aims to maximize the contribution of the forest sector in meeting the goal related to carbon neutrality. It is already known that forests in Kosovo have a considerable potential to contribute greatly to the improvement of the well-being of residents in rural areas by generating jobs and income through the development of activities, therefore protection of forests is a demand of the today's time in order to have sustainable and healthy ecosystems. This Strategy includes five strategic objectives:

1. Improving the condition of forest resources;
2. Protection of forest resources;
3. Sustainable and highly functional use of forest resources;
4. Development of the capacities of the forestry sector;
5. Digitization and improvement of communication;

The statistics of the National Forest Inventory/NFI of 2012 show that in Kosovo forests cover about 45% of the surface area, which are considered a sustainable potential in enhancing the country's development capacities. Public forests cover an area of about 62% of the total forest area, of which 12% have been declared protected areas under the Law on the National Park "Sharri" and "Bjeshkët e Nemuna", while about 38% are considered private forests.

Figure 31: Forest extent map and forests by origin



Source: National Forest Inventory, NFI 2012

Hunting

It is one of the sectors that has stalled and is under development. The giving for management of joint hunting grounds and their management through 10-year and annual long-term management plans is in progress. In fact, this is achieved after the municipalities have managed to establish their own hunting grounds after receiving the consent from the MAFRD, in which case the Municipal Assembly is responsible for issuing the decision on establishment.

Table 49: Consents on establishment, giving for management and MP approval

Name of the hunting area	Status	Municipality	Area/ ha
Establishment			
Sharr	Rejected	Dragash (re-establishment)	10,131.00
Gmica	Rejected	Kamenica (private)	16.00
Podguri	Approved	Peja re-establishment)	13,672.50
Dubock	Approved	Peja (re-establishment)	13,616.50
Giving the hunting area for management			
Kalaja	Rejected	Novobërda	16,000.00
Kriva reka	Rejected	Ranillug	7,761.80
Lojza	Approved	Deçan	11,645.00
10-year long-term management plans			
Bjeshka 2021-2031	Approved	Fushë Kosova	4,725.00
Qyqavica 2021-2031	Rejected	Obiliq	10,482.00
Karadaku	Rejected	Gjilan	8,495.00
Maja e gjelbër	Rejected	Gjilan	16,680.00
Zhegoci	Rejected	Gjilan	15,300.00
Annual management plans			
Bjeshka 2021/2022	Approved	Fushë Kosova	4,725.00
Karadaku 2021/2022	Rejected	Gjilan	8,495.00
Maja e gjelbër 2021/2022	Rejected	Gjilan	16,680.00
Zhegoci 2021/2022	Rejected	Gjilan	15,300.00

Source: Forestry Department

Licensing

The licensing process for the year 2021 has been accompanied by many difficulties due to the COVID 19 Pandemic, which mainly had to do with the restrictions on the movement of the responsible personnel related to the failure to carry out field visits. However, although under restrictive conditions, a total of 64 requests were submitted for the performance of various activities in forests and forest lands such as: cultivation, afforestation -3 requests, sustainable use of forests -19 requests, collection of NWFP- 19 requests and primary sawnwood processing -23 requests.

Licensing activities have been followed by the Forestry Department Commission, through the review of requests, field visits to entities, and the development of the procedure for issuing licenses, and the data on the number of licenses issued are presented in the following table.

Table 50: Licenses issued

License name	No. of issued licenses	
	New	Extension
For sustainable forest use	2	15
For collection of non-wood products (wild fruits)	2	15
For wood processing	5	10
Afforestation	2	0
For designs in the field of forestry	0	0
Total	11	40

Source: Forestry Department

Forest Management

Forest management in Kosovo is done pursuant to Law No. 2003/3 on Forests of Kosovo amended and supplemented by Law No. 03/L-153, regulations, a multitude of sub-legal acts, norms, standards and professional guidelines. In addition to these documents, the management, use and treatment of forests is carried out on the basis of forest planning for the Forest Management Unit/FMU.

According to the report of the Forestry Agency, so far over 80% of management plans have been drawn up by 84 evident forest management units. The Kosovo Forestry Agency/FAK during the year 2021 has not developed activities for the drafting of the MP, even though it was planned to carry out their drafting on an area of about 28,624 ha, which as a result of budget cuts, carrying out activities with reduced staff due to the COVID19 pandemic, delays in the development of procedures, has influenced the cancellation of all procedures for drafting these MPs.

State forests

The gross volume foreseen by the logging plan in the state forests for the year 2021 was 67,972 m³, of which the net volume was 63,680 m³ and forestry residues 4,292 m³

Table 51: Logging plan in state forests

Assortment	Volume m ³
Technical wood	8,481
Fire wood	55,199
Net volume	63,680
Forestry residues	4,292
Gross volume	67,972

Source: KFA

In 2021, it was managed to fulfill only 40% of the logging plan or 27,221 m³ of planned wood material through logging during the treatment of forest stands in state forests.

Table 52: Implementation of the logging plan in state forests

Assortment	Plan m ³	Implementation m ³	Implementation of plan %
Technical wood	8,481	4,322	51
Fire wood	55,199	22,542	41
Forestry residue	4,292	357	8
Total	67,972	27,221	40

Source: KFA

The National Forest Inventory Report (2012) shows that the average annual cutting in these forests is around 619,000 m³. In the concrete case for the year 2021, it is shown that only 11% of this average has managed to be planned, while about 4.4% of this average has been managed to be implemented.

Private forests

The plan for private forests foresees the implementation of activities in the establishment of new forests with afforestation of 59 ha, the cultivation of forests in about 2,779 ha, the acceptance of requests for forest treatment (4,235 requests) submitted by forest owners and the cutting of a wood volume of about 192,290 m³ in order to fulfill their needs for fire wood and industry wood.

Table 53: Plan in the cultivation and use of private forests and technical-professional works

Plan in the cultivation and use of private forests	Unit	Total
Establishment of new forests - afforestation	ha	59
Forest renewal - reclamation	ha	14
Forest cultivation	ha	2,779
Forest use	ha	4,240
Technical-professional works		
Requests submitted	pieces	4,235
Logging planning in private forests	m ³	192,290
Fire wood	m ³	182,270
Technical wood	m ³	10,020

Source: KFA

Activities in private forests have been marked by engaging in the fulfillment of the plan for 2021, through the implementation of the requests submitted by the forest owners. The afforestation plan was implemented in cooperation with the Association of Private Forest Owners of Kosovo/APFOK.

Table 54: Data on the use of private forests

Directorate	Plan m ³	Implementation m ³	Implementation of plant %
Prishtina	43,450	21,881	50
Mitrovica	83,850	49,509	59
Peja	4,580	3,758	82
Prizren	3,960	2,530	64
Ferizaj	10,900	5,220	48
Gjilan	44,800	57,396	128
Blinaje/MKFE	750	295	39
Total	192,290	140,589	73

Source: KFA

Referring to these data, it is shown that in private forests, the implementation of the plan has been significantly more stable as a result of the engagement of the forest owners, the requests submitted and their needs for the supply of wood for heating and processing. The above table shows that about 140,589 m³ or 73% of the planned wood volume were harvested.

The average annual cut in private forests for broadleaves and coniferous trees is around 338,000 m³ per year (NFI 2012). The analyzes show that for the year 2021, about 56.9% of this

annual average is planned to be harvested, while about 41.6% of it has been achieved in meeting the needs with wood assortments.

Forest protection

Forest protection activities are mainly focused on the protection of forests from the human factor through irregular logging. The municipal authorities have carried out a multitude of activities in the protection of forests and the fight against informality in forests. Here we can mention the engagement through monitoring, surveying forests, inspecting markets, roads, warehouses, collection sites, confiscations, etc. It has been reported that about 2,592 criminal and misdemeanor reports have been filed, of which 441 criminal reports and 2,151 misdemeanor summonses. The amount of wood material reported as forest damage is estimated to be around 5,549.82 m³ worth around €743,769.53. It is established that during the last year, 1,524.26 m³ of timber were confiscated, of which 464.72 m³ were sold, while the stocks carried over from the previous year amount to 2,350.65 m³.

Table 55: Reports or summonses, 2021

Reports	Piece	m ³	Amount in €
Misdemeanour summonses	2,151	3,610	479,276
Criminal reports	441	1,940	264,520
Total	2,592	5,550	743,796

Source: KFA

Below is presented the state of the timber stocks confiscated during 2021 and their existing state after the sale and distribution of the timber assortments by the municipalities.

Table 56: Confiscation of wood material

Timber	m ³
Stocks from 2020	1,460
The amount of wood confiscated in 2021	1,524
Quantity sold	465
Distribution/Memorandum of Cooperation	169
Current state of stocks	2,350

Source: KFA

Forest fires

Protecting forests from fires, especially in the period when drought prevails, represents the biggest challenge for our institutions that deal with the management of forests and forest lands, but it is also a challenge for emergency institutions. Statistics show that the vast majority of fires are caused by the human factor, while other abiotic causes are rare.

During the summer drought period of 2021, the number of cases and the forest areas affected by forest fires has marked a continuous increase. This is due to high temperatures and the carelessness of people, as well as activities in the cleaning of agricultural lands. In 2021, 87

cases of fires in public and private forests were recorded, which involved a forest area of about 2,653 ha.

Table 57: Number of forest fire cases and area, 2021

Regions	No.of cases	Area (ha)		Total (ha)
		Public	Private	
Prishtinë	20	62	59	121
Mitrovica	9	1,777	367	2,143
Peja	2	6	0	6
Prizren	37	91	116	208
Ferizaj	9	83	2	84
Gjilan	10	61	29	91
Total	87	2,080	573	2,653

Source: KFA

Production of forest seedlings

The nursery of the Institute of Peja for the year 2021, in addition to the forest health monitoring through bioindicative points, has also dealt with the cultivation of forest seedlings. Seedlings produced in nurseries are mainly used for afforestation and reforestation in forests and forest lands aged 2+0. About 1,289,975 forest seedlings were produced in this nursery for 2021.

Table 58: Production of seedlings, 2021

Type	Cultivation	No. of seedlings
Coniferous	Classic	634,582
Coniferous	Industrial	495,000
Broadleaf	Classic	102,000
Broadleaf	Industrial	58,393
Total		1,289,975

Source: KFA

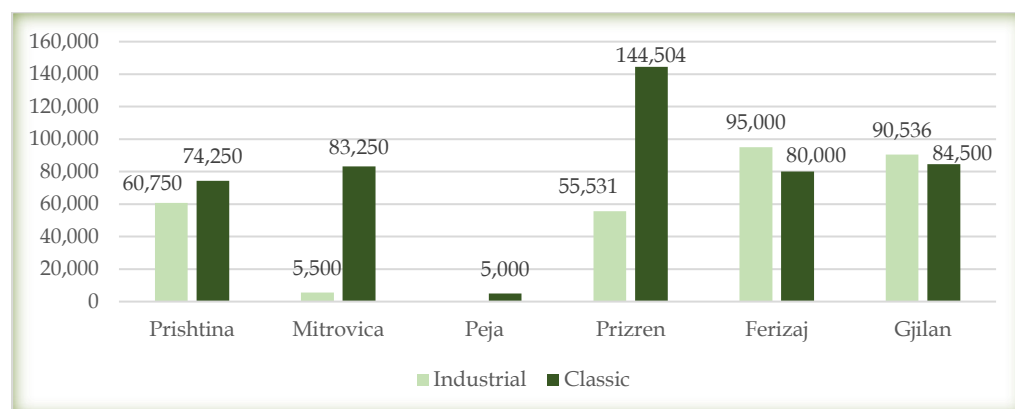
Afforestation

The afforestation of forest lands is very important in order to increase the quality of the forests, regulate the composition, increase sustainability in terms of health, etc. In the framework of this objective with the 2021 Annual Forest Management Plan, autumn afforestation based on the seedling production program has been carried out. These activities are mainly carried out for the provision of afforestation services through the contracting of licensed enterprises in the implementation of projects in the afforestation of about 309.30 ha.

Table 59: Autumn afforestation, 2021

Seedlings	Prishtina	Mitrovica	Peja	Prizren	Ferizaj	Gjilan	Total	%
Industrial	60,750	5,500	0	55,531	95,000	90,536	307,317	39
Classic	74,250	83,250	5,000	144,504	80,000	84,500	471,504	61
Total	135,000	88,750	5,000	200,035	175,000	175,036	778,821	100

Source: KFA

Figure 32: Seedlings used for autumn afforestation, 2021

Source: KFA

4 Trade³

4.1 Overall trade

The trade exchange of Kosovo for the period 2017-2019 has been approximate in value. In 2021, the total export (chapters 01-98) marks a value of €749.7 million, which is a 57.8% increase compared to 2020. The import value in the period 2017-2020 was over €3 billion, while in 2021 it has increased to over €4.5 billion, which represents an increase in 2021 compared to 2020 of 41.2%. Coverage of Import with Export is 16.1%.

Table 60: General Exports-Imports

Year	Exports (1-98), in '000 €	Imports (1-98), in '000 €	Trade balance, in '000 €	Import coverage with Export (%)
	1	2	3=1-2	4=1/2
2017	378,010	3,047,018	-2,669,007	12.4
2018	367,500	3,347,007	-2,979,507	11.0
2019	383,491	3,496,431	-3,112,940	11.0
2020	474,959	3,296,323	-2,821,364	14.4
2021	749,720	4,653,050	-3,903,330	16.1

Source: KAS, prepared by DEAAS-MAFRD

4.2 Trade of agricultural products

The export value of agricultural products in 2021 was €92.6 million, which is an increase of 18.7% compared to 2020. In 2021, the import value of agricultural products was €965.6 million, which represents an increase of 26.2% compared to 2020.

Table 61: Export-Import of agricultural products

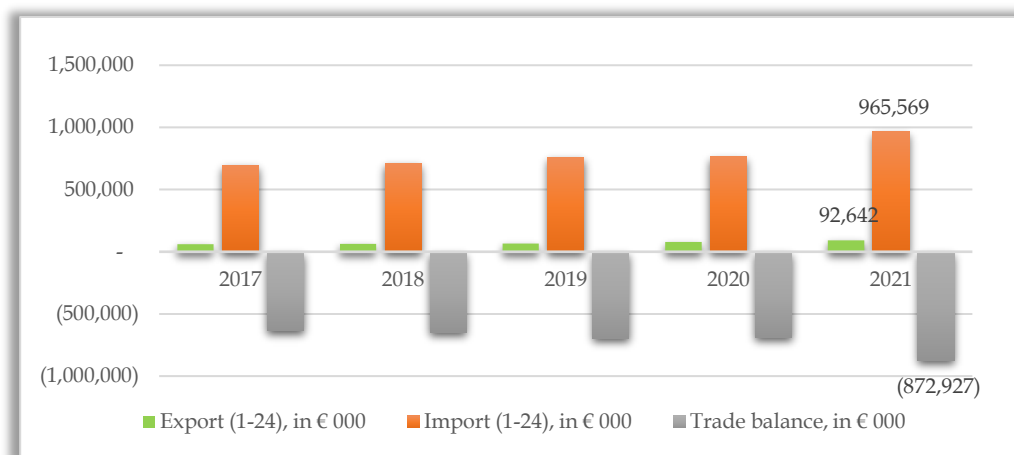
Year	Exports (1-24), in '000 €	Imports (1-24), in '000 €	Trade balance, in '000 €	Import coverage with Export (%)
	1	2	3=1-2	4=1/2
2017	61,336	694,517	-633,180	8.8
2018	63,950	712,314	-648,364	9.0
2019	65,510	759,359	-693,849	8.6
2020	78,076	765,357	-687,281	10.2
2021	92,642	965,569	-872,927	9.6

Source: KAS, prepared by DEAAS-MAFRD

The trade balance continues to be negative as in other years, in this case in 2021 the negative balance stands at €872.9 million, while the coverage of import with export is at 9.6%.

³ Trade data for 2021 are preliminary data.

Figure 33: Export, Import and Trade Balance of agricultural products (1-24), in '000



Source: KAS, prepared by DEAAS-MAFRD

The largest share of the export of agricultural products (01-24) in the total export (1-98) was in 2018 and 2019 with 17%. The share of the export of agricultural products in the total export in 2021 is 12%.

The lowest share of the import of agricultural products in the total import was in 2018 and 2021 with a share of 21%, while the highest share was in 2017 and in 2020 with 23%.

Figure 34: Share of agricultural products in total exports (left), Share of agricultural products in total imports (right)



Source: KAS, prepared by DEAAS-MAFRD

4.2.1 Trade by country groups

The export of agricultural products in 2021 reached a value of €92.6 million, of which €51.6 mil. are from CEFTA countries, €31.7 million from EU countries and €9.3 mil. from other countries. The largest import value was from EU countries (€467.0 million), followed by CEFTA countries (€266.6 million) and other countries €232.0 million. According to the data presented above, it appears that in 2021 the trade balance was negative in the amount of €872.9 million.

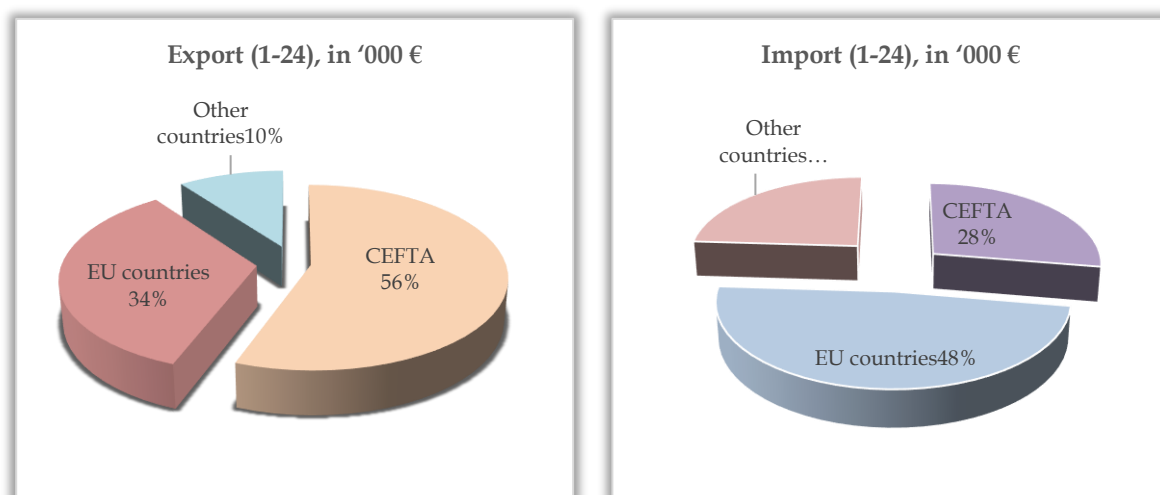
Table 62: Export-Import of agricultural products by groups of countries, 2021 in mil. €

	CEFTA	EU countries	Other countries	Total
Export (1-24), in '000 €	51.6	31.7	9.3	92.6
Import (1-24), in '000 €	266.6	467.0	232.0	965.6
Trade balance, in '000 €	-215.0	-435.3	-222.6	-872.9
Export/Share in %	55.7	34.2	10.1	100.0
Import/Share in %	27.6	48.4	24.0	100.0
Import coverage with export (%)	19.4	6.8	4.0	9.6

Source: KAS, prepared by DEAAS-MAFRD

The following two figures show the share of export and import according to groups of countries in 2021. The largest export value was marked to the CEFTA countries with a share of 55.7%, the EU countries 34.2% and other countries with 10.1%. The largest import was from EU countries with a share of 48.4%, from CEFTA countries 27.6% and other countries 24.0%.

Figure 35: Export by country group (left), Import by country group (right), 2021 in %



Source: KAS, prepared by DEAAS-MAFRD

Trade with CEFTA countries

The value of exports to the CEFTA countries has marked a slight increase for the period 2017-2020 and in 2021 reached the value of €51.6 million, which in contrast to 2021 is an increase of

25.4%. The import in 2021 was €266.6 mil., where there was an increase compared to 2020 of 45.4%. The coverage of import with export is 19.4%.

Table 63: Export-Import of agricultural products with CEFTA countries

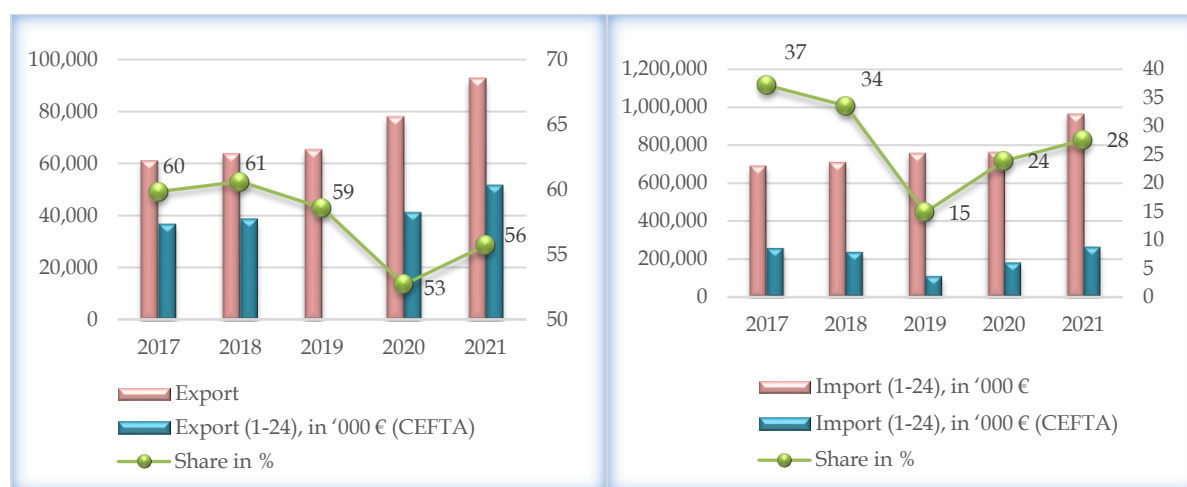
Year	Export (1-24), in '000 €	Import (1-24), in '000 €	Trade balance, in '000 €	Import Coverage with Export (%)
	1	2	3=1-2	4=1/2
2017	36,697	258,444	-221,747	14.2
2018	38,762	239,244	-200,482	16.2
2019	38,386	113,072	-74,686	33.9
2020	41,135	183,381	-142,246	22.4
2021	51,594	266,571	-214,977	19.4

Source: KAS, prepared by DEAAS-MAFRD

The largest share of export to CEFTA countries appears in 2018 with 60.6%, while the smallest share of export of agricultural products is marked in 2020 (52.7%).

Imports from CEFTA countries had the largest share in 2017 with 37.2%, while the smallest share was in 2019 with 14.9%, which turns out to be the smallest share of imports for these years from CEFTA countries. In 2021, this share has increased to a rate of 27.6%.

Figure 36: CEFTA share in agricultural export (left), CEFTA share in agricultural import (right)



Source: KAS, prepared by DEAAS-MAFRD

The value of the export of agricultural products to the CEFTA countries in 2021 shows an increase of 25.4% compared to 2020. There was an increase in export to Serbia of 48.3%, Montenegro with an increase of 42.3%, North Macedonia 32.1%, B. Herzegovina 16.1% and Albania 15.9%.

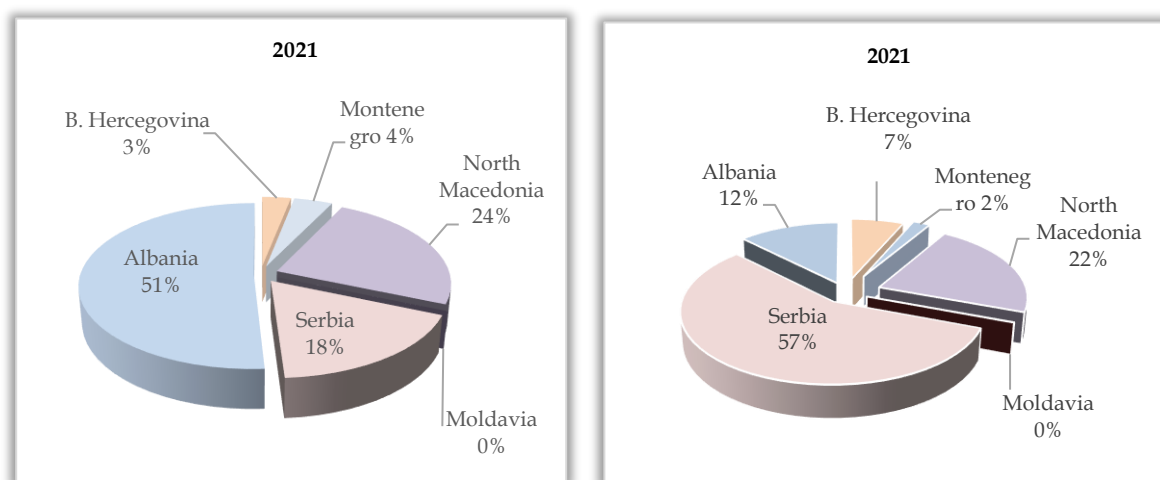
The value of the import of agricultural products from the CEFTA countries in 2021 compared to 2020, has increased by 45.4%. Import from Serbia had an increase of 89.3%, B. Herzegovina 85.1%, followed by Montenegro by 26.2% and Albania 18.7%. There was a decrease in the value of imports from North Macedonia by 4.1% and Moldova by 55.9%.

Table 64: Export-Import of agricultural products to/from CEFTA countries, in '000 €

Countries	Export			Import		
	2020	2021	Difference '21/'20, (%)	2020	2021	Difference '21/'20, (%)
B. Hercegovina	1,373	1,593	16.0	9,363	17,325	85.0
Montenegro	1,504	2,140	42.3	4,484	5,657	26.2
Macedonia	9,428	12,452	32.1	61,207	58,715	-4.1
R. of Moldova	0	3	0.0	324	143	-58.2
Serbia	6,149	9,117	48.3	80,129	151,668	89.3
Albania	22,680	26,289	15.9	27,857	33,062	18.7
Total	41,135	51,594	25.4	183,381	266,571	45.4

Source: KAS, prepared by DEAAS-MAFRD

Albania has the highest share in the export to the CEFTA countries with 51.0%, followed by North Macedonia 24.1%, Serbia 17.7%, B. Herzegovina 3.1% and Montenegro 4.1%. The largest share in the value of the import of agricultural products is occupied by Serbia (56.9%), North Macedonia (22.0%), Albania (12.4%), B. Herzegovina (6.5%), Montenegro (2.1%), and Moldova (0.1%).

Figure 37: Exports according to CEFTA countries (left), Imports according to CEFTA countries (right), 2020

Source: KAS, prepared by DEAAS-MAFRD

Trade with the EU countries

From 2017, an increase in exports to EU countries is observed, and this increase has continued in 2021, where the export value of €31.7 million was reached, which is the highest export value to EU countries, with an increase of 8.0% compared to 2020.

In 2021, the value of imports from EU countries was €467.0 million, where there is an increase in the value of imports compared to 2020 of 15.4%.

Table 65: Export-Import of agricultural products with EU countries

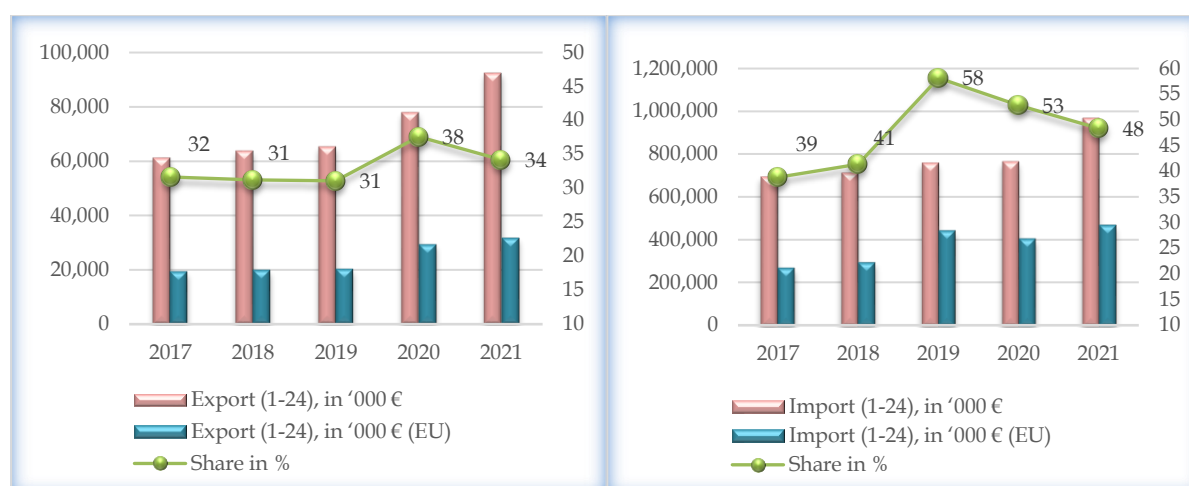
Year	Export (1-24), in '000 €	Import (1-24), in '000 €	Trade balance, in '000 €	Import coverage with Export (%)
	1	2	3=1-2	4=1/2
2017	19,419	269,662	-250,243	7.2
2018	19,987	294,748	-274,761	6.8
2019	20,377	441,580	-421,203	4.6
2020	29,360	404,641	-375,282	7.3
2021	31,711	466,997	-435,286	6.8

Source: KAS, prepared by DEAAS-MAFRD

* Trade data for the period 2017-2021 is for 27 countries and differs from other years as it is presented without Great Britain after Brexit from the EU in 2020

The largest share of export to EU countries in the total export for chapters 01-24 was in 2020 (37.6%), while the share on a similar scale or 31% was in the period 2017-2019. In 2021, this share was 34.2%.

The highest share of imports from EU countries in the total import for chapters 01-24 was in 2019 (58.2%), while the lowest was in 2017 (38.8%). In 2021, this share is at 48.4%.

Figure 38: EU share in agricultural exports (left), EU share in agricultural imports (right)

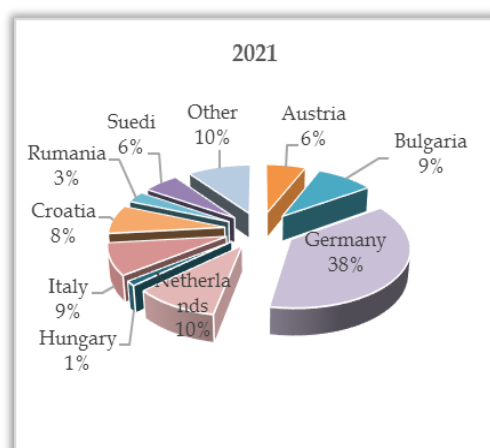
Source: KAS, prepared by DEAAS-MAFRD

* Trade data for the period 2017-2021 is for 27 countries and differs from other years as it is presented without Great Britain after Brexit from the EU in 2020

Increase in export value in 2021 compared to 2020 is mostly observed to countries such as: Austria by 46.1%, Croatia 28.5%, Netherlands 27.0%, Hungary 20.4%, as well as other countries that had smaller changes. There was a decrease in the value of exports to Romania by 19.2% and Italy by 11.7%.

Table 66: Exports by EU countries in '000 € (left) and Exports by EU countries in % (right)

	2020	2021	Ndryshimi '21/'20, (%)	Pjesëmarrja në %
Austria	1,363	1,992	46.1	6.3
Bulgaria	2,758	2,923	6.0	9.2
Germany	11,603	11,910	2.6	37.6
Netherlands	2,557	3,248	27.0	10.2
Hungary	335	403	20.4	1.3
Italy	3,140	2,772	-11.7	8.7
Croatia	1,953	2,510	28.5	7.9
Romania	1,178	952	-19.2	3.0
Sweden	1,653	1,803	9.1	5.7
Others	2,821	3,198	13.4	10.1
Total EU 27	29,360	31,711	8.0	100.0



Source: KAS, prepared by DEAAS-MAFRD

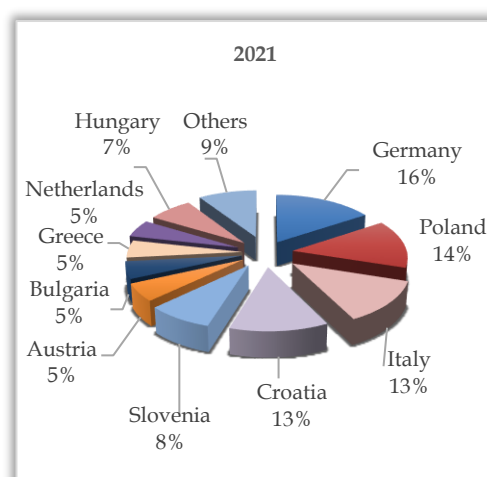
In 2021, the countries presented in the table make up 89.9% of the export value of agricultural products in the EU, while other EU countries had a share in the export value of 10.1%, as can be seen in the figure above : Germany had a share of 37.6%, the Netherlands 10.2%, Bulgaria 9.2% as well as the other countries presented in this figure.

The countries shown in the table below account for 90.73% of the value of the import of agricultural products from EU countries and the rest of the import of 9.27% comes from other EU countries. The largest percentage of the increase in the value of imports in 2021 compared to 2020 appears in these countries: the Netherlands had an increase of 46%, Germany 31% and Italy 22%. There was a decrease in value of 34% of the import from Bulgaria as well as from other EU countries by 1%.

Table 67: Import according to EU countries, in '000 €

	2020	2021	Difference '21/'20, (%)	Share in %
Germany	56,248	73,460	31	16
Poland	52,199	66,288	27	14
Italy	48,245	58,679	22	13
Croatia	50,313	57,522	14	12
Slovenia	34,295	38,207	11	8
Austria	19,628	24,766	26	5
Bulgaria	36,033	23,805	-34	5
Greece	18,819	23,805	26	5
Netherlands	16,268	23,770	46	5
Hungary	28,869	33,415	16	7
Others	43,723	43,282	-1	9
Total EU 27	404,641	466,997	15	100

Source: KAS, prepared by DEAAS-MAFRD



The above figure shows the countries and their share in the import that Kosovo had from EU countries in 2021, where we can notice that Germany had the largest share of all EU countries at 16 %, Poland 14%, Croatia and Italy with a share of 13% and other countries as in the figure.

Trade with third countries

Kosovo in 2021 had trade exchange for agricultural products from third countries as well. Looking at the trend of export and import from these countries, it is observed that Kosovo has an increase in import and a slight increase in export from year to year. In 2021, the export to other countries was €9.3 million and increased by 23.2% compared to 2020.

Table 68: Imports and Imports from Third Countries

Year	Export (1-24), in '000 €	Import (1-24), in '000 €	Trade balance, in '000 €	Import coverage with Export (%)
	1	2	3=1-2	4=1/2
2017	5,220	166,411	-161,191	3.1
2018	5,202	178,322	-173,121	2.9
2019	6,747	204,707	-197,960	3.3
2020	7,581	177,334	-169,753	4.3
2021	9,337	232,001	-222,663	4.0

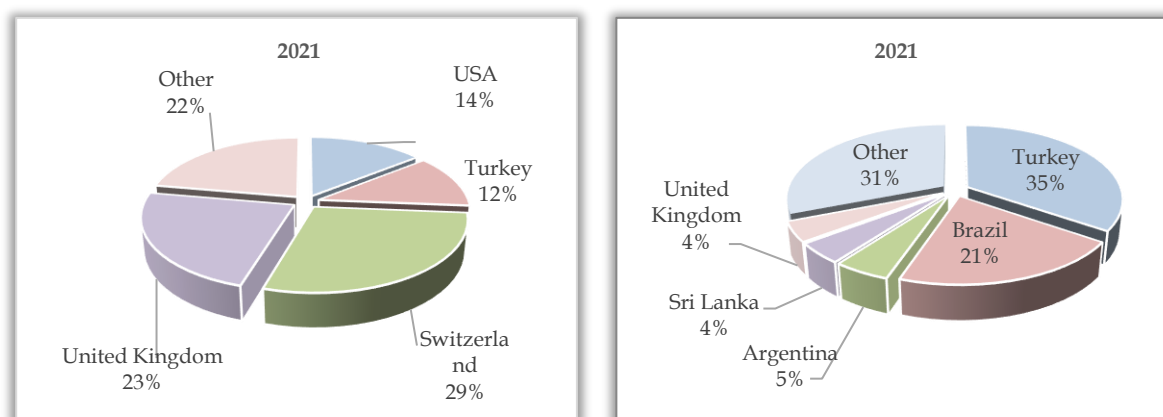
Source: KAS, prepared by DEAAAS-MAFRD

* Trade data for the period 2017-2021 is for 27 countries and differs from other years as it is presented without Great Britain after Brexit from the EU in 2020

The export of agricultural products in 2021 to Third Countries reached €9.3 million. The countries with the largest export share in this group of countries were: Switzerland 29%, the United Kingdom 23%, Turkey 12% and the USA with 14%, and others with a share of 22%.

The import of agricultural products from Third Countries in 2021 stood at €232.0 million, which compared to 2020, has increased by 30.8%. The countries with the largest share are: Turkey with 35%, followed by Brazil 21%, Argentina 5%, Sri Lanka 4%, the United Kingdom 4% and other countries from this group of countries that had a share of 31%.

Figure 39: Exports to Third Countries, (left) and Imports from Third Countries, in % (right)



Source: KAS, prepared by DEAAAS-MAFRD

4.2.2 Export-Import of agricultural products by chapters (1-24)

Export of agricultural products by chapters (1-24)

The export of agricultural products for chapters 01-24 in 2021 was €92.6 million, and unlike 2020 there was an increase of 18.7%. Chapters 05, 24, 16, 03, 02 and 21 had the biggest positive change in the export value in 2021 compared to 2020. The chapters that recorded a decrease in the export value are: 07, 06, 12 and 10. Other unspecified chapters had growth below 100%.

Table 69: Export of agricultural products 2017-2021, in '000 €

Code	Description	2017	2018	2019	2020	2021
01	Live animals	-	17	-	-	0
02	Meat and edible meat offal	183	127	333	337	654
03	Fish and crustaceans, molluscs and other aquatic invertebr. animals	172	110	106	111	216
04	Dairy products; eggs; natural honey; edible products of animal origin	492	471	758	841	1,211
05	Products of animal origin, not elsewhere specified or included	-	-	134	4	118
06	Trees and other plants; tubers, roots and the like; cut flowers and ornamental foliage	165	226	1,170	1,641	1,468
07	Edible vegetables and some types of roots and tubers	4,899	5,636	5,307	8,869	6,415
08	Edible fruits and nuts; peel of citrus fruits or watermelon and melon peel	8,616	8,781	7,675	9,681	11,391
09	Coffee, tea, mate and spices	3,677	3,971	4,319	5,890	6,147
10	Cereals	262	386	118	513	505
11	Products of the milling industry; malt; starches; inulin; wheat gluten	4,254	2,411	913	1,133	1,872
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruits; industrial or medicinal plants; straw and fodder	1,558	2,414	3,481	4,064	3,648
13	Lac; gums, resins, and other vegetable saps and extracts	-	-	0	-	-
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	-	1	5	-	8
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; plant or animal waxes	179	343	1,363	1,433	1,695
16	Preparations of meat, of fish or crustaceans, molluscs or other aquatic invertebrates	618	776	872	1,817	4,037
17	Sugars and sugar confectionery	652	712	696	846	990
18	Cocoa and cocoa preparations	1,909	1,763	1,821	1,449	1,987
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	1,925	1,893	1,785	1,667	2,130
20	Preparations of vegetables, fruits, nuts or other parts of plants	6,171	4,507	4,556	6,378	8,798
21	Miscellaneous edible preparations	352	612	601	638	1,229
22	Beverages, spirits and vinegar	24,194	27,565	28,666	29,667	36,638
23	Residues and waste from food industries; prepared animal fodder	1,060	1,228	709	1,093	1,452
24	Tobacco and manufactured tobacco substitutes	-	-	122	5	32
Total (01-24)		61,336	63,950	65,510	78,076	92,642

Source: KAS, prepared by DEAAS-MAFRD

Import of agricultural products by chapters (01-24)

The total import of agricultural products for chapters 01-24 in 2021 was worth €965.6 million, which compared to 2020 had an increase of 26.2%. There was a 8% decrease in the value of imports in the products of chapter 10 (cereals) as well as chapter 11 (Products of the milling industry, malt, starches, inulin, wheat gluten), which had a decrease of 23%. In all other chapters there was an increase in the value of imports.

Table 70: Import of agricultural products 2017-2021, in '000 €

Code	Description	2017	2018	2019	2020	2021
01	Live animals	10,873	15,502	19,673	30,236	49,285
02	Meat and edible meat offal	61,986	64,878	74,391	60,824	82,618
03	Fish and crustaceans, molluscs and other aquatic invertebr. animals	2,640	2,999	3,603	4,236	5,227
04	Dairy products; eggs; natural honey; edible products of animal origin	45,069	47,672	49,793	50,800	58,504
05	Products of animal origin, not elsewhere specified or included	915	986	1,313	1,098	1,745
06	Trees and other plants; tubers, roots and the like; cut flowers and ornamental foliage	4,847	4,566	4,813	5,926	6,757
07	Edible vegetables and some types of roots and tubers	22,934	24,742	28,171	24,957	31,150
08	Edible fruits and nuts; peel of citrus fruits or watermelon and melon peel	35,069	34,415	36,464	39,185	43,365
09	Coffee, tea, mate and spices	33,629	31,163	30,051	27,839	32,053
10	Cereals	31,697	36,434	39,275	41,893	38,645
11	Products of the milling industry; malt; starches; inulin; wheat gluten	10,822	9,187	10,559	13,689	10,588
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruits; industrial or medicinal plants; straw and fodder	9,409	10,703	10,434	9,852	11,195
13	Lac; gums, resins, and other vegetable saps and extracts	368	534	447	386	405
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	7	10	8	14	31
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; plant or animal waxes	28,362	27,930	30,054	32,135	41,398
16	Preparations of meat, of fish or crustaceans, molluscs or other aquatic invertebrates	27,338	26,677	29,853	31,754	36,631
17	Sugars and sugar confectionery	35,568	28,296	30,377	30,795	38,063
18	Cocoa and cocoa preparations	23,485	23,888	24,648	25,509	30,221
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	62,925	64,618	66,239	69,975	88,803
20	Preparations of vegetables, fruits, nuts or other parts of plants	26,373	27,321	28,847	28,130	36,892
21	Miscellaneous edible preparations	64,124	68,105	74,635	75,852	90,955
22	Beverages, spirits and vinegar	75,220	77,152	80,667	76,266	115,123
23	Residues and waste from food industries; prepared animal fodder	18,736	19,688	16,251	20,903	29,391
24	Tobacco and manufactured tobacco substitutes	62,122	64,848	68,793	63,101	86,522
Total (1-24)		694,517	712,314	759,359	765,357	965,569

Source: KAS, prepared by DEAAS-MAFRD

5 Food safety, standards and quality

The Directorate of Public Health and Animal Welfare - Animal Health Sector (AHS) has carried out the following activities: Epizootiological situation regarding the presence of animal diseases for bird flu and other diseases has been monitored based on the information and reports of OIE and ADIS. The distribution, monitoring and implementation of animal vaccination programs in the field has been done. In 2021, 18,492 tests for TB disease were carried out throughout the territory of Kosovo, as well as other activities that are shown in the following Table:

Table 71: Distribution of vaccines according to animal diseases

Name	Animal disease				
Type of vaccination	Brucellosis	Rabies	MKD/CSF	Anthrax	Vaccination Rabies wild animals from the air
Name of vaccine	Ocurev/Rev1	Biocan/Bioveta	Pestisen /Bioveta	Romvac	Biocan/Bioveta
Amount of vaccine dispensed	90,000 doses	19,000 doses	20,500 doses	0	500,000 bait vaccines by air and 250 vaccines by hand
Type of vaccinated animals	Sheep & goats	Dogs	Pigs	Cattle, Sheep, goats	Wild animals foxes
Number of vaccinated animals	57,887	14,200	7,337	0	500,000 bait vaccines

Source: FVA

Table 72: Taking blood samples for laboratory analysis

Name of laboratory tests	Type of animals	No. of samples taken
Pathological analyses	Cattle, sheep, goats, poultry	43
Serological analyses, suspicion of animal disease in the field	Cattle, sheep, goats	364
Quarantine	Cattle	222
Analysis for New castle	Chickens	74
Analysis for Avian Influenza	Chickens	106
Bacteriological analyses	Bees, other animals	25
Analysis Rabies	Fox	2
ASF analyses	Wild pigs	4
American pest	Bees	405
PNMSK - Brucellosis, IBR, BVD Bluetongue	Cattle, sheep, goats	5,796

Source: FVA

Table 73: Extermination of animals according to infectious diseases and the amount of compensation to farmers

Name of disease	Type of animal	Exterminated/heads	Farmer compensation/ €
Brucela abortus	Cattle	66	99,000
Brucellosis	Sheep	32	3,200
TBC	Cattle	121	181,500
American pest	Bees	73	7,300
Bird flu	Chicken	80,304	240,912

Source: FVA

Table 74: Issuance of import permits

Type of import permit	Total
Import of live animals for slaughter	313
Import of animal feed	205
Import of genetic material	11
Import of cattle for reproduction	13
Import of day-old birds	46
Import of pigs for slaughter	5
Import of pigs for reproduction / fattening	1
Import of bees	1
Import of horses for recreation	1
Import of calves for fattening	15
Total	613

Source: FVA

Table 75: Licensing of business entities

No.	Type of licence	Total
1	Licensing of veterinary clinics, extension of licenses	15
2	Licensing of leather depots	1

Source: FVA

From the Sector of the Border Veterinary Inspectorate, 333 samples were taken to test imported products in parameters according to the plan of official controls regarding microbiological, physico-chemical analysis, determination of heavy metals, sample for radiological analysis, sample for aflatoxin testing and other analyzes that are shown in the following table.

Table 76: Analyzes for testing imported products and No. of samples

Type of analysis required	Number of samples
Microbiological analysis	135
Physico-chemical analysis	97
Determination of heavy metals	3
Sample for radiological analysis	1
Sample for aflatoxin testing	28
Histamine	20
Determination of the presence of milk powder in UHT	22
Undeclared presence of vegetable fat	24
Determining authenticity	3
Total	333

Source: FVA

During the reporting period, **the Border Phytosanitary Sector** has carried out inspection checks which were carried out based on the National Annual Plan of Official Controls 2021, activities according to the cases identified in the meantime, receiving information from the Joint Intelligence Unit, Risk and Threat Analysis, receiving notifications and traceability of cases within RASFF (Rapid Alert System for Food and Feed).

Table 77: Table of activities of the Border Phytosanitary Sector

			Import			Analysis			Rejected				
No. of Cases-Imports	Import permit for cigarettes and tobacco	Europellets piece	T/L	Wood mass / m ³	Plant / piece	No. of cases under analysis	Negative res.	Positive res.	No. of rejected cases	T/L	Wood mass / m ³	Plant / piece	No. of transit cases
45,209	33	22,646	1,242,725	497,523	6,142,815	1,687			32	521		4,950	3,840

Source: FVA

The directorate of the food and veterinary laboratory has carried out activities which are presented in the following table:

Table 78: Taking samples and sending them to the Laboratory

Tested samples - parameters according to quarters Q1-Q4 (January-December) 2021				
Analyzed parameters	No. of samples			
	Q1-2021	Q2-2021	Q3-2021	Q4-2021
Phytopathological analysis	87	46	59	98
Entomological analysis	12	31	23	4
Physico-chemical analysis	241	229	279	306
Microbiological analysis	9	22	11	15
Analysis of heavy metals	11	16	22	14
Pesticide residue analysis	25	78	21	/
Radioactivity analysis	/	1	/	/
Aflatoxin analysis	12	30	31	19
Total	398	453	446	456

Source: FVA

During this year, the Food Microbiology Sector included for testing 387 samples, (meat products-232, milk products-129, eggs-21, PT-5) in microbiological parameters Salmonella spp., Listeria monocytogenes, Escherichia coli, Enterobacteriaceae, Total aerobic microorganisms in 2,327 tests.

Table 79: Activities carried out by the Food Microbiology Sector

Samples	Total
Accepted	387
Entered for testing	387
Tested	386
Carried over from the previous year	63
Carried over to the following year	1
Outside the eligibility criteria	46

Source: FVA

In the **Food Chemistry Sector**, activities were carried out as in the following table:

Table 80: Samples tested in Food Chemistry

Type of sample according to the matrix for testing	No. of samples tested
Cereals, peanuts, animal feed	177
Milk and milk products	176
Eggs	80
Fish	25
Urine	2
Beef	9
Chicken meat	2
Honey	7
Total	478

Source: FVA

Table 81: Tested parameters according to devices

Year 2021	Report – according to devices			
	Bactoskan	Milkoscan	Fosomatik	Total
Total	20,200	15,269	18,594	54,063

Source: FVA

The pathology sector analyzed the received samples in terms of pathology, which are presented in the following table:

Table 82: Type and number of analyzes of the pathology sector

Examinations in the pathology laboratory	No. of samples tested
Anatomopathological examination of sheep/lambs/goats and kids	7
Anatomopathological examination of goats and kids	6
Anatomopathological examination of poultry (chicken/chicks, turkey, quail, goose, mallard duck)	380
Anatomopathological examination of wild boar	5
Anatomopathological examination of fox	2
Total	400

Source: FVA

The Sector of Serology and Molecular Diagnostics during 2021 carried out the following activities: a total of 6,865 samples were received, of which 4,231 were cattle samples and 77 were dog samples . A total of 2,119 samples came from the field and quarantine.

The number of tests performed is a total of 9,109 tests, where a number of samples were tested for more than one parameter. Most of the samples were tested for brucellosis (5,638 cattle samples). They participated in 5 proficiency tests with a total of 15 methods.

Table 83: Number of samples tested, 2021

Arrival of samples		Total
National plan	Cattle	4,231
	Sheep and goats	
	Brucellosis vaccine titer	
	Dogs	77
Field		1,472
Quarantine		647
Authenticity		10
Necropsy		302
PT		126
Total		6,865

Source: FVA

5.1 Greenhouse gas emission

Climate change refers to long-term changes in temperatures and weather on the globe in general. Some of these shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, largely due to the burning of fossil fuels such as coal, oil and gas.

Burning fossil fuels is constantly increasing emissions of greenhouse gases which are acting as an envelope around the Earth, blocking the sun's heat, increasing temperatures and causing climate change. The main factors that can be mentioned are: the use of fuels and coal, the clearing of land and forests can also release carbon dioxide, landfills are also a major source of methane emissions. Energy, industry, transport, buildings, agriculture and land use are among the main emitters.

As emissions continue to rise, as a result, the Earth is now about 1.1°C warmer than it was in the late 1800s. The last decade (2011-2020) was the warmest on record.

The consequences of climate change now include, among others, intense droughts, water shortages, severe wildfires, rising sea levels, floods, melting polar ice, catastrophic storms and declining biodiversity. Emissions that cause climate change come from every part of the world and affect everyone, but some countries produce much more than others, so the 100 countries with the least emissions generate 3% of total emissions, while the 10 countries with the most emissions contribute with 68%.

The Greenhouse Gas Management System (GHG) in Kosovo is managed by the Kosovo Environmental Protection Agency (KEPA) and reports to local and foreign institutions on development policy and oversight policy.

The total annual greenhouse gas emissions in Kosovo for 2019 are estimated at about 9,613 Gg (Giga grams) CO₂ eq. (equivalent) or about 9.6 million tons of CO₂ eq. The main source of greenhouse gas emissions is the energy sector with a share of 86% of total emissions. The

second sector is that of agriculture, forestry and land use with 8%. The waste sector represents 5% of total emissions and the industrial processes and product use sector with about 1%.

Table 84: Overall greenhouse gas emissions in Kosovo by sectors, 2019

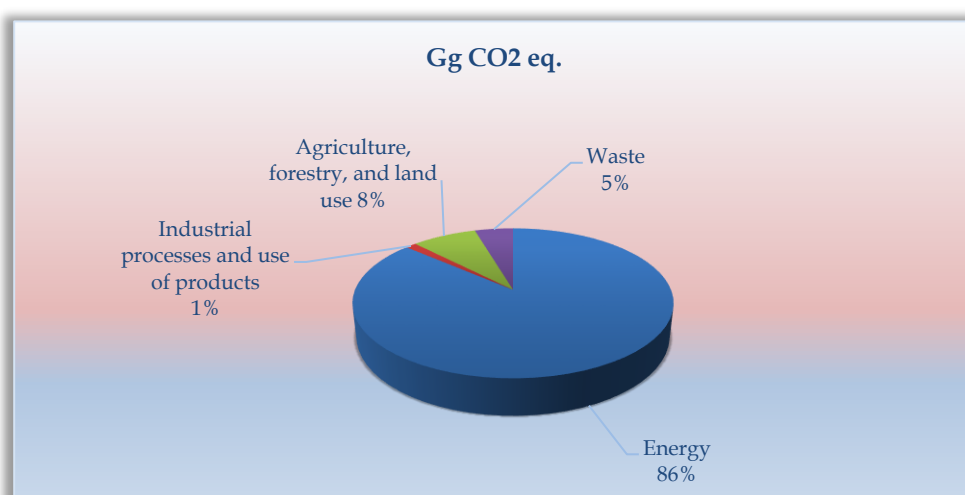
Emissions of GHG	Gg CO ₂ eq.
Energy	8,624
Industrial processes and use of products	130
Agriculture, forestry land use	773
Waste	457
Total emissions	9,613

Source: Report, Greenhouse Gas Emissions in Kosovo 2019

The total greenhouse gas emissions in Kosovo is highly dependent on the amount of energy produced from coal, which is the main source of greenhouse gas emissions in our country. The trend of total gas emissions in Kosovo in the period 2014-2019, compared to other countries in Europe, is lower (5 tons of CO₂ equivalent), per capita, than the average of the European Union, but higher than in some of the countries of the region. As for CO₂ emissions per unit of GDP (Gross Domestic Product), Kosovo with 0.5 kg of CO₂ has higher emissions than the average of the European Union and higher than other countries in the region excluding Bosnia and Herzegovina.

The sector of agriculture, forestry and land use includes about 8% of the total emission of greenhouse gases in Kosovo. In 2019, about 706 Gg CO₂ eq., respectively 706 thousand tons of CO₂ eq., were recorded.

Figure 40: GHG emissions by sectors, 2019 (%)



Source: Report, Greenhouse Gas Emissions in Kosovo 2019

The sector of agriculture, forestry, and land use belongs to the third category (3) of greenhouse gas emissions according to the IPCC and consists of three other sub-sectors (categories). The first sub-sector 3A includes livestock emissions. These mainly include emissions from enteric

fermentation (animal digestive process) and emissions from animal manure management. From this sub-sector derive about 545 Gg CO₂ eq. per year or 77% of total emissions. Greenhouse gas emissions for this sub-sector have been calculated according to the IPCC methodology, applying the emission factors according to the respective methodology.

The second sub-sector 3B deals with the accumulation of CO₂ from forest lands and other lands, as well as the emissions resulting from the conversion of land from one category into another. It is the only sector that makes the reduction (accumulation) of CO₂ emissions by about -39 Gg CO₂ calculated during 2019. CO₂ emissions and accumulations for this category are calculated according to the IPCC 2006 methodology, applying the relevant emission factors, calculating shifts in carbon stocks by categories of land use, and through implementation of the land conversion matrix by categories.

Sub-sector 3C deals with emissions from soil fertilization and biomass burning. The most important categories of this sub-sector are indirect nitrous oxide emissions related to fertilizer management and cereal fertilization. In total, this sub-sector emits about 156 Gg CO₂ eq. per year, or about 22% of total emissions. Greenhouse gas emissions for this sector are calculated according to the IPCC methodology, applying the emission factors according to the respective methodology.

By sub-categories, enteric fermentation (animal digestive process), accounts for 67% of emissions or 476 Gg CO₂ eq., rich in direct N₂O emissions from land (soil) management by 12% (89 Gg CO₂ eq.), as well as emissions from animal manure management by about 10% (69 Gg CO₂ eq.). The table below provides details of emissions by sub-categories of this sector.

Methane (CH₄) with a share of about 86% of the total, is the main emitted gas that comes mainly from the sub-category of enteric fermentation, animal manure management, and biomass burning, rich in Nitrous Oxide (N₂O) with 11 %, emitted by sub-categories related to animal manure management and soil management and Carbon Dioxide (CO₂) by 3%, emitted mainly by the use of UREA.

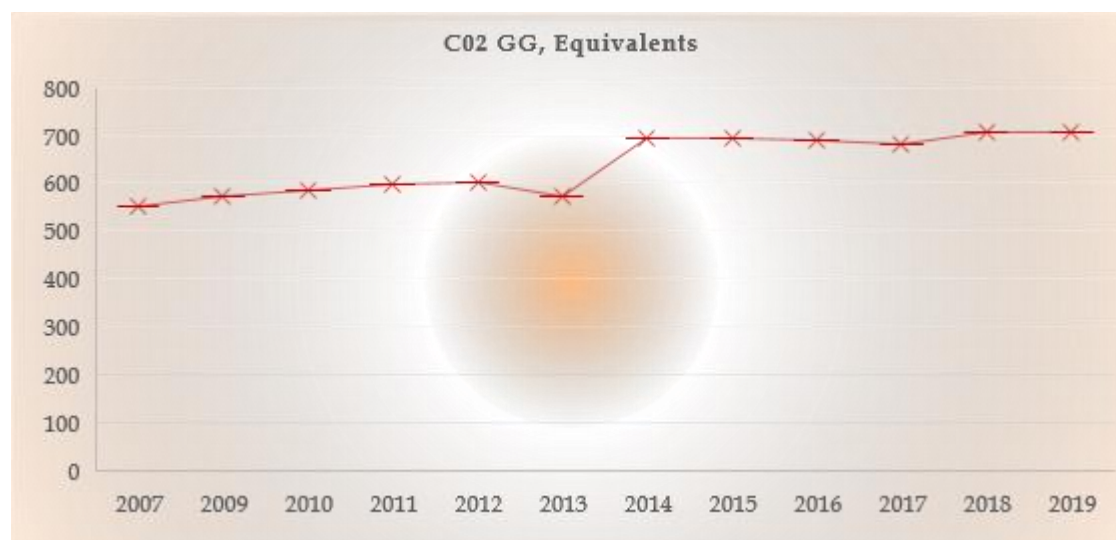
Table 85: Main sources of greenhouse gas emissions in the sector of agriculture, forestry and land use by sectors and sub-sectors for 2019

Emission categories	Emission sub-categories	CO2 Gg eq	%	Emitted gases by categories		
				CO2	CH4	N2O
3. A- Livestock	Enteric fermentation (animal digestive process)	476	67	-	+	-
	Animal manure management	69	10	-	+	+
3. B-Land	Forest lands	-39				
	Other lands (agricultural, pastures, etc.)	5	1	+	-	-
3.C- Aggregate sources and sources of non-CO2 emissions in soil	Direct N2O emissions from land (soil) management	89	12	-	-	+
	Indirect N2O emissions from land management	33	5	-	-	+
	Indirect N2O emissions from animal manure management	9	1	-	-	+
	UREA application	19.5	3	+	-	-
	Biomass burning	5.5	1	-	+	+
Total emissions		706	100	3%	86%	11%

Source: Kosovo Environmental Protection Agency, Inventory of Greenhouse Gas Emissions in Kosovo

Based on the data presented in the following figure we see that the trend of emissions for the period 2007-2019, with differences between time periods. The approximate trend of increasing greenhouse gas emissions from the agricultural sector was from 2007 to 2012, followed by a decline in 2013. Growth is seen from 2014, continuing with a similar trend throughout the period 2014-2019.

Figure 41: Trend of total greenhouse gas emissions from the agricultural sector 2007-2019



Source: Kosovo Environmental Protection Agency, Inventory of Greenhouse Gas Emissions in Kosovo

6 Agricultural Policies, Direct Payments in Agriculture and Rural Development Support

6.1 Summary of objectives, programs, measures, budget, grants and subsidies

The Ministry of Agriculture, Forestry and Rural Development in 2021 has continued to support the agricultural sector through the Direct Payments program.

Support through direct payments has been provided for:

- Agricultural crops (the support is given per hectare, with the exception of raspberries, which is based on quantity, as well as for wheat, which, in addition to hectares, is also supported per quantity of wheat in kg);
- Livestock head (the support is per head, while for milk, based on the quality category, the support is per liter);
- Inputs (produced seedlings of fruit trees and grape vines);
- Support for produced wine and agricultural insurance for raspberries, apples, plums, grapes, strawberry, peppers and walnuts.

Within the framework of the Rural Development Program 2020/2021, it was foreseen that in 2021 the second call for applications will be made, which was closed in March. In July 2021 with the decision with ref. KM 609/21, this call for applications has been canceled due to the prioritization of other activities by the MAFRD, the need to announce the DPP 2021 and taking as a basis the situation created in the agricultural sector due to the COVID 19 pandemic and the continuous losses caused by natural damage in agriculture.

In 2021, the planned budget for direct payments was €21.6 million. Part of the direct payments program have been the sectors shown in the table below along with details of payments per subsidized unit.

Table 86: The budget planned for direct payments, 2021

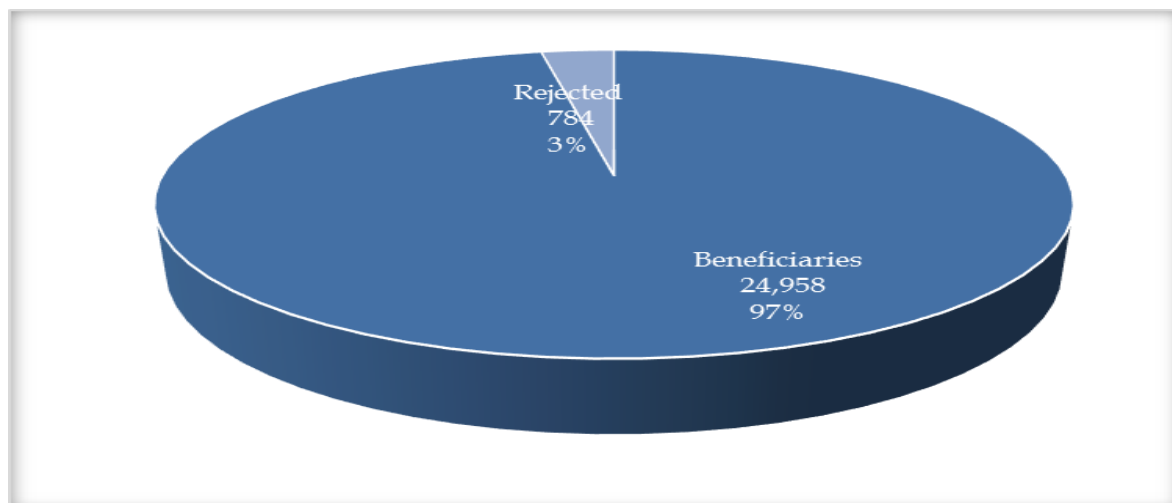
		Budget planned	Subsidy per unit
1	Wheat	4,187,713.50	75 €/ha; 0.019 €/kg
2	Wheat seed	131,751.30	250 €/ha
3	Barley	39,108.60	150 €/ha
4	Rye	17,361.00	150 €/ha
5	Oat	117,509.40	150 €/ha
6	Maize	2,540,000.00	150 €/ha
7	Sunflower	3,610.80	150 €/ha
8	Existing vineyards	1,842,870.00	1000 €/ha; 700 €/ha; 500 €/ha; 400 €/ha
9	Wine	137,070.90	0.04 €/litër
10	Existing orchards	1,119,719.90	400 €/ha
11	Raspberry	162,315.90	0.12 €/kg
12	Seedlings	47,508.12	0.20 €/piece 0.15 €/piece 0.10 €/piece
13	Vegetables	1,650,422.60	400 €/ha; 500 €/ha
14	Medicinal and aromatic plants	114,512.40	450 €/ha
15	Organic farming	412,231.20	50 €/ha + basic subsidy
16	Dairy cows and buffaloes	3,417,603.77	85 €/ head
17	Sheep	1,914,960.00	20 €/ head
18	Goats	206,112.00	20 €/ head
19	Bees	2,076,237.00	15 €/ hive; 30 €/hive
20	Milk	758,792.20	0.06 €/liter; 0.04 €/liter; 0.02 €/liter
21	Laying hens	333,175.61	0.50 €/laying hen; 0.40 €/laying hen
22	Quails	7,103.40	0.50 €/quail
23	Sows	23,340.00	20 €/ head
24	Reported cattle slaughter	14,580.40	50 €/ head
25	Aquaculture	20,393.00	0.20 €/kg
26	Agricultural insurance premium	30,000.00	75%
27	Calves for fattening	300,000.00	10 €/ head
Total		21,626,003.00	

Source: Direct Payments Program 2021

6.2 Direct payments/subsidies

In 2021, a total of 25,742 farmers applied under the DPP, of which 24,958 (97%) were declared beneficiaries, while 3% of applicants were rejected for not meeting the criteria or lack of documents.

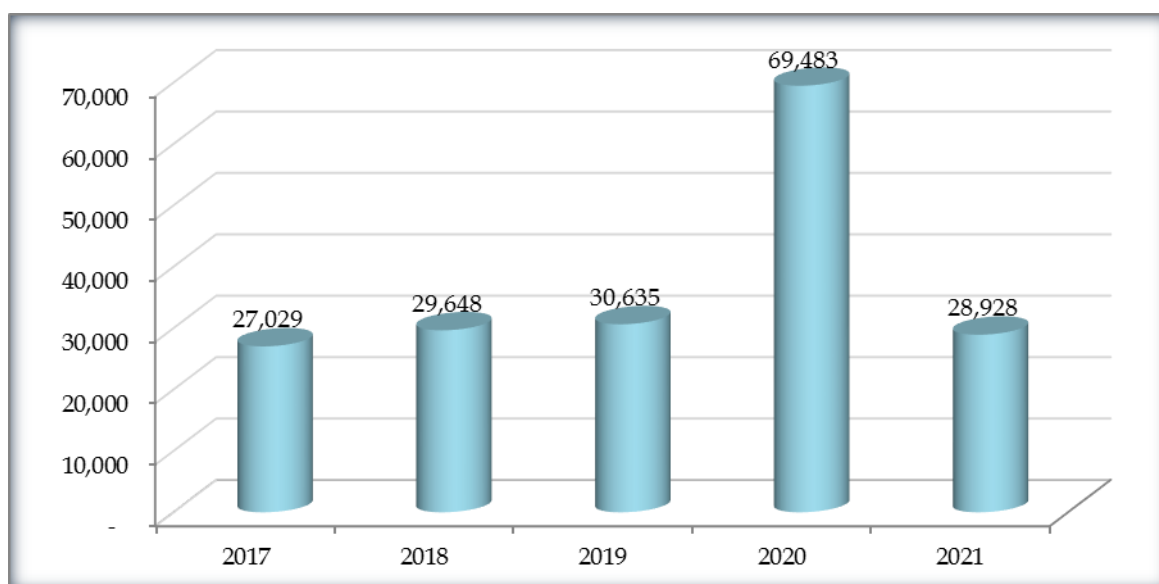
Figure 42: Number of beneficiaries and rejected in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

In 2021, the total support through direct payments was €28.9 million and a total of 27 sectors were supported.

Figure 43: Direct payments 2017-2021, in 1000 €



Source: Annual Report of the Agency for Agricultural Development (ADA); Data from the Direct Payments database, prepared by DEAAS-MAFRD; In 2020, the support provided as part of measure 4A of the Economic Recovery Program is also included.

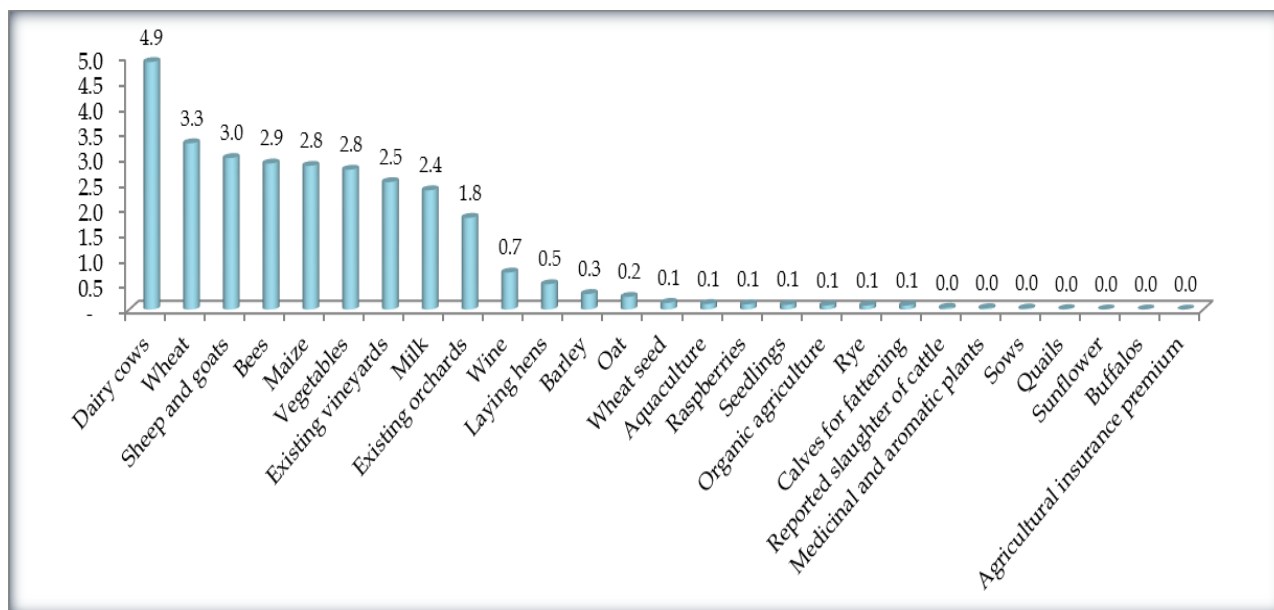
Table 87: Direct payments 2017-2021, in €

	2017	2018	2019	2020*	2021
Wheat	5,781,300	6,550,929	5,292,996	14,079,396	3,287,048
Wheat seed	122,003	114,204	140,395	434,540	131,913
Maize	3,311,579	3,227,784	4,122,464	8,547,885	2,840,082
Barley	38,662	77,688	73,194	132,645	308,040
Rye	16,957	29,343	29,423	58,623	79,845
Oat	-	-	139,161	396,261	249,689
Sunflower	7,946	749	14,621	12,036	2,946
Existing vineyards	2,266,235	2,580,250	2,988,810	6,160,400	2,520,246
Vegetables	2,244,228	2,693,021	2,488,506	5,525,712	2,764,378
Existing orchards	1,599,496	1,905,548	1,656,812	3,805,736	1,814,448
Raspberries	-	-	71,883	168,854	103,766
Wine	55,024	190,774	389,375	228,452	731,900
Medicinal and aromatic plants	-	-	-	111,479	26,933
Organic farming	35,373	277,578	524,900	1,672,210	81,150
Dairy cows	4,777,500	4,746,770	4,373,460	9,421,300	4,893,535
Buffalos	-	-	17,920	48,580	2,635
Sheep and goats	2,112,810	2,298,615	2,411,520	5,129,550	2,995,680
Bees	2,295,555	2,471,085	3,070,950	6,996,810	2,888,265
Laying hens	435,035	484,343	537,497	1,165,861	500,676
Quails	29,013	18,280	14,044	23,678	8,123
Sows	17,180	27,320	28,100	75,080	20,840
Milk	1,712,609	1,736,944	2,041,145	4,906,204	2,358,351
Reported slaughter of cattle	18,350	48,900	48,550	70,600	35,050
Aquaculture	84,053	86,068	89,598	154,010	110,314
Calves for fattening	-	-	-	-	79,380
Seedlings	68,459	82,046	69,600	155,495	92,477
Agricultural insurance premium	-	-	-	1,769	170
Total	27,029,367	29,648,239	30,634,922	69,483,164	28,927,879

Source: Annual Report of the Agency for Agricultural Development (ADA); Data from the Direct Payments database, prepared by DEAAS-MAFRD; * In 2020, the support that was provided within measure 4A of the Economic Recovery Program is also included; The total presented for 2020 and the amount for milk, slaughter and aquaculture differs from HR 2021 because now the payments made for the second half of the year of 2020 are also included.

In 2021, the distribution of direct payments is as in the figure below. The sectors in which 91% of the total amount of direct payments in 2021 are distributed are: dairy cows (17%), wheat (11%), sheep and goats, bees, maize, vegetables (from 10%), vineyards (9 %), milk according to quality (8%) and orchards (6%), while the rest of 9% to other sectors.

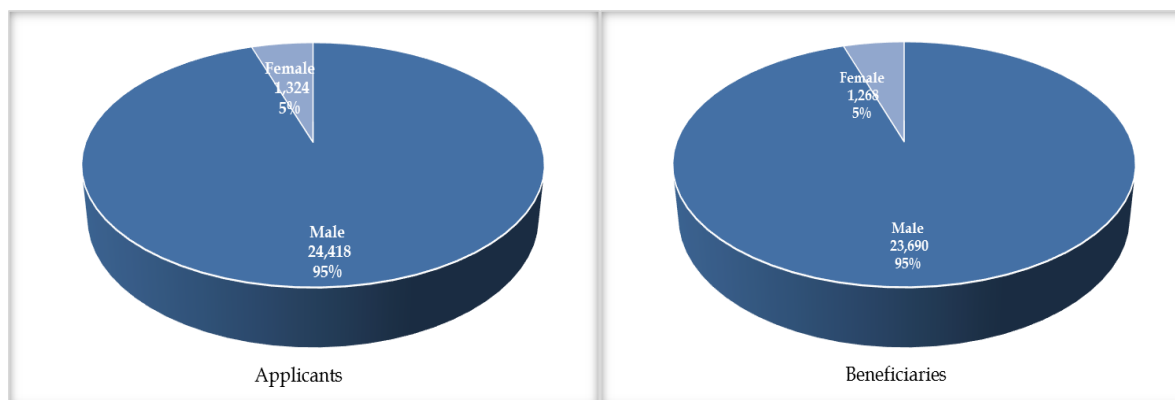
Figure 44: Direct payments by sectors 2021, in mil. €



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

Of the total number of applicants, 95% are men, while only 5% are women. The percentage of participation is the same even after the announcement of the beneficiaries.

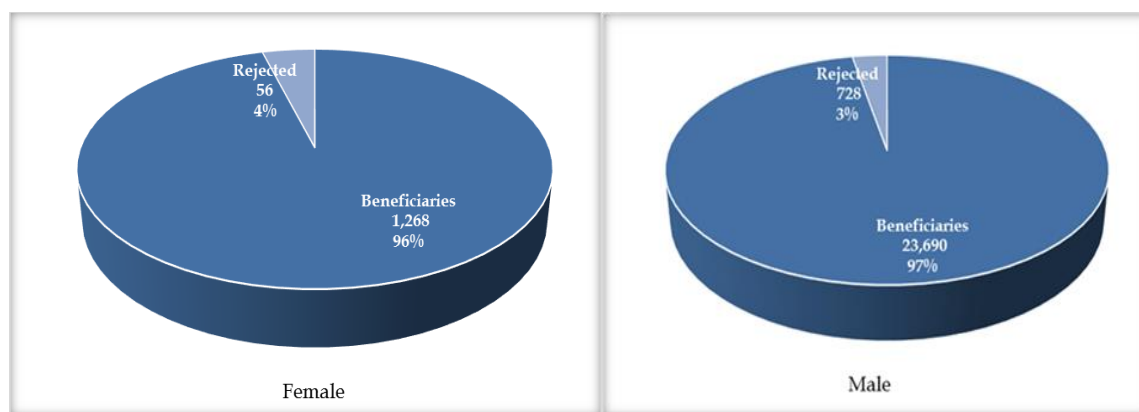
Figure 45: Number of applicants and beneficiaries by gender in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

Out of a total of 1,324 women applicants, 1,268 are beneficiaries, while only 4% or 56 applicants were rejected. Among men out of 24,418 applicants, 728 or 3% of them were rejected, resulting in a number of 23,690 men receiving direct payments.

Figure 46: Number of beneficiaries and rejected by gender in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

From the total amount of direct payments for 2021 of €28.9 million, the percentage that was distributed to women beneficiaries was 7% (€1.9 million) while to men beneficiaries 93% (€27.0 million). The percentage was different depending on the sector and the details can be seen in the table below.

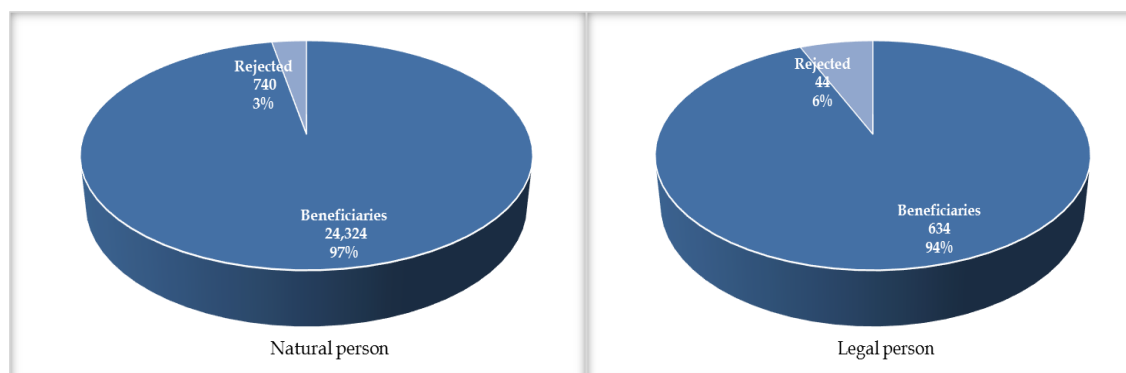
Table 88: Direct payments by gender in 2021, in €

	Men	Women	% share of women	% share of men
Wheat	77,924	3,209,123	2	98
Wheat seed	4,995	126,918	4	96
Maize	117,783	2,722,299	4	96
Barley	14,289	293,751	5	95
Rye	2,793	77,052	3	97
Oat	12,990	236,699	5	95
Sunflower	2,319	627	79	21
Existing vineyards	67,860	2,452,386	3	97
Vegetables	119,417	2,644,961	4	96
Existing orchards	227,124	1,587,324	13	87
Raspberries	7,435	96,331	7	93
Wine	174,425	557,475	24	76
Medicinal and aromatic plants	2,862	24,071	11	89
Organic farming	-	81,150	-	100
Dairy cows	271,915	4,621,620	6	94
Buffalos	510	2,125	19	81
Sheep and goats	158,340	2,837,340	5	95
Bees	325,965	2,562,300	11	89
Laying hens	51,260	449,417	10	90
Quails	6,700	1,423	82	18
Sows	60	20,780	0	100
Milk	232,641	2,125,710	10	90
Reported slaughter of cattle	-	35,050	-	100
Aquaculture	-	110,314	-	100
Calves for fattening	4,460	74,920	6	94
Seedlings	-	92,477	-	100
Agricultural insurance premium	-	170	-	100
Total	1,884,066	27,043,812	7	93

Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

Of the total number of applicants, 97% applied as natural persons and only 3% as legal persons. The percentage of rejection was higher among applicants as legal entities (6%) compared to applicants as natural persons, in which the percentage of rejection was 3%.

Figure 47: Number of beneficiaries and rejected by type of farmer in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

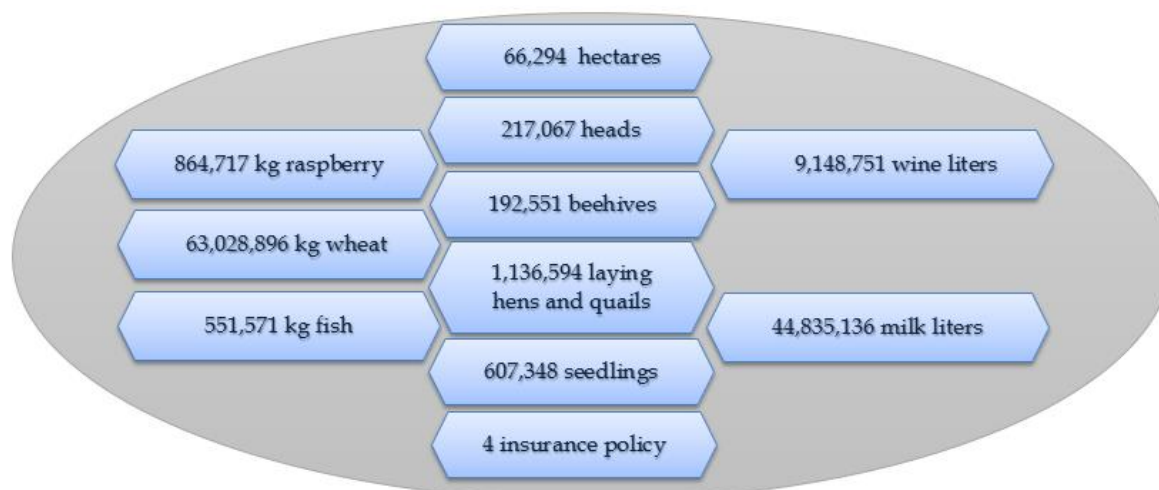
In 2021 of € 28.9 mil., the percentage that was distributed to the beneficiaries who applied as natural persons is 86% (€ 24.8 million) while to those who applied as legal persons 14% (€ 4.1 million). The percentage was different depending on the sector and the details can be seen in the table below.

Table 89: Direct payments by type of farmer in 2021, in €

	Natural person	Legal person	% share Natural person	% share Legal person
Wheat	3,162,766	124,282	96	4
Wheat seed	51,228	80,685	39	61
Maize	2,699,511	140,571	95	5
Barley	297,470	10,571	97	3
Rye	68,832	11,013	86	14
Oat	231,213	18,476	93	7
Sunflower	2,946	-	100	-
Existing vineyards	1,977,620	542,626	78	22
Vegetables	2,634,648	129,730	95	5
Existing orchards	1,459,576	354,872	80	20
Raspberries	101,380	2,386	98	2
Wine	-	731,900	-	100
Medicinal and aromatic plants	26,843	90	100	0
Organic farming	32,350	48,800	40	60
Dairy cows	4,597,990	295,545	94	6
Buffalos	2,635	-	100	-
Sheep and goats	2,949,200	46,480	98	2
Bees	2,653,380	234,885	92	8
Laying hens	9,682	490,995	2	98
Quails	6,398	1,725	79	21
Sows	20,840	-	100	-
Milk	1,758,141	600,210	75	25
Reported slaughter of cattle	-	35,050	-	100
Aquaculture	-	110,314	-	100
Calves for fattening	74,370	5,010	94	6
Seedlings	19,760	72,717	21	79
Agricultural insurance premium	170	-	100	-
Total	24,838,947	4,088,932	86	14

Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

The following scheme shows the number of units subsidized through direct payments in 2021.



6.2.1 Direct payments for agricultural crops, wine and agricultural insurance

The total amount of direct payments in 2021 for agricultural crops is €14.9 million, where wheat, maize, vegetables, vineyards and existing orchards had the largest share in the total of direct payments for agricultural crops, while other categories occupy a share of 11% in the total of direct payments for agricultural crops.

Wheat for the first time in 2021 is supported in two forms: per ha and per kg. The number of applicants per quantity of wheat has been significantly smaller than per area of wheat because, being a new form of support, farmers have been less prepared to apply for this form, but also because they have not delivered the wheat at collection points at harvest time due to the low selling price.

From the total support for vegetables of €2.8 mil., €80.9 thousand or 3% are for vegetables in greenhouses while the rest for vegetables in the open field. As for vegetable crops, those that make up 91% of the total amount of direct payments for vegetables are: potato, pumpkin, pepper, watermelon, stella blue squash, onion, cabbage and monoculture beans, while all other vegetables, including vegetables in greenhouses occupy a share of 9%.

Under support for vineyards in 2021, a scaling of the payment has been made depending on the number of hectares for which it is applied, this has enabled that large producers who are more stable in the market to benefit from a much smaller average support per ha in relation to smaller producers. Those who had from 0.10-20 ha were supported with €1,000/ha, from 20-50 ha with €700/ha for every hectare over 20 ha, from 50-100 ha with €500/ha for every hectare over 50 ha and for each ha over 100 were supported with 300 €/ha.

From the total amount of €1.8 mil., that was paid for orchards, the fruit crops that have the largest share in this total are: apples, walnuts, plums, hazelnuts, sour cherries and pears, all of which make up 91% of the total support for orchards, while the remaining 9% is distributed to other fruit crops.

Within organic agriculture, of the total amount paid of €81,000, 90.5% was for organic aromatic medicinal plants, 7.0% for organic wheat and 2.5% for organic orchards. In other crops for which support is planned by the program if they are cultivated organically, such as: wheat seed, maize, barley, rye, oats, sunflower and vegetables in open fields or greenhouses, there were no beneficiaries.

Table 90: Direct payments by sector, 2017-2021

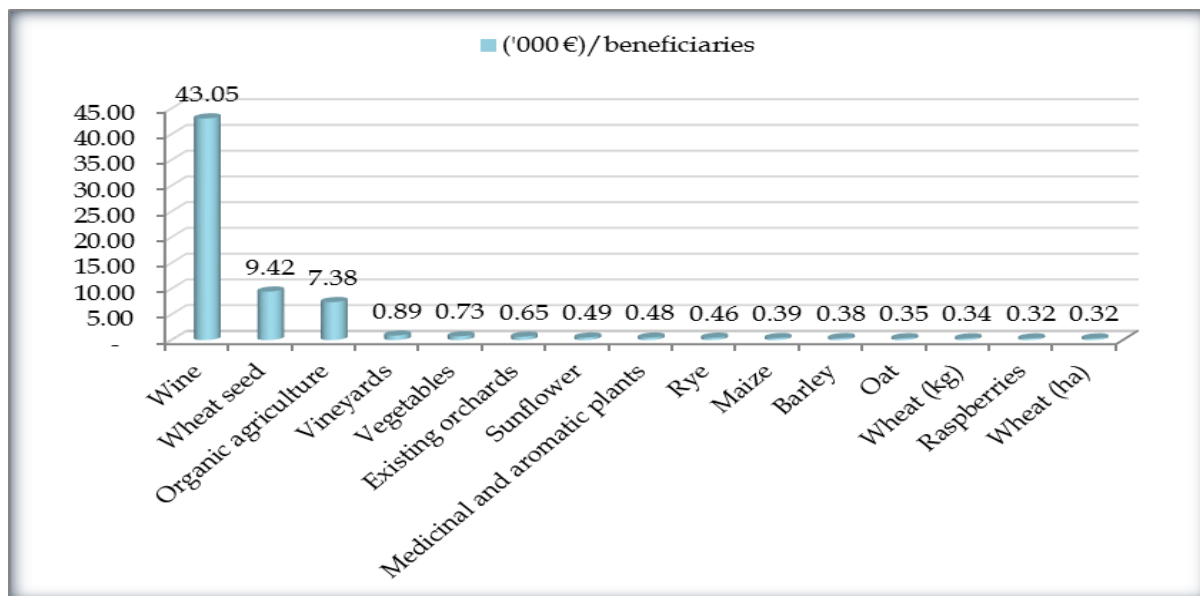
		2017	2018	2019	2020*	2021
Wheat	Number of applicants	9,709	10,683	8,872	11,044	6,862
	Number of beneficiaries	9,216	10,311	8,698	10,729	6,553
	Number of ha paid	38,542	43,673	35,287	46,931	27,860
	Payment per ha	150	150	150	300	75
	Total amount paid	5,781,300	6,550,929	5,292,996	14,079,396	2,089,499
Wheat	Number of applicants	-	-	-	-	3,801
	Number of beneficiaries	-	-	-	-	3,550
	Number of kg paid	-	-	-	-	63,028,896
	Payment per kg	-	-	-	-	0.019
	Total amount paid	-	-	-	-	1,197,549
Wheat seed	Number of applicants	11	11	15	25	16
	Number of beneficiaries	11	11	15	24	14
	Number of ha paid	508	458	562	869	528
	Payment per ha	250	250	250	500	250
	Total amount paid	122,003	114,204	140,395	434,540	131,913
Maize	Number of applicants	8,598	8,432	9,526	10,020	7,510
	Number of beneficiaries	8,231	8,165	9,370	9,808	7,224
	Number of ha paid	22,077	21,519	27,483	28,493	18,934
	Payment per ha	150	150	150	300	150
	Total amount paid	3,311,579	3,227,784	4,122,464	8,547,885	2,840,082
Barley	Number of applicants	227	316	273	242	856
	Number of beneficiaries	208	306	267	233	820
	Number of ha paid	387	518	488	442	2,054
	Payment per ha	100	150	150	300	150
	Total amount paid	38,662	77,688	73,194	132,645	308,040
Rye	Number of applicants	78	83	70	59	182
	Number of beneficiaries	67	72	67	56	173
	Number of ha paid	170	196	196	195	532
	Payment per ha	100	150	150	300	150
	Total amount paid	16,957	29,343	29,423	58,623	79,845
Oat	Number of applicants	-	-	505	569	746
	Number of beneficiaries	-	-	485	538	706
	Number of ha paid	-	-	928	1,321	1,665
	Payment per ha	-	-	150	300	150
	Total amount paid	-	-	139,161	396,261	249,689

Vineyards	Number of applicants	2,969	3,012	2,939	2,919	2,848
	Number of beneficiaries	2,909	2,949	2,900	2,880	2,826
	Number of ha paid	2,508	2,580	2,989	3,080	3,039
	Payment per ha	1,000/500	1,000	1,000	2,000	1,000/700 500/400
	Total amount paid	2,266,235	2,580,250	2,988,810	6,160,400	2,520,246
Sunflower	Number of applicants	7	5	11	5	6
	Number of beneficiaries	6	4	11	3	6
	Number of ha paid	53	5	97	40	20
	Payment per ha	150	150	150	300	150
	Total amount paid	7,946	749	14,621	12,036	2,946
Vegetables	Number of applicants	5,716	6,664	7,270	4,676	3,917
	Number of beneficiaries	5,550	6,435	7,099	4,481	3,802
	Number of ha paid	7,481	8,977	8,295	9,210	6,870
	Payment per ha	300	300	300	600	400/500
	Total amount paid	2,244,228	2,693,021	2,488,506	5,525,712	2,764,378
Existing orchards	Number of applicants	4,358	5,278	3,557	3,166	2,929
	Number of beneficiaries	4,110	5,097	3,488	3,034	2,774
	Number of ha paid	3,999	4,764	4,142	4,757	4,536
	Payment per ha	400	400	400	800	400
	Total amount paid	1,599,496	1,905,548	1,656,812	3,805,736	1,814,448
Organic farming	Number of applicants	10	37	27	48	35
	Number of beneficiaries	6	24	26	38	11
	Number of ha paid	118	443	1,050	1,672	197
	Payment per ha	+300	+500	500	1,000	125/200 450/500
	Total amount paid	35,373	277,578	524,900	1,672,210	81,150
Medicinal and aromatic plants	Number of applicants	-	-	-	84	62
	Number of beneficiaries	-	-	-	70	56
	Number of ha paid	-	-	-	248	60
	Payment per ha	-	-	-	450	450
	Total amount paid	-	-	-	111,479	26,933
Wine**	Number of applicants	18	16	15	18	17
	Number of beneficiaries	7	14	15	17	17
	Number of liters paid	1,375,607	4,769,358	9,734,385	5,711,290	9,148,751
	Payment per liter	0.04	0.04	0.04	0.04	0.08
	Total amount paid	55,024	190,774	389,375	228,452	731,900
Raspberry	Number of applicants	-	-	967	525	376
	Number of beneficiaries	-	-	594	386	320
	Number of kg paid	-	-	898,547	1,055,337	864,717
	Payment per kg	-	-	0.08	0.16	0.12
	Total amount paid	-	-	71,883	168,854	103,766

Source: Annual Report of the Agency for Agricultural Development (ADA); Data from the Direct Payments database, prepared by DEAAAS-MAFRD; * In 2020, the support that was provided under measure 4A of the Economic Recovery Program is also included; **The payment per unit for wine in 2021 was planned at €0.04/liter, while the payment was actually done at €0.08/liter because the doubling of the payment per unit under the ERP was not applied for wine in 2020.

The figure below shows the average amount of subsidies per beneficiary, where it can be seen that the highest average was the beneficiaries who had applied for produced wine with €43.1 thousand, followed by the beneficiaries of wheat seed with €9.4 thousand, organic agriculture with €7.4 thousand, while all other crops had lower average per beneficiary, i.e. below €1,000.

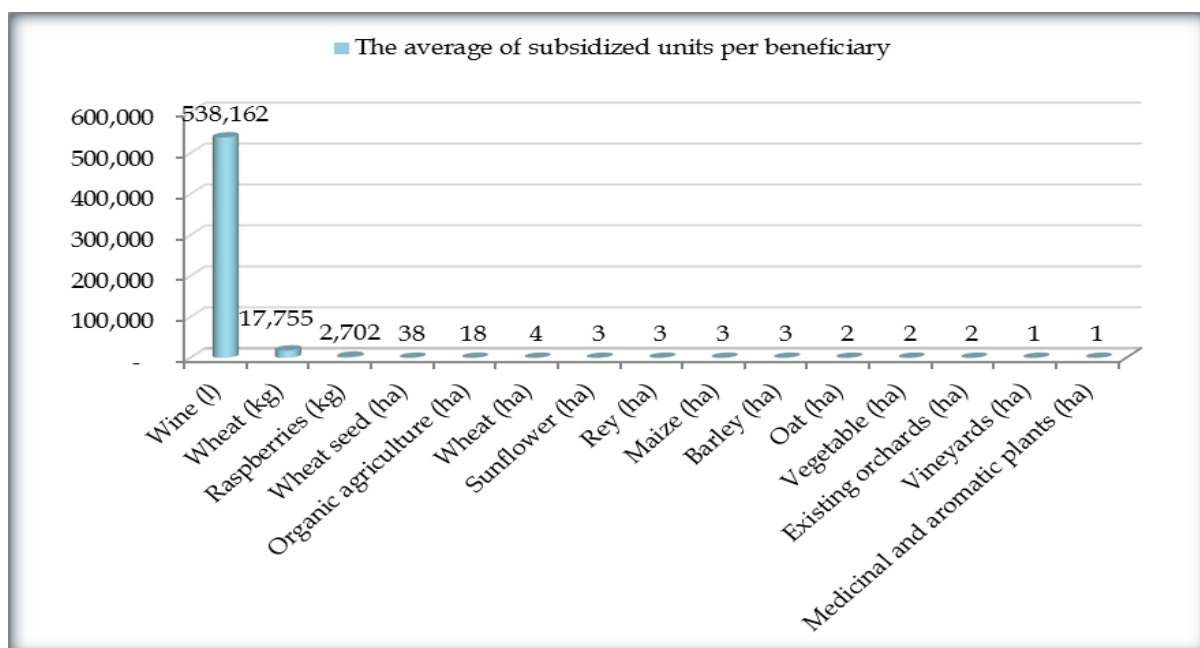
Figure 48: Average subsidy amount per beneficiary in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

The average of subsidized units per beneficiary was in most cases below 5 ha, except for wheat seed and organic farming, where the average subsidized area was high because the number of beneficiaries was small.

Figure 49: The average of subsidized units per beneficiary in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

Agricultural insurance premium

During 2021, the MAFRD continued to subsidize insurance premiums for insurance policies. In addition to the raspberry, apple, plum, grape, pepper and strawberry that were included under the DPP 2020, the premium subsidy measure was extended to cover the walnut insurance policy. In addition, the amount of policy coverage was increased from 50% to 75%. So, within the framework of this program, the MAFRD covered 75% of the cost of the insurance policy (premium) for all farmers who purchased agricultural insurance policies in 2021 and who applied under the DPP.

The implementation of this subsidy measure is planned as follows: 1) farmers buy insurance policies first and pay the full price themselves, 2) then they apply under the subsidy scheme to later receive compensation of 75% of the cost of the policy from the MAFRD.

Under this measure, 4 farmers benefited and none were rejected. These farmers have received a compensation of 75% for the cost of their insurance, where the MAFRD has distributed a total of €170.45. Farmers received an average of €42.61 as a subsidy, ranging from a minimum of €34.09 to €68.18.

MAFRD is committed to supporting all farmers who purchase insurance policies as a way to mitigate their production risks and ensure the continuity of agricultural businesses, but the number of farmers who have insured their crops continues to remain low..

6.2.2 Direct payments for livestock and milk

The amount of direct payments for the livestock sector in 2021 was €13.9 million. Of the total direct payments for livestock, 35% were for dairy cows, 22% for sheep and goats, 21% for beekeeping, 17% for milk according to quality and 5% for other subsidy categories. In 2021, the share of direct payments for livestock in the total of direct payments is 48%.

From the total amount of about €3 mil., for sheep and goats, the share of subsidy for sheep is 90%, while for goats only 10%. Calves for fattening began to be subsidized for the first time in 2021 with €10 per head and since it was a subsidy applicable for the first time, the number of rejected farmers was quite high or 37.9% of applicants.

Table 91: Direct payments by sectors, 2017-2021

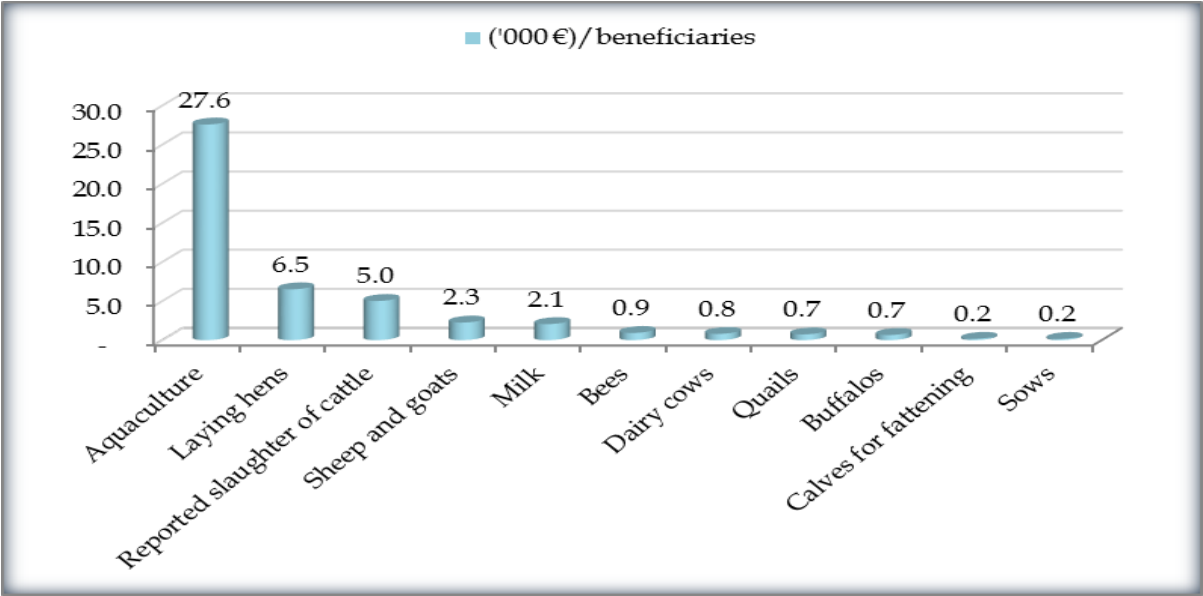
		2017	2018	2019	2020	2021
Dairy cows	Number of applicants	7,778	7,595	6,775	7,027	6,210
	Number of beneficiaries	7,546	7,395	6,606	6,905	6,105
	Number of heads paid	68,250	67,811	62,478	67,295	57,571
	Payment per head	70	70	70	140	85
	Total amount paid	4,777,500	4,746,770	4,373,460	9,421,300	4,893,535
Buffalos	Number of applicants	-	-	6	5	5
	Number of beneficiaries	-	-	6	4	4
	Number of heads paid	-	-	256	347	31
	Payment per head	-	-	70	140	85
	Total amount paid	-	-	17,920	48,580	2,635
Sheep and goats	Number of applicants	1,367	1,436	1,380	1,515	1,379
	Number of beneficiaries	1,334	1,378	1,355	1,469	1,329
	Number of heads paid	140,854	153,241	160,768	170,985	149,784
	Payment per head	15	15	15	30	20
	Total amount paid	2,112,810	2,298,615	2,411,520	5,129,550	2,995,680
Sows	Number of applicants	151	210	216	251	158
	Number of beneficiaries	130	202	211	235	133
	Number of heads paid	859	1,366	1,405	1,877	1,042
	Payment per head	20	20	20	40	20
	Total amount paid	17,180	27,320	28,100	75,080	20,840
Bees	Number of applicants	2,595	3,007	3,411	3,941	3,373
	Number of beneficiaries	2,467	2,764	3,238	3,634	3,133
	Number of hives paid	153,037	164,739	204,730	233,227	192,551
	Payment per hive	15	15	15	30	15
	Total amount paid	2,295,555	2,471,085	3,070,950	6,996,810	2,888,265
Laying hens	Number of applicants	88	88	85	84	94
	Number of beneficiaries	80	81	82	84	77
	Number of laying hens paid	960,955	1,023,671	1,181,829	1,310,235	1,120,349
	Payment per laying hen	0.50/0.40	0.50/0.40	0.50/0.40	1.00/ 0.80	0.50/ 0.40
	Total amount paid	435,035	484,343	537,497	1,165,861	500,676

Quails	Number of applicants	13	13	13	11	12
	Number of beneficiaries	13	13	9	10	11
	Number of quails paid	29,013	36,560	28,088	23,678	16,245
	Payment per quail	1.00	0.50	0.50	1.00	0.50
	Number of applicants	29,013	18,280	14,044	23,678	8,123
Milk	Number of applicants	2,700	3,116	1,836	1,282	1,197
	Number of beneficiaries	2,700	3,055	1,798	1,245	1,149
	Number of liters paid	-	34,522,414	38,664,480	47,515,642	44,835,136
	Payment per liter	0.06/0.04/ 0.02	0.06/0.04/ 0.02	0.06/0.04/ 0.02	0.12/ 0.08/ 0.04	0.06/ 0.04/ 0.02
	Total amount paid	1,712,609	1,736,944	2,041,145	4,906,204	2,358,351
Reported slaughter of cattle	Number of applicants	6	28	14	12	8
	Number of beneficiaries	6	24	13	9	7
	Number of heads paid	367	978	971	706	701
	Payment per head	50	50	50	100	50
	Total amount paid	18,350	48,900	48,550	70,600	35,050
Aquaculture	Number of applicants	4	8	8	4	4
	Number of beneficiaries	4	5	8	4	4
	Number of kg paid	420,264	430,341	447,990	385,024	551,571
	Payment per kg	0.20	0.20	0.20	0.40	0.20
	Total amount paid	84,053	86,068	89,598	154,010	110,314
Calves for fattening	Number of applicants	-	-	-	-	744
	Number of beneficiaries	-	-	-	-	462
	Number of heads paid	-	-	-	-	7,938
	Payment per head	-	-	-	-	10
	Total amount paid	-	-	-	-	79,380

Source: Annual Report of the Agency for Agricultural Development (ADA); Data from the Direct Payments database, prepared by DEAAS-MAFRD; * In 2020, the support that was provided under measure 4A of the Economic Recovery Program is also included; The data presented for the year 2020 for Milk, Reported Cattle Slaughter and Aquaculture differ from HR 2021 because now the payments made for the second half of 2020 are also included

The figure below shows the average subsidy amount per beneficiary, where it can be seen that beneficiaries for aquaculture had the highest average with €27.6 thousand, followed by those for laying hens with €6.5 thousand, reported cattle slaughter with €5 thousand, while a lower average per beneficiary, namely less than €5,000 is seen with the beneficiaries of sheep and goats, milk, bees, dairy cows, quails, buffaloes, calves for fattening and sows.

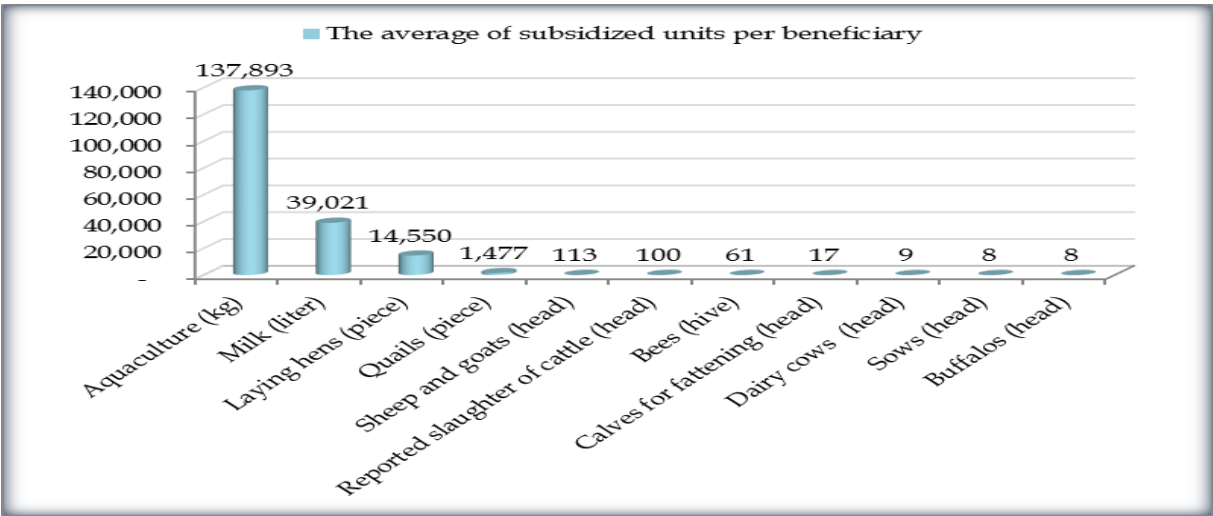
Figure 50: Average subsidy amount per beneficiary in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

The average of subsidized units per beneficiary is shown in the figure below where it can be seen that in terms of heads, the highest average is in the case of sheep and goats, followed by the reported slaughter of cattle, calves for fattening, dairy cows, sows and buffalo.

Figure 51: The average of subsidized units per beneficiary in 2021



Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

6.2.3 Support for agricultural inputs

Support for seedlings

The total amount of direct payments per seedling in 2021 was around €92.5 thousand. The largest number of subsidized seedlings is in the region of Gjakova (48%), followed by Gjilan (26%), Peja (16%) and Ferizaj (13%), while in other regions there were no beneficiaries at all.

Producers of fruit tree seedlings are subsidized with €0.20/seedling for the first 40,000 seedlings (starting from a minimum of 5,000 pieces), and with €0.15/seedling for each seedling above this number, as well as grape vine seedling producers with €0.10/seedling for each seedling over 5,000 pieces.

The average number of seedlings for which a farmer benefited was about 43 thousand seedlings, the lowest was in the Ferizaj region (20 thousand seedlings), while the highest was in the Gjakova region (67 thousand seedlings).

Table 92: Direct payments for seedlings by region, 2021

No.	Region	No. of applicants	No. of beneficiary farmers	No. of subsidized seedlings	Amount paid in €
1	Prishtina	0	0	-	-
2	Prizren	1	0		
3	Peja	3	2	97,548	18,362
4	Mitrovica	0	0		
5	Gjakova	4	4	269,700	29,220
6	Ferizaj	4	4	80,200	16,040
7	Gjilan	5	4	159,900	28,855
Total		17	14	607,348	92,477

Source: Data from the Direct Payments database, prepared by DEAAS-MAFRD

6.3 Agro loans and guarantee fund

6.3.1 Agro Loans

The agricultural sector in Kosovo is in great need of financing, especially for agro-loans. The development of the agricultural sector, even after many years, is still not at the desired level, despite the continuous support from the ministry with grants and subsidies.

Agriculture continues to have low access to general bank financing with only 2.1% for 2021 (0.1 percentage point lower than the previous year), i.e. the sector that has been least credited by financial institutions in Kosovo. In Microfinance Institutions (MFIs), the situation is different, the share of agro loans is 19.5% for 2021.

Agro loans are known as non-performing loans and therefore lending has a high cost for banks and microfinance institutions. This low level of lending highlights the conservative approach of the banking system towards the agricultural sector. The lack of an adequate insurance system in agriculture also greatly affects farmers' access to credit, respectively affordable credit. USAID and KCGF have provided important assistance for credit guarantees in agriculture.

In order to increase the effectiveness on the farm, farmers need to expand more the level of financing of their investment in: increasing the livestock fund, adjusting and expanding farms in line with European standards, solar energy, purchasing state of the art agricultural equipment and machinery, purchase of inventory, purchase of inputs, creation of collection points, storage-refrigerator and many other agricultural equipment. Such investments in the farm enable farmers to increase productivity and at the same time prepare for the new agricultural season. Through various investments in this sector, it will be possible to improve well-being in rural areas, increase local production, which affects the substitution of imported products, the creation of opportunities for export as well as the retention of new workforce.

The banks that financially support the agricultural sector in Kosovo with loans are: Banka për Biznes, Banka Ekonomike, Raiffeisen Bank (RBKO), Procredit Bank (PCB), TEB Bank, NLB Prishtina and Banka Kombwtare Tregtare (BKT), while the Microfinance Institutions are: Kosovo Financing Agency (AFK), Finca, KosInvest World Vision, KEP Trust, KGMAMF, Kosovo Rural Credit (KRC), Qelim Kosova and Start Finance.

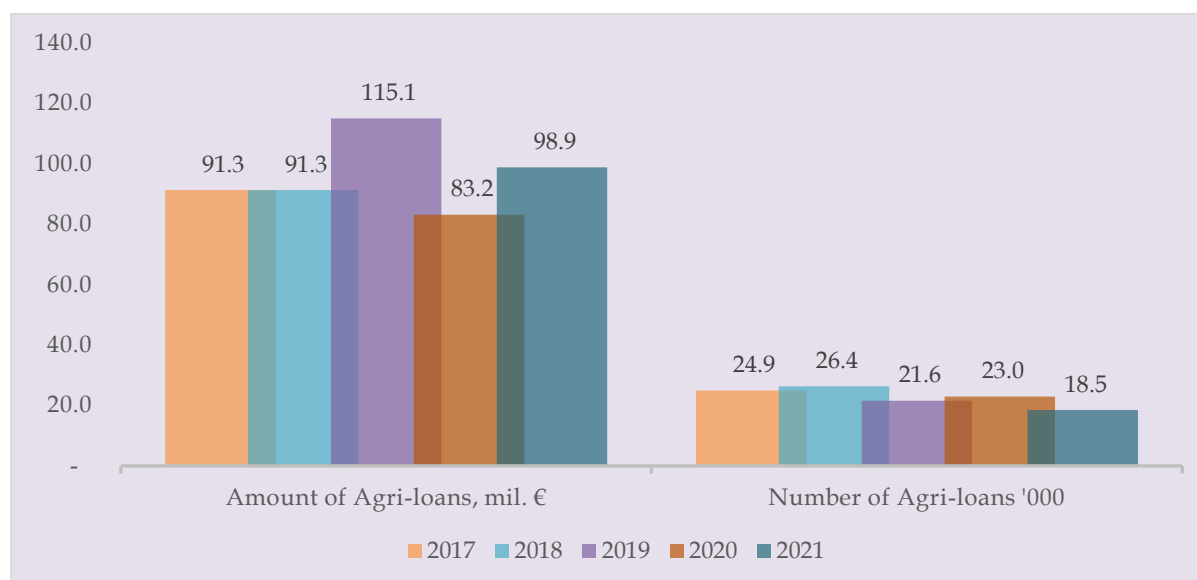
The leader in the amount of disbursed Agro Loans is TEB, PCB, BPB, BKT and RBKO, followed by MFIs: KRC, AFK, Finca, KEP, etc. The table shows that most loans were disbursed in 2019. The total amount of loans disbursed in 2019 is over €115 million. The number of loans granted from 2017 to 2021 is over 114 thousand loans with a total amount of €479.8 million. So, for these 5 years, about 1,907 loans have been disbursed on average every month, with an average monthly amount of €8.0 million..

Table 93: Agro-loans 2017 – 2021

Agro-loans 2017 - 2021	Number of disbursed loans	Total amount of disbursed loans (mil. €)	Loan term (months)	Average interest rate (%)	Share of agro- loans compared to other loans (%)
2017	24,940	91.3	17 - 39	7.3 - 26.7	0.3 - 43.0
2018	26,403	91.3	12 - 39	6.0 - 28.5	1.3 - 64.5
2019	21,622	115.1	18 - 42	6.4 - 28.4	0.7 - 43.5
2020	22,958	83.2	18 - 40	5.3 - 28.6	0.5 - 36.7
2021	18,477	98.9	18 - 41.5	5.2 - 24	0.4 - 33
Total	114,400	479.8			

Source: Commercial Banks & MFIs in Kosovo, prepared by DEAAS-MAFRD

From the data in the table and figure, it is clearly seen that the years 2020 and 2021 are quite different in terms of loans granted (increase by 18.8%). If we compare the year 2021 with the year 2017, there is a low increase of only 8.3%.

Figure 52: Total amount and number of agri-loans disbursed (mil. € and '000)

Source: Commercial Banks & MFIs in Kosovo, CBK

The term of agricultural loans varies from 18 to 41.5 months, depending on the purpose of the loan. Interest rates vary from 5.2% to 24%, based on the loan amount and repayment term. Agricultural producers continue to be dissatisfied with interest rates, which do not affect the stimulation of the development of this sector.

Collateral is usually not required for small loan amounts. For medium and large amounts, banks and MFIs required collateral of 100% to 388% of the loan amount, while in recent years there has been a noticeable normalization. In general as a standard for collateral, the lender requires from 100% to 150% of the loan value.

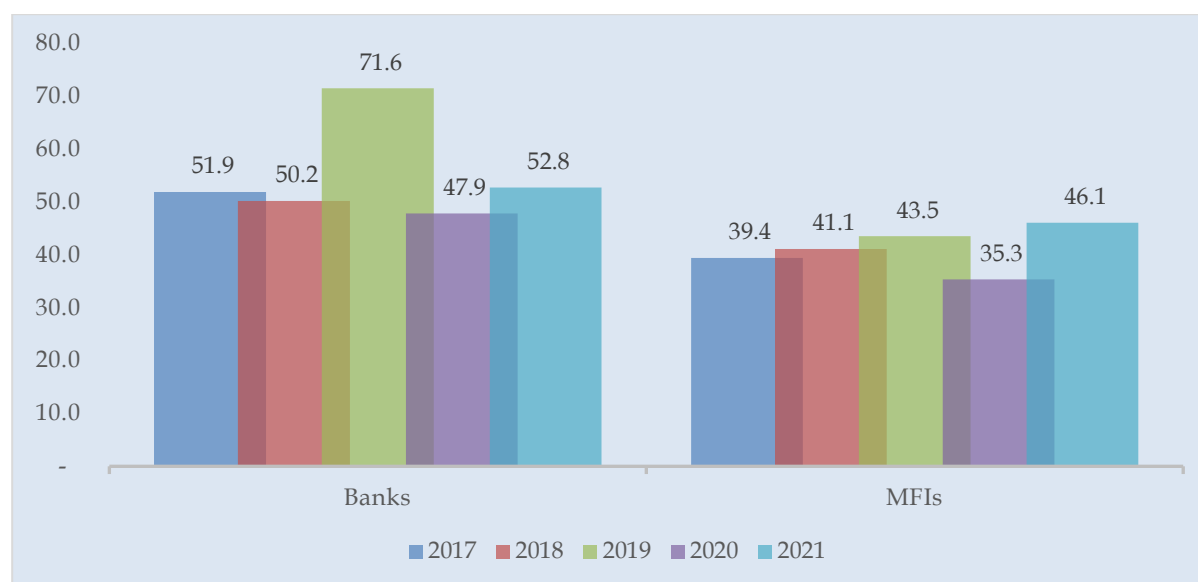
Grace period or period of payment deferral, varies from 3 to 12 months, although in some publications it is indicated as 18 months, depending on the cases where the grace period is flexible. It is worth noting that repayment of the largest percentage of loans is made after the harvesting season. Over the years, it is noticed that the grace period was shorter, while in recent years it is increased.

The share of loans in agriculture compared to other loans, in Banks and MFIs, varies greatly. With, the share stated is from 0.4% to 11.7%, which is a good example. With MFIs, the share stated varies from 15.4% to 33%, which as an average is over 27%.

Borrowing from banks and MFIs with interest rates varies depending on the amount of the loan and its maturity. The larger the amount and the shorter the duration of the loan, the lower the interest rate and vice versa.

The figures below show the differences in figures between commercial banks and MFIs.

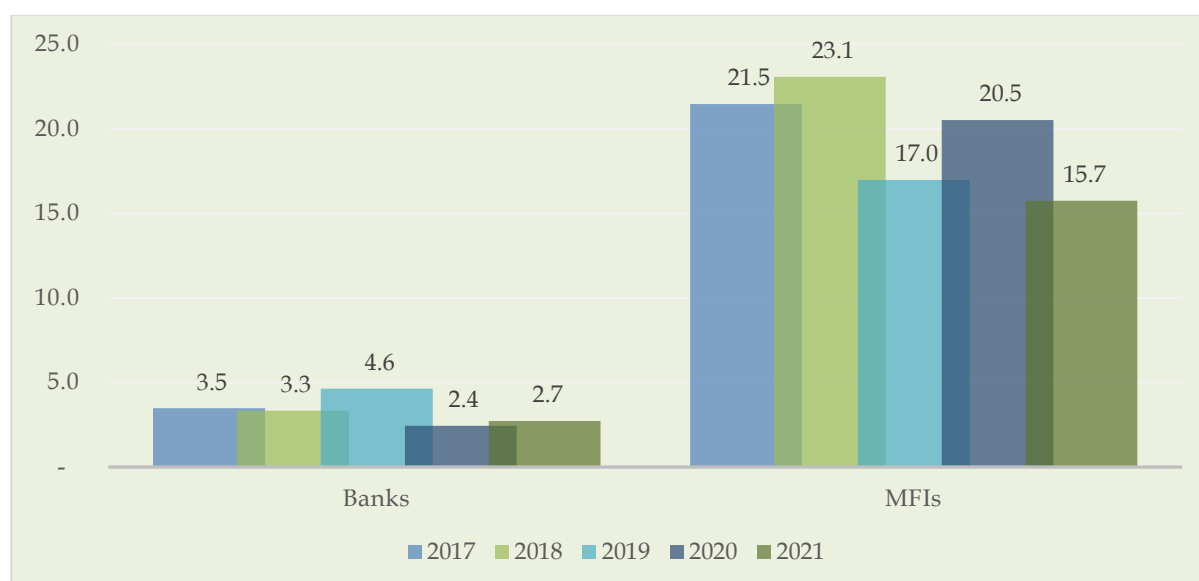
Figure 53: The amount of agro-loans from banks and MFIs, mil. €



Source: Banks & MFIs, prepared by DEAAS-MAFRD

Banks are characterized by a smaller number of loans but with larger amounts, which means that the average loan for 2021 was €19,300. With MFIs, the average loan is €2,900, i.e. a large number of loans but with smaller amounts, achieving a balance of interests for almost every farmer.

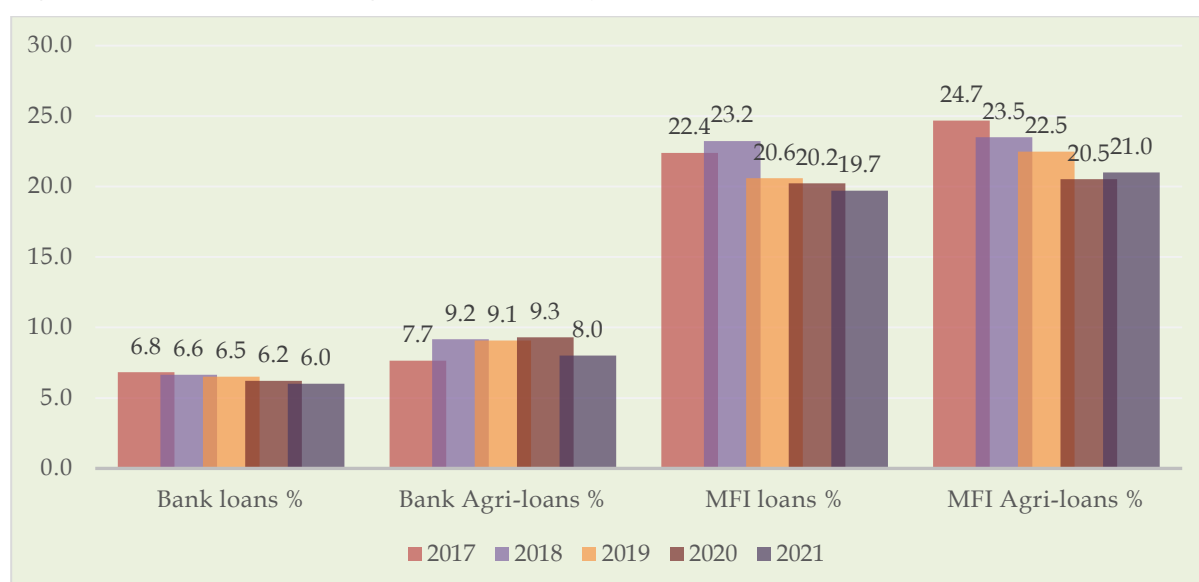
Figure 54: Number of agri-loans from banks and MFIs, '000 €



Source: Banks & MFIs, prepared by DEAAS-MAFRD

The interest rates on loans for the agricultural sector are high compared to the loans of other sectors and the countries of the region, although the year 2021 was characterized by a slight decrease in the interest rate by 1.3 percentage points compared to 2020 and this decrease in the interest rate is not an incentive for farmers, knowing that the difference with business loans is still high (2 percentage points).

Figure 55: Interest rate on agricultural loans by banks and MFIs, %



Source: CBK

Interest rates on loans for the agricultural sector of MFIs for the year 2021 were characterized by an increase in the interest rate by 0.5 percentage points compared to the previous year or by a 3.7 percentage point decrease in the interest rate compared to 2017.

As for the percentage of bad loans in agricultural loans, we can say that they are at the acceptable level within the limits set by most banks and financial institutions. Compared to the countries of the region, we are at a very satisfactory level.

Over the years in Banks, the maximum of bad loans was around 5%, while in MFIs it is significantly higher.

Kosovo Credit Guarantee Fund - KCGF

The Kosovo Credit Guarantee Fund is an independent legal entity of a developmental character, which provides credit guarantees for Micro, Small and Medium Enterprises (MSMEs), sharing the credit risk with financial institutions.

KCGF continues to have as one of its most important objectives the support of the development of the agricultural sector, through the guarantee of agricultural loans along the entire value added chain within this sector.

In addition, it has continued to guarantee the agricultural sector even during the COVID-19 pandemic, continuing to support this sector and having it as a special focus. In addition, the German Development Bank (KfW) during the month of April 2021, which marked the rapid onset of this pandemic, donated €6.5 million, thereby influencing the increase of the capital of the KCGF and further strengthening the Agro Window.

Like other sectors, agriculture has also been affected by the pandemic. It is worth noting the fact that not all sub-sectors have been affected in the same way. While the small fruit sub-sector was profitable due to the increased demand for these products and the possibility of harvesting their entire yield. On the other hand, farmers who were part of the HoReCa chain and supplied this sector with their products, mainly had problems due to the restrictions that this sector faced during this pandemic.

Until the end of 2021, KCGF has signed agreements with 7 banks and 3 Microfinance Institutions (MFIs) of KCGF that are active in agro loans for the Window, while it has started the registration process of the fourth MFI in a row. A turning point for the registration of MFIs in KCGF was the opportunity it offered to financial institutions to guarantee loans given to farmers who possess a Farmer's Certificate and a Farm Identification Number (NIF), which was not possible before. This was made possible during the year 2021, a period that coincides with the time when the Economic Recovery Package (ERP) was active and implemented by the Government of the Republic of Kosovo (GRK). This package, in addition to the possibility of guaranteeing farmers who have NIF, also enabled partner financial institutions to guarantee up to 80% of the agro loan.

During 2021, a total of about €15.6 million new loans were approved from PFIs in the agricultural sector which have been placed under the guarantee of KCGF. This represents about 118% increase in the volume of guaranteed loans compared to the previous year 2020

(or about 65% increase compared to 2019), which increase came as a result of the increase in lending during the period of the beginning of the post-pandemic recovery. Also, the number of guaranteed loans has increased from 202 to 469, by 132% compared to the previous year (or about 108% compared to 2019).

The average amount of guaranteed loans in the agricultural sector during 2021 was around €33,400, with an average maturity of over 39 months (up from 35.7 months a year earlier).

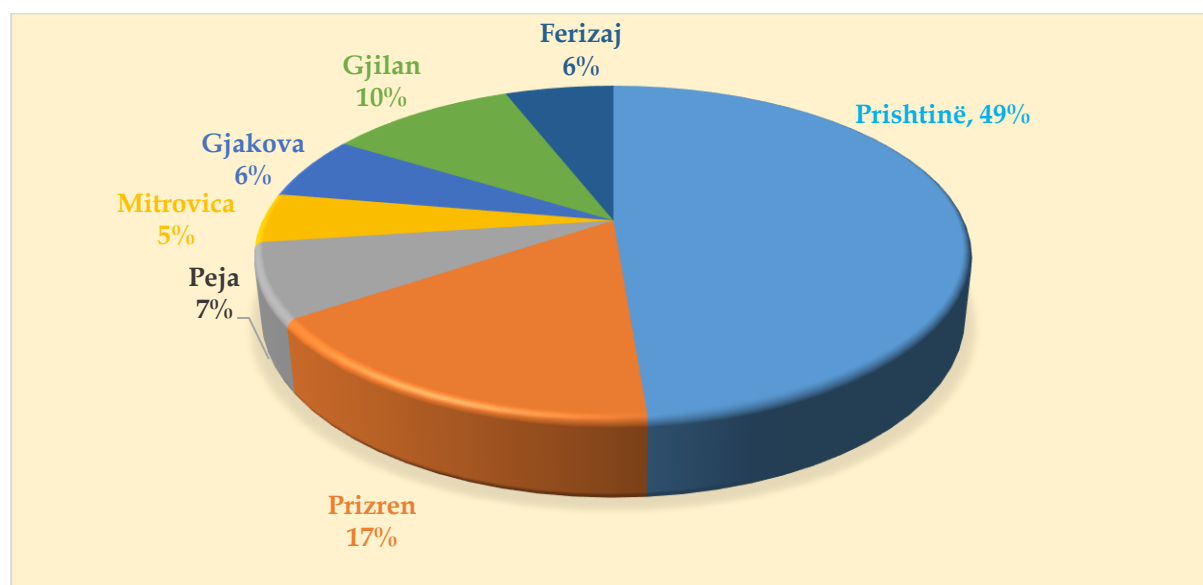
The regional distribution of €15.6 mil. of loans issued by PFIs and guaranteed by KCGF, in different regions for the agricultural sector during 2021 is as follows:

Table 94: Regional distribution of approved loans, 2021

Regional distribution	Approved loans, €
Prishtina	7,613,000
Prizren	2,631,600
Peja	1,140,200
Mitrovica	754,600
Gjakova	960,300
Gjilan	1,601,700
Ferizaj	921,600
Total	15,623,000

Source: KCGF

Figure 56: Loan distribution share, %



Source: KCGF

6.4 Insurance in the field of agriculture

Equipping farmers with an insurance policy is a unique opportunity to help develop agriculture in the country, as well as to increase access to finance for all Kosovo farmers and to create new opportunities to overcome the risks they face every day. Kosovo's agricultural insurance system is strengthening its foundations, bringing best international practices in designing the most suitable products for Kosovo farmers.

Development and Sale of Index Agricultural Insurance Products

In 2021, in addition to the existing seven (7) index insurance products for apple, grape, plum, pepper, strawberry, raspberry and walnut, (5) index insurance products have been developed. These five additional index insurance products were developed for these agricultural crops (sour cherries, cherries, beans, pears and maize). These products were designed to be launched in 2022. These crops were jointly selected by MAFRD and IFC based on various factors such as farm structure, number of farmers, cost of production, value chain and analysis of risk for each culture.

After the development of these products, total index insurance products are twelve (12) products (see the table below).

Table 95: Index Insurance Products for Kosovo for 2021

Type of crop	Risks covered	Period of coverage
Apple	Spring frosts	March 20 – May 15
Plums	Spring frosts	March 20 – May 15
Grape	Spring frosts	March 20 – May 15
Raspberries	Extreme high temperatures	July 1 – August 31
Strawberries	Spring frosts	March 1 - April 30
Pepper	Excessive rains	May 15 – June 10
Walnuts	Spring frosts	March 20 – May 15
Sour cherry	Spring frosts	March 20 – May 15
Cherry	Spring frosts	March 20 – May 15
Pear	Spring frosts	March 20 – May 15
Beans	High temperatures	June 15 – July 31
Maize	High temperatures	June 25 – July 25

* Note: Insurance products may change each year, following an annual review. Insurance products for sour cherry, cherry, pear, bean and maize are designed to be available in 2022.

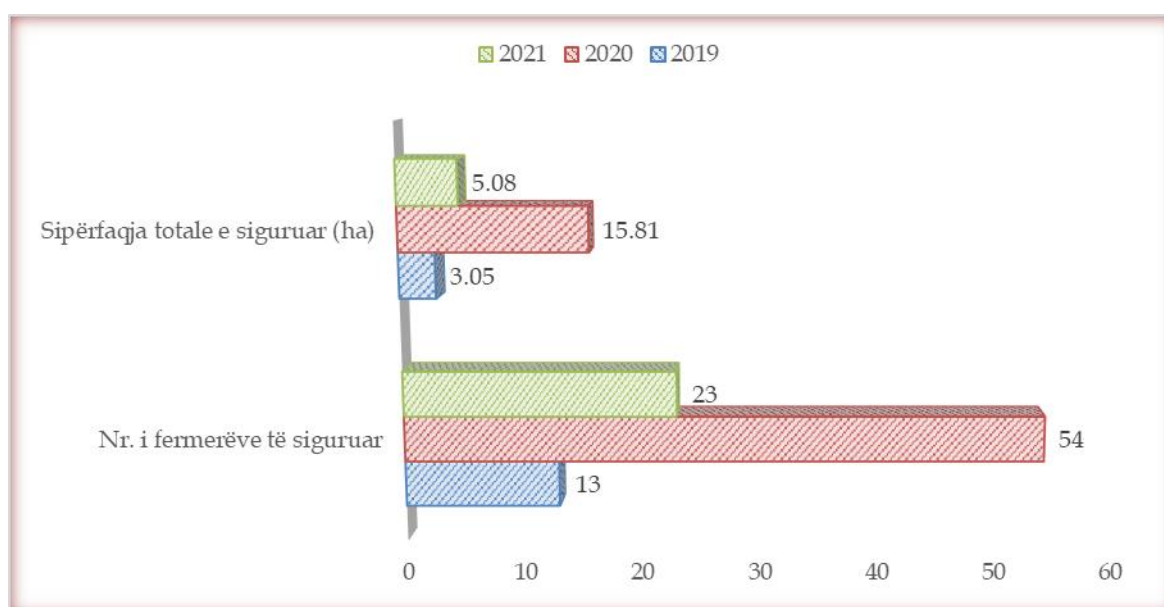
As for the sale of index insurance products, the year 2021 marks two years since the piloting of the agricultural insurance program (pilot phase). During this year, a total number of twenty-three (23) farmers joined the insurance scheme. These insurance policies were issued only for the raspberry crop - raspberry index insurance. The policies sold have provided protection in the eastern part of Kosovo, namely in the

municipality of Podujeva and in the southern part of the country, namely in the municipality of Shterpce.

In total, an area of 5.08 ha cultivated with raspberries was insured, with a minimum insured area of 0.20 ha and a maximum of up to 0.40 ha. Overall, in 2021, the average insured area with raspberries was 0.22 ha. To insure this area of raspberry cultivation, raspberry farmers pay an average price of €26 for the insurance policy, ranging from a minimum value of just €15 to a maximum of €90. These farmers paid a total of €599.62 as a premium, while the total amount of insurance reached the value of €9,652.

Compared to 2020, the number of farmers who insured their orchards with raspberries is almost the same, where the total area insured with raspberries has decreased by only 3%. However, compared to 2020, the total number of farmers who insured their cultivation areas decreased by 57%, while the total insured area decreased by 68%.

Figure 57: Total insured area in ha and no. of insured farmers



Source: Agricultural Insurance Information System (AIIS)

Damages/Losses and Compensation Payments

As in 2020, raspberry insurance policies had a validity period from 1 July to 31 August 2021 - a total of 62 days of risk cover against high temperatures of 29°C and above for 10 consecutive days. Since the summer of 2021 in Kosovo was accompanied by relatively high temperatures, these temperatures also resulted in damage to raspberry orchards.

Fortunately, of the group of farmers who purchased raspberry insurance, all farmers received compensation payments for losses in their orchards. Of the affected insurance limits, insured farmers suffered losses ranging from 25% to a maximum of 67.5%. In monetary terms, on average, raspberry farmers who suffered losses received

compensation of €154 for their losses, ranging from a minimum compensation value of €95 to a highest compensation value of €513.

Traditional Agricultural Insurance Products

At the beginning of the insurance project work in 2017, traditional insurance was not suitable for Kosovo as it required expertise and in-depth knowledge of underwriting, risk assessment and loss (damage) assessment (calculation). Furthermore, the risks of adverse selection and moral hazard were high. However, the climatic conditions that have prevailed in Kosovo in recent years have caused tremendous damage to many farmers, especially those in the fruit sub-sector, thus severely damaging their agricultural products and discouraging them from continuing and expanding their businesses. Hail has been a common meteorological phenomenon that has affected most of the country, causing great damage especially in the agricultural sub-sectors of fruits, vegetables and vineyards. The table below shows the reported losses of farmers in the last five years. As can be seen, in three of these years, hail constitutes the hazard with more than half of all declared damages.

Table 96: Damages reported by farmers in the period 2017-2021, in €

	2017	2018	2019	2020	2021
All losses (damages)	15,425,096	8,381,478	1,969,656	11,837,908	4,996,848
Losses from hail	1,972,730	6,457,937	1,198,947	3,448,707	3,085,539
Losses from hail (%)	13	77	61	29	62

Source: Evidence from the work of the Commission for the review of claims for compensation of damages

So, even from the reported damages, hail constitutes the main risk. Additionally, hail insurance became a common insurance requirement for farmers throughout Kosovo. Therefore, to help farmers overcome these difficult situations, it was necessary to develop agricultural insurance products that would help overcome these risks and ensure the continuity of activity for many Kosovar farmers. So far, three traditional insurance products have been developed (against hail, namely for these crops: apples, grapes and peppers). Hail insurance coverage will provide protection against physical damage from hail, and in many cases will also include coverage for some diseases that result as the impact of hail. During 2021, the necessary documentation for the full functionalization of traditional insurance products has been completed.

Human capacity development

Development of the capacities of the first assessors of agricultural losses in Kosovo

During the past three years, namely during 2018, 2019 and 2020, the work in agricultural insurance was also focused on the development of the necessary human capacities that would enable the full functionalization of traditional insurance products. Bearing in mind that traditional agricultural insurance requires loss assessment in the field, the insurance project has continuously trained twenty-five (25) future loss assessors, who determine the exact

percentage of damage to the insured crop and thus enable the calculation of the damage and the value of the compensation that the farmers will receive.

While throughout 2021, the agricultural insurance project is focused on licensing or creating other alternative opportunities for these certified damage assessors to start their work in the field. For this reason, the project has held several meetings with insurance companies and the Central Bank of Kosovo (CBK), to enable the use of existing damage assessors in agricultural insurance. Based on existing licensing requirements, the loss assessor must have experience in the insurance field and experience in the agricultural field. Of the existing loss assessors trained in the last three years, none meet these criteria. Therefore, the insurance project has recommended to the relevant institutions to count the training of loss assessors provided by IFC as required experience in agriculture.

In the framework of raising and developing human capacities, IFC in close cooperation with the MAFRD have continued with trainings to increase the capacities of the staff of insurance companies that will provide agricultural insurance, as well as training for agricultural insurance products and training for loss assessment.

Public Awareness Campaigns

Events with farmers, insurance companies, commercial banks and other actors

As part of the agricultural insurance project, in 2021, IFC in close cooperation with MAFRD organized and implemented several public relations events throughout Kosovo. The purpose of these events was to develop human capacities and increase awareness about insurance in agriculture.

Throughout this year, work on agricultural insurance was mainly focused on consultative (coordinating) meetings with farmers and farmers' associations and in general public awareness and awareness raising on the importance of agricultural insurance. Within the framework of the coordination meetings, several meetings with farmers have been organized (two round tables and six other meetings), with the aim of obtaining farmers' opinions on the new agricultural insurance products, namely to consult farmers on the accuracy of the agricultural insurance products- namely to confirm the causes, insurance period and cost of production. In addition, participation in television shows and publication of various articles related to agricultural insurance have been part of the key activities on raising awareness on agricultural insurance. Overall, in 2021, a number of 76 people participated in a total of 11 organized events.

Agricultural Insurance Information System

During 2021, in addition to the existing seven insurance products, the other five index insurance products were included in this information system. Moreover, throughout this year, the form of invoicing insurance policies has also been improved in the system. However, the

most important part is that throughout this year, due to technical problems, especially in the development of new features in the system, it has been decided to create a new information system. The work to create this system started in the middle of 2021 and is expected to be completed at the end of 2022.

Also, the website www.sigurimibujgesor.com, which was launched in 2019, was updated with new material during 2021.

6.5 Rural development projects - Investment grants

The part of the rural development projects, this year will present the summary of the Rural Development Program 2020-2021, for the measures and sub-measures included in the program as follows:

Measure 101 – Investments in physical assets in agricultural holdings, including the sector of fruit trees (apples, pears, plums, sour cherries, cherries, apricots, peaches and quinces), the greenhouse sector including potatoes and vegetable storage, the meat sector (calf fattening), meat sector (pig fattening), dairy sector (dairy cows, sheep and goats), collection points sector, grapes sector and laying hen sector.

Measure 103 – Investments in physical assets in the processing and marketing of agricultural products, including the dairy processing sector, the meat processing sector, the fruit and vegetable processing sector and the wine production sector.

Measure 302 – Diversification of farms and development of rural businesses, includes sub-measures such as production and marketing of honey, processing of agricultural products (cultivated) and their marketing, development of craft activities and their marketing, development of rural tourism and farm tourism, aquaculture/fish farming and poultry farming for eggs and meat.

Measure – Irrigation of agricultural lands.

Measure 303 – Implementation of local development strategies - Leader approach, includes the sub-measure of acquisition of skills and encouragement of the inhabitants of the territories of the selected LAGs; implementation of local development strategies, LEADER approach - for selected LAGs; and co-operation which will be initiated at a later stage, once the LAGs are well structured, their employees are trained and the residents of their territories have demonstrated capacity to benefit from those activities;

The table below shows the estimated budget for the implementation of the Rural Development Program 2020-2021, the estimated value amounts to € 29,370,000 and includes the budget for each measure and sub-measure.

Table 97: Projected budget of RDP, 2020-2021

Measure and sub-measure	Value in €
Measure 101: Investments in physical assets in agricultural holdings	17,620,000
101.1 Fruit tree sector	3,200,000
walnuts and hazelnuts	800,000
101.2 Manor trees	1,500,000
101.3 Vegetables and greenhouses sector	3,000,000
101.4 Fruit and vegetable storage	1,200,000
101.5 Meat production/calf breeding	2,500,000
101.6 Meat production/pig raising	400,000
101.7 Milk/cow production	2,500,000
101.8 Milk/sheep and goat production	420,000
101.9 Milk collection points	500,000
101.10 Grapes production	900,000
101.11 Egg production	700,000
Measure 103: Investments in physical assets in processing and trading agricultural products	6,800,000
103.1 Milk processing sector	1,700,000
103.2 Meat processing sector	2,000,000
103.3 Fruit and vegetable processing sector	2,100,000
103.4 Wine production sector	1,000,000
Measure 302: Diversification of farms and business development	3,850,000
302.1 Sector, beekeeping and production/processing and trade of honey	700,000
302.2 Collection, processing and promotion of non-timber mountain products	700,000
302.3 Processing of cultivated agricultural products	600,000
302.4 Development of craftsmanship activities and their marketing	300,000
302.5 Development of rural tourism and farm tourism	700,000
302.6 Aquaculture/fish farming sector	350,000
302.7 Poultry breeding sector for eggs and meat	500,000
Measure: Irrigation of agricultural lands	800,000
Measure 303: "Implementation of local development strategies, Leader- approach"	300,000
303.1 Skills acquisition and encouragement of residents of selected LAG territories	89,000
303.2 Drafting and implementation of local development strategies, LEADER approach -for selected LAGs	211,000
Total	29,370,000

Source: Rural Development Program 2020-21

Based on the data reported by the Directorate for Project Authorization in ADA, during the period 2020-2021, a total of 304 projects were authorized in the amount of €9,749,612.68, from the total budget foreseen for the RDP 2020-2021 of €29,370,000.00. It is worth noting that the call for applications for 2021 has been cancelled, therefore the presented projects are the beneficiary projects for the announced call for 2020.

According to the data in the table below for measure 101 Investments in physical assets in agricultural holdings containing sub-measures 101.1, 101.2, 101.1.1, the value of the support was a total of €5,804,681.72 for 188 beneficiaries. For measure 103 Investments in physical assets in processing and trading agricultural products, the value of the support was

€2,623,685.08 for a total of 19 beneficiaries, including sub-measures 103.1, 103.2, 103.3, 103.4. Measure 302 Diversification of farms and business development including sub-measures 302.1, 302.3, 302.4, 302.7 the value of support was €1,211,430.68 including 96 beneficiaries. As well as the measure for the irrigation of agricultural lands that had a value of €109,815.20 and there was only one beneficiary. The following table presents in detail the distribution of beneficiaries and the value for each measure and sub-measure.

Table 98: Projects authorized under the RDP, 2020-2021

Measure	Sub-measure	No. of beneficiaries	Value of public support
MEASURE 101: Investments in physical assets in agricultural holdings	101.1 Fruit trees	59	2,165,164.35
	101.2. Greenhouses	105	2,825,915.36
	101.1.1 Nut trees	24	813,602.01
Total Measure 101		188	5,804,681.72
MEASURE 103: Investments in physical assets in processing and trading agricultural products	103.1 Milk processing	2	285,485.63
	103.2 Meat processing	4	641,058.80
	103.3 Fruit and vegetable processing	9	1,004,079.65
	103.4 Wine production	4	693,061.00
Total Measure 103		19	2,623,685.08
MEASURE 302: Diversification of farms and business development	302.1 Production, processing of honey	46	526,019.20
	302.3 Processing of agricultural products in households	16	196,095.58
	302.4 Development of craftsmanship activities	11	198,171.35
	302.7 Poultry breeding for eggs and meat	23	291,144.55
Total Measure 302		96	1,211,430.68
Measure: Irrigation of agricultural lands	Measure:irrigation of agricultural lands	1	109,815.20
Total IAL		1	109,815.20
Total		304	9,749,612.68

Source: ADA, Directorate for the Authorization of Projects

6.6 Capacity enhancement and development

Education, training and advisory service

The Department of Advisory Services at the MAFRD has continued even this year with the coordination of activities at the central and local level, supporting and offering advice and training.

DATS continuously deals with the education and training of advisers and farmers. Capacity building trainings and certification trainings are organized for advisers, while trainings and advice are organized for farmers and publications are issued.

The Advisory System of Kosovo for Agriculture and Rural Development is being used to achieve the objectives set in the ARDP. These focus on raising farm incomes through improved market competitiveness, productivity and rural development. For this to happen, the following needs to be improved:

- Agricultural knowledge and management skills of farmers, in order to increase their competitiveness and encourage innovation;
- Sustainable management of agricultural properties, including the improved use of technology and methods of agricultural production;
- Preservation of the environment (water, land and air);
- Achieving food safety and quality;
- Veterinary, phytosanitary, animal welfare, environmental protection, quality and hygiene standards;
- Establishment of farmer groups, relationships between producers, traders and inputs from suppliers, as well as improved packaging, quality and continuity of food supply.

The NSARD strategy aims to provide professional advisory services for farmers on the basis of public/private partnership. The advisory service is helping to build technical capacities at farm level, in order to:

- achieve a more competitive, market-oriented agricultural sector (for exports and imports);
- support farmers to apply for grants and subsidies which are available through MAFRD and EU/donor programs;
- provide support through advisory services for farmers, as well as rural families and communities that address broader socio-economic issues in rural areas;
- align the agro-agricultural sector of Kosovo with that of the EU.

DATS, through the projects that have been developed within their plan, has achieved the implementation of activities to support farmers for soil analysis, training, counseling and recommendations for the results of soil analysis as follows:

Table 99: Attendance in soil analysis training

Training Participants 2021							
No. of trainings	No. of participants	Albanian	Minorities	Females	Males	Age 18-40 years	Age over 40 years
65	884	709	175	52	832	299	585
	100%	75%	25%	4%	96%	24%	76%

Source: Department of Advisory and Technical Services

Within the framework of the activities conducted in the municipal Information Advisory Centers (IAC) of advisory services, activities have been organized to support farmers with technical advice in the sectors of livestock, beekeeping, viticulture, arboriculture, olericulture and organic production. The following table presents the activities developed in the IACs.

Table 100: Activities conducted in municipal advisory centers

No. of applications for subsidies received from advisors	9,340
No. of farmers informed about grants and subsidies	6,607
No. of farmers supported in applying for grants and subsidies	4,245
No. of farmers supported in project preparation	246
Materials provided in the form of brochures and leaflets	4,891
No. of farmers supported by technical advice in the office	5,683
No. of beneficiaries with training and field counselling	1,813

Source: Department of Advisory and Technical Services

Note: only the applications accepted by the municipal advisors are presented and for this reason it differs from the total number of applications for subsidies because during the application process additional staff are also engaged for accepting applications.

Also, regarding the activities conducted in the field, some activities have been carried out by the advisors with their equipment, which aim to support the farmers in determining some parameters and giving advice based on them. The activities conducted in the field are shown in the following table:

Table 101: Field activities conducted by advisors

No. of samples taken and their submission for analysis	62
No. of measurements and determination of soil pH	28
No. of measurements and determination of water pH	20
No. of soil salinity measurements - EC based on soil salt content	22
No. of temperature and humidity measurements in indoor facilities	136
No. of fruit sugar measurements and determination of harvest time	65
No. of measurements of fruit hardness and determination of harvest time	25
Identification of pests in agricultural crops	74

Source: Department of Advisory and Technical Services

DATS, within the framework of the work plan, also coordinates the companies licensed to provide advice on agriculture and rural development, which according to the administrative instruction are obliged to report twice a year and to submit the annual work plan to DATS.

The following table shows the licensed companies for providing advice on agriculture and rural development where a total of 13 companies have been licensed so far.

Table 102: Companies licensed to provide advice on agriculture and rural development

Company	Municipality
IADK	Vushtrri
Consult Engineering	Prishtina
IKC	Ferizaj
ESG	Prishtina
KDC	Gjakova
NSH. KMI	Prishtina
"PMC" LLC	Prishtina
Ekrem Strana B.I	Mitrovica
Novus Consulting	Prishtina
Kosovo Consulting Group LLC	Gjilan
Agrovinifera LLCK	Rahovec
Recura JSCa	Prishtina
Organika	Prishtina

Source: Department of Advisory and Technical Services

Promotion, efficiency and structural development

The Advisory Service continues to give special importance to promotion, efficiency and development through the website of the MAFRD, where services for farmers and interested parties, various publications and statistical data, as well as advice from all areas are provided. Messages for farmers are also offered according to the periods where it is intended to sensitize farmers about the deadlines for carrying out different agricultural activities in order to be as productive as possible and informed about any development.

As part of the promotion, regular visits were organized to the AICs for agriculture and rural development in all the municipalities of the Republic of Kosovo, where a comprehensive analysis was made about the best organization of activities in the municipalities in cooperation with DATS. Through this analysis, the organization of the work plan in the future and the coordination of activities together with the municipalities are planned so that the advisory service continues to be a connecting bridge and guide for any development in the field of agriculture and rural development.

7 Annexes

7.1 List of laws and sub-legal acts related to Agriculture, Forestry and Rural Development

7.1.1 National legislation in force

Law No. 03/L-098 on Agriculture and Rural Development (Official Gazette of the Republic of Kosovo No. 56/27 July 2009)

7.1.2 Administrative Instructions approved by the Ministry of Agriculture, Forestry and Rural Development in 2021

1. Administrative Instruction (MAFRD) – No. 01/2021 dated 01.03.2021 on Amending and Supplementing the Administrative Instruction (MAFRD) - No. 01/2018 on Financial Compensation for Veterinary Services in the Field, dated 12.02.2018.
2. Administrative Instruction (MAFRD) – No. 02/2021 dated 01.03.2021 on Amending and Supplementing the Administrative Instruction (MAFRD) - No. 02/2018 on the Identification and Registration of Pet Animals, dated 02.03.2018.
3. Administrative Instruction (MAFRD) – No. 03/2021 on Setting Criteria for Internal Trade, Import, Export of Wine and other Grape and Wine Products, dated 29.04.2021.
4. Administrative Instruction (MAFRD) – No. 04/2021 on the Registration of Grape Growers, Wine Producers, Fruit Wines and other Grape and Wine Products, dated 04/29/2021.
5. Administrative Instruction (MAFRD) – No. 05/2021 dated 29.04.2021 on Amending and Supplementing the Administrative Instruction No. 08/2009 on Determination of Tax for the Registration of Entities, Testing of Varieties for the Cultivation Production Value and Printing of Labels for Cereal Seeds.
6. Administrative Instruction (MAFRD) – No. 06/2021 dated 29.04.2021 on the Amendment and Supplement to Administrative Instruction No. MA14/2004 on Registration, Licensing and Tax Determination for Importers, Exporters and Traders of Plant Material, Amended and Supplemented by Administrative Instruction MA No. 04/2007 dated 14.03.2007 and Administrative Instruction No. 04/2011 dated 24.04.2011.
7. Administrative Instruction (MAFRD) - No. 07/2021 on Direct Payments in Agriculture for the year 2021, dated 31.08.2021.
8. Administrative Instruction (MAFRD) – No. 08/2021 dated 29.10.2021 for the Amendment and Supplement to the Administrative Instruction (MAFRD) - No. 02/2020 on the Measures and Criteria of Support for Rural Development for the year 2020-2021.

9. Administrative Instruction (MAFRD) - No. 09/2021 on Services Performed in the Department of Viticulture and Winery, dated 10.11.2021.
10. Administrative Instruction (MAFRD) - No. 10/2021 dated 24.11.2021 on Amending and Supplementing the Administrative Instruction (MAFRD) - No. 07/2021 on Direct Payments in Agriculture for 2021, dated 31.08.2021.

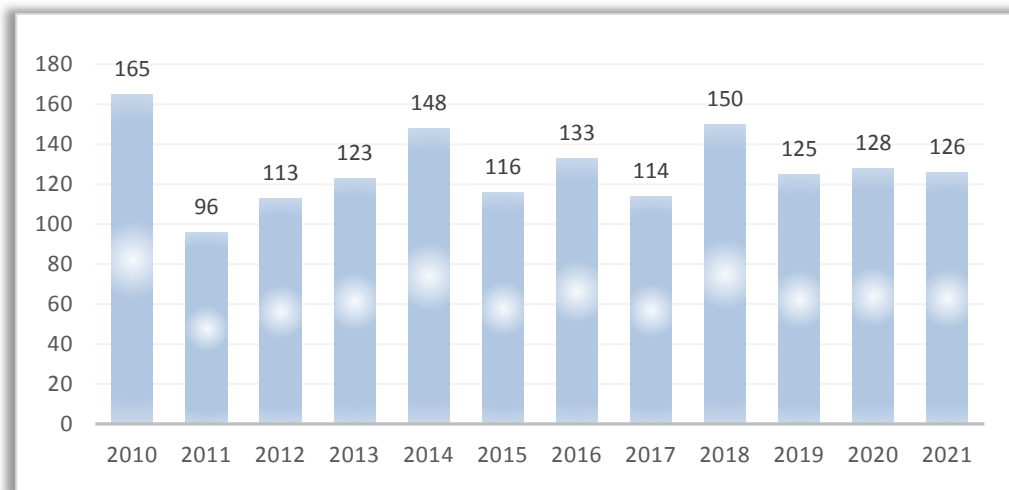
7.2 Comparative statistics

Table 103: Weather in Prishtina, number of days with rainfall and snowfall by month and year

Months	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
January	17	8	16	15	10	19	14	10	10	17	6	17
February	19	10	14	14	5	12	14	6	18	6	10	7
March	17	8	4	17	15	14	14	7	23	2	14	12
April	17	10	17	11	19	6	7	10	6	19	8	14
May	15	9	12	16	15	10	17	15	11	16	14	8
June	7	17	5	14	10	12	12	8	17	9	16	14
July	7	9	5	4	15	3	8	9	21	9	11	7
August	5	7	1	3	5	5	10	4	10	5	15	4
September	9	3	7	9	18	11	8	11	4	9	9	8
October	17	5	7	7	11	14	18	8	7	3	11	13
November	15	7	8	9	12	8	10	14	10	16	2	9
December	20	3	17	4	13	2	1	12	13	14	12	13
Total	165	96	113	123	148	116	133	114	150	125	128	126

Source: Hydrometeorological Institute of Kosovo

Figure 58: Weather in Prishtina, number of days with rainfall and snowfall 2010-2021



Source: Hydrometeorological Institute of Kosovo

Table 104: The length of the main rivers within the territory of Kosovo

Rivers	Length in km
Drini i Bardhë	112
Sitnica	110
Lumbardh of Peja	56
Morava e Binçës	67
Lepenci	50
Ereniku	38
Ibri	85
Lumbardh of Prizren	36

Source: Kosovo Agency of Statistics

Table 105: Forests of Kosovo by type and ownership, ha

	State owned	Private	Total
High forests	51,000	15,000	66,000
Low forests	116,000	63,000	179,000
Degraded forests	34,000	48,000	82,000
Shrubs/bushes	67,000	36,000	103,000
Total	268,000	162,000	430,000

Source: Kosovo Agency of Statistics

Table 106: Main lakes in Kosovo, the surface in km

Main lakes in Kosovo, the surface in km	
Gazivoda	9.1
Radoniq	5.96
Batllava	3.27
Badoc	2.57

Source: Kosovo Agency of Statistics

Table 107: Internet usage by age groups, 2018-2022* (%)

	2018	2019	2020	2021	2022
16-24	17	14.5	17.4	..	15.9
25-34	16.5	17.4	16.1	..	15.4
35-44	20.6	20.5	19.5	..	21.8
45-54	19.3	19.5	18.9	..	19.1
55-64	12.7	13.5	15.5	..	16.5
65+	8.4	9.2	10.1	..	10.1

Source: Kosovo Agency of Statistics,

* According to the EUROSTAT Methodology, there is no evidence for the year 2022

Table 108: Type of Internet access in households by type of access and year (%)

	2017	2018	2019	2020	2021
Fixed/mobile line	88.8	93.2	93.2	96.4	96.1
Fixed line	83.6	90.2	91.2	95.1	94
Mobile line	24.6	24.6	39.6	54.7	62.3

Source: Kosovo Agency of Statistics,

* According to the EUROSTAT Methodology, there is no evidence for the year 2022

7.3 Persons responsible for the Green Report, 2022

Table of Contents		Responsible person
1	Overall economic environment	
1.1	Level of socio-economic development	H. Xhaferi
1.2	Labour and employment	H. Xhaferi
1.3	Economic accounts for agriculture	H. Xhaferi
1.3.1	Agricultural products	H. Xhaferi
1.3.2	Entrepreneurial income	H. Xhaferi
1.3.3	Inputs in agriculture	H. Xhaferi
1.4	Prices of inputs and agricultural products	A. Maksuti
1.4.1	Prices of agricultural inputs	A. Maksuti
1.4.2	Prices of agricultural products	Sh. Duraku
	Farm prices of agricultural products	Sh. Duraku
	Consumer prices of agricultural products	Sh. Duraku
	Import prices of agricultural products	Sh. Duraku
	Comparison of local prices with prices in the countries of the region and the EU	Sh. Duraku
1.5	Privatization of agricultural lands	H. Xhaferi
1.6	Agricultural businesses - Agroindustry	H. Xhaferi
2	Agricultural production and its uses	
2.1	Use of agricultural land	H. Xhaferi
2.2	Crop production	A. Maksuti
2.2.1	Cereals	A. Maksuti
2.2.2	Vegetables	D. Hana
2.2.3	Fruits	D. Hana
2.2.4	Vineyards and wines	D. Hana
	Vineyards	D. Hana
	Wine	D. Hana
	Physico-chemical analyzes of wine	D. Hana
2.2.5	Forage crops and green cereals	A. Maksuti
2.2.6	Industrial crops	A. Maksuti
2.3	Irrigation of agricultural land	D. Hana
2.4	Livestock	A. Maksuti
2.4.1	Cattle	A. Maksuti
2.4.2	Sheep and goats	A. Maksuti
2.4.3	Pigs and other farm animals	A. Maksuti
2.4.4	Poultry	A. Maksuti
2.4.5	Beekeeping	A. Maksuti
3	Forestry	S. Bajrami
4	Trade	
4.1	Overall trade	B. Dabiqaj/H. Xhaferi
4.2	Trade of agricultural products	B. Dabiqaj/H. Xhaferi
4.2.1	Trade by country groups	B. Dabiqaj/H. Xhaferi
	Trade with CEFTA countries	B. Dabiqaj/H. Xhaferi
	Trade with EU countries	B. Dabiqaj/H. Xhaferi
	Trade with third countries	B. Dabiqaj/H. Xhaferi
4.2.2	Export-Import of agricultural products according to chapters (1-24)	B. Dabiqaj/H. Xhaferi
	Export of agricultural products according to chapters (1-24)	B. Dabiqaj/H. Xhaferi
	Import of agricultural products according to chapters (01-24)	B. Dabiqaj/H. Xhaferi
5	Food safety, standards and quality	H. Xhaferi
5.1	Greenhouse gas emissions	H. Xhaferi
6	Agricultural Policies, Direct Payments in Agriculture and Rural Development Support	
6.1	Summary of objectives, programs, measures, budget, grants and subsidies	A. Maksuti

6.2	Direct payments/subsidies	A. Maksuti
6.2.1	Direct payments for agricultural crops, wine and agricultural insurance	A. Maksuti
	Agricultural insurance premium	A. Maksuti
6.2.2	Direct payments for livestock and milk	A. Maksuti
6.2.3	Input support in agriculture	A. Maksuti
	Seedling support	A. Maksuti
6.3	Agro loans and guarantee fund	Sh. Duraku
6.3.1	Agro Loans	Sh. Duraku
	Kosovo Credit Guarantee Fund- KCGF	Sh. Duraku
6.4	Insurance in the field of agriculture	A. Maksuti
	Development and Sale of Index Agricultural Insurance Products	A. Maksuti
	Damages/losses and Compensation Payments	A. Maksuti
	Traditional Agricultural Insurance Products	A. Maksuti
	Development of human capacities	A. Maksuti
	Public Awareness Campaigns	A. Maksuti
	Agricultural Insurance Information System	A. Maksuti
6.5	Rural development projects - Investment grants	D. Hana
6.6	Improvement and development of capacities	D. Hana
	Education, training and advisory service	D. Hana
	Promotion, efficiency and structural development	D. Hana
7	Annexes	
7.1	List of laws and sub-legal acts related to Agriculture, Forestry and Rural Development	D. Hana
7.1.1	National legislation in force	D. Hana
7.1.2	Administrative Instructions approved by the Ministry of Agriculture, Forestry and Rural Development in 2021	D. Hana
7.2	Comparative statistics	H. Xhaferi

Contact e-mails:

delvina.hana@rks-gov.net

hakile.xhaferi@rks-gov.net

adelina.maksuti@rks-gov.net

shkelqim.duraku@rks-gov.net

belgin.dabiqaj@rks-gov.net

skender.bajrami@rks-gov.net