

2019



# Annual Report

Ministry of Environmental Protection and  
Agriculture of Georgia

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# Annual Report

## 2019

# Agricultural And Rural Development Agency



## Unified Agri-Project

Regional consultation centers and cooperation-focused programs/projects of the Agricultural Cooperatives Development Agency of the Ministry of Environmental Protection and Agriculture were transferred under the functional management of the N(N)LE Agricultural Projects Management Agency in 2019. Due to this structural change, the agency was renamed to N(N)LE Agricultural and Rural Development Agency, which elaborates programs/projects initiated by the Ministry of Environmental Protection and Agriculture of Georgia, with the purpose of supporting the agricultural sector and promoting the environment protection and rural development in general.

[www.georgianwine.gov.ge](http://www.georgianwine.gov.ge)

# Agricultural And Rural Development Agency

## Achieved and Forecasted Results

Period: March 2013 – December 2019

February 2020

## Implemented and ongoing programs/projects

Since 2013, the Agricultural And Rural Development Agency has been implementing the following projects with state co-financing and technical support:

	Project
1	Preferential Agri-Credit Project
2	Co-financing of Agri Processing and Storage Enterprises
4	Agri-insurance
5	Plant the Future
6	Tea Plantations Rehabilitation Program
7	Program of Agri-Production Promotion
8	Young Entrepreneur
9	Program of Co-financing of Agricultural Machinery

## Preferential Agri-Credit Project

The project has been implemented since 2013. The project goal is to support the primary agricultural production, processing, storage and sales of agricultural output through promoting access to finances for agricultural producers.

Within the framework of the project, farmers and enterprises engaged in primary agricultural production, processing and storage-sale, get preferential agri-credit and agro-leasing from financial institutions for their fixed and current assets.

There is a subcomponent for the agricultural mechanization added to the project's fixed assets component, within the frameworks of which the preferential agro-credits will be issued only for the purchase of agricultural machinery and/or implements.

Credits/leasing are issued by commercial banks/financial institutions involved in the project (12 banks and 3 leasing companies), and the agency provides co-funding for loan interest rates/leasing fees. It should be mentioned that making the banking/leasing sector interested in the agricultural sector is one of the most important achievements of the project, which promotes the agricultural development.

**The following interest rates apply based on the loan amount and purpose:**

**Agricredit for fixed assets, in case of the fixed interest rate:**

from 20,000 GEL to 150,000 GEL, inclusive	no more than 16%
from 150,001 GEL to 600,000 GEL, inclusive	no more than 15%
from 600,001 GEL to 1,500,000 GEL, inclusive	no more than 14%

**Agri credit for fixed assets, in case of the floating interest rate:**

From 20,000 GEL to 150,000 GEL, inclusive no more than 8% added to the refinancing rate set by the National Bank
from 150,001 GEL to 600,000 GEL, inclusive no more than 7% added to the refinancing rate set by the National Bank
From 600,001 GEL to 1,500,000 GEL, inclusive no more than 6% added to the refinancing rate set by the National Bank

The agency provides the interest rate co-financing in the amount of 11%, for no longer than 66 months. For the grape processing enterprises, for which the total residual amount of their current preferential agro-credit(s) under the subcomponent ranges between 1,500,001 GEL to 5,000,000 GEL, the Agency provides co-financing of interest rate in the amount of 10%, for no longer than 24 months.

**Agri-credit for agricultural mechanization, in case of the fixed interest rate:**

from 20,000 GEL to 150,000 GEL, inclusive	no more than 16%
from 150,001 GEL to 600,000 GEL, inclusive	no more than 15%
from 600,001 GEL to 1,500,000 GEL, inclusive	no more than 14%

**Agri-credit for agricultural mechanization, in case of the floating interest rate:**

From 20,000 GEL to 150,000 GEL, inclusive no more than 8% added to the refinancing rate set by the National Bank
from 150,001 GEL to 600,000 GEL, inclusive no more than 7% added to the refinancing rate set by the National Bank
From 600,001 GEL to 1,500,000 GEL, inclusive no more than 6% added to the refinancing rate set by the National Bank

**The Agency co-finances the interest rate in the amount of 11%, for no longer than 66 months.**

<b>Preferential agro-credit - interest rates within the agricultural framework of the state program Enterprise Georgia</b>
From 1,500,000 GEL to 3,000,000 GEL, inclusive no more than 6% added to the refinancing rate set by the National Bank
from 3,000,001 GEL to 5,000,000 GEL, inclusive no more than 5% added to the refinancing rate set by the National Bank

**The agency co-finances the interest rate in the amount of 10%.**

**Preferential Agri-Leasing**

From 20,000 GEL to 1,500,000 GEL, inclusive, with no more than 21%
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**The agency co-finances the leasing fee in the amount of 12%.**

**Since the beginning of the Preferential Agri-Credit Project (March 2013) until 2019, inclusive, the following loans were disbursed throughout Georgia:**

**For current assets:**

11,843 loans with the value of 534,229,056 GEL

**For fixed assets:**

28,386 loans with the value of 1,749,792,079 GEL.

In total, 40,124 loans with the amount of 2,260,082,131 GEL and 105 leasings with the amount of 23,939,004 were disbursed during 2013-2019.

**In 2019, the following loans were disbursed throughout Georgia:**

**For current assets:**

4 loans with the value of 1,044,052 GEL

**For fixed assets**

6,072 loans with the value of 431,822,899 GEL.

In total, 6,055 loans with the amount of 430,260,151 GEL and 21 leasings with the amount of 2,606,799 GEL were disbursed in 2019.

**Issued credits, co-financing and beneficiaries:**

*Table #1: Basic statistical and financial data (2013-2019)*

Indicator	March 2013 - December 2019	from this: January 2019 - December 2019
Volume of credits issued by the banks (GEL)	2,284,021,134	432,866,951
Amount of agency co-financing (GEL)	314,097,121	68,958,360
Number of credits issued by the banks	40,229	6,076
Number of unique beneficiaries	23,130	5,254

*Table #2: Amounts of issued credits per years (2013-2019)*

Year	Preferential agro-credits disbursed by the banks (GEL)	Size of the loan interest rate co-financed by the state (GEL)
2013	249,609,891	4,143,845
2014	481,066,433	29,306,079
2015	318,214,075	53,032,584
2016	200,032,076	49,129,338
2017	310,494,347	48,890,679
2018	291,737,362	60,636,237
2019	432,866,951	68,958,360
<b>Total</b>	<b>2,284,021,134</b>	<b>314,097,121</b>

*Table #3: Credits issued for fixed and current assets, per years (2013-2019)*

Purpose	Loan amount (GEL)	Number of loans
for current assets	534,229,056	11,843
for fixed assets	1,749,792,079	28,386
<b>Total</b>	<b>2,284,021,134</b>	<b>40,229</b>

*Table #4: Credits disbursed for fixed and current assets, per years (2019)*

Purpose	Loan amount (GEL)	Number of loans
for current assets	1,044,052	4
for fixed assets	431,822,899	6,072
<b>Total</b>	<b>432,866,951</b>	<b>6,076</b>

#### Disbursed Credits Per Industries

*Table #5: Statistical and financial data per industries (2013-2019)*

Industry	Number of credits issued by the banks	Volume of credits issued by the banks (GEL)	Share in total credits (%)	Amount of state co-financing of the credit interest rate (GEL)
cattle breeding	12,471	337,779,171	14.8	44,749,631
purchase of grapes	348	313,841,827	13.7	24,487,796
viticulture	3,450	213,531,034	9.3	22,982,018
horticulture	1,618	142,183,579	6.2	21,767,414
winemaking	373	139,282,453	6.1	34,895,139
sheep breeding	3,484	94,026,623	4.1	12,976,244
Poultry farming	873	90,490,130	4.0	14,571,252
greenhouse farming	1,684	90,214,657	3.9	14,137,892
mixed	1,080	73,155,269	3.2	10,355,739
other industries	14,848	789,516,392	34.6	113,173,998
<b>Total</b>	<b>40,229</b>	<b>2,284,021,134</b>		<b>314,097,121</b>

*Table #6: Statistical and financial data per industries (2019)*

Industry	Number of credits issued by the banks	Volume of credits issued by the banks (GEL)	Share in total credits (%)	Amount of state co-financing of credit interest rate (GEL)
Viticulture	1,131	99,456,105	23.0	9,916,959
cattle breeding	880	46,872,562	10.8	6,673,694
horticulture	378	44,843,201	10.4	7,638,712
machinery	542	27,834,801	6.4	1,897,161
Poultry farming	165	27,586,342	6.4	3,289,093
Beekeeping	884	26,034,890	6.0	3,162,194
Product storage facilities	385	25,962,433	6.0	2,739,970
Cold storage facilities for products	96	22,391,941	5.2	2,453,209
Mixed	346	20,355,732	4.7	3,506,464
other industries	1,269	91,528,944	21.1	27,680,905
<b>Total</b>	<b>6,076</b>	<b>432,866,951</b>		<b>68,958,360</b>

**Credits issued by commercial banks to the resident legal entities and natural persons**

Dates	total credit portfolio (thousand GEL)	Out of which: credit portfolio in agriculture, forestry and fishery industries (thousand GEL)	share in total credit portfolio (%)
01/01/2011	5,946,310	47,219	0.79
01/01/2012	7,449,543	59,868	0.80
01/01/2013	8,372,207	59,206	0.71
01/01/2013*	8,401,257	56,251	0.67
01/01/2014	10,115,168	153,711	1.52
01/01/2015	12,478,505	281,454	2.26
01/01/2016	15,509,651	312,677	2.02
01/01/2017	18,512,300	377,293	2.04
01/01/2018	21,761,898	393,783	1.81
01/01/2019	25,918,136	406,154	1.57
01/01/2020	31,078,641	482,165	1.55

Source: National Bank of Georgia

\* The Preferential Agri-credit project started on March 27<sup>th</sup>, 2013

From April 2013 until the January 1<sup>st</sup>, 2020, the total credit portfolio has increased by 3.70 times (by 270%), and the portfolio of credits issued in the agricultural, forestry and fishery sectors has increased by 8.57 times (by 757%).

### **Taxes paid to the state budget**

In 2013-2018, the beneficiaries registered as taxpayers (both as entrepreneur natural persons and legal entities) have paid 766,457,625 GEL to the state budget.

*Table #7: Taxes paid to the state budget by the beneficiaries of the Preferential Agri-Credit Project (2010-2018, only the beneficiaries who were registered as taxpayers)*

Year	Taxes paid by the enterprises to the state budget (GEL)	Increase of taxes paid to the state budget during the current year, as compared to 2012 (GEL)
2010	70,659,107	-
2011	94,944,612	-
2012	97,420,387	-
2013	111,187,102	13,766,715
2014	122,752,475	25,332,088
2015	129,262,629	31,842,242
2016	124,389,173	26,968,786
2017	133,301,287	35,880,900
2018	145,564,959	48,144,572
2019		
Total		

Source: The Ministry of Finance of Georgia

The amount paid to the state budget every year during 2013-2018 has increased by 30.3 million GEL on average, as compared to 2012 (in total – more by 181,935,303 GEL).

### **Joint revenues of beneficiary enterprises**

Joint revenues of beneficiaries registered as taxpayers is 2.36 times more in 2018 than the joint revenues of agricultural enterprises in 2012 (growth by 136%)

*Table #8: Joint revenues of beneficiaries per year (beneficiaries registered as taxpayers)*

Year	Joint revenues (GEL)	Growth compared to the previous year (GEL)
2010	648,191,735	-
2011	804,402,849	156,211,114
2012	904,221,995	99,819,146
2013	1,273,194,509	368,972,514
2014	1,462,228,560	189,034,051
2015	1,467,827,153	5,598,593
2016	1,727,086,215	259,259,062
2017	1,988,946,070	261,859,855
2018	2,132,016,008	143,069,938 2019
2019		

*Source: the Ministry of Finance of Georgia*

## **Jobs**

There were 12,600 new jobs created since launching the Preferential Agri-Credit Project in 2013 until December 2018, inclusive. The number of actual employees is in fact more, because the obtained data is received only according to the indicators of beneficiaries who are registered as taxpayers.

*Table #9: Number of employed individuals per years, only those beneficiaries who were registered as taxpayers (both entrepreneur natural persons and legal entities)*

Year	Jobs
2012	9,171
2013	15,365
2014	16,348
2015	14,745
2016	17,598
2017	18,603
2018	21,698
2019	

*Source: the Ministry of Finance of Georgia*

# Project - Co-Financing of Processing and Storage Enterprises

The project is comprised of two components:

- Processing enterprises co-financing component;
- Storage facilities co-financing component.

Processing enterprises and storage facilities are co-financed through the following sources:

- Co-financing by the Agency - no more than 50% of the total project value, but no more than 600,000 GEL;
- Preferential credit/leasing - no more than 1,500,000 GEL;
- Co-participation of beneficiaries and/or alternative funding source for project financing.

*Comment: Special terms and conditions of co-financing covers those projects that will be implemented in the territory specified in the list of high-mountainous settlements and villages located along the administrative border line, and/or the ones that will be implemented by an agricultural cooperative. In this case, the Agency co-financing will be no more than 60% of the total project value, but not exceeding 600,000 GEL.*

The project for co-financing the processing and storage enterprises will be implemented in the following target areas: all the municipalities and self-governing cities of Georgia, except the self-governing cities of **Tbilisi, Kutaisi, Batumi, Poti**:

## Processing enterprises component

Achieved and forecasted results of 50 beneficiary enterprises of the project are provided below. As of December 2019, 43 enterprises had started functioning. All the 50 enterprises will be operational in 2020. The indicators do not envisage the growth of production, and the average planned sales estimates are provided. Sources of actual data are based on the information available at the Rural and Agricultural Development Agency, and the forecasted data are taken from the business plans approved during the grant selection stage of the project.

## Industries, enterprises, investments and state co-financing

*Table #10: Statistical and financial data per industries of financed enterprises (2014-2019)*

Industry	Number of enterprises	Total investment (GEL)*	State co-financing, grant (GEL)	Share of state co-financing (grant) in total investment (%)
Fruit processing	13	25,399,808	7,189,576	28.3%

Hazelnut processing	8	12,791,838	3,986,087	31.2%
Dairy processing	6	5,686,100	2,472,675	43.5%
Wine production	5	6,164,649	3,181,864	51.6%
Laurel processing	2	2,434,795	945,351	38.8%
Animal feed production	2	2,321,200	840,290	36.2%
Tea processing	2	2,155,800	989,198	45.9%
Peach puree production	1	4,257,803	600,000	14.1%
Fish processing	1	1,556,758	622,896	40.0%
Berry processing	1	1,137,500	419,397	36.9%
Ham production	1	875,000	331,093	37.8%
Grain processing	1	2,500,000	948,484	37.9%
Milk processing (Guda cheese)	1	548,500	219,400	40.0%
Mushroom briquette and mushroom production	1	2,863,885	598,255	20.9%
Tea and spices production	1	929,188	352,282	37.9%
Fruit juice, syrup production	1	1,744,910	610,376	35.0%
Meat processing	1	951,500	373,642	39.3%
Meat and fish processing	1	1,149,583	420,235	36.6%
Janjukha and tkłapi (fruit leather) production	1	1,060,325	443,411	41.8%
<b>Total</b>	<b>50</b>	<b>76,529,140</b>	<b>25,544,514</b>	<b>33.4%</b>

*Table #11: Statistical and financial data per sectors of financed enterprises (2019)*

Industry	Number of enterprises	Total investment (GEL)*	State co-financing, grant (GEL)	Share of state co-financing (grant) in total investment (%)
Wine production	3	4,699,050	1,800,000	38.3%
Animal feed production	1	571,200	228,480	40.0%
Tea processing	1	1,084,500	600,000	55.3%

Fruit processing	1	1,443,000	577,200	40.0%
<b>Total</b>	<b>6</b>	<b>7,797,750</b>	<b>3,205,680</b>	<b>41.1%</b>

\* Before launching the larization program, the project estimates were made in USD dollars; total investment amounts of the project are converted into the national currency in the provided data according to the currency exchange rate of \$ / GEL=2.5.

The processing enterprises are getting grants, but the state also finances their loan interest rate (within the framework of the preferential agro-credit project) as well. In this respect, the estimated co-financing volume for the project's beneficiary enterprises is 13,961,052 GEL (perhaps Kavtaradze was providing you with this information); (this volume can be affected by the partial or full repayment of the loan, fluctuation of currency rates, and changes in the timeframes of issuing the credit installments for those enterprises that have not fully utilized the preferential agro-credit yet.

### Inputs, production of output and sale

*Table #12: Available and forecasted data regarding the input purchase and output sales, per sectors of financed enterprises (2014-2019)*

Industry	Number of enterprises	Price of inputs (GEL)	Cost of output (GEL)	Expected sales revenue (GEL)
Fruit processing	13	3,590,434	5,628,828	10,912,245
Hazelnut processing	8	61,721,963	66,624,855	71,150,458
Dairy processing	6	1,883,560	2,264,317	3,435,703
Wine production	5	987,806	2,254,727	3,930,896
Laurel processing	2	528,637	914,220	1,453,780
Animal feed production	2	3,359,344	3,263,588	3,784,564
Tea processing	2	302,200	616,275	1,228,802
Peach puree production	1	982,800	1,452,999	2,304,048
Fish processing	1	1,034,504	1,084,703	1,526,667
Berry processing	1	112,376	159,286	196,424
Ham production	1	122,283	100,544	200,902
Grain processing	1	878,884	1,264,034	1,436,452
Milk processing (Guda cheese)	1	21,850	34,087	60,210
Mushroom briquette and mushroom production	1	686,252	717,087	1,219,048
Tea and spices production	1	47,065	200,460	418,000

Fruit juice, syrup production	1	179,547	232,540	451,532
Meat processing	1	584,545	825,061	1,035,000
Meat and fish processing	1	548,818	896,855	1,350,779
Janjukha and tkłapi (fruit leather) production	1	118,295	91,608	269,314
<b>Total</b>	<b>50</b>	<b>77,691,162</b>	<b>88,626,073</b>	<b>106,364,823</b>

## Jobs

*Table #13: Jobs - project of co-financing the processing enterprises (already created + forecasted) (2014-2019)*

Industry	Number of enterprises	Employed individuals (person)	Average number of employees at an enterprise (person/enterprise)
Fruit processing	13	324	25
Hazelnut processing	8	752	94
Dairy processing	6	87	15
Wine production	5	65	13
Laurel processing	2	51	26
Animal feed production	2	38	19
Tea processing	2	25	13
Peach puree production	1	12	12
Fish processing	1	13	13
Berry processing	1	28	28
Ham production	1	11	11
Grain processing	1	50	50
Milk processing (Guda cheese)	1	6	6
Mushroom briquette and mushroom production	1	49	49
Tea and spices production	1	23	23
Fruit juice, syrup production	1	23	23
Meat processing	1	18	18

Meat and fish processing	1	24	24
Janjukha and tkłapi (fruit leather) production	1	23	23
<b>Total</b>	<b>50</b>	<b>1,622</b>	<b>32</b>

About 15,800 GEL was spent for creating one job in the form of the state co-financing (grant).

### Results achieved with the state grant - 2014 – 2019

*Table #14: Investments*

Created investments	Volume
Total investment (GEL)	76,529,140
State co-financing as a grant (GEL)	25,544,514
Attracted investments (GEL)	50,984,626
<b>Investments attracted with 1 GEL of grant amount (GEL)</b>	<b>2.00</b>

In total, 76,529,140 GEL was or is being invested at 50 enterprises (as grants, credits, entrepreneur's investment) since 2014. The share of state grant (25,544,514 GEL) in the investments amounted at 33.4%. 1 GEL invested by the state resulted in attracting the investment of 2.00 GEL (agro-credit and entrepreneur's investment).

*Table #15: Employment*

Created jobs	Amount
Total number of employees including seasonal employment	1,622
Average salary per employee, income tax inclusive (GEL/month)	390
Total salary of employees, income tax inclusive (GEL/year)	7,600,000
Income tax, total (GEL/year)	1,520,000
<b>Salary generated with 1 GEL grant (GEL/year)</b>	<b>0.06</b>

50 enterprises will employ 1,622 people (on average, 32 employees per enterprise) including the seasonal employees. Annual salary of employees is 7,600,000 (390 GEL (income tax inclusive) per month per employee). 1 GEL invested by the stage generates 0.30 GEL annual salary (out of which 0.06 GEL is paid every month to the state budget as an income tax).

*Tables #16: Inputs*

Total inputs	Volume
Cost of inputs to be purchased (GEL)	77,691,162
<b>Purchase of inputs generated with 1 GEL grant (GEL/year)</b>	<b>3.04</b>

50 enterprises will purchase local inputs with the value of 77,691,162 GEL annually - 1 GEL invested by the state will generate revenues in the amount of 3.04 GEL for hundreds of local small and medium farming undertakings.

*Tables #17: Revenues and production*

Revenues and produced agricultural output	Amount
Weight of agricultural output to be produced (kg/year)	18,200,000
Sales revenue from agricultural products	106,364,823
Cost of agricultural product for sale (GEL)	88,626,073
Created added value (GEL)	17,738,750
<b>Sales price of the output produced with 1 GEL grant (GEL/year)</b>	<b>0.71</b>
<b>Added value created with 1 GEL grant (GEL/year)</b>	<b>0.69</b>

50 enterprises will additionally create 18,200 tons of agricultural products, with the sales value of more than 106 million GEL (1 GEL of the grant amount annually creates 0.71 kg agricultural product). 1 GEL invested by the state as a grant amount will annually create additional value of 0.69 GEL.

**Taxes paid to the state budget**

This indicator will be calculated based on actual taxes, according to the information provided by the Revenue Service. The estimated amount of taxes may be affected by the new system of profit tax that was updated in 2017, exemption of export and some industries from VAT, tax breaks instituted for enterprises in high mountainous regions, application of offset procedure for the consolidated surplus of the accumulated VAT in the investment part, and/or the return of overpaid amount.

With various assumptions, beneficiary enterprises will pay the property and income tax in the amount of 3.7 million GEL to the state budget annually, after becoming fully operational. The amount of 1.5 million GEL will be added every year to this amount, as an income tax withheld by them. In total, the state budget will receive 5.2 million GEL annually from program beneficiary processing enterprises in the form of property, profit and income taxes (1 GEL issued as a state grant will generate the tax of 0.20 GEL annually).

## Component of Storage Facilities

### Industries, enterprises, investments and state co-financing

*Table #18: Statistical and financial data according the financed enterprises by industries (2016-2019)*

Industry	Number of enterprises	Total investment (GEL)	State co-financing (GEL)	Share of state co-financing in total investment (%)
Stone fruits	8	10,017,631	4,603,040	45.9
Fruit storage	6	8,490,678	3,600,000	42.4
Fruit and vegetable storage	6	9,097,695	3,508,758	38.6
Hazelnut storage	5	3,981,136	1,990,566	50.0
Seed fruit	2	4,077,036	1,200,000	29.4
Berries	2	1,465,433	732,717	50.0
Fruit storage	1	1,313,521	525,408	40.0
Vegetable storage	1	1,020,616	510,308	50.0
Hazelnut storage	1	862,440	344,976	40.0
Potato storage	1	1,657,723	627,556	37.9
<b>Total</b>	<b>33</b>	<b>41,983,908</b>	<b>17,643,330</b>	<b>42.0</b>

In the storage enterprises co-financing project, the grant amount of 1 GEL invested by the state attracted the investment of 1.38 GEL.

*Table #19: Statistical and financial data according of financed enterprises by industries (2019)*

Industry	Number of enterprises	Total investment (GEL)	State co-financing (GEL)	Share of state co-financing in total investment (%)
Stone fruit	8	10,017,631	4,603,040	45.9
Hazelnut storage	5	3,981,136	1,990,566	50.0
Seed fruit	2	4,077,036	1,200,000	29.4
Berries	2	1,465,433	732,717	50.0
Fruit storage	1	1,268,739	600,000	47.3
Fruit and vegetable storage	1	1,242,578	600,000	48.3
<b>Total</b>	<b>19</b>	<b>22,052,553</b>	<b>9,726,323</b>	<b>44.1</b>

### Capacity of storage facilities

*Table #20: Storage facilities co-financing project – capacities of financed facilities per industries (2014-2019)*

Industry	Number	Total capacity (tons)
Stone fruits	8	5,310
Fruit storage	6	4,500
Fruit and vegetable storage	6	4,770
Hazelnut storage	5	2,756
Seed fruit	2	2,000
Berries	2	400
Fruit storage	1	500
Vegetable storage	1	800
Hazelnut storage	1	1,000
Potato storage	1	1,800
<b>Total</b>	<b>33</b>	<b>23,836</b>

### Enterprises per regions and industries

*Table #21: Financed enterprises per regions and industries (2014-2019)*

Region / Industry	Number of storage facilities
Guria	1
Berries	1
Kakheti	7
Hazelnut storage	3
Fruit storage	1
Fruit and vegetable storage	3
Mtskheta-Mtianeti	2
Fruit storage	1
Fruit storage	1
Samegrelo Zemo-Svaneti	2
Hazelnut storage	1
Hazelnut storage	1
Kvemo Kartli	3
Vegetable storage	1
Seed fruit	1
Potato storage	1

Shida Kartli	18
Seed fruit	1
Hazelnut storage	1
Berries	1
Stone fruit	8
Fruit storage	4
Vegetable storage	3
<b>Total</b>	<b>33</b>

*Table #22: Financed enterprises per regions and industries (2019)*

Region / Industry	Number of storage facilities
Guria	1
Berries	1
Kakheti	4
Hazelnut storage	3
Fruit storage	1
Samegrelo Zemo-Svaneti	1
Hazelnut storage	1
Kvemo Kartli	1
Seed fruit	1
Shida Kartli	12
Seed fruit	1
Hazelnut storage	1
Berries	1
Stone fruit	8
Fruit and vegetable storage	1
<b>Total</b>	<b>19</b>

Other than providing the grants, the state (within the framework of a preferential agro-credit project) also finances the credit interest rate for storage facilities; in this section, 5,916,262 GEL is the estimated co-financing volume for the project beneficiary enterprises (the amount can be affected by full or partial prepayment of the loan, currency rate fluctuations and the changes in timeframes of issuing credit installments for those enterprises which have not fully utilized the preferential agro-credit yet).

## Program of Agri-Production Promotion

The program is implemented within the framework of Agriculture Modernization, Market Access and Resilience Project (AMMAR). The program is funded by the International Fund for Agricultural Development (IFAD) and the Global Environment Facility (GEF). The program started in 2016 and it is implemented by the Agricultural and Rural Development Agency.

### Primary processing component

**Program beneficiaries:** farmers and commercial legal entities, which intend to upgrade existing orchards or to plant new ones, to arrange/upgrade greenhouse farming, to purchase agricultural machinery, to purchase anti-frost and anti-hail systems, to purchase the equipment required for primary treatment/processing of harvest and to arrange the infrastructure required for primary warehousing of their harvest.

**Main conditions of the program:** a beneficiary gets co-financing from the state in the amount of 40% of the total project value; the beneficiary co-participation is 60%. For agricultural cooperatives, the maximum amount of state co-financing is the GEL equivalent of 150,000 USD and for other entities - the GEL equivalent of 15,000 USD.

### Component of processing enterprises and storage facilities

**Program beneficiaries:** commercial legal entities, which are willing to modernize the existing processing/storage enterprises, or to set up new processing enterprises/storage facilities.

**Main conditions of the program:** a beneficiary gets co-financing from the state in the amount of 40% of the total project value; the beneficiary co-participation is 60%. Maximum amount of state co-financing is the GEL equivalent of 100,000 USD.

### Industries, enterprises, investments and the state co-financing

*Table #23: Program of Agri-Production Promotion – number of projects and investments per components (2016-2019)*

Component	Number of projects	Volume of investment (GEL)	Volume of state co-financing (GEL)	Share of state financing in total investment (%)
Primary production	582	26,557,308	10,437,625	39.3
Processing storage	12	5,654,044	2,237,215	39.6
<b>Total</b>	<b>594</b>	<b>32,211,352</b>	<b>12,674,840</b>	<b>39.3</b>

Within the framework of the Program of Agri-Production Promotion, the grant amount of 1 GEL invested by the state attracted the investment of 1.54 GEL.

*Table #24: Program of Agri-Production Promotion - number of projects and investments per components (2019)*

Component	Number of projects	Volume of investment (GEL)	Volume of state co-financing (GEL)	Share of state co-financing in total investment (%)
Primary production	151	8,964,709	3,468,899	38.7
Processing / storage	5	2,025,764	810,305	40.0
<b>Total</b>	<b>156</b>	<b>10,990,473</b>	<b>4,279,204</b>	<b>38.9</b>

#### **Purpose, projects, investments**

*Table #25: Program of Agri-Production Promotion, number of projects and investments per purpose (2016-2019)*

Financed purpose	Number of projects	Total volume of investments (GEL)	Volume of state co-financing (GEL)
Purchase/repair of equipment	10	3,489,627	1,384,811
Technology adapted to climate change	1	13,850	5,540
Beekeeping appliances	52	2,542,751	1,012,364
Primary warehousing of harvest	10	1,582,429	551,702
Plant/rehabilitate perennial orchards	18	287,209	114,990
Arrange/re-equip the greenhouse	93	8,705,438	3,430,616
Purchase of irrigation system	1	22,850	9,140
Agricultural equipment	362	13,942,026	5,558,266
Certification (Global GAP)	1	26,300	10,520
Anti-hail nets	5	405,868	161,392
Set up the storage facilities	1	650,741	260,296
Drip irrigation system	40	542,263	175,202
<b>Total</b>	<b>594</b>	<b>32,211,352</b>	<b>12,674,840</b>

*Table #26: Program of Agri-Production Promotion - number of projects and investments per purpose (2019)*

Targeted activity to be financed	Number of projects	Total volume of investments (GEL)	Volume of state co-financing (GEL)
Purchase/repair of equipment	5	2,025,764	810,305
Beekeeping appliances	10	411,480	161,352
Primary warehousing of harvest	2	1,265,446	425,230
Plant/rehabilitate perennial orchards	2	26,263	10,505
Arrange/re-equip the greenhouses	37	3,234,446	1,260,982
Purchase irrigation system	1	22,850	9,140
Agricultural equipment	91	3,742,339	1,496,936
Anti-hail nets	1	196,656	78,662
Drip irrigation system	7	65,229	26,092
<b>Total</b>	<b>156</b>	<b>10,990,473</b>	<b>4,279,204</b>

**Estimated results in the primary production component:**

- Greenhouses produce the output with the value of 3.22 million GEL annually
- Honey with the value of 3.3 million GEL is produced annually
- Cold storage facilities will get the annual revenue of 550,000 GEL
- Farmers will save 3.5 million GEL annually from renting going to cultural equipment

**Estimated results in the component of processing and storage enterprises:**

- 368 people will be employed
- Salaries in the amount of 1.21 million GEL will be issued annually
- Output with the value of 5.1 million GEL will be created

# Tea Plantation Rehabilitation Program

Goal of the program is to rehabilitate the state-owned and private tea plantations, to maximize the tea potential, to create modern tea processing enterprises and to promote the local tea (among them bio-tea) production. The program has been implemented since 2016.

Within the framework of the program, legal entities (except the agricultural cooperatives), which own land parcels, will receive 60% of the funds needed for the plantation rehabilitation, and in case of leasing the land plots, the co-financing volume will increase up to 70%.

If the agricultural cooperatives own their land, they will receive 80% of the money required for plantation rehabilitation, and in case of leasing the land parcel - 90%.

After the plantation rehabilitation, agricultural cooperatives will receive all the equipment and appliances required for primary tea processing from the state for free.

## Projects, land area and investments

*Table #27: Tea plantation rehabilitation program - number of projects, land area and investments (2016-2019)*

Number of projects	Area to be rehabilitated (ha)	Total investment (GEL)	Volume of state co-financing (GEL)	Weight of ready product * (kg./year)	Sales price of ready product (GEL/year)
49	1,024	2,551,642	1,775,488	1,219,000	36,570,000

\* ready product means the processed tea without packaging.

1 GEL invested by the state has returned the investment of 0.44 GEL (the total investment includes the investments required for the rehabilitation of tea plantations, it does not include the expenses such as: fencing, construction of a tea processing enterprise, purchase of equipment and appliances, introduction of standards...). With 1 GEL invested as a state grant, 0.69 kg tea products will be produced annually, and farmers/enterprises will receive 20.6 GEL revenues annually.

The number of permanently employed people will be 450 individuals, and the number of seasonal workers will be about 1,200 people. Average monthly salaries of enterprise employees will be 400 GEL.

*Table #28: Tea plantations rehabilitation program - number of projects, land area and investments (2019)*

Number of projects	Rehabilitation area (ha)	Total investments (GEL)	Volume of state co-financing (GEL)
5	59	148,583	96,537

Besides, 8 cooperatives received the equipment and appliances required for primary tea processing in 2019 (with the value of 314,080 GEL).

## Program for Supporting Young Entrepreneurs in Rural Areas – “Young Entrepreneur”

The program has been initiated by the Ministry of Environmental Protection and Agriculture of Georgia, and it has been implemented since 2018 by the N(N)LE Agricultural and Rural Development Agency, with the funding of the donor organization Danish International Development Agency (DANIDA).

Program beneficiaries: individual entrepreneurs willing to start up a new business in the regions, aged 18-35 in case of men, and aged 18-40 in case of women; agricultural cooperatives, founders/shareholders and board chairpersons/director(s) of which are men aged 18-35 and/or women aged 18-40.

Basic terms and conditions of the program: within the frameworks of the program, funding is provided both for agricultural and non-agricultural business activities. The state co-finances no more than 40% (no more than 60,000 GEL) of the investment value of the project described in the business plan. The project investment value should be no less than 10,000 (ten thousand) GEL.

### Industries, projects and investments

*Table #29: Program Young Entrepreneur - number of projects and investments per purpose (2018-2019)*

Industry	Number of projects	Volume of investments (GEL)	Volume of state co-financing (GEL)	Share of state co-financing in total investments
Primary production	114	10,628,981	4,171,086	39
Processing	58	6,027,791	2,333,273	39
Service	28	3,272,864	1,267,938	39
Storage	5	394,404	157,762	40
Production	2	169,595	67,838	40
<b>Total</b>	<b>206</b>	<b>20,493,635</b>	<b>7,997,897</b>	<b>39</b>

One GEL of grant amount invested by the state has returned the investment of 1.56 GEL.

*Table #30: Program Young Entrepreneur - number of projects and investments per purpose (2019)*

Industry	Number of projects	Volume of investments (GEL)	Volume of state co-financing (GEL)	Share of state co-financing in total investments
Primary production	65	5,256,453	2,093,935	40
Processing	20	2,223,492	870,672	39
Service	12	1,156,625	459,528	40
Storage	2	125,813	50,325	40
Production	1	60,000	24,000	40
<b>Total</b>	<b>100</b>	<b>8,822,382</b>	<b>3,498,460</b>	<b>40</b>

### Regions, Projects and Investments

*Table #31: Projects and investments per regions (2018-2019)*

Region	Number of projects	Size of investment (GEL)	Volume of state co-financing (GEL)
Kakheti	129	12,001,688	4,682,146
Mtskheta-Mtianeti	18	2,354,299	886,067
Racha-Lechkhumi	15	1,226,384	490,553
Samtskhe-Javakheti	7	1,039,023	409,172
Shida Kartli	10	927,636	355,781
Guria	7	793,789	317,516
Samegrelo-Zemo Svaneti	6	674,169	269,667
Kvemo Kartli	5	613,764	244,145
Adjara	5	524,283	207,620
Imereti	4	338,602	135,230
<b>Total</b>	<b>206</b>	<b>20,493,635</b>	<b>7,997,897</b>

*Table #32: Projects and investments per regions (2019)*

Region	Number of projects	Size of investment (GEL)	Volume of state co-financing (GEL)
Kakheti	71	5,795,373	2,294,228
Racha-Lechkhumi	11	1,093,103	437,241
Mtskheta-Mtianeti	5	647,274	253,510
Samtskhe-Javakheti	3	450,276	178,938

Guria	2	253,043	101,217
Adjara	3	219,821	87,928
Imereti	2	136,651	54,660
Kvemo Kartli	1	126,314	50,525
Shida Kartli	1	70,920	28,368
Samegrelo-Zemo Svaneti	1	29,608	11,843
<b>Total</b>	<b>100</b>	<b>8,822,382</b>	<b>3,498,460</b>

## The Program “Plant the Future”

The program implementation started in March 2015 and its main goal is to effectively use the agricultural lands in Georgia through planting perennial cultures, as a result of which the imported products will be replaced by the Georgian ones, the export will grow, it will be easier to provide raw materials to processing enterprises, and the social-economic conditions of rural population will improve.

The program Plant the Future consists of two components and one subcomponent: component for co-financing of perennial orchards, component for co-financing nurseries, and subcomponents for financing the berries.

### Orchard component

Under the component of perennial orchards, the following costs will be financed: 70% of cost of young trees, and in case of agricultural cooperatives, villages situated along the administrative border line and high-mountainous settlements - 80% of cost (maximum funding per young tree is determined), 50% of cost of drip irrigation system, and 60% of costs for the cooperatives with the agricultural status, villages situated along the administrative border line and high-mountainous settlements (it is determined to allocate no more than 2,500 GEL per 1 ha for arranging the drip irrigation system).

A beneficiary can participate in the state program Plant the Future several times; however, the total amount of the received funding should not exceed 250,000 GEL, and the total area or for the planted orchards should not be more than 50 hectares.

Within the frameworks of the orchards component of the program, funding will be provided for planting at least 0.5 ha of perennial orchards by one beneficiary.

Volume of co-financing should not exceed 10,000 Gel per 1 ha. The maximum limit for blueberries is 15,000 GEL per 1 ha.

Under the orchards components, at first, 70% or 80% of the cost of young trees will be financed, and from the remaining difference - the drip irrigation system will be financed.

### Crops, areas and investments

*Table #33: Crops that have been or are being planted, and investments (2015-2019)*

Crops	Area (ha)	Total investment (GEL)	State co-financing (GEL)	Share of state co-financing in total investments (%)
Walnut	2,809	23,052,179	13,641,155	59
Almond	1,412	10,638,522	5,552,262	52
Apple	1,023	16,408,924	8,449,076	51
Hazelnuts	627	2,318,669	1,213,016	52
Blueberry	474	12,339,467	6,807,243	55
Olive	468	4,069,303	2,414,056	59
Raspberry	318	5,217,719	3,038,109	58
Plum	311	3,138,160	1,562,762	50
Other	1,034	9,715,412	5,165,909	53
<b>Total</b>	<b>8,476</b>	<b>86,898,356</b>	<b>47,843,589</b>	<b>55</b>

1 GEL invested by the state grant attracted 0.82 GEL investment. In total, 1,305 orchards with the area of 8,476 ha has been or are being planted during the period from 2015 until December 31, 2019.

*Table #34: Crops that have been or are being planted and investments (2019)*

Crops	Area (ha)	Total investment (GEL)	State co-financing (GEL)	Share of state co-financing in total investments (%)
Almond	519	4,516,832	2,285,852	51
Walnut	501	4,374,337	2,585,756	59
Blueberry	182	5,028,749	2,680,113	53
Raspberry	172	2,885,040	1,704,898	59
Olive	167	1,701,962	928,720	55
Pistachio	147	670,350	539,320	80
Apple	111	1,943,730	1,032,910	53
Sour plum	65	335,619	196,032	58
Other	235	2,914,215	1,399,964	48
<b>Total</b>	<b>2,099</b>	<b>24,370,834</b>	<b>13,353,566</b>	<b>55</b>

## Regions and areas

*Table #35: Areas planted or being planted per regions (2015-2019)*

Region	Area (ha) 2015-2019	Out of which: area (ha) - 2019
Adjara	44	10
Guria	196	42
Imereti	497	170
Kakheti	3,380	891
Mtskheta-Mtianeti	120	13
Racha-Lechkhumi	21	3
Samegrelo	648	161
Samtskhe-Javakheti	25	0
Kvemo Kartli	1,449	469
Shida Kartli	2,096	341
<b>Total</b>	<b>8,476</b>	<b>2,099</b>

## Harvest and revenues

*Table #36: Forecasted harvest of planted crops and estimated revenues of farmers per years*

Year	2020	2021	2022	2023	2024	2025
Harvest (tons)	16,139	28,468	42,338	57,597	68,708	74,385
Revenues (million GEL)	20,505,543	41,534,827	69,224,305	105,013,765	134,060,181	151,425,550

One GEL of state co-financing generates 1.55 kg agricultural product annually (since the moment when the orchards start to yield full harvest), and generates 3.17 GEL revenues for farmers every year.

*Table #37: Program “Plant the Future” – forecasted harvest of planted crops (tons) per years*

Crop/year	2020	2021	2022	2023	2024	2025
Stone fruit	1,353,489	3,013,077	6,438,084	10,446,476	14,938,308	18,186,492
Seed fruit	13,746,844	22,136,631	29,532,712	35,981,323	39,037,296	39,309,767
Subtropical	288,330	579,755	940,744	1,420,943	1,776,656	2,066,130
Nuts	4,074,055	10,536,861	21,885,620	37,115,614	53,304,234	62,154,798
Berries	1,042,824	5,268,503	10,427,147	20,049,410	25,003,687	29,708,363
<b>Total</b>	<b>20,505,543</b>	<b>41,534,827</b>	<b>69,224,305</b>	<b>105,013,765</b>	<b>134,060,181</b>	<b>151,425,550</b>

*Table #38: Program “Plant the Future” – forecasted revenues of farmers (million GEL) per crops and per years*

Crop/year	2020	2021	2022	2023	2024	2025
Stone fruit	1,353,489	3,013,077	6,438,084	10,446,476	14,938,308	18,186,492
Seed fruit	13,746,844	22,136,631	29,532,712	35,981,323	39,037,296	39,309,767
Subtropical	288,330	579,755	940,744	1,420,943	1,776,656	2,066,130
Nuts	4,074,055	10,536,861	21,885,620	37,115,614	53,304,234	62,154,798
Berries	1,042,824	5,268,503	10,427,147	20,049,410	25,003,687	29,708,363
<b>Total</b>	<b>20,505,543</b>	<b>41,534,827</b>	<b>69,224,305</b>	<b>105,013,765</b>	<b>134,060,181</b>	<b>151,425,550</b>

### Component of nursery farms

Under the component of nursery farms, no more than 70% of cost of setting up a nursery, with no more than 500,000 GEL will be financed.

From 2015 until December 31<sup>st</sup>, 2019, in total, there were 2 nursery farms with the capacity of 100,000 young trees set up annually in Vani and Senaki municipalities.

### Subcomponents for financing the berries

The subcomponent for financing the berries envisages financing 100% of cost of purchasing young trees, purchase/installation of drip irrigation system, and for other materials required for planting the berries orchard: blueberry, raspberry, blackberry, on the agricultural land with the area from 0.15 ha to 0.5 ha.

### Crops, land areas and investments

*Table #39: Crops that have been or are being planted and investments (2019)*

Crops	Area (ha)	Total investment (GEL)	State co-financing (GEL)	Share of state co-financing in total investment (%)
Blueberry	50.90	2,120,945	2,120,945	100
Blueberry, blackberry, raspberry	0.40	10,060	10,060	100
Blackberry	3.31	68,502	68,502	100
Raspberry	11.57	285,693	285,693	100
Raspberry, blackberry	2.26	50,688	50,688	100
<b>Total</b>	<b>68.4</b>	<b>2,535,888</b>	<b>2,535,888</b>	<b>100</b>

## Regions and areas

*Table #40: Areas that have been or are being planted per regions (2019)*

Region	Area (ha)
Guria	15.95
Imereti	26.34
Mtskheta-Mtianeti	7.79
Samegrelo	17.61
Shida Kartli	0.75
<b>Total</b>	<b>68.4</b>

## Agricultural Insurance Program

Goal of the agri-insurance program is to develop insurance markets in the agricultural sector, to support agricultural activities, to maintain revenues for the individuals engaged in agricultural activities and to minimize the risks. The program has been implemented since 2014.

Within the framework of the agri-insurance program, the farmers are able to insure their harvest against the hail, flood, hurricane and frost in the fall.

Within the framework of the program, it is possible to insure the land area of no more than five hectares, except the grain crops, where the maximum land area is 30 ha. In case of agricultural cooperatives, the maximum amount of insurance premium is 50,000 GEL, and there is no limit for the area of the land to be insured.

**A farmer who purchases the insurance under the program, will get the funding to cover the following share of costs:**

50 % - in case of insuring the vine

70 % - in case of insuring all the other crops

### **Insurance premiums, policies and insured areas**

*Table #41: Agri-insurance program - number of policies, insurance premium and area of insured land per years*

Year	Number of policies	Total insurance premium (GEL)	Insurance area, ha
2014	21,056	12,586,739	18,723
2015	7,634	3,444,300	4,944
2016	18,795	11,981,874	15,472

2017	21,394	11,649,283	20,718
2018	12,574	7,135,833	11,557
2019	16,473	9,583,048	13,852
<b>Total</b>	<b>97,926</b>	<b>56,381,077</b>	<b>85,265</b>

#### Data per regions

*Table #42: Agri-insurance program - number of policies, insurance premiums, insured areas and reimbursements per regions (2014-2019)*

Region	Number of policies	Insurance premium (GEL)	Share of a premium paid by the state (GEL)	Area (ha)	Reimbursed claim (GEL)
Adjara	23,186	5,368,997	4,040,759	7,637	6,447,736
Guria	8,845	1,760,586	1,558,444	3,119	501,375
Tbilisi	9	1,144	855	2	0
Imereti	6,169	447,040	271,778	2,020	14,037
Kakheti	35,822	30,074,567	20,254,756	44,226	19,353,339
Mtskheta-Mtianeti	261	152,736	123,926	317	13,691
Racha-Lechkhumi and Kvemo Svaneti	391	71,513	41,451	156	14,772
Samegrelo-Zemo Svaneti	8,130	2,107,737	1,578,160	6,038	1,113,479
Samtskhe-Javakheti	4,043	4,259,666	2,916,517	4,906	2,035,276
Kvemo Kartli	2,598	1,844,858	1,406,481	8,120	2,084,428
Shida Kartli	8,476	10,292,233	7,507,541	8,722	6,673,886
<b>Total</b>	<b>97,926</b>	<b>56,381,077</b>	<b>39,700,667</b>	<b>85,265</b>	<b>38,252,017</b>

*Table #43: Agri-insurance program - number of policies, insurance premiums and insured areas, and reimbursement per regions (2019)*

Region	Number of policies	Insurance premium (GEL)	Share of premium paid by the state (GEL)	Area (ha)	Reimbursed claim (GEL)
Adjara	858	261,093	181,997	258	3,802
Guria	208	31,481	21,894	87	121
Tbilisi	2	214	150	-	-

Imereti	1,993	152,312	90,491	571	310
Kakheti	8,464	5,765,876	3,208,095	8,308	2,044,084
Mtskheta-Mtianeti	61	8,219	5,584	24	1,400
Racha-Lechkhumi and Kvemo Svaneti	156	24,689	12,600	45	894
Samegrelo-Zemo Svaneti	1,337	205,898	143,675	696	45,835
Samtskhe-Javakheti	613	522,707	365,749	569	142,233
Kvemo Kartli	785	340,142	230,759	1,483	117,515
Shida Kartli	1,998	2,270,418	1,585,209	1,811	553,444
<b>Total</b>	<b>16,473</b>	<b>9,583,048</b>	<b>5,846,204</b>	<b>13,852</b>	<b>2,909,637</b>

### Structure of insurance premiums

*Table #44: Agri-insurance program - size of insurance premiums and structure per years*

Year	Total insurance premium (GEL)	Share of the premium paid by the insured (GEL)	Share of the premium paid by the state (GEL)	Share of the premium paid by the state in total premium (%)
2014	12,586,739	779,693	11,800,629	93.8
2015	3,444,300	1,442,672	1,948,980	56.6
2016	11,981,874	3,677,059	8,223,721	68.6
2017	11,649,283	4,238,293	7,406,244	63.6
2018	7,135,833	2,657,198	4,474,889	62.7
2019	9,583,048	3,730,594	5,846,204	61.0
<b>Total</b>	<b>56,381,077</b>	<b>16,525,509</b>	<b>39,700,667</b>	<b>70.4</b>

### Claims and reimbursements

*Table #45: Insurance reimbursements per years (2014-2019)*

Year	Number of affected beneficiaries	Area of the damaged land parcel (ha)	Reimbursed claim (GEL)
2014	6,395	10,210	11,296,414
2015	4,483	2,561	2,904,487
2016	6,399	6,061	6,211,368
2017	5,663	9,659	9,284,934
2018	1,619	4,849	5,645,178
2019	2,518	14,696	2,909,637

<b>Total</b>	<b>19,041</b>	<b>48,036</b>	<b>38,252,017</b>
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*Table #46: Premiums received in the category of agri-insurance in Georgia and the reimbursed amounts: comparison of data of 2010-2012 with the next period since the beginning of the implementation of the state agri-insurance program*

Year	Total insurance premium (GEL)	Reimbursed damage (GEL)
2010	76,933	84,805
2011	84,626	93,286
2012	93,089	956,353
2013	182,556	56,727
2014	12,586,739	11,296,414
2015	3,444,300	2,904,487
2016	11,981,874	6,211,368
2017	11,649,283	9,284,934
2018	7,135,833	5,645,178
2019	9,583,048	2,909,637

## Efficiency

*Table #47: Agri-insurance program - structure of insurance reimbursements per years (2014-2019)*

Year	Reimbursed damage (GEL)	Reimbursed damage / premium paid by the agency (%)	Reimbursed claim / total premium (%)
2014	11,296,414	95.7	89.7
2015	2,904,487	149.0	84.3
2016	6,211,368	75.5	51.8
2017	9,284,934	125.4	79.7
2018	5,645,178	126.2	79.1
2019	2,909,637	49.8	30.4
<b>Total</b>	<b>38,252,017</b>	<b>96.4</b>	<b>67.8</b>

Efficiency of state funding is high in the program - for every 100 GEL of insurance premium co-financing paid by the state there is a 96.4 GEL insurance reimbursement. Besides the state has contributed into the development of insurance industry (revenue, knowledge, experience, development of specialists...). The state has effectively handed over a function of agri-insurance administration to the private sector

(respective expenses would have been significantly higher if it were administered by the state) - insurance companies have reimbursed 68% of all the received premium, which is a moderate indicator for insurance practices (the remaining part consists of the payments to agents, administrative expenses and profit of insurance companies).

## Program of Co-financing the Agricultural Machinery

The state program for co-financing the agricultural equipment envisages co-financing the following agricultural equipment:

Any type of harvesting equipment, both self-moving and attached;

Agricultural tractors;

Agricultural trailers (implement and rototiller).

The amount of agency co-financing per beneficiary is no more than 50% of the cost of agricultural equipment to be purchased, but no more than 150,000 GEL.

The agricultural equipment to be purchase should be new (not used), namely, it should meet 2 conditions:

The agricultural equipment should be produced no earlier than two calendar years before its purchase;

At the moment of purchasing, the agricultural equipment should have an effective warranty.

The program beneficiary should be a natural person who is a citizen of Georgia, or a sole trader, or a commercial legal entity registered in accordance with the law (among them, an agricultural cooperative, where the state does not have any share /stake/stocks).

### Purpose, investments and state co-financing

*Table # 48: Programs for co-financing the agricultural equipment - number of projects and investments per purpose (2019)*

Component	Number of projects	Size of state co-financing (GEL)	Size of investments (GEL)
Harvester	13	1,855,454	4,226,414
Other	89	4,822,217	10,080,628
<b>Total</b>	<b>102</b>	<b>6,677,671</b>	<b>14,307,042</b>

*1 GEL invested under the state grant, attracts the investment of 0.82 GEL.*

*Table # 49: Program for co-financing the agricultural equipment - number of projects and investments per regions (2019)*

Region	Number of Projects	Size of state co-financing (GEL)	Size of investments (GEL)
Guria	1	19,540	39,080
Imereti	1	42,965	85,930
Kakheti	74	4,955,113	10,709,040
Mtskheta-Mtianeti	3	229,840	541,350
Racha-Lechkhumi	2	96,563	193,125
Samegrelo	2	27,075	54,150
Kvemo Kartli	6	612,514	1,288,171
Shida Kartli	13	694,061	1,396,195
<b>Total</b>	<b>102</b>	<b>6,677,671</b>	<b>14,307,042</b>

## Programs for Supporting the Development of Agricultural Cooperatives

There are many state programs implemented with the purpose of supporting the business-oriented farmers unions and agricultural cooperatives.

In 2019, there was a registration announced for the programs focused on supporting the agricultural cooperatives in various sectors, which includes the financial support for the introduction of food safety international system for primary and processing enterprises, and for promoting the produced output.

By 2019, within the framework of the “**State program for the rational use of state-owned hayfields and grazing fields in high-mountainous regions**”, total of 7,649 ha of hayfield and grazing fields were handed over to 23 agricultural cooperatives out of 38 cooperatives participating in the program, with the 25 year leasing rights. these 23 agricultural cooperatives were received the tractors and trailer equipment with 90% co-financing. For the remaining 15 cooperatives, there are procedures underway as envisaged by the program for the handover of hayfields and grazing fields, and equipment as well.

The goal of the state **program for supporting the agricultural beekeeping cooperatives** is it to improve the material and technical resources of beekeeping holdings of agricultural cooperatives, to improve the quality and to increase the volume of honey and other beekeeping products. Various types of beehives will be handed over to the entities participating in the state program, as a grant covering 30% of the cost. There were seven applications registered as the results of the registration announced within the framework of the program.

**State program for supporting the dairy producing agricultural cooperatives** aims to promote the production of milk and dairy products in Georgia. Within the framework of the program, the agricultural cooperatives registered in high-mountainous settlements will receive 95% co-financing for purchasing the milk processing equipment and appliances, with no more than 150,000 GEL, and 90% co-financing in the remaining territory of Georgia, with no more than 150,000 GEL. There were three applications registered as a result of the registration announced within the framework of the program.

**State program for supporting the viticulture agricultural cooperatives** aims to support processing of grapes produced in the country, among them those produced by agricultural cooperatives; to set up the grapes receiving-processing enterprises equipped with modern technologies within the frameworks of agricultural cooperatives; the agency co-financing includes no more than 90% funding for purchasing the equipment and appliances required for processing no less than 100 tons of grapes, with no more than 500,000 GEL, and 95% of funding in a high-mountainous settlements, with no more than 500,000 GEL. There were 8 applications registered as a result of the registration announced within the framework of the program.

**State program for branding and introducing the international standards at agricultural cooperatives** aims to support the cooperatives to ensure that their production processes are compliant with European standards, and it also aims to promote their output. In case of threats analysis and introduction of system of critical control points, a beneficiary will cover no less than 10% of service fee, and the Agency will cover no more than 90%, where the maximum amount shall not exceed 13,500 GEL. When engaged in the branding component, an agricultural cooperative can request co-financing for the purchase of equipment needed for finalizing/branding the products. No less than 30% of equipment costs will be covered by the beneficiary and no more than 70% - by the Agency, where the maximum amount shall not exceed 10,000 GEL. There were 4 applications registered as the result of the registration announced within the framework of the program.

## **Providing the Agricultural Extension Service**

**Purpose of the activity:** to support farmers and rural population engaged in agriculture in growing the agricultural crops, introducing new technologies and innovations for storing and processing the harvest, to enhance knowledge and to share experience, to promote the implemented and ongoing projects of the agency.

### **Implemented activities**

In 2019, there was a mobile extension implemented in 144 villages of 33 municipalities in the Autonomous Republic of Adjara and six regions of Georgia. In total, sectorial consultations were provided to 1,700

population in rural areas. The project was implemented with the LEPL Scientific-Research Center of Agriculture.

In 2019, 9 regional offices and 54 information consultation services provided 48,863 consultations to 81,470 interested individuals (consultation can be provided to several interested individuals at the same time). There were information meetings with the local population, covering about 2,600 villages throughout Georgia.

Consultations were offered in various sectors; besides, the farmers were provided with complete information about the ongoing projects implemented by the Agency.

**Ways of providing the consultations:**

- Consultations at offices (legal entities, natural persons)
- Telephone conversations, text messages
- Visits of interested individuals (farmers) to land parcels
- Group meetings with farmers in the villages
- Meetings at community centers of the Ministry of Justice
- Emails and social networks

## **Farms/farmers registration project**

**Purpose of the activity:** to register all the individuals engaged in agricultural activities throughout Georgia (except those engaged in agricultural activities as contracted by legal entities registered in Georgia and/or based on the labor agreement), which will enable the state to have information and to use it for the right selection of target groups, and for planning and implementing various stimulating projects/programs, as needed.

**Implemented activities**

In 2019, there were activities carried out in order to register new farmers/farming holdings and to verify the data about the farmers/farming holding registered in 2018. There were activities carried out in 2019 aimed at improving the electronic system required for the registration of farmers/farming holdings in order to make this system more dynamic and interactive. Within the framework of this activity, an electronic module for “processes and control management” of the company Abaco was introduced.

In 2019, as a result of the measures taken under this activity, the following outcomes were achieved: 15,541 farmers/farming holdings were registered under the “project for the registration of farmers/farming holdings”.

In total, since the beginning of the project, 122,861 farmers/farming holdings were registered within the framework of the project.

## Technical Assistance

### Introduction of international standards

**Project beneficiaries:** all the beneficiaries, who are financed with the purpose of setting up the processing enterprises within the framework of the project for co-financing the processing and storage enterprises, are obliged to implement ISO-22000 or HACCP international standards.

**Basic conditions of the project:** 30% of costs associated with the implementation of the standard is financed by the state, and 70% is contributed by the beneficiary.

In total, there were 23 agreements signed with beneficiaries in 2016-2019 regarding the implementation of international standards: 19 enterprises got the ISO 22000 certificate, and two enterprises got HACCP certificates. There were 2 agreements signed in 2019 (all ISO 22000:2005).

### Mandatory trainings for the project Plant the Future

Within the framework of technical assistance, there were 608 beneficiaries trained for the project Plant the Future in 2017-2019. Among them, trainings were held for 178 beneficiaries in 2019.

### Trainings in management

As a result of trainings conducted for the beneficiaries financed under the Unified Agri-credit program, there were 44 beneficiaries trained in general management, and 32 beneficiaries trained in financial management in 2018.

## Information Department of the Agricultural and Rural Development Agency

### *Number of calls received on hotline (1501) per years*

Year	Total
2013	63,396
2014	31,394
2015	35,895

2016	47,031
2017	29,490
2018	49,581
2019	82,622
<b>Total</b>	<b>339,409</b>

Comment: from 2013 until 2016, the hotline served only the N(N)LE Agricultural Projects Management Agency, from 2016 to 2019 it served only the Ministry of Agriculture and its agencies, and starting from 2019 - the Ministry of Agricultural Protection and Agriculture and its agencies.

*Messages received via online chat per years*

Year	Total
2014	42
2015	615
2016	2,906
2017	4,343
2018	5,649
2019	5,801
<b>Total</b>	<b>19,356</b>

**Comment:** the online chat served only the N(N)LE Agricultural Projects Management Agency from 2014 to 2016, then it served only the Ministry of Agriculture and its agencies from 2016 to 2020, after which the Department of Environmental Supervision was added starting from 2020.

## Programs/projects to be implemented in 2020

### Imereti Agrizone

#### Goals:

To stimulate the maximum utilization of export potential of traditional export industry, namely, the greenhouses sector (herbs and greenhouse vegetables) of the west Georgia, and, consequently, to increase the export revenues;

To facilitate the access to new markets for traditional export industries and, consequently, to diversify the export markets;

To set an example of modernization of the greenhouse sector and knowledge sharing throughout the country;

To create preconditions for establishing Kutaisi as a logistics center.

**Objectives:**

To stimulate the creation of a critical number of primary enterprises with food safety standards required for international trade within tight timeframes;

To stimulate the creation of a modern enterprise for harvest processing;

To create all the necessary infrastructure required for the smooth functioning of the agri-zone.

**Rural development program**

The following activities are important for rural development: ensuring relevant conditions for the creation of new jobs in the villages, supporting the entrepreneurship development, economic diversification, targeted activities focused on agriculture development, and attracting investments in this sector. With this purpose, funded by the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD) and supported by the UNDP, the Agricultural and Rural Development Agency will implement the Rural Development Program.

**Program goals**

To support the development of non-agricultural entrepreneurial activities in rural areas, which from its side will stimulate the economic development of the municipality, improve the social economic conditions, promote economic diversification and creation of new jobs.

To overcome the challenges related to the environment and climate change, and to ensure the efficient use of natural resources.

**Dairy Modernization and Market Access Program**

**Program goal:**

The program is focused on rural economic development and poverty reduction by contributing to the modernization and emergence of a competitive, diversified, resilient and sustainable dairy industry;

**Program objective:**

To enhance the livelihoods and resilience of smallholder dairy producers, and improve the management of natural resources on which they depend.

**Program for Technical Assistance to Beneficiaries**

**The program envisages:**

Providing financial support for the introduction of food safety management international systems and standards.

Financial support for branding and packaging design.

Hiring the long-term foreign agri-consultants / agri-consultation companies / experts for agency projects / program beneficiaries. Financial support to agricultural cooperatives for ensuring the improved enterprise management and processes.

**Program goal:**

To strengthen the industries envisaged in the programs/projects of the Agency, and to eliminate the gaps in the value chain of these industries.

**Program objective:**

To improve the quality of products produced by beneficiaries of programs/projects of the Agency, to enhance food safety, traceability and competitiveness by co-financing.

# National Wine Agency



Main area of activities of the LEPL National Wine Agency is to support the development of viticulture and winemaking. To this effect, the National Wine Agency implements the following programs:

- Activities to support the promotion of Georgian wine
- Vintage support activities
- Activities for viticulture development
- Research and promotion of Georgian vine culture
- Laboratory research of wine.

[www.georgianwine.gov.ge](http://www.georgianwine.gov.ge)

# National Wine Agency

*Results of 2019 indicate that as a result of the rights sectorial policy implemented in recent years by the state, the wine-making industry has developed significantly, and it is playing a big role in the economic development of the country.*

*Along with the growing importance of wine and other alcoholic beverages, the number of wine cellars and vineyard areas is increasing, and so is the volume of industrially processed grapes, which eventually increases the revenues of people engaged in the winemaking sector.*

*Quantity-wise, there is a higher growth rate observed in regard to the sales revenues generated from wine. This indicates that the export price for the Georgian wine increases at the global market, and this is due to the improved quality of the Georgian wine, as pointed out by international wine experts and professionals unanimously, which indicates that the Georgian wine is gradually finding its place in the premium segment.*

## Promotion of the Georgian Wine

In 2019, the Georgian wine was presented at more than 20 international exhibitions and up to 200 wine tasting events in various countries in the world, among the United States of America, Japan, China, South Korea, France and European countries. The activities continued for raising awareness on the Georgian wine at the strategic markets that were agreed with the private sector, and therefore, for penetrating these markets. Contractor organizations of the National Wine Agency have been implementing various marketing activities at the strategic markets. For the Georgian wine, the strategic markets are the US, the UK, China, Poland and Japan, where the export and awareness on the Georgian wine is increasing year by year.

Among the marketing activities carried out during the reporting year, we should especially point out the project implemented in Tokyo, the capital Japan, “Georgia – Homeland of Wine, which was taking place from March 10 to May 6 at the exhibition center Terrada Warehouse, hosting the thousands of Japanese visitors. The exhibition arranged within the framework of the project showcased the unique archaeological exhibits, which promoted the uniqueness of the Georgian wine culture with modern technologies.

The project was implemented in partnership with the largest company of the world Sony Music Communication and the company TOPPAN. The exhibition also hosted the presentation-wine tasting events and seminars on the Georgian wine, led by Kenichi Ohashi, Master of Wine in Japan, Andrew Jefford, the British wine writer, a famous Japanese TV host Hitoshi Kusano, the writer Zurab Karumidze, the Georgian sumo wrestlers Tochinoshin (Levan Gorgadze) and Gagamaru (Teimuraz Jugheli), etc.

**In 2019, with the support of the National Wine Agency, the Georgian wine companies and small cellars participated in the following exhibitions and festivals:**

- International Food and Beverage Exhibition “Foodex Japan 2019”, (Japan, Tokyo, March 5-8);
- RAW Wine International Exhibition of Natural Wines (United Kingdom, London, March 10-11);
- ProWein-2019, International Trade Fair for Wine and Spirits (Germany, Dusseldorf, March 17-19);
- International exhibition of wine and food “The China Food and Drinks Fair” (China, Chengdu, March 21-23);
- International exhibition “Wine & Gourmet Japan 2019” (Japan, Tokyo, April 17-19);
- International Natural Wine Festival “Zero Compromise” (Georgia, Tbilisi, May 10);
- “New Wine Festival” (Georgia, Tbilisi, May 11);
- International Wine Exhibition “VinExpo Bordeaux-2019” (France, Bordeaux, May 13-16);
- Natural Wine Exhibition “London Wine Fair 2019” (United Kingdom, London, May 20-22);
- Exhibition “Women in Wine Expo 2019” (the Netherlands and Belgium, May 23-24);
- 11<sup>th</sup> international exhibition of wine and spirits “WinExpo Georgia-2019 (Tbilisi, Georgia, June 13-15);
- International exhibition of wine and spirits, “Seoul International Wines and Spirits Expo 2019” (Seoul, South Korea, June 20-22);
- Gastronomic Exhibition “San Sebastián Gastronomika 2019” (San-Sebastian, Spain, October 6-9);
- Wine festivals held within the framework of “Gvinobistve-2018” on October 5-12 in Tbilisi, Telavi, Marneuli and Gurjaani;
- International exhibitions of natural wines “RAW Wine” in the US, in New York, (October 27-28) and in Los Angeles (November 3-4);
- “Georgian Wine Forum” (Boston, US, October 27-29);
- International exhibition “Ferment” (Warsaw Poland, October 27-28);
- International exhibition “Stockholm Food and Wine 2019” (Stockholm, Sweden, November 8-10);
- International exhibition of wine and spirits “Prowine China-2019” (Shanghai, China, November 12-14);
- Annual wine and gastronomy festival “Salon Savim Automne” (Marseille, France, November 15-19);
- International exhibition of natural wines “RAW WINE” (Berlin, Germany, December 1-2);

**It is possible to say that the success of the movie “Georgia - the Homeland of Wine” at the Marseille cinematography festival was the achievement of the Georgian wine culture.** A scientific feature-documentary film “Georgia – the Homeland of Wine” was awarded the special prize of science and culture instituted by the festival’s partners at the photography and cinematography festival held in the city of Marseille, France. The movie “Georgia – the Homeland of Wine” is dedicated to the international scientific research, which provided a scientific proof that Georgia is the homeland of wine. The scientific feature-documentary movie was shot with the support of the National Wine Agency and Sakpatenti, the National Intellectual Property Center of Georgia.

**The following important activities were also implemented with the support of the National Wine Agency with the purpose of promoting the Georgian wine:**

- There was a third international contest of Kvevri wine held on June 21-22. Organized by the Association “Georgian Wine”, the Ministry of Environmental Protection and Agriculture and the National Wine Agency, the contest was held in Georgia for the third time;
- Wine professionals from China and Hong Kong, led by the Master of Wine Debra Meiburg, the director of Meiburg Wine Media – a company contracted by the National Wine Agency, visited Georgia in June;
- Kenichi Ohashi, Master of Wine, head of the Red Bridge, a marketing company contracted by the National Wine Agency, was visiting Georgia in June together with Japanese wine importers and a group of sommeliers.
- In July, the Georgian wine was presented in New York, Chicago in Boston. Together with winemaking, the presentation also included the seminar about the Georgian wine culture and the contemporary wine industry. The events were hosted by the American top-sommelier Taylor Parsons;
- In September, within the framework of the Rugby World Cup taking place in Japan, there was a presentation of the Georgian wine and wine-tasting at the shopping mall Marunochi Building in Tokyo. The Georgian wine was also presented the during the match in Osaka;
- In September, a team of 11 British wine professionals visited Georgia, comprised of sommeliers, wine importers and media representatives. The visit was organized by the Swirl Wine Group, a company contracted by the National Wine Agency;
- In October, the American wine professionals got familiar with the Georgian wine in various regions of Georgia. A group of wine professionals was led by Julie Peterson, the director of the marketing company Mark Energy, contracted by the National Wine Agency;

- In December, organized by the marketing company contracted by the National Wine Agency, The Georgian wine was presented the at the Christmas market in Poland, within the framework of the campaign Perceive Georgia;
- The American Master of Wine Lisa Granik, head of the American company Tastingwork, which was contracted by the National Wine Agency, wrote a book about the Georgian wine - The Wines of Georgia;
- Asian Tour of the Georgian Wine, aimed at presenting the Georgian wine in China and other cities of Asian countries, was organized by Meiburg Wine Media, a company contracted by the National Wine Agency;
- In October, there was a Georgian Wine Festival held in London, Bristol and Manchester in the UK, which hosted the wine-tasting events, master classes, presentations and seminars about the history and culture of the Georgian wine.

The active marketing events had a direct impact on the sales of the Georgian wine.

## **Export**

Since 2019, there were about 94 million bottles (0.75 liter) of wine exported from Georgia to 53 countries of the world, which is 9% more than the amount in 2018, and it represents the highest indicator in the history of the independent Georgia. The value of exported wine reaches 240 million USD, which is 17% more than the same indicator of 2018.

**The export has increased at the strategic markets for the Georgian wine:**

- Poland - 17% (4,114,972 bottles)
- China - 2% (7,089,259 bottles)
- US - 48% (678,148 bottles)
- United Kingdom - 60% (168,307 bottles)

**It should be mentioned that the export has grown in the following countries as well:**

- Lithuania - 45% (708,408 bottles)
- Germany - 40% (671,453 bottles)
- Belarus - 74% (2,787,065 bottles)
- Israel - 80% (324,700 bottles)
- Estonia - 20% (693,248 bottles)
- Russia - 9% (58,384,540 bottles)

- Moldova - 8738% (625,724 bottles)
- The Netherlands - 17% (96,464 bottles)
- Czech Republic - 34% (83,136 bottles)
- Sweden - 636% (92,214 bottles)
- Bulgaria - 30% (34,734 bottles)
- Mongolia - 40% (297,576 bottles), etc.

In 2019, 341 companies exported wine in different volumes. There were 31.6 million bottles of Brandy (0.5 liters) exported to 25 countries of the world, which is 58% more than the same indicator in 2018. The expert revenues from brandy totaled 68 million USD (the growth is 67%). There are 625 thousand bottles (0.5 liter) of chacha exported in 28 countries of the world, the export growth was 48%. Revenues from exporting the chacha reaches 1.7 million USD (growth 38%).

Among the wines of protected appellations, the most exported ones are: Kindzmarauli - 17,418,683 bottles, followed by Mukuzani - 5,160,309 bottles, Tsinandali – 4,407,563 bottles, Akhasheni - 1,577,823 bottles, Khvanchkara - 1,011,887 bottles, Tvishi – 298,509 bottles, etc.

In total, 345 million US dollars was generated as a result of exporting wine, brandy, chacha, brandy spirit and dispensable brandy, which is 15% more than the indicator for the same period in 2018.

## **Vintage 2019**

The most important area of activities of the National Wine Agency is to conduct the vintage in an organized manner. With this purpose, the vintage coordination headquarters started functioning in Telavi on 10<sup>th</sup> of August. There were several main challenges during the vintage: access harvest, reduced demand on white grapes, existing wine reserves at enterprises and unstable situation at the Russian market. Despite this, based on the social responsibility taken by the private sector in the country, the harvest was fully stored. As a result, 271 thousand tons of grapes was processed, which was the record high harvest for the last 30 years approximately, among them, 268 thousand tons in Kakheti region. This indicator is almost 10% higher than that of in 2018. In total, 172,000 tons of Rkatsiteli, 82 thousand tons of Saperavi, 5.5 thousand tons of Kakhuri Mtsvane and 8.5 thousand tons of other species were processed in the Kakheti region. 1,863 tons of grapes was processed in Ambrolauri municipality, among them Aleksandrouli and Mujuretuli – 1,828 tons; in other regions of Georgia – about 1,130 tons. Throughout Georgia, grape sales revenues amounted at more than 300 million GEL. More than 300 wine enterprises were engaged in grape processing.



## Quality Control

During the reporting period, the output produced for export purposes was inspected in 166 wine companies, where from the samples of about 750 alcoholic beverages were taken. Among them, 22 were rejected and did not get a certificate.

State control and state supervision was carried out at 36 wine companies.

In total, about 202 wine producers were inspected in 12 months. Samples of about 1,800 alcoholic beverages were tested for various indicators at the accredited laboratories.

Within the framework of the delegated authority granted by the LEPL National Food Agency, about 300 wine samples produced by up to 100 producers were taken from domestic markets at various locations throughout the entire territory of Georgia, and violations were established in 56 samples.

With the purpose of organoleptic testing of alcoholic beverages, 232 wine-tastings were organized. In total, 9,231 samples were tested, among them 731 received negative assessment, others received positive appraisals.

In total, 9,822 applications were filed for obtaining the certificates and export documentation. Various types of documents were issued based on the received applications: 5,984 units of VI-1 form certificates for EU states (1,167 applications), and 8,655 compliance certificates were issued. In total, 14,639 certificates were issued.

## Vineyard Cadaster

- During the vintage in 2019, it was the first time when 3,200 winegrowers in the microzones of Kindzmarauli, Akhasheni, Kvareli and Mukuzani had an opportunity to deliver Saperavi grapes based on the cadastral excerpt.
- The National Wine Agency continued works related to the vineyard cadaster program in 2019, which presents quantitative and qualitative state of vineyards and wines. The following works were carried out: registration of vineyard areas, taking ortho-photos, registration and passportisation of vineyards and vine-growers, verification of boundaries of specific zones, collecting the personal profile data from vine-growers and other entities engaged in the viticulture-winemaking sector, etc. Information about the vineyards located in Kvareli Municipality and partially in Gurjaani municipality were updated in the vineyard cadastral database (ABACO). The company selected through the bidding “Ruka Mapping” submitted the data on vineyards in Gurjaani and Signaghi.

## Study of Georgian Vine Culture

- Within the framework of the program, 11 archaeological artefacts were dated based on the C14 method at the Weizmann Institute of Israel during the reporting year;
- With the purpose of obtaining and further study of archaeological material related to viticulture – winemaking, archaeological excavations were organized at the Neolithic old settlements of Shulaveri Culture located near the Marneuli district, under the name Cut Hill, Shulaveri Hill and Imiri Hill;
- The material obtained from the excavation of archaeological sites of Shulaveri culture was studied in 2019 with the laboratory methods;
- Archaeo-botanical studying revealed the existence of new grape stones at Jokhtnikhevi (Gldani territory) medieval archaeological sites, and in other samples obtained from archaeological excavations of various periods in Rustavi;
- In cooperation with Gabriele Cola, a researcher from Milan University, a book “Analysis of the Georgian climate for sustainable viticulture” was prepared for publishing.

## Other legislative and administrative activities related to the industry development:

The following memoranda of understanding were signed:

- With the NNLE Georgian Wine Museum, for promoting the Georgian wine and supporting the activities for presenting the Georgian culture to the international community;
- With the NNLE Agroservice, with the purpose of developing the agricultural sector, increasing the effectiveness and profitability of agribusiness, also for supporting the individuals engaged in the agrarian sector, for ensuring the delivery of information needed for the sector and for the website developed by the NNLE Agroservice;
- With the Technical University of Georgia, with the purpose of supporting the internship of students.

#### **“Bolnisi” was added to the protected appellations**

The wine Bolnisi was registered in the roster of Georgian appellations. So far, there were 19 appellations of the Georgian wine registered in Georgia: Khvanchkara, Mukuzani, Tsinandali, Akhasheni, Gurjaani, Kindzmarauli, Manavi, Kakheti, Napareuli, Teliani, Ateni, Svir, Vazisubani, Kardenakhi, Tibaani, Tvishi, Kvareli, Kotekhi and Khashmis Saperavi.

This decision indicates on a big potential of Georgian species of grapes and wines produced from them, which is especially important for the promotion of the Georgian wine and for increasing the export potential.

Agricultural Cooperatives Development Agency



# Agricultural Cooperatives Development Agency

In total, there are 1,044 cooperatives with the agricultural status registered in Georgia (31.12.2019).

## Agricultural cooperatives per regions:

Kakheti - 126;
Kvemo Kartli - 101;
Mtskheta-Mtianeti - 54;
Shida Kartli - 77;
Samegrelo-Zemo Svaneti - 102;
Guria - 40;
Adjara - 75;
Samtskhe-Javakheti - 198;
Imereti - 121;
Racha-Lechkhumi - 89;
Tbilisi - 61.

Within the framework of the state program “Rational Use of State-Owned Hayfields and Grazing Fields in the High-Mountainous Regions of Georgia”, construction of milk processing enterprise was completed in the village Shuapkho, Dusheti municipality, and it was equipped with relevant appliances. The enterprise, which ensures the production of high-quality dairy products with contemporary technologies, will be handed over to the agricultural cooperative selected through competition, with the 75% state co-financing, and the cooperative will ensure paying the remaining 25% for 8 years.

Within the framework of the state program for Supporting Beekeeping Agricultural Cooperatives, there was a honey-processing enterprise constructed and equipped with relevant appliances in the village Berbuki, Gori Municipality. The enterprise will be handed over to the agricultural cooperative selected through competition, with 70% co-financing by the state, and the cooperative will pay the remaining portion in 8 years.

It will be possible to produce no less than two tons of honey a day at the enterprise, also to process, warehouse and package the output in various volumes. The enterprise will also produce honeycombs.

As a result of participation in the state program, the beekeepers will have an opportunity to process honey at their cooperatives and to sell the output under the common brand at the local and international markets.

There were amendments made to the law of Georgia on Agricultural Cooperatives, which regulated the organizational and legal issues related to the activities of agricultural cooperatives.

In 2017-2019, within the framework of the state program implemented by the Agricultural Cooperatives Development Agency, 139 new agricultural cooperatives were co-financed, among them: 35 agricultural cooperatives received beehives and honey processing equipment under the state program for supporting the beekeeping agricultural cooperatives; 13 cooperatives received the production equipment for delivering and processing the grapes under the state program for supporting viticulture agricultural cooperatives; 34 agricultural cooperatives received agricultural equipment with the 10% co-participation under the state program for the rational use of state-owned hayfields and grazing fields in high mountainous regions, and state-owned hayfields and grazing fields were leased to them for 25 years; 11 agricultural cooperatives received milk processing equipment under the state program for supporting the dairy agricultural cooperatives; 46 agricultural cooperatives received rototillers and manual seeders under the program for providing agricultural cooperatives with rototillers and manual seeders. The list of financed agricultural cooperatives is available at the website of the Agricultural and Rural Development Agency – [www.arda.gov.ge](http://www.arda.gov.ge).

The 2017-2018 report states that the number of agricultural cooperatives has reduced from 147 to 139, which is caused by several factors including the refusal of cooperatives to participate in the state program and the temporary suspension of state program for branding and implementation of international standards at agricultural cooperatives, due to the reorganization of the LEPL Agricultural Cooperatives Development Agency.

# Georgian Amelioration



# Georgian Amelioration

Given the climate conditions of Georgia, the issues of land amelioration, construction of irrigation and drainage systems, their operation and management are important, which should create all the necessary conditions for the intensive and effective agricultural production.

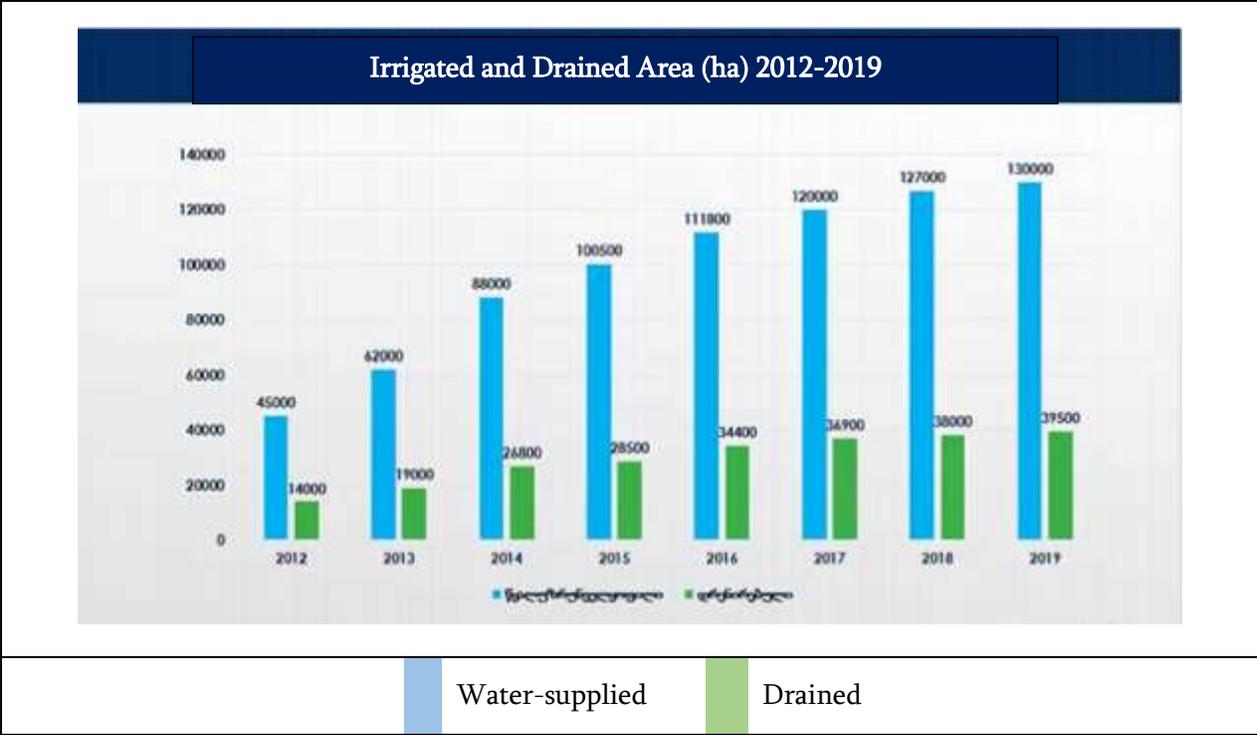
Georgian Amelioration Ltd is a company supplying irrigation and drainage services to agricultural lands. The company provides the following services: to supply water to hydropower stations, enterprises and ponds. The company provides services to the entire country through its 20 service centers. With the purpose of increasing the fund of ameliorated agricultural lands, Georgian Amelioration Ltd carries out large-scale works for the rehabilitation of amelioration infrastructure that has been out of service for decades.

Organizing the amelioration systems will significantly develop the agricultural sector. Average yield per hectare will improve and increase. In this respect, there have been significant breakthrough and achievements. The area of ameliorated lands increases every year, which creates an additional incentive for the rural population to get back to land cultivation.

## **Projects implemented by the company during 2012-2019:**

- 289 projects were implemented for the rehabilitation of amelioration infrastructure throughout Georgia;
- 2,050 km irrigation and 1,096 km drainage canals were rehabilitated, 35 main buildings and 25 pumping stations were repaired;
- While implementing the infrastructure's technical operation program, more than 12,370-kilometer-long amelioration canal was cleaned and arranged in an orderly manner, 12,943 units of various types over hydro-technical buildings were repaired.

As a result of implemented activities, the area of irrigated lands in the country increased from 45,000 ha (2012) to 130,000 ha (2019), and the area of drained agricultural land increased from 14,000 ha (2012) to 39.5 thousand ha.



In 2019, the project for the rehabilitation of 31 amelioration infrastructure was completed under the rehabilitation program.

58 km of irrigation canals and 77 km of drainage canals were cleaned/arranged under the rehabilitation program, and the two main buildings were repaired.

1,860 km-long canals were cleaned and arranged under the operational program, and 2,700 units of various types of hydro-technical buildings were repaired.

### Projects implemented in 2019 per regions

Region	Number of sites	Area (ha)			
		Regular irrigation	Improvement of water supply	Land drainage	Excess water removal
Shida Kartli	7	1,001	1,000	0	0
Mtskheta-Mtianeti	2	0	0	0	0
Samtskhe-Javakheti	3	1,141	771	0	0
Kvemo Kartli	4		3,200	0	0
Kakheti	6	634		0	0
Imereti	4	75	0	515	0
Guria	3	0	0	0	640
Samegrelo-Zemo Svaneti	2	0	0	964	0
<b>Total:</b>	<b>31</b>	<b>2,851</b>	<b>4,971</b>	<b>1,479</b>	<b>640</b>

### Important Projects Implemented in 2019

- Rehabilitation of C-3-2 distribution networks of the main canal of the Tiriponi irrigation system

Regular irrigation area – 2,500 ha



### Rehabilitation of main building of Imirasani irrigation system and a main canal

Supply of irrigation water improved on 2,600 hectares.



Rehabilitation of main building of Zemo Alazani



Rehabilitation of main building of Chala-Orghuli irrigation system and the main canal

Regular irrigation area - 50 hectares



## Riverbank Reinforcement Works on the River Abasha

In 2019, the rehabilitated pumping stations were put into operation, and they started to supply irrigation water to the villages in the municipalities of Sighnaghi, Gurjaani, Dedoplistskaro and Akhaltsikhe, where the agricultural lands had not been irrigated for 2-3 decades.

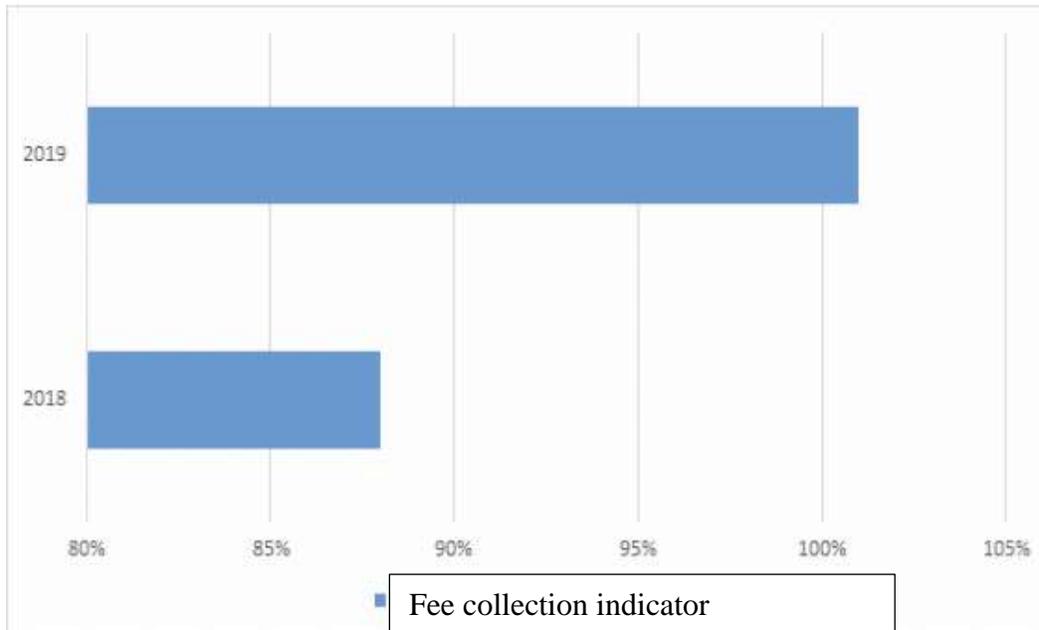


**Indicators of provided services are increasing annually**

Contracted area	2018 actual	2019 planned	2019 actual
Irrigation	47,233	56,000	57,055
Pond	1,723	2,700	2,133
Drainage	3,551	3,700	4,336
Total hectares	52,507	62,400	63,524

In 2019 the size of contracted areas increased by 21% as compared to the previous year.

## Service fee collection indicator has improved in 2019



With the purpose of collecting the accounts receivable and for providing uninterrupted services to the consumers during the current year, the company elaborated the debt rescheduling procedure.

### New technologies

- In 2019, the company created a hydrometric device with the respective software, which is now operational at several million amelioration sites in the testing mode. The device provides a real time measurement for the water level in the canal, temperature and other parameters. This enables the company to conduct a full monitoring over the amelioration infrastructural sites, in regard to safety, also the efficient management of water resources.
- The GIS information systems and billing will be fully integrated, that will make it possible to produce interactive maps.

### Trainings and building the capacity of the staff

- With the purpose of upgrading the qualification of amelioration and water usage specialists and for enhancing the effectiveness, in tight cooperation with the World Bank and representatives of Academician Ts. Mirtskhulava Water Management Institute of the Technical University of Georgia, a training course was prepared and delivered for the staff on the following issues:
  - Operating the amelioration systems;
  - Soil irrigation regime;
  - Organization of hydro-station operations and management of its elements.

The Georgian Amelioration carries out rehabilitation works with the special equipment, which currently is comprised of 208 units.

In 2019, the company actively participated in the works for cleaning the infrastructure affected by heavy rains in the municipalities of Lagodekhi, Telavi, Gori, Kareli and Kobuleti.



### Donor Organizations and Planned Activities

- Rehabilitation of “city canal” of the River Rioni flowing through Poti. The project works started in 2019 and at this stage the detailed engineering and tender documentation undergoes the expertise.
- There are negotiations underway with donor organizations regarding the financing of construction/rehabilitation projects of the Zemo Samgori irrigation system and for the Tedzami irrigation reservoir.
- In 2019, the law of Georgia on Water User Organizations (WUO) came into force.
- The works are being finalized on the design of internal distribution networks of three pilot (Kvemo Samgori, Zeda Ru and Tbisi-Kumisi) irrigation systems, and on the safety assessment report of

Sioni and Algeti reservoir dams, also on the design of safety measures. In accordance with the agreement reached between the Georgian Amelioration Ltd and the World Bank, the “irrigation and land market development project” will finance the construction works on the internal distribution networks at these sites.

- Georgian Amelioration Ltd actively cooperates with the International Commission on Irrigation and Drainage (ICID). Under the ministerial decree, the Georgian National Committee on Irrigation and Drainage was formed, which will cooperate with the Commission in the future.
- With the Agriculture Modernization, Market Access and Resilience Project financed by the International Fund for Agricultural Development (IFAD), there were 6 rehabilitation projects implemented in Shida Kartli, Kvemo Kartli and Kakheti in 2019. The projects will be completed in 2020. Total contracted value of the projects is 14,711,891 GEL.
- By the end of 2019, 33 transitional rehabilitation projects of amelioration infrastructure were being implemented.

As a result:

- 6,521 hectares of agricultural land will be included in the area of regularly irrigated land;
- Supply of irrigation water will improve in the lands with the area of 23,692 hectares;
- 3,769 hectares of lands will be drained;
- Excess water will be removed from the area of 9,540 hectares.

ENPARD III Commitments	2016	2017	2018	2019
Hydro-ameliorated area (ha) - Georgian Amelioration Ltd		156,900	165,000	169,500
Planted /contracted land area (ha) within the framework of plant the future		4,090	6,171	8,101
Consolidated hydro ameliorated and irrigated area (ha)	143,375**	160,990	171,171	177,601
* Irrigation systems were arranged in these areas				
** Basic indicator represented in the ENPARD III document				

# National Food Agency



The National Food Agency is the only agency in the country that carries out the state control in the areas of food safety, veterinary and plant protection, main function of which is to ensure the protection of human life and health through providing safe food products.

The agency carries out its activities in all the regions of Georgia.

The local population are able to enjoy the services provided by the National Food Agency for ensuring food safety, veterinary and phytosanitary reliability.

## Food Safety

State control of food safety aims at protecting human life, health and consumer interests, which is implemented based on the risk through the following mechanisms: inspection, supervisions, monitoring, sampling, and document review.

With the purpose of state control of food/feed safety, the Agency conducts both scheduled and ad-hoc inspections without prior notification.

Under the 2019 program on state control of food safety, as a priority and without risk determination, there was a scheduled inspection of business operators that are represented at agrarian markets, provide food to kindergartens, export hazelnut and laurel, export fish and fish products to the European Union, slaughter animals/poultry and/or engage in thermal processing of raw milk.

While conducting the scheduled document-based inspection, priority was given to the inspection of kindergartens, school cafeterias, and meat sales points.

The scheduled inspection is one of the mechanisms of state control, which inspects business operators to ensure their compliance with statutory requirements at the stage of food production, processing and distribution. The scheduled inspection is carried out in accordance with the annual program of risk-based state control.

### **There were 6,798 scheduled inspections carried out in 2019, among them:**

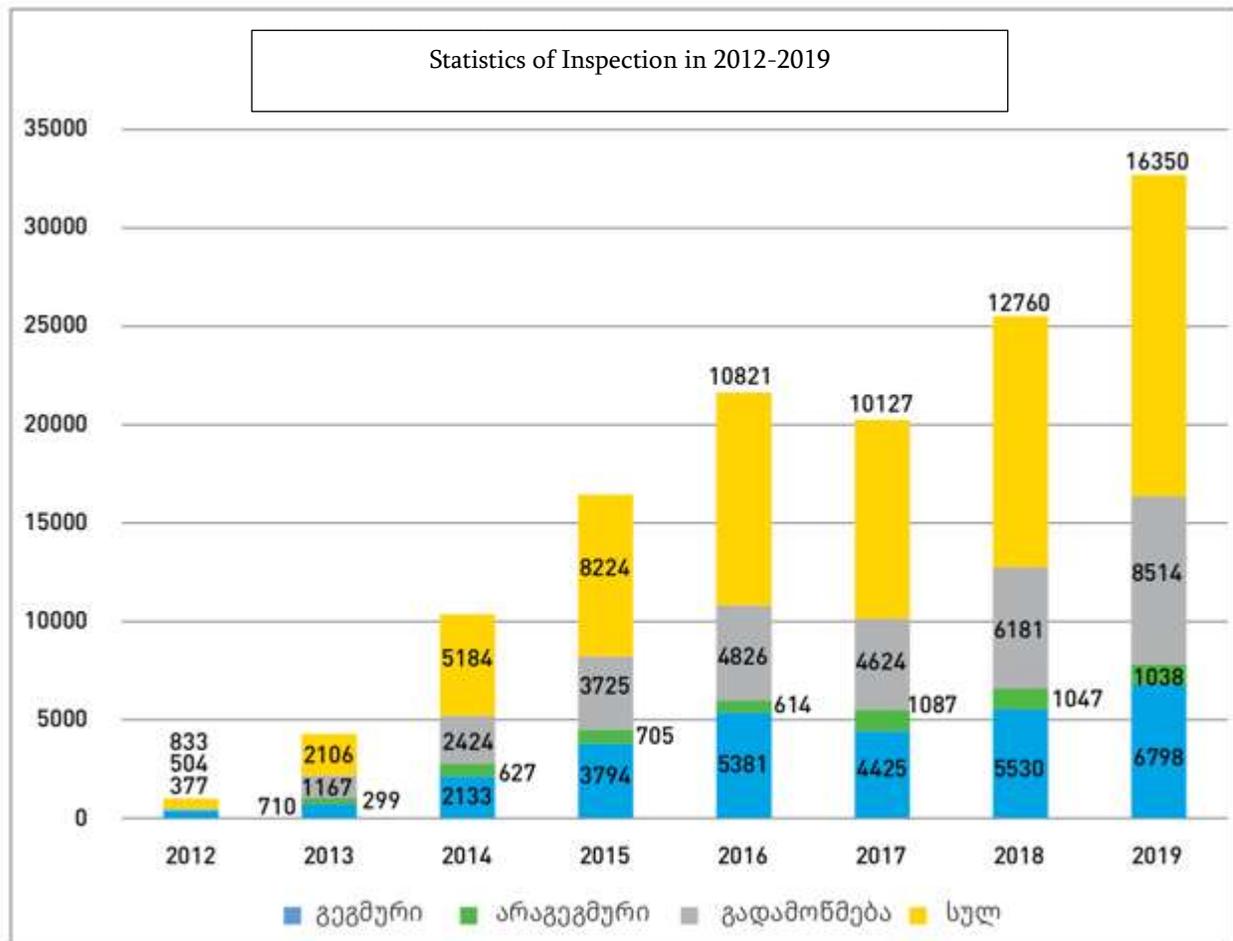
- 403 inspections at slaughterhouses;
- 285 inspections at the places where meat and meat products are produced and sold;
- 182 inspections at milk and dairy enterprises (among them, ice cream - 21);
- 1,452 inspections at public dining facilities;
- 1,759 inspections at kindergarten food areas (among them, 200 private kindergartens) and 160 - at school cafeterias;
- 49 inspections at the facilities where fish and fish products are produced and sold;
- 77 inspections at agrarian markets;
- 61 inspections at the enterprises producing semi-cooked food;
- 434 inspections at bakeries/producers of baked products and confectionaries;
- 61 inspections at enterprises producing alcoholic and non-alcoholic beverages;
- 1,488 inspections at grocery stores.
- 50 inspections at hazelnut processing enterprises.

Besides, scheduled inspections were carried out at honey producers-sellers, producers of vegetable fat (oil, margarine), canning facilities, other enterprises producing egg, bottled drinking water, spices, food supplements, sugar, chips, canned food, tea and coffee, enterprises supplying drinking and industrial water, fruit and vegetable sales points, distribution, retail and wholesale points, flour mills, cold storage and warehousing facilities.

Ad hoc inspection is state control mechanism carried out without any prior planning, which takes place based on the results of state control, including the results of lab tests of samples taken by the Agency. Grounds for ad hoc inspection can be created by the notification sent by the public and various agencies, etc.

In 2019, there were 820 ad-hoc inspections, and 218 ad-hoc inspections with recognition purposes. Verification – 8,514.

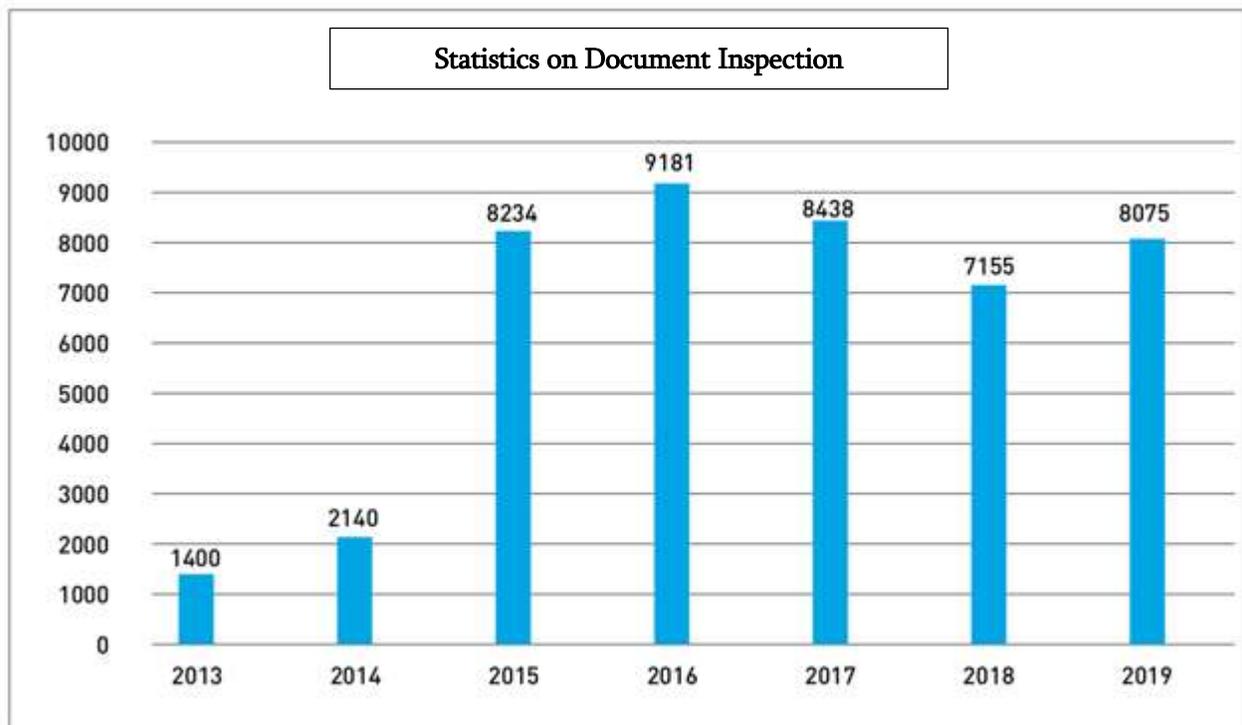
**In 2019, the National Food Agency carried out 16,350 inspections in total.**



■ scheduled ■ ad-hoc ■ verification ■ total

Document review is a mechanism of state control, when the documents linked to the activities of food/feed business operators, including the records and food/feed labeling inspection is carried out independently, or with other mechanisms of state control.

In 2019, there were 8,075 document reviews carried out at public dining facilities (restaurants, ready food stores, shawarma places, fast food sites, kindergarten kitchens and school cafeterias, grocery stores and shops, agrarian markets, distribution and sales chains, bakeries, meat sales points and food producing or other types of business operators).

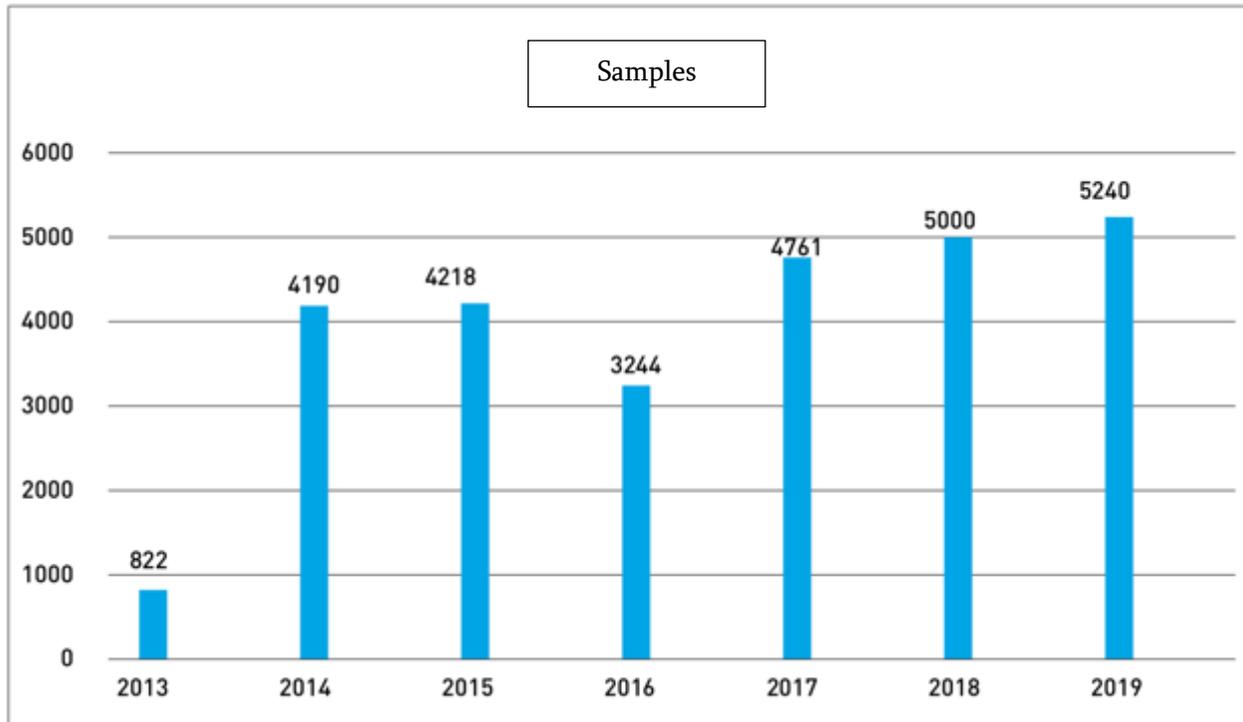


### Monitoring

Monitoring is a mechanism of state control, when the scheduled observations and measurements are carried out for assessing the compliance of food/feed with the requirements stipulated in the legislation of Georgia. Within the monitoring framework, the food samples are taken from sales points and tested at accredited laboratories.

### Sampling

In 2019, authorized people of the National Food Agency took 5,240 samples/specimen of food (among them, those of drinking water) in accordance with relevant procedures and had them tested at the laboratory. Violations were identified in 11.5% of them.



## Supervision

Activities of a business operator are supervised to ensure that no food/feed is placed at the market unless they meet the statutory requirements, to remove/revoke the products that are already placed at the market, to identify the failures to fulfill the instructions issued by the Agency, and to destroy the food/feed. There were 976 supervisions carried out in 2019.

As a result of identifying the facts of using/selling the expired and/or incompliant food, the following products were destroyed under the supervision of the authorized personnel of the Agency:

Meat and meat products	34,622 kg
Other solid food	4,746 kg
Liquid food	1,513 liter
Egg	32,632 items
Meat without the form #2	6,314 kg

Slaughtering processes were supervised at animal and poultry slaughterhouses, and based on the data of 2019, there were 100 poultry slaughterhouses and 19 animal slaughterhouses functioning in Georgia. During this period, 550,652 animals (cattle – 174,202, small ruminants – 189,765, hogs – 156,326, rabbits – 29,960, sheep/donkey - 399) and 10,807,885 birds were slaughtered at slaughterhouses. In total, 360,401 form #2 veterinary certificates were issued.

Administrative offenses (fine): in accordance with the “Food feed, veterinary in the plant protection code”, 4,674 administrative offences were revealed while carrying out their food safety state control.

### **Issued certificates**

There were 1,635 hygiene, 65 compliance assessments, 57 recognition and 774 veterinary certificates issued in 2019.

### **Provided consultations**

The authorized people provided 609 consultations.

In 2019, the Department received 1,172 notifications (phone notifications by citizens - 1,114; also 32 notifications from the National Center for Disease Control and Public Health; and 26 from other agencies), which were followed up respectively.

The LEPL National Food Agency received 22 notifications via the RASFF rapid alert system of the European Commission (DG Sante) of the Directorate-General for Health and Food Safety (DG SANTE), for which the respective response was provided within the established time frames.

Under the 2019 program of state food safety control, results of business operator inspections, document review, monitoring and supervision were assessed and analyzed, the state food safety control program was elaborated for 2020 and priorities were identified.

### **Achieved results**

The situation improves year by year, which ensures more protection of the population; awareness of the National Food Agency is enhanced, which is proved by the increasing number of notifications received via the hotline and social networks; customers are more informed and engaged than in previous years. Besides the legislative amendments, which are focused on improving the market, significantly improved the relations among the state, business and consumers, resulting in the increased effectiveness of state control, more awareness among the population, and the creation of a competitive environment for the business.

## **Ensuring the veterinary reliability**

The Veterinary Department aims at maintaining and controlling the epizootic reliability in the country; it analyzes the risk of episodic situation, registers veterinary medicines, establishes the reasons of emergence and spread of massive, communicable diseases that are dangerous for animals and people, and takes required measures for ensuring the prevention, prophylaxis, localization and liquidation of these

diseases. The most significant functions of the Veterinary Department are to control the circulation of veterinary medicines, to ensure and control the animal identification registration, to provide veterinary services to business operators, to diagnose animal diseases, to supervise animal movement, to collect, utilize and destroy the biological waste.

Vaccinations carried out in 2019 (preliminary data) for:

- Foot and mouth disease: 2,166,628 heads of cattle and small ruminants were vaccinated /re-vaccinated, among them, 884,860 heads of cattle and 1,281,768 heads of small ruminants;
- Anthrax: 1,057,206 heads of animals susceptible to the disease, among them 410,118 heads of cattle, 642,856 heads of small ruminants and 4,230 heads of odd-toed ungulates;
- Rabies: 283,399 dogs and cats;
- Brucellosis: 210,754 heads of cattle and 251,615 heads of small ruminants;
- Sheep pox and goat pox: 166,251 heads of small ruminants;
- Peste des petits ruminants: 281,847 heads of small ruminants;
- Nodular prurigo: 76,918 heads of cattle;

**Examined for:**

- Brucellosis – 3,550 heads of cattle;
- Tuberculosis, with allergy method – 10,040 heads of cattle;
- Non-structural proteins (NSP) of foot-and-mouth-disease – 5,000 heads of cattle and small ruminants;
- Structural proteins (NSP) of foot-and-mouth-disease – 1,000 heads of cattle and small ruminants;
- Peste des petits ruminants (post-vaccine investigations) – 199 heads of small ruminants;
- Rabies (post-vaccine investigations) – 300 dogs;
- Brucellosis (post-vaccine investigations) – 700 heads of small ruminants.

**Treated:**

- 4,280 heads of cattle against Crimean-Congo haemorrhagic fever.

**Cases of rabies**

In 2019, there were 50 cases of rabies reported, among them 31 dogs, 14 heads of cattle and 2 heads of small ruminants, 1 swine, 2 wild animals. In 2019, compared to 2013, the number of rabies cases among animals has decreased by 57%.

25,000 heads of animals susceptible to the disease were vaccinated at the infection outbreak spots.

### **Anthrax cases**

- In 2019, there were six anthrax cases reported, among them 2 cases were among the cattle, 2 - among small ruminants, 1 - in the soil and 1 in the sample taken from the environment.
- In 2019, compared to 2013, the number of anthrax cases has decreased by 85%
- 4,500 heads of animals susceptible to the disease were vaccinated at the infection outbreak spots.

As a result of the applied effective measures, the risk of diseases spread, and the cases of zoonotic diseases were minimized among humans.

### **Animal identification-registration**

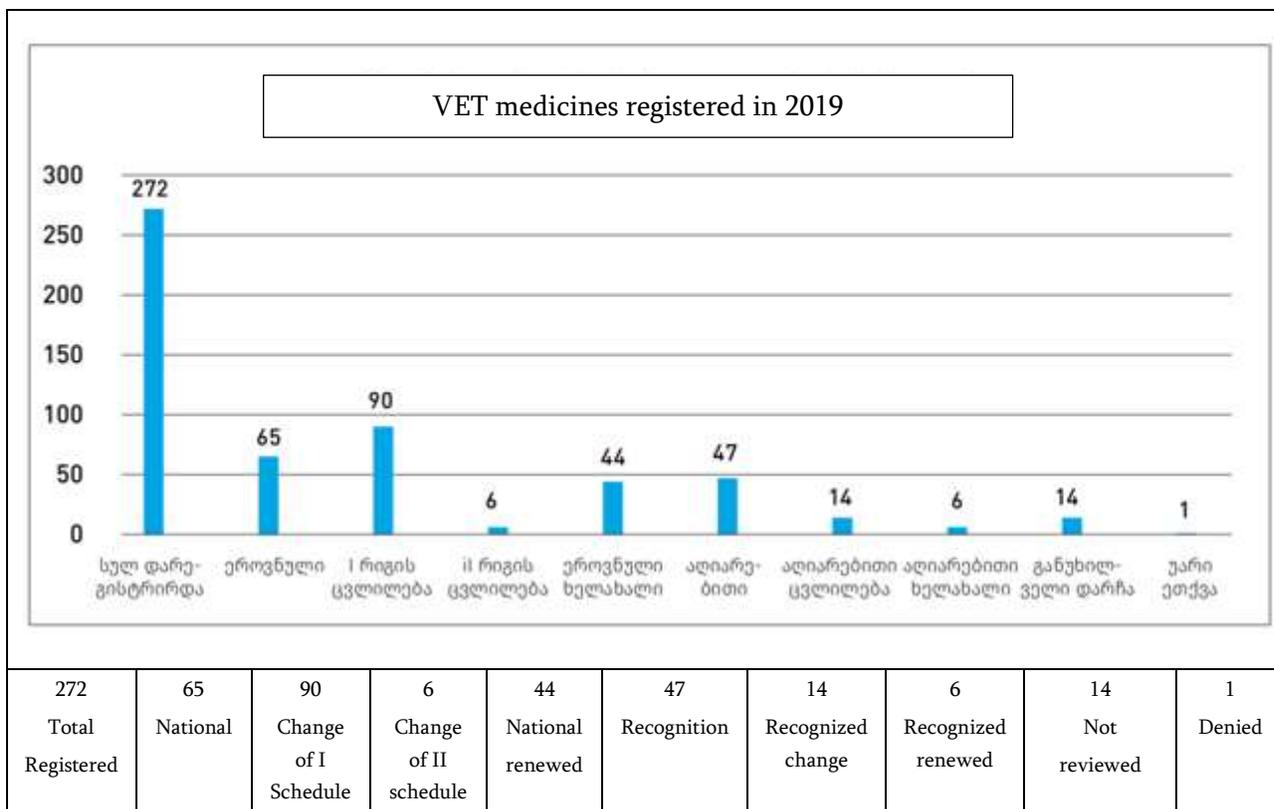
With the purpose of ensuring the animal health control, registration, traceability, labeling and transparency, there is an animal identification registration going on along with the animal vaccination process.

- According to the preliminary data, there were 417,000 heads of cattle, 365,000 heads of small ruminants and 1,500 hogs identified in 2019.
- There were 356,923 heads of cattle, 305,145 heads of small ruminants registered in the electronic database.
- While performing the control of holdings /temporary holdings of cattle and small ruminants, incompliances were identified at 4 cattle holdings.
- Veterinary action envisaged in the state programs were registered for 1,106,929 animals.
- According to the preliminary data, together with the preventative vaccination for brucellosis, passports were issued for 210,754 heads of cattle.

### **Registration and Control of Veterinary Medicines**

In 2019, 288 veterinary medicines were filed for registration. 272 veterinary medicines were registered (some part of veterinary medicines for registration were transferred from 2018, because the registration process may take several months). Out of the registered 272 veterinary medicines, 65 veterinary medicines were registered under the national regime, 90 - with the changes under the I schedule, and 6 - with the changes under the II schedule, 44 - with the new registration of the national regime, 47 - with the recognition regime, 14 with the changes in the recognition regime, 6 - new registration of the recognition regime, registration documents of 14 veterinary medicines were not reviewed.

145,425 GEL was transferred to the public treasury in 2019 as veterinary medicine registration fees.



**In 2019:**

- With the purpose of quality monitoring, the 228 samples of veterinary medicines were tested at the laboratory (among them, 18 – ad hoc);
- 399 veterinary sites were inspected. Among them are: 294 veterinary pharmacies, 35 vet-clinics, 40 zoo-shops, 21 sites using the psychotropic medicines that fall under the special control in Georgia, 29 marketplaces where the live animals are sold;
- Lab tests were performed for 228 samples of vet medicines with the purpose of quality monitoring (among them, 18 ad hoc);
- 25 ad hoc inspections were carried out based on the reported information;
- 29 business operators were fined because of administrative offences;
- 8 entities were registered as users of psychotropic medicines that are subjected to special control;
- 3 pet feed producers were recognized, together with 4 enterprises producing the fish powder;

- There were 325 samples of biological fluids and 750 samples of animal tissues taken and sent to the laboratory with the purpose of testing against the veterinary medicines and other contaminating residual substances among live animals;
- There were 20 samples taken and sent to the laboratory with the purpose of testing against the processed food of pet animal origin;
- There were 9 samples taken and sent to the laboratory with the purpose of testing the fish powder (ad-hoc).

**Achieved result: sale of high-quality medicines increased in the country.**

### **Export**

**The following animals and products were exported from Georgia in 2019:**

- 92,554 heads of cattle;
- 153,821 heads of small ruminants;
- 2,829,363 kg salted beef leather;
- 482,087 kg salted leather of small ruminants;
- 217,701 kg chrome leather;
- 532,663 kg wool;
- 5,389,543 chicken;
- 1,307,500 kg manganese oxide;
- 10,265,280 kg fish oil;
- 26,126,444 kg fish powder;
- 100,990 kg soy oil;
- 1,496 kg vet medicines;
- 63,000 kg fish food;
- 1,362,430 kg sunflower wholegrain;
- 40,000 kg food supplements;
- 2,772,889 kg soy wholegrain;
- 4,324,320 fertilized hatching eggs;
- 4,525,342 kg feed;

- 95,180 kg cattle omasum.

### **Veterinary-Sanitary Supervision**

In order to control the animal health and animal movement on seasonal grazing fields, it is important to ensure the functioning of veterinary oversight (bio-safety) centers. There are 6 points operating throughout the country (3 in Kvemo Kartli region and 3 in Kakheti region), where 11,659 heads of cattle and 700 and 7080 heads of small ruminants were treated with the insectocicide medicines in 2019.

## **Ensuring the Phytosanitary Reliability**

The function of the Plant Protection Department is to carry out quarantine activities in the country, and to protect the country from the import and spread of pests.

The Departments conducts phytosanitary diagnostics of the agricultural field, forecasts the spread of pests and implements measures against them, also conducts the phytosanitary quarantine inspection of products that are subject to quarantine.

Through its structural units, the Plant Protection Department organizes the disinfection of plant products, means of transportation, warehouses and sites, registers pesticides and agri-chemicals, conducts phytosanitary monitoring and risk management, is responsible for issuing phytosanitary and re-export phytosanitary certificates, and is in charge of providing phytosanitary services to business operators.

### **Combatting especially dangerous and quarantine pests**

With its own efforts, the agency carries out activities to combat the especially dangerous and quarantine pests annually. As a result of the applied measures, the harmful impact of pests is minimized on agricultural crops and on the vegetation in general.

In 2019:

- 437,349 ha land was treated against the marmorated stink bug in the west Georgia, among them, 8,000 ha land was treated with a high-capacity generator;
- 34,374.6 ha land was treated for locusts and other non-quarantine pests;
- From May 31, 2019 to July 29, inclusive, within the framework of the Decree #1253 of the Government of Georgia dated May 28, 2019 and the Decree #1530 dated July 2 “On the Measures against carriers of transmissible diseases in Sighnaghi, Dedoplistskaro, Lagodekhi and Gurjaani Municipalities”, 6,908.4 ha land was treated against the carriers of transmissible diseases, the

mosquitos, with special equipment of the Agency in Gurjaani, Telavi, Kvareli and Lagodekhi municipalities.

### **State Control of Pesticides and Agri-Chemicals**

The Plant Protection Department regularly conducts the state control over the quality of pesticides and agri-chemicals that are available for sale.

316 pesticide samples and 44 agrichemical samples (in total 360 samples) were collected and tested at a laboratory in 2019.

Also, 150 points of pesticide sales were inspected as well.

### **Oversight and Monitoring of Plant Pests (among them, quarantine and non-quarantine)**

In 2019, under the phytosanitary control program, with the purpose of oversight and monitoring the especially dangerous and quarantine pests, there were 1,400 units of sex pheromone traps placed for the entomology investigations in the regions of Kakheti, Shida Kartli and Kvemo Kartli, Mtskheta-Mtianeti, Samegrelo-Zemo Svaneti, Guria, Imereti, Samtskhe-Javakheti, Racha-Lechkhumi and Kvemo Svaneti, in the Autonomous Republic of Adjara and Tbilisi City; 1,961 samples were studied for pest diagnostics (entomology, phyto-pathology, virology, helminthology, herbology). If the pest-affected area grows fast, or if new pests are identified, it is also possible to study other harmful organisms with the purpose of their identification. While conducting the phytosanitary control, it was envisaged to take additional 103 samples. On the ground of 1,961 test reports received from the laboratory during the control program, the following quarantine pests were identified for Georgia:

1. *Erwinia amylovora* – 1 (Kakheti);
2. *Ceratitis capitata* – 10 (Mtskheta-Mtianeti – 2, Kakheti – 8);
3. *Stenocarpella maydis* – 5 (Samegrelo/Zemo Svaneti – 4, Guria – 1);
4. *Frankliniella occidentalis* – 4 (Imereti);
5. *Synchytrium endobioticum* – 8 (Adjara – 5, Samegrelo-Zemo Svaneti – 3);
6. *Aleurocanthus woglumi* – 44 (Adjara);
7. *Globodera rostochiensis* – 9 (Racha-Lechkhumi/Kvemo Svaneti);
8. *Citrus tristeza closterovirus* – 3 (Guria).

### **Phytosanitary Certification of Export**

During 2019, plant protection specialists of regional divisions of the National Food Agency have issued 13,170 phytosanitary certificates for plant products, among them, 12,923 export and 2 reexport phytosanitary certificates.

89,792,102 tons of plant products received phytosanitary certificates and were exported from Georgia based on the issued certificates, among them:

- Hazelnut – 14,491 tons
- Laurel – 4,959 tons
- Timber – 67418,814 მ3
- Tea – 1,144 tons
- Persimmon - 5,914 tons
- Peach - 3,541 tons
- Nectarine - 7,461 tons
- Other fruits - 1,405 tons
- Vegetables - 2,386 tons
- Herbs - 3,580 tons
- Potato - 3,476 tons

# LEPL Laboratory of the Ministry of Environmental Protection and Agriculture of Georgia



# LEPL Laboratory of the Ministry of Environmental Protection and Agriculture of Georgia

With its quality of research and equipment, the State Laboratory of the Ministry of Agriculture meets the highest international ISO 17025 standard, and is successfully accredited every year.

The laboratory network is comprised of Tbilisi laboratory, 2 zonal-diagnostic laboratories (Kutaisi, Akhaltsikhe), and 10 regional laboratories (Gori, Marneuli, Dusheti, Gurjaani, Ambrolauri, Ozurgeti, Zugdidi, Batumi, Sachkhere and Mestia).

The laboratory actively introduces new standards, which are standardized and meet international requirements. It is noteworthy that new diagnostic methods were introduced for various parameters in 2019. The laboratory conducts studies for more than 250 indicators.

**The laboratory carries out its activities in three directions. These are: food testing, animal and plant diagnostics.**

**Food testing department** studies of food, raw food materials, animal feed and drinking water. The studies are carried out at the laboratory in three different areas, these are:

- Instrumental research laboratory - activities of these laboratories are to identify food safety parameters, to study pesticides, antibiotics, trans fats, radio nucleotides and other safety parameters;
- General chemistry laboratory, which establishes the food quality;
- Microbiology research laboratory, which determines the total amount of microbes in foodstuffs.

**Plant Pest Diagnostics Department** identifies the pests, which may cause the loss of significant part of agricultural harvest every year. Plant pests are studied at the laboratory in three different directions, these are:

- Entomology laboratory, where the tests are carried out for insects, ticks and nematodes in the soil;
- Phyto-pathology laboratory, which studies the fungi and bacteria, weed and seed quality;
- Molecular biology laboratory, which accurately identifies diseases in the shortest period of time, also determines the genetically modified organisms and allergens, and identifies the disease in its inactive and latent phases with contemporary methods.

**Animal Disease Diagnostics Department** diagnosis the animal, poultry, fish and bee diseases. Studies are conducted at the Department in four various directions. These are:

- Bacteriology laboratory, which diagnosis anthrax, identifies brucellosis, studies milk for mastitis, also foot and mouth disease and other animal diseases, among them the especially dangerous ones;
- Virology and molecular biology laboratory - the methods introduced in this laboratory makes it possible to conduct serology and molecular-biological studies of animal diseases within the shortest period time;
- Rabies laboratory – rabies is diagnosed for domestic and wild animals only at our laboratory in Georgia. There is a vivarium of test animals providing services to the laboratory.
- Laboratory of pathological-morphological studies and parasites – the laboratory conducts resection-observation of samples, histology tests and studies on parasitic diseases.

In order to ensure the safety of personnel and public, adherence to biosafety norms is strictly monitored. There is a quality management system introduced at the laboratory. The personnel successfully undergoes professional competency tests every year - in 2019 the laboratory successfully conducted 17 professional tests. 115 staff members attended the advanced training on biosafety and quality management. The laboratory tries to develop future specialists, and actively cooperates with various educational institutions in this respect. There are open door days arranged for students and schoolchildren with the purpose of promoting professional education.

#### **Plans for 2020:**

The year 2020 is important for the LEPL State Agricultural Laboratory with regard to research and infrastructure. The laboratory is planning to introduce new research methods, namely:

- 7 new research methods will be introduced at animal diseases diagnostics department;
- It is planned to introduce 20 new research methods at the plant pests research department;
- Food research department plans to introduce 11 new researches;
- Two newly opened laboratories in Mestia an Sachkhere will be equipped in accordance with contemporary standards, which will enable the regional population to have access to qualified laboratory services;
- With the purpose of strengthening the area of food research, the buildings in the territory of Tbilisi laboratory will be reconstructed-rehabilitated, which from its side will support the implementation of objectives related to food research in the country.

# LEPL Scientific-Research Center of Agriculture



# LEPL Scientific-Research Center of Agriculture

The Scientific-Research Center of Agriculture Carries out its activities in the following directions: to develop the agrarian science, agriculture and food production, namely: to preserve agro-biodiversity of plants and animals, to support artificial insemination of animals and breeding activities, to test plant species and to revive the selection activities, to elaborate the standards and certification systems for seed and planting materials, to disseminate new technologies, to ensure risk assessments in the field of veterinary and plant protection, to elaborate bio methods, to develop bio farming and to support the extension of agricultural entities.

## Infrastructure

The Scientific-Research Center of Agriculture has agricultural-farming bases, which are state-owned, but handed over to them with managerial rights, also up-to-date laboratories and testing demonstration plots:

- Research-demonstration base for perennial crops (vine, fruit, agri-forestry) (in the village Jighaura, Mtskheta Municipality);
- Research-remonstration base of annual crops (grains, legumes, vegetable, melons, technical) (in the village Tsilkani, Mtskheta Municipality);
- Silk production holding (in the village Tsilkani, Mtskheta Municipality);
- Cattle-breeding facility, selection-breeding holding (in the village Gantiadi, Dmanisi Municipality);
- Test-demonstration research farm of domestic animals and poultry (in Krtsanisi);
- Beekeeping breeding holding (in the village Mukhuri, Chkhorotsku Municipality);
- Greenhouse complex, 6 large and 27 small solar system greenhouses (in the village Shulaveri, Marneuli Municipality);
- Demonstration plots for species testing and selection of plants in 24 municipalities of Georgia;
- Integrated plant protection laboratory (in the village Tsilkani, Mtskheta Municipality);
- Plant research ELIZA and RT PCR laboratory (in the village Jighaura, Mtskheta Municipality);
- Laboratory of the seed and planting material standards and certification service (in the village Tsilkani, Mtskheta Municipality);
- Professor Ivane Sarishvili Soil Research Laboratory (in the village Tsilkani, Mtskheta Municipality);

- Molecular marking laboratory (DNA laboratory) (in the village Tsilkani, Mtskheta Municipality);
- Laboratory for studying the microclone (in vitro) procreation of plants and virus-free planting material (in the village Tsilkani, Mtskheta Municipality);
- Ltd Wine Laboratory – with the managerial right (Tbilisi);
- “Ltd Adam Beridze Soil and Food Diagnostics Center” – with managerial rights (in the village Anaseuli, Ozurgeti Municipality).

In 2019, the Scientific-Research Center of Agriculture carried some activities in the following key areas with the purpose of providing scientific support to the development of the agrarian sector, preservation of plant and animal agri-bio-diversity, also supporting the study and introduction of contemporary technologies:

**Search for, restore, improve and preserve the gene pool of vegetables and melons, elaborate innovative technologies for bio-agri-production:**

- 3 species of kidney-beans were prepared for enlisting in the national catalog;
- 1 form of flax, 1 - lentil, 2 – tomatoes, 1 – watermelon, 1 – melon, 2 - pepper, 3 – garlic, 1 – onion, 3 - potato and 1 eggplant were prepared for registration;
- 9 local tomato hybrids were produced;
- Elite seeds of chickpeas (Elixir), lintel (Pablo) and kidney-beans (Kuti Saparke) were received;
- With the purpose of further conservation, a collection plot for 6 species of tobacco was arranged;
- Local forms of cucumber – 7, tomato – 12, pepper – 3, 1 - watermelon, 1 – melon, 1 – eggplant and 1 – zucchini were studied according to their bio-farming characteristics;
- There were field tests carried out in Marneuli, Tsilkani, Kazbegi, Lentekhi and Akhaltsikhe in order to reproduce the elite potato seed materials, study the farming characteristics and identify the distinguished forms;
- There were 3 less widespread crops planted at the Tsilkani base collection plot, with the purpose of preliminary testing and further studying of species: Bamia, leaf beet (Mangold), Italian dill;
- Farming characteristics of 1 species of asparagus (Arganteuil) was studied;
- 32 locally produced and foreign bio-preparations were tested on annual and perennial crops; their application scheme and efficiency has been elaborated.

**Improvement of agri-technologies of perennial crops and preservation of gene pool:**

- Expeditions were organized for searching and reproducing local fruit species (Shida Kartli, Kvemo Kartli, Imereti, Samegrelo, Adjara);
- The collection of introduced fruits of species was enriched with 34 new genotypes;
- Farming-biological characteristics of 74 fruit species were studied;
- New collection of local fruit species was created (60 genotypes);
- Available stock plants were re-validated for the existence of viruses by performing relevant ELISA tests;
- Primary recommendations for trimming-forming sweet cherry and hazelnut plants were developed for farmers;
- 30 practical trainings and seminars were held also in horticulture for farmers and 940 beneficiaries of the program “Plant the Future”; 1,200 recommendations for soil compliance were issued.

**Conservation of genetic resources of plants, creation of gene pool of seeds. Selection of grain crops and the primary seed production:**

- Within the framework of the program for the conservation of agri-biodiversity and endemic species, the gene pool was enriched with new samples: 200 - wheat, 50 - corn, 30 – beans;
- A long-term collection of plant genetic resources was created;
- Samples of 9 species of millet, 10 species of sorghum and 4 species of foxtail millet were collected and procreated for the genetic bank;
- Rules and organizational diagram was prepared for the functioning of the plant seed genetic bank;
- 9 species of Georgian doli wheat were restored;
- The following species were selected from international nurseries and are studied based on zonality: winter wheat – 35, spring wheat – 10, 20 prosperous species of naked wheat and spring barley;
- Combination potential of 37 lines are studied at selection nurseries via artificial hybridization;
- Superelite and elite seed material of local corn species are received.

**Support to the development of seed and planting material production:**

- Within the framework of mandatory certification, field inspection was carried out at 17 seed plots (252 ha) of wheat. 21 seed quality assurance certificates were issued;

- Donor organizations (FAO and USAID) were involved in the projects with the purpose of reinforcing the works for introducing the planting material certification system;
- New criteria and application forms were developed for qualified nurseries; qualification status was awarded to 39 nursery farms;
- 13 quality assurance certificates were issued for planting materials;
- Final draft of the national catalog was developed;
- 6 foreign (Amicus, Galus, Bagira, Grom, Vassa, Tanais) and 5 Georgian (Dika, Makha, Chelta Zanduri, Akhaltsikhe Red Doli, Lomtagora 126) traditional species of wheat were introduced into the national catalogue;
- Seed quality laboratory passed the pre-accreditation audit. About 400 tests were performed within the framework of interlaboratory comparison and internal utilization of the center.

#### **Study of Integrated Plant Protection Systems and Implementation of Results:**

- For the first time in Georgia, two viral and fetal plasma diseases of hazelnut were identified with the laboratory methods of contemporary immunoferment analysis (ELISA-test) and molecular diagnostics - real time chain polimeraza (RT PCR);
- About 400 plants of 15 species of vine and about 200 plants of 7 species of fruit trees were tested for viral diseases through ELISA and Agristrip Assay BioReba laboratory methods;
- Location schemes for virus-free rootstocks of vine and fruit trees were updated;
- Due to the research activities and fight against the brown marmorated stink bug and other harmful insects of hazelnuts, and the sanitary monitoring activities that were regularly held in Guria and Samegrelo regions, the dominating group of harmful organisms was identified; frequency of their spread was determined;
- Main fungal diseases of hazelnut and a seed fruits were identified, and activities were elaborated against them;
- Insecticides are identified in Guria and Samegrelo regions, which can be regularly applied against the brown marmorated stink bug;
- New insecticides produced in Turkey were tested during their registration process. A new herbicide was tested against weeds, and its effectiveness was established;

- With the purpose of improving the integrated system for protecting the grapes from other invasive harmful organisms, route-based studies were arranged in Kakheti and Mtskheta regions; 3 dominating pests and 3 diseases were identified;
- Symptoms and spreading area were studied and verified for 2 bacterial and 2 viral hazelnuts diseases, also for 3 viral, 2 phytoplasmic diseases of vine, and 2 viral diseases of seed fruits.

**Study of Georgian land fund and restoration-improvements of soil fertility:**

- Agricultural land with the area of 20,000 ha was studied to determine the overall condition of soil, in accordance with the methodology of the EU Joint Research Center;
- With the purpose of creating the maps of soil degradation and changes in land usage, spectral images of soil, which were received from the satellite Corona, were categorized within the framework of the project “Long-term land degradation in the Caucasus”;
- Within the framework of the project National Spatial Data Infrastructure (NSDI), the soil condition information system was created, and digital cartography was performed;
- 153 samples of soil were tested at the laboratory;
- Based on the results obtained from the studies, electronic soil databases were updated;
- With the purpose of assessing the potential soil loss as a result of water erosion, digital modeling of the studied area was performed;
- The maps were produced to reflect the stocks of organic carbon and micro, micro and toxic elements in the soil;
- Chemical composition of kaolin clay was studied at the deposits in Guria Region.

**Restoration-improvement of the population of local species of domestic animals, poultry, fish and agricultural-friendly insects in Georgia, and creation of gene pool:**

- Typical representatives of Kazbeguri and Khevsuruli subspecies of mountainous cows were identified and transferred to cattle breeding and selection area;
- Within the framework of the memorandum of cooperation, the exterior, development, and milk-producing indicators of the Caucasian brown cows are studied in Ninotsminda and Akhalkalaki municipalities;
- Breeding and efficacy indicators (productivity, reproduction, diseases, etc.) of highly productive species (Holstein and Swiss) are continuously studied;

- With the purpose of supporting the development of intensive hog farming, the new generations of introduced hog species (Landrace Yorkshire Duroc Hampshire) are received and spread;
- Selection works continue at the Kakhetian hog breeding farm;
- The collection team was made up with the third generation of 5 populations of local chickens, with 50-50 chickens in each population;
- The following endangered species of sheep were received: Georgian semifinewool and fat-tail sheep – 20 heads, 19 ewes and 1 ram, and Georgian finewool fat-tail sheep – 15 heads, 13 ewes and 2 rams; as a result of bonitation, the number of sheep meets the first class requirements;
- With the purpose of creating the breeding nuclei, the following species were located: Megrelian goat, Tushetian and Imeretian sheep. The pure-breeding activities are underway;
- Productivity of the first generation of egg-laying Colchis pheasant, also the growth dynamics of young ones were studied;
- With the purpose of selecting the local carp and creating a bio-pond, a bio-pond model was set up from the wild Paravani and Rioni carp breeding team, total of 57 individuals;
- There are selection activities for the identification of the Georgian bee populations (those of Samegrelo, Guria and Kartli), and for supporting the development of breeding farms; the number of pure-bred Mengrelian population of bee colonies is 52;
- There are expedition works initiated for the restoration of Gurian bee population;
- Studies are continued for exploring the honey-producing plants and with the purpose of increasing the honey yield;
- With the purpose of preservation and improvement of gene pool of mulberry silkworms, 4,000 pure grena eggs of mulberry silkworms were produced;
- Blood-renewal activities were performed for 10 species of Georgian mulberry silkworms;
- With the purpose of creating the animal feed base, new feed crops were selected; recommendations were produced regarding the increase of productivity of grass at natural hayfields and grazing fields;
- With the purpose of refining the activities focused on the prevention of some infectious and invasive diseases of agricultural animals, there were activities for combating brucellosis; 462 heads of cattle, 171 sheep and goats were investigated, and 61 blood samples were taken in compliance with laboratory procedures (villages in Mtiuleti-Pshav-Khevsureti);

- With the purpose of identifying the epizootic situation concerning the helminthous diseases of hogs, sheep, goats and water buffaloes in Georgia, there were coprology researches throughout the country (in Mtskheta, Gardabani and Oni districts, and 6 helminthous diseases were revealed; recommendations were produced, and regional maps were created.

### **Research on Modern Technologies of Storage-Processing of Agricultural Products**

- There is a technology elaborated for preserves, syrups, compot, nectare and fruit freezing; ground - fruit dehydration, fruit composition, limited usage of free sugar, usage of grape concentrate as a sugar substitute, increase the share of fruit, reduce the calorie count, reduce the freezing temperature;
- New combined compound (calcium chloride + methyl jasmonate) was obtained with the purpose of improving the storage potential of table grapes, also stone fruit (peach, nectarine, sweet cherry), positive effect of the preparation is identified as compared to the control variant, namely, the losses are reduced, storage period is extended;
- Main physical-chemical, and organoleptic properties were established in natural soft drinks (5 types in total) that were produced from fruits that are rich with biologically active substances (sweet cherry, elderberry, white aromatic grapes), without saccharose and artificial additives;
- Improved technological alternative was elaborated with the purpose of refining the technological instruction for the production of Tenili cheese.

### **Food Safety Risk Assessment:**

- Threat of food contamination with salmonella was identified and described; scientific opinion was produced for the recommendation on minimizing the risk of salmonella contamination in food of animal origin;
- There was a research carried out to identify the potential “ways of risk” regarding the emergence of resistance to antibiotics in foodborne or other infections, which is related to the spread of resistance genes originated from polyvalent phages;
- Within the framework of food, veterinary and phytosanitary risk analysis, the procedural documents were elaborated to initiate risk assessments;
- There was a memorandum signed between the Scientific Research Center of Agriculture and the German Federal Institute for Risk Assessment, also with the European Food Safety Supreme Body;
- There was a practical workshop and training – “Chemical (CRA) and microbiology risk assessments (MRA) for Eastern European neighborhood policy countries” (Tbilisi, Georgia, October 21-22, 2019).

### **Research of contemporary equipment and technologies for agricultural crops production:**

- Tea trimming and crushing equipment was tested in Tsalenjikha municipality; the multifunctional machine was tested to perform 4 operations at the Lazi Ltd plantations, and technical parameters were set;
- With the purpose of studying the construction of small capacity machines for harvesting the annual crops, the basic scheme of bean harvester was elaborated, basic parameters were set, sketches and working documents were prepared.

### **Receiving virus-free seed and planting materials, and in vitro conservation of species:**

- 3 endemic and 10 introduced potato species, also more than 15,000 plants of 40 clones of the International Potato Center (CIP) were propagated in test tubes at the laboratory;
- With the purpose of species preservation, non-massive in-vitro propagation was performed for the varieties of goji berries [*Lycium barbarum* - orange goji; *Lycium Chinese* – red goji; *Lycium Ruthenicum* – black goji] and sweet potatoes.
- Test-tube plants of Georgian vine species (Buza, Tsitska, Danakharuli, Dzelshavi, Adanasuri, Akhmetis Tsiteli) were received;
- There were activities focused on improving the Georgian grape species (Kisi, Khikhvi 430, Krakhuna, Usakhelouri, Shavi Kabistoni, Shavi Rkatsiteli, Chvilitiuri, Paneshi, Ojaleshi, Margulis Sapere, Uchakhardani, Chkhaveri, Koloshi, Machkvaturi, Buza, types of wild vine, rootstocks (S04, 420A)), refining the in-vitro propagation technology, receiving the basic planting material and preserving the Georgian vine gene pool in the in-vitro gene bank.

### **Study of genetic resources of rare species of forests, study of agri-forest crops:**

- There was an inventory performed for three woody forest varieties (Georgian sycamore, Georgian almond, Imeretian oak), and habitat conditions were assessed; maps reflecting their spread were developed in the GIS software;
- With the purpose of specifying the similarities and differences between the populations, molecular genetic study was conducted for the leaf samples of Georgian Maple and Imeretian oak;
- 10 samples of 5 varieties of rare forest varieties were prepared for ex situ gene banks;
- With the purpose of studying the new fast growing forms of poplar, and identifying the variants adapted in the East Georgia, two new test plots were arranged with the new planting scheme in the municipalities of Mtskheta and Khashuri;

- 25 new forms of poplar introduced from scientific research centers of Italy and Turkey were studied;
- With the purpose of studying the resistant species and forms of mulberry, as a result of plant phenology observation, 4 spring and 3 winter forms of mulberry were identified;
- 80 grafted plants of 8 resistant forms of mulberry were produced.

**Collection and study of genetic resources of perspective forms of tea and subtropical crops, obtaining the planting materials**

- Eight perspective forms of citrus (mandarin, lemon, orange) and perspective species-forms of actinidia, feijoa, hazelnut, laurel, cherry-laurel, tea, blueberry, stevia, raspberry and blackberry were studied;
- Preparation works were carried out for selecting the nursery plot for the Georgian tea species Kolkhida, and for arranging the grafting nursery plot;
- Recommendations were studied and issued within the framework of the program Georgian Tea Rehabilitation; final opinions were produced regarding the rehabilitated plantations with the area of up to 50 ha.

**Preservation of the gene pool of the Georgian vine, study of Georgian and introduced species and evaluation of the application potential;**

- Species were described and assessed in accordance with the (GEO038) OIV descriptors at the Jighaura Solomon Cholokashvili vine collection plot;
- As a result of the conducted study, 5 recommended species of vines were identified: 3 wine grapes and 2 table grapes;
- There were expeditions arranged with the purpose of locating and identifying Georgian rare species of vine (Tsageri municipality and Adjara region); 38 rare species of Georgian vine have been identified;
- With a purpose of future propagation, grafting was performed on the material brought from Samtskhe-Javakheti and Samegrelo regions (Roketula, Black Aspindzura, Egurdzguri, Chergvali, Kharistvala Megruli);
- With the purpose of studying the specific microzones of viticulture, studies of perspective microzones our continued (Kardenakhi, Usakhelouri, Orbeluri, Ojaleshi).

**Identification of Georgian Vine species with DNA markers, and creation of genetic database:**

- DNA was extracted out of 70 species of the Georgian vine and ten wild forms of vine at the laboratory;
- With the purpose of further DNA extraction, the DNA extraction materials were taken from 240 species of the Georgian vine and 60 wild forms of vine;
- Through 9 pair of vine microsatellite DNA markers, PCR products were received from 30 species of the Georgian vine and 10 wild forms of vine.

**Access to cutting-edge technologies in the agrarian field and enhancing the knowledge of people engaged in this field:**

- Within the framework of the project “Mobile Extension”, consultations were provided to about 5,300 farmers and interested individuals throughout Georgia;
- With participation of the personnel of the Scientific-Research Center of Agriculture, the following activities were held:
  - 71 thematic trainings;
  - 32 lecture-seminars;
  - 4 field days;
  - About 35 thematic brochures were prepared;

Published and produced:

  - 24 manuals (books);
  - 107 articles;
  - About 60 pieces on TV and radio.

# National Environmental Agency



# National Environmental Agency

The National Environmental Agency studies the ambient air, water and soil, also monitors the hydrometeorological and geological occurrences, observes weather and climate conditions, also studies the biodiversity of the Black Sea.

## **The Agency implemented several important projects in 2019:**

- Equipping the laboratory of ambient air, water and soil analysis with up-to-date European standards;
- New automated stations for the monitoring of ambient air quality;
- Indicator-based measurement of ambient air;
- Informational bulletin on geology;
- Hazardous Geological Risk Zoning Map of Tbilisi;
- Automated meteorological stations;
- New draft law on aquaculture;
- Scientific expeditions to the Georgian maritime sector;
- International cooperation.

## **Laboratory of ambient air, water and soil analysis equipped with up-to-date European standards**

The Laboratory of ambient air, water and soil analysis of the LEPL National Environmental Agency was accredited in accordance with the new ISO/IEC 17025:2018 standard in 2019.

This is the only laboratory in Georgia, which has a unique database and has been monitoring the qualitative state of the environment since 1960s.

*Photo: Accreditation of the laboratory of ambient air, water and soil analysis*

With the purpose of expanding the scope for monitoring the environment pollution, the laboratory of ambient air, water and soil analysis introduced the most recent methodologies, which are focused on determining new parameters envisaged in the respective framework directives of the European Union. Besides, there was a whole range of studies carried out at the laboratory last year for measuring the presence of benz(a)pirene and for identifying the asbestos fibers in the ambient air. In addition, the process for expanding the field of accreditation started as well. There were works carried out to study the packaging materials, which is restorable through the introduction of laboratory analysis.

Supported by one of the projects of the European Union, the laboratory of ambient air water and soil analysis was equipped with new devices and equipment in 2019, which makes it possible to measure the components of water quality research, to apply modern methods for the scientific research analysis, and to measure the concentrations of priority pollutants established under the water framework directive. Together with the Austrian Environmental Agency, the laboratory participated in the international intercalibration exercise last year, as a result of which it was awarded a chemical analysis quality certificate.

The laboratory studies the quality of ambient air, atmospheric precipitation, underground waters, surface waters, wastewaters and the extent of soil pollution throughout Georgia.

*Photo: Laboratory of the National Environmental Agency*

### **New automated stations for monitoring the ambient air quality**

The LEPL National Environment Agency carries out a whole range of important activities with the purpose of improving the monitoring of ambient air quality.

There was an automated station for air quality monitoring installed in Rustavi in 2019, which made it possible to conduct continuous air quality monitoring in this city, and to identify the presence of eight harmful substances.

Also, one more automated station was added to the ambient air quality monitoring network in Tbilisi, and now the monitoring is performed at five locations in the capital.

These stations enable the National Environmental Agency to obtain the data round-the-clock about the quality of ambient air.

*Photo: Ambient air automated stations*

### **Indicator-based measurements of ambient air**

In 2019, the LEPL National Environmental Agency carried out four stages of indicator-based measurement of ambient air. During the whole year, the indicative pipes were installed in 25 cities throughout Georgia. In total 507 measurements took place at various locations.

These measurements aimed at establishing the concentrations of nitrogen dioxide, ozone and benzol. The samples were sent to the accredited laboratory of the United Kingdom of Great Britain for testing. The results are evaluated in accordance with the systems harmonized with the EU ambient air quality indexes, and they are available at the ambient air quality portal [air.gov.ge](http://air.gov.ge).

*Photo - indicator-based measurements*

### **Study of geological hazards (landslide, mudflow, rockfall, etc.)**

The annual geological newsletter Results of Developing Geological Processes in Georgia in 2018 and Forecast for 2019 was published in 2019, which captures the information about hazardous geological processes (landslide, mudflow, rockfall, etc.), obtained as the result of studies conducted during the monitoring and also during the period when extreme natural occurrences were active. Each section is accompanied with the forecast for 2019 and maps of geological hazards; recommendations are provided in tables for carrying out the protection measures.

### **Geological hazard zoning map of Tbilisi and geological report**

Specialists of the Geology Department of the National Environmental Agency carried out the geological assessment of the territory in Tbilisi in 2019, based on which the geology report was produced – engineering-geodynamic conditions of the territory of Tbilisi, and assessment of geological hazards. The report contains a narrative which is attached with the thematic maps for zoning the geological hazards and other topics, which captures all the geological processes identified in the territory of the capital (landslide, mudflow, rockfall etc.). Geological hazards databases are prepared with catalogs/cadasters, recommendations are produced as well for carrying out the protection measures.

This report and the geological hazards zoning map support the safety of population susceptible to geological hazards and infrastructural science, it will also assist the capital to ensure sustainable development in the long run.

*Photo: Geological hazards zoning map of Tbilisi*

### **Automated meteorologist stations**

Specialists of the Hydro-Meteorology Department of the LEPL National Environmental Agency updated and installed six automated meteorology stations and six automated hydrology stations throughout the country. These stations ensure the continuous measurement of meteorological and hydrological parameters, atmospheric pressure, air temperature and humidity, amount of precipitation, wind speed and direction, and water level, and they ensure the data transmission online.

The data received from hydrometeorology stations will improve the quality of weather forecasting, and to prepare and disseminate warnings about the anticipated natural meteorological and hydrological events in a timely manner.

*Photo: Automated Meteorological Station*

### **New draft law on aquaculture**

There were active legislative works carried out in 2019. The agency specialists elaborated and drafted a new law on aquaculture and tabled it to the Parliament. The draft law is a significant step taken forward in regard to the meaningful and efficient use of water resources and its potential in the country. the draft law aims at developing the agriculture in Georgia and attracting the investments in this field.

In accordance with the draft law, aquaculture zones will be identified in the seawaters of Georgia, and aquaculture permits will be issued with the purpose of using the respective territories. Besides, the activities of aquaculture sites will be regulated in the entire territory of Georgia.

The new regulations will support the protection of interests of the community, permit holders and users of natural resources. The draft law will regulate the usage of continental shelf of the Black Sea, territorial sea, and special economic zone and internal waterbodies of Georgia (lakes, reservoirs, ponds, rivers, springs, canals, wetlands and other waterbodies that can be used for breeding the water products) with the aquaculture purposes, which means breeding (cultivation, growing, propagation) of water organisms in these sites (fish, water plants, etc.), with and without aquaculture constructions. The law has been drafted in consideration of the international practice, with the purpose of protecting the interests of local population, and it envisages the issuance of ecological aquaculture permits at internal waterbodies (lakes, reservoirs) to the unions of individuals residing in specific municipalities, also to the agricultural cooperatives (fish farms) established for this purpose. NGOs, also representatives of scientific communities and experts will be involved in reviewing the new draft law.

### **Scientific expeditions to the maritime sector of Georgia**

2019 was an important year for studying the Black Sea. In accordance with the commitments taken under the EU-Georgia Association Agreement, the maritime expeditions were held in the area of ichthyology and hydrobiology. Besides, there were scientific expeditions organized in the maritime sector of Georgia, which aimed at assessing fish resources and identifying their stocks, which from its sides ensures the rational utilization of resources, and generate economic benefit for the country.

*Photo: Studies in the Black Sea, scientific ship*

### **International Cooperation**

There was a project launched in 2019, financed by the Green Climate Fund and the Swiss Agency for Development and Cooperation. Together with other activities, it aims to assess natural geological and hydro meteorological hazards in the territory of Georgia, develop the hazard and risk zoning maps and improve the early warning system.

There were works initiated together with the experts of the World Bank to produce a guidebook for improving the field of hydrometeorology in Georgia, which aims at enhancing the quality of weather and hydrology forecasting, and studying the climate regime in an objective manner.

#### **Projects implemented in 2019**

- Project title – subproject “Capacity building for air quality management in Georgia (within the framework of the project (#00097412) of the UNDP Governance Reform Fund (UNDP-GRF)).

Donor organization: Government of Sweden, project implementation timeframes: October 2019 - December 2020;

- Project title: Support in mitigation of arsenic content in natural waters, soils and food products, and possibilities to treat arsenic contents in drinking waters in Georgia (implementer - Water Research Institute of Slovakia (WRI)), donor organization: Slovak Agency for International Development Cooperation (SlovakAid), project implementation timeframes: October 2019 - May 2021.
- Project title: Strengthening the Climate Adaptation Capacities in Georgia (within the framework of the UNDP Programme “Reduction of Disaster Risks Caused by the Climate in Georgia), donor organization: Swiss Agency for Development Cooperation (SDC), Project implementation timeframes: 2019 -2023.
- Project title - Institutional Cooperation Between the Ministry of Energy and the Ministry of Environment Protection and Natural Resources of Georgia and the Norwegian Water Resources and Energy Directorate (NVE), donor organization: Ministry of Foreign Affairs of Norway, project implementation timeframes: 2018 – 2023;
- Project title - EU Water Initiative Plus for the Eastern Partnership (EUWI+ 4EaP), donor organization: The European Union, Project implementation timeframes 2016 -2020;
- Project title – Development of Georgia’s Fourth National Communication and Second Biennial Update Report to the United Nations Framework Convention on Climate Change (drafting the chapter “Climate Change vulnerability assessment and adaptation” of the fourth national communication), donor organization: Global Environment Facility (GEF), project implementation timeframes: November 2018 - February 2020.

# Agency of Protected Areas



# Agency of Protected Areas

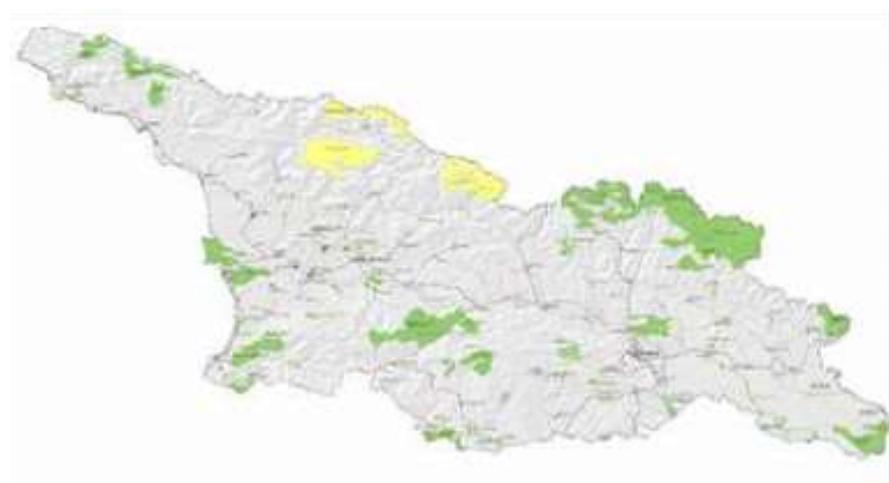
The Agency of Protected Areas carries out the following activities: management of state reserves, national parks, natural landmarks, sanctuaries, protected landscapes, biosphere reservations, world heritage sites and wetlands of international significance.

Purpose of the Agency is it to improve the management of protected areas, to ensure the functioning of territorial administrations and to control the adherence to statutory procedures, to plan, create and develop new protected areas.

**The Agency carried out its activities in the following important directions in 2019:**

- Development of the network of protected areas;
- Biodiversity conservation-monitoring;
- Sustainable management of natural resources;
- Environmental education and interpretation;
- Ecotourism development;
- International cooperation;
- Marketing and public relations, development of the network of protected areas.

In 2019, the area of protected territories increased by 70,144 ha (by 1.01% throughout the country) compared to the previous year; four new protected areas were created in 2019: sanctuaries of Pontos Mukha (Pontine Oak), Saghamo Lake, Paravani Lake and Abuli Lake. As of 2019, the total area of protected areas was 666,107 ha, making up 9.56% of the total area of the country (in 2018, the area of protected areas was 665,355 ha, which was 9.55% of the territory of the country).



### **Biodiversity conservation-monitoring**

A project to reintroduce gazelles into the Vashlovani protected areas - within the framework of the cooperation between the Ministry of Environmental Protection and Agriculture of Georgia and the Ministry of Ecology of Azerbaijan, gazelles were reintroduced from Azerbaijan to Georgia. The reintroduction has been successfully going on since the 2013 to date. The project is implemented with the financial support of the World Wild Fund (WWF) – Caucasus Nature Fund and Transboundary Joint Secretariat (TJS). According to the data of 2019, there are 140 gazelles in the Vashlovani protected areas.

### **Monitoring of West Caucasian Tur in the Lagodekhi Protected Areas**

For the first time in the Caucasus, the NGO NACRES has been conducting a transboundary telemetric monitoring on east Caucasian tur in the Lagodekhi protected areas and in Zakatala sanctuary since 2018. The monitoring is carried out with the financial support of TJS – Transboundary Joint Secretariat.

### **Introduction of contemporary monitoring technologies**

With the purpose of improving the protection and monitoring of protected areas, pilots were initiated: contemporary SMART patrolling technologies are being introduced in the protected areas of Borjomi-Kharagauli and Lagodekhi, donor: CNF;

### **Monitoring of forest pests-diseases and activities to combat them**

In 2019, pheromones insect traps were placed in 8 protected areas based on the phytosanitary study, in total, in the area of 200 ha: Borjomi-Kharagauli (45 ha), Kazbegi (7 ha), Machakhela (10 ha), Pshav-Khevsureti (1 ha) and Kolkheti (1 ha) national parks, also in the protected areas of Batsara-Babaneuri (1 ha) and Kintrishi (2 ha), and in Chachuna sanctuary (132 ha).

### **Forest care-restoration**

There is a forest (Imeruli and Georgian oak) restoration project implemented in Ajameti sanctuary in the area of 56 ha;

### **Forest inventory and preparation of management plans**

In 2019, the forest inventory was completed in 2 protected areas: Tbilisi National Park (21,031 ha) and Pshav-Khevsureti protected areas (18,266 ha).

### **Eco-education and Interpretation**

In total, 86,781 people participated in environmental awareness-raising campaigns in 2019. There were 839 lecture-seminars arranged on the topic of environment protection and protected areas during 2019, with 63-weekly activities, 126 green campaigns, 2,098 eco-tours and 195 cleaning activities organized. There were 635 information meetings with the local population, attended by 9,740 people.

## **Ecotourism Development**

### **Statistics on Visitors and Revenues**

According to the data of 2019, the number of visitors to the protected areas of Georgia (1,199,011 visitors) increased by 8% as compared to the data of 2018 (1,108,503 visitors).

Among the visitors, 49% were Georgians (587 022 visitors), and 51% - foreign (611,989 visitors). According to the data of 2019, compared to the data of 2018, the number of Georgian visitors has increased by one person, and the number of foreign visitors has increased by 16%.

In 2019, revenues in the amount of 9,363,447 were generated from ecotourism services, which is increased by 11%, as compared to the data of 2018 (8,436,125 GEL).

### **Development of ecotourism infrastructure**

The Agency of Protected Areas pays much attention to the development of ecotourism. In 2019:

- Within the framework of the ENPARD program, ecotourism infrastructure of so called Ropes Park of the administration of Algeti National Park was set up;
- Infrastructure of hanging paths of Okatse Canyon was renewed with a viewing platform.
- A zipline service was arranged at the natural landmark of Okatse waterfall.
- Ropes Park was arranged at Mtirala National Park.

### **Planning-improvement of echo trails**

Planning of hiking trails started in the 2019 in protected areas of Borjomi-Kharagauli, Ajameti, Samegrelo and Batsara-Babaneuri;

Eco-trails were arranged in the National Park, also in the protected areas of Batsara-Babaneuri and Vashlovani – Eagles Ravine.

### **International Cooperation**

4 protected areas – Kolkheti National Park, Kobuleti protected areas, Kintrishi protected areas and Mtirala National Park, as unique Kolkhetian forests and wetlands, were nominated for UNESCO world natural heritage – “Kolkhetian forests and wetlands”.

Martvili Canyon was awarded the prize of the Landscape Award held within the Council of Europe Landscape Convention in 2019, for the implementation of the projects “Martvili Canyon Development Project”;

There are procedures underway for presenting and nominating the candidate protected areas for IUCN Green List.

In 2019, the Agency of Protected Areas obtained new brands, among them with financial support of the ENPARD program.

### **Marketing and Public Relations**

## **Image-making videos**

There was a series of blogs (22 videoblogs) on the national parks of Georgia prepared under the joint project of the Agency of Protected Areas and Wissol Group #TravelWith Wissol. The blogs had more than two million views in the social network. The blog hosts informed the public about popular itineraries, also mountain trails and helped them in discovering new destinations. The viewers have exhaustive information about the issues related to safe travel.

## **Media relations**

The Agency of Protected Areas has an active cooperation with tourism sections of leading TV companies of the country. The topics were covered in the programs of Giorgi Korkia and Onise Janashia “Reliable Tour”; “Nutsa’s Tour”.

In 2019, information about the protected areas agency was published more than 1,000 times in the media outlets.

## **Events**

### **Opening of Ropes Park in the Mtirala National Park**

Ropes Park Opening ceremony was held at Mtirala National Park. “Park of 100 Ropes” is an eco-educational attraction and represents an educational entertaining place in the nature. The ecotourist site is targeted to various segments and it has a special significance for promoting the environment protection.

### **Opening of the renewed trail of the Okatse Canyon**

There was a ceremony for opening the hanging trail at the renewed Okatse Canyon. At the footsteps of current global trends, the cover of the hanging trailer and the viewing platform was changed at the Canyon. A metal transparent floor was arranged, which will make the trail even more extreme. Besides, the side protection rails were replaced with the stainless ones. As a result, traveling to the canyon will be safer. 13 bridges were rehabilitated along the trail leading from the visitor center to the station - wooden construction was replaced with a metal one.

## **In 2017 -2019**

- Forest management plans were prepared and approved with the support of the European Union (5): for Ajameti, Nedzvi, Katsoburi sanctuaries, for Kolkheti and Machakhela national parks.
- 5 new categories were added to the system of protected areas: Kintrishi National Park, Ponto oak sanctuary, Saghamo lake sanctuary, Paravani Lake sanctuary, Abuli Lake sanctuary.
- In 2017 -2019, with the support of the European Union, 4 new management plans were prepared and approved for the following territories: for the national parks of Tbilisi (covering the Mtskheta-Mtianeti and Kvemo Kartli regions: Mtskheta, Tianeti, Gardabani and Marneuli municipalities) and Machakhela, Kobuleti protected areas, Kolkheti national park and Katsoburi sanctuary.
- As of 2019, 13 out of 20 territorial administrations under the protected areas agency are administered under the management plan, which is 65%.

# National Forestry Agency



# National Forestry Agency

Considering the national forestry concept paper<sup>1</sup>, the Third National Environmental Action Programme of Georgia 2017 -2021 (NEAP III)<sup>2</sup>, Georgia Biodiversity Strategy and Action Plan (2014 -2020)<sup>3</sup>, Georgia Rural Development Strategy and Action Plan (2017-2020)<sup>4</sup> and 15.1, 15.2 objectives of the Sustainable Development Goals, priorities of the National Forestry Agency are:

- Capacity building of the Agency and its institutional development;
- To maintain and improve the quantitative and qualitative indicators of forests;
- Effective planning of forest management;
- Sustainable forest use.

As a result of activities carried out in 2019, the institutional system of the Agency was strengthened and working conditions of employees improved. The National Forestry Agency provides life and health insurance for forest officers, with incentives for performing official obligations in good faith, also for performing especially difficult or important tasks, which will significantly increase the motivation of employees and promote the interest among the youth in this profession.

There were amendments prepared to the secondary legislation that will regulate and improve:

- Effective utilization of the forest recreational potential and support to eco-tourism development - as the result, the local population and the private sector will have an opportunity to develop the tourist infrastructure and tourist products, which will support the creation of additional jobs and generate additional revenues.
- Preparation and distribution of timber resources received as a result of forest planting activities; - the demand on wood for agricultural materials (support poles) has been a burning issue for the population and businesses. The agency will produce this resource in the plantations of acacia or other fast growing varieties in its territories, which are intended for producing this type of materials. It is also noteworthy that the fast growing plantations represent the best tool for mitigating the pressure on forest, and the agency has been arranging this type of plantation since 2014;
- Effective management of tree-forest residues - to development of briquette and pallet production; one of the priorities of the Agency is to make the private sector interested in this business, because

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<sup>1</sup> Resolution of the Parliament of Georgia №1742-Іb 11.12.2013

<sup>2</sup> Resolution of the Parliament of Georgia №1124 22.05.2018

<sup>3</sup> Resolution of the Parliament of Georgia N343 8.05.2014

<sup>4</sup> Resolution of the Parliament of Georgia №631 30.12.2016

the alternative resources for burning can be considered the most effective ones for replacing firewood at this stage for our country. These changes will facilitate access to forest residues even more, and procedures will be simplified for interested individuals.

Considering the above-mentioned priorities, the Agency implemented important activities in 2019, among them:

### **Forest inventory and preparation of management plans**

With the purpose of continues implementation of forest inventory works and for ensuring the process sustainability, the National Forestry Agency elaborated a training program and special three-month internship courses<sup>5</sup>. After three months of theoretical and practical trainings, 16 young graduates - forest specialists - were employed for forest inventory field works.

Forest inventory field works were completed at Lagodekhi forest section (21,116 ha), and the forest invention started at Akhmeta forest section (55,492 ha) and Lentekhi forest section (76,350 ha).

Along with fieldworks taking place at Akhmeta for a section, the new methodology (FMI) was also tested.

For ensuring the elaboration of forest management plans, there were works initiated for developing a special software with the support of the German Society for International Cooperation (GIZ), which from its side will make a significant contribution in the development of Forest Information and Monitoring System (FIMS).

A forest management plan was approved for Lanchkhuti forest section for the area of 11,254 ha (Decree #2-1089 13.11.2019 of the Minister of Environmental Protection and Agriculture of Georgia).

As of 2019, the updated forest management plans are prepared for the area of 297,3 thousand ha, which is the territory managed by the National Forestry Agency.

In total, 15.1% of the territory of forest fund (territory under the management of LEPL National Forestry Agency and LEPL Agency of Protected Areas) is managed in accordance with the approved forest management plans.

### **Forest care and restoration**

In 2019, forest care-planting activities (among them the activities to care for the areas planted /restored in previous years) were carried out in the regions of Imereti, Guria, Kvemo Kartli, Samegrelo-Zemo-Svaneti and Samtskhe-Javakheti – in the area of 409.07 ha. 125,430 young trees of various species were planted.

Among them:

- Temporary forest nursery – 0.2 ha;

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<sup>5</sup> The training program is supported by the United Nations development program (UNDP).

- Forest planting – 152.76 ha;
- Support to the natural renewal of forest – 43.5 ha;
- Maintenance activities for the area of 212.61 hectares restored in 2016 -2018.

Based on the preliminary studies, forest restoration projects were prepared for the area of 307.8 ha to be implemented in 2020. It is noteworthy that the National Forestry Agency expands the scopes of forest restoration activities every year, and for the last two years it has met the unconditional commitments taken under the Nationally Determined Contributions (NDC) based on the Paris agreement.

It is important that the society and the private sector, especially the youth and the school children are involved in forest restoration activities. Other than the fact that the only local population are employed to perform these activities throughout the regions, the Agency also has a successful cooperation with private companies and public schools.

#### **Monitoring of forest-pest diseases and activities to combat them**

Activities continued to fight against European spruce bark beetle spread in spruce grooves in the Samtskhe-Javakheti region (26,000 ha) with the pheromone traps and sanitary logging. There were 1,000 pheromone traps installed from May to October, inclusive. As a result of 12 monitoring, 7,294,700 (seven million two hundred and ninety-four thousand seven hundred) European spruce bark beetles were captured and destroyed. Monitoring and countermeasures continued for the Kolkhetian box-tree grooves that were damaged by pests and diseases in the area of 550 ha. Pheromone insect traps were used in Imereti and Samegrelo-Zemo Svaneti regions against box-tree moth, and the area of 12 ha in Racha-Lechkhumi and Kvemo Svaneti regions was treated three times with insecticides. At the same time, various methods and measures were tested as well.

Within the framework of the chestnuts grooves restoration-improvement program in Imereti region, additional studies were conducted for the affected grooves (among them, lab tests). Based on the recommendations produced after the studies were over, the affected trees were marked for sanitary logging in the area of 43 ha, and after the logging is over, biological control methods will be tested by introducing hypovirulent strains into the territory.

#### **Fire prevention**

With the purpose of forest fire prevention and harm mitigation, the Agency produced the response plan for the agency during 2019; temporary firefighters and guards were hired for the fire hazard period; fire roads were rehabilitated-cleaned in the area of 11.4 m<sup>3</sup> at fire-hazard districts. The agency was actively implementing the information campaigns as well.

#### **Sustainable forest use**

#### **Arrangement of the forest infrastructure**

With the purpose of cutting the timber production costs, supporting the unimpeded usage of timber resources by the population and carrying out the fire prevention activities, forestry roads were arranged and rehabilitated at 113 kilometers. For supporting the works for preparing and producing the timber in an organized manner, continuous works were carried out with the purpose of arranging business yards: design and preparation works were carried out for arranging 16 business yards: (5 units in Kakheti: Gurjaani, Dedoplistskaro, Mskhalgori, Sagarejo, Kisiskhevi; 5 units in Mtskheta district: Bulachauri, Kanatia, Tvalivi, Lisi, Bodorna; 5 units in Samtskhe-Javakheti: Andeziti, Borjomi-Plateau, Tsagveri, Aspindza, Chorchani). The works will continue in 2020 as well.

### **Timber production**

Within the framework of the special logging activity of the Agency, there were 83,000 m<sup>3</sup> timber resources produced. Through arranging a commercial e-auction and also for ensuring the access to timber resources, the Agency has realized (sold with the status) 55.0 thousand m<sup>3</sup> timber resources.

In total, 38,000 m<sup>3</sup> timber resources were produced and handed over to schools and budgetary organizations as firewood supplies.

It is important that with the initiative of the Agency 12,000 m<sup>3</sup> firewood was substituted by energy efficient briquettes at many schools and budgetary organization in 2019. 386,000 m<sup>3</sup> of forest area was allocated for social logging.

### **Multipurpose usage**

With the purpose of maximizing the recreational tourism potential of forests, a recreational management plan was elaborated for Borjomi municipality, where the investment proposals were developed at 16 locations about the types of infrastructure or tourist products to be developed there.

The first camping area and interpretation trail were arranged at Borjomi plateau, in the territory of the forest fund. It is planned to develop similar management plans for Racha region in 2020.

### **During 2017-2019:**

- It is worth mentioning that 3 forest management plans were developed and approved with the support of the European Union – for Akhaltsikhe, Aspindza-Akhalkalaki and Lanchkhuti Forest districts in 2017-2019;
- With the purpose of developing the management plans, forest inventory fieldworks were carried out at Lentekhi and Akhmeta forest districts;
- As of 2019, 15.1% of forest fund territory (the territory under the management of LEPL National Forestry agency and the LEPL Agency of Protected Areas) is managed in accordance with the approved forest management plans.

**LEPL Environmental Information and Education Center**  
**Education for Sustainable Development**



# LEPL Environmental Information and Education Center

The LEPL Environmental Information and Education Center conducts its activities in accordance with the bylaws of the legal entity of public law Environmental Information and Education Center. At the same time, the center is operating in accordance with the principles of the Aarhus Convention and the Georgian legislation. While conducting its activities, the center shares the visions and directions of the UN Sustainable Development Goals and The United Nations Economic Commission for Europe (UNECE).

The report presents the activities implemented by the LEPL Environmental Information and Education Center in 2019 in different areas such as: support to environmental and agrarian education, dissemination of environmental information, ensuring the public engagement in decision-making processes and development of information technologies throughout the Ministry.

## Education for Sustainable Development

### National Strategy and Action Plan

With the purpose of mainstreaming the principles of Education for Sustainable Development at the national level, the LEPL Environmental Information and Education Center drafted a document - Education for Sustainable Development - National Strategy and Action Plan for 2020-2014, in close cooperation with the Ministry of Education, Science, Culture and Sports of Georgia, supported by the German Society for International Cooperation (GIZ).

Purpose of the strategy on Education for Sustainable Development is to support the sustainable development process in Georgia through establishing the educational system, which will assist the citizens of Georgia to develop knowledge, skills, values and competences required for the creation of sustainable future.

The strategy reflects the components of formal, informal and non-official education, which is directly linked to the concept of education for sustainable development.

### Formal education

#### Preschool environmental education

The environmental Information and Education Center finished the introduction of manual for preschool environmental education throughout Georgia in 2019. In total, 1,963 teachers and methodology specialists of about 1,600 preschool educational institutions were trained for introducing the manual.

1,145 representatives of preschool educational institutions were trained from Imereti, Samtskhe-Javakheti, Samegrelo-Zemo Svaneti, Racha-Lechkhumi Kvemo Svaneti regions, Adjara and Tbilisi, to whom the manuals were handed over together with support materials.

With the purpose of supporting the preschool environmental education, with the initiative of LEPL Environmental Information and Education Center, an environmental component was added to the national school preparedness educational standard, which was elaborated and approved by the Ministry of Education, Science, Culture and Sports of Georgia in 2015. Within the framework of school preparedness program, the center elaborated the support manual for teachers in 2016 - preschool environmental education, which includes the following environmental topics: biodiversity around us, saving water and energy resources, waste management.

### **Green Award**

With the purpose of supporting the environmental education and giving incentives to the teachers and methodology specialists of kindergartens, the contest Green Award was initiated in 2018, where teachers and methodology specialists participated only from Tbilisi kindergartens.

In 2019, after the preschool environmental education manual was introduced everywhere, the contest was rolled out to the entire territory of Georgia, and 120 teachers and methodology specialists took part in it.

At the first round of the contest, the participants were assessed based on the submitted applications, and the second round of the contest was held in Tbilisi and Kutaisi, where the selected contestants made presentations about the implemented environmental activities. Out of ten finalists, Natia Tavadze, a kindergarten teacher from the village Nigvziani, Lanchkhuti Municipality, became the winner of Green Award in 2019. The winner received the Green Award for supporting the preschool environmental education, and all the other finalists received certificates of appreciation and memorable gifts.

### **General education**

With the purpose of promoting the environmental issues in the primary school subjects, the center elaborated a training module: “teaching the environmental issues in the subjects of primary level”. The center representatives held trainings on Environment Protection for the curriculum experts involved in the New School Model. The training was comprised of the theoretical and practical part, during which the participants were performing various types of practical assignments. The practical assignment aimed at reflecting the environmental issues in both formal and informal studies.

93 curriculum experts participated in the trainings.

The New School Model is a part of the reform implemented within the educational system. Its purpose is to create an educational environment that is focused on critical thinking and personality, which will equip an adolescent with knowledge and skills required for meeting the challenges of the 21<sup>st</sup> century.

## **Informal education**

### **Trainings /training courses**

There were trainings on environmental and agricultural issues held in 2019, attended by 2,375 participants, 330 of which were the employees of the Ministry, and 2,045 participants were from the interested communities.

With the purpose of raising the environmental awareness of the public, the center held the following trainings in 2019:

- Preschool environmental education (1,145 participants);
- Teaching the environmental issues in the subjects of the primary level (93 participants);
- “Environmental democracy - human rights and obligations” (475 participants);
- training course “environmental manager” (72 participants);
- Art of debates - about ecosystem services and infrastructural development (12 students);
- Trainings for technicians providing maintenance for refrigerants (25 participants).

With the purpose of promoting the development of agricultural cooperatives, trainings were held for the representatives of cooperatives from various regions of Georgia (250 participants in total):

- Legal regulation of agricultural cooperatives and internal relations within the enterprise (134 participants);
- Sustainable management of pastures (35 participants)
- Artificial insemination of cattle (51 participants).

### **Support to the qualified human resources of the Ministry**

With the purpose of supporting the qualified human resources of the ministry, the center offers trainings in various areas every year.

330 participants attended the trainings held with the purpose of building the capacity of ministry’s personnel in 2019:

- The center organized trainings for the personnel of the Environmental Patrolling and Rapid Response Division of the state subagency institution – Department of Environmental Supervision, with the financial support of the GIZ. Within the framework of the project, 158 personnel were trained, among them 150 rapid response personnel, 8 lawyers and an analyst.

- 12 participants attended the training “professional educational programs, statutory requirements and peculiarities of their organization/implementation”.
- The center organized study tours to Turkey, supported by the Turkish Development Agency, with participation of 26 personnel of the agricultural laboratory.

There were trainings held with the support of the Environmental Information and Education Center and the United Nations Food and Agriculture Organization (FAO) in the following areas:

- Trainings for the staff of the ministry with a focus on developing the transferable skills - leadership and a personal skills, attended by 51 participants;
- Office program trainings were held for the staff of the ministry, attended by 26 participants;
- Trainings were held for the specialist of human resources management of the ministry, attended by 36 participants.
- English language courses were held for the ministry personnel, which was successfully completed by 21 participants.

### **Raising the environmental awareness**

With the purpose of promoting global environmental education and awareness-raising, the center carries out its activities in the area of informal education:

#### **Lecture-seminars**

There were 35 lecture-seminars held for schoolchildren, students and teachers during the year on the following topics:

- Environmental democracy - human rights and obligations;
- Modern waste management technologies;
- Protected areas of Georgia;
- Ecosystem services;
- Current environmental challenges;
- Protection of ozone layer;
- Climate change;
- The earth history - from a protoplanet to the blue planet

- Earth hour 2019
- Natural disasters
- Other.

1,402 people attended the lecture-seminars held by the center in 2019, among them were: 1,354 schoolchildren, 31 teachers and 17 students.

**[www.izrune.ge](http://www.izrune.ge)**

The center created about 1,000 tests of different levels of difficulty for the website [izrune.ge](http://www.izrune.ge) on the issues of environment protection and agriculture. By using the cutting-edge technologies, the website tries to motivate the students and offers them to test their knowledge through individual online tests. The platform is intended for the schoolchildren of I-XII grades, also for their parents.

### **Environmental and agrarian days**

There were various activities organized to mark the following environmental and agrarian days:

- World Wetland Day – a thematic banner and online questionnaire “what do you know about wetlands” was prepared with the purpose of informing the public and raising their awareness on the World Wetland Day. The questionnaire was disseminated via the center’s Facebook page and it was filled out by 191 users of social networks.
- Earth Hour 2019 - the center organized various activities to mark their most large-scale environmental campaign “Earth Hour”. There was a bike tour and a 6-km run organized in the territory near Lake Lisi to mark this event, participated by about 200 volunteers. The Earth Hour was also marked at Rike Park with a big concert specially arranged for this day.
- International Day for Biological Diversity - there was a final event of “Debates: Ecosystem Services or Infrastructure” (60 persons) organized on the International Day for Biological Diversity, preceded by trainings for schoolchildren on the art of debates, ecosystem services and infrastructure development (12 students). Besides, a thematic information banner was prepared with the purpose of informing the public and raising their awareness on the International Day for Biological Diversity, which was disseminated via the center’s Facebook page.
- There was an online questionnaire “how well do you know the box tree?” for preventing the box trees from being cut on Palm Sunday, and it was uploaded on their Facebook page. The questionnaire was filled out by 73 users of the social network.
- Georgia’s Independence Day - May 26<sup>th</sup> was marked with the event “Knowledge leads to freedom”, which was dedicated to the knowledge sharing and its significance. There was a green space

arranged with the exhibition constructions and installations made of a geometric figures in the Rustaveli Avenue. The green space was comprised of educational, informative and entertainments zones. The guests entering the spaces were able to get familiar with biographies of the people who are creating future with their work and knowledge. There were special green spaces arranged, where every person had an opportunity to participate in educational and environmental activities, also to take part in games and quizzes, which the staff of the Environmental Information and Education Center were organizing during the whole day. Besides, on the Independence Day, within the framework of the campaign “Knowledge leads to freedom” 8 information posts/banners were prepared and uploaded on the center’s Facebook page.

- International Children’s Day - in connection to the International Children’s Day, there were educational-entertainment activities held at the Ministry of Environmental Protection and Agriculture. There was a space arranged in the yard of the Ministry specially for children, where Levan Davitashvili, Minister of Environmental Protection and Agriculture hosted the IDP children from occupied territories and those lacking parental care (70 participants). Besides, with the purpose of informing the public and raising their awareness, a thematic information banner was prepared and disseminated through the center’s Facebook page.
- Mtkvari Protection Day - In connection to the Mtkvari Protection Day, the center organized a lecture-seminar and a practical activity for taking samples from the River Mtkvari and for testing them at the laboratory. 23 schoolchildren attended the lecture-seminar. With the purpose of informing the public and raising their awareness, a thematic information banner was prepared and disseminated via the center’s Facebook page.
- World Environment Day - there was a public dialogue “Reduce Air Pollution with Your Action” in connection to the World Environment Day. Within the framework of the event, the guests discussed ambient air pollutants and pollution sources together with the subject matter expert, also talked about their impact on human health and activities to be carried out for improving the ambient air quality (60 persons). Besides, a thematic informational banner was prepared with the purpose of informing the society and raising their awareness, which was disseminated via the center’s Facebook page.
- World Day to Combat Desertification – the following activities were arranged for marking this day:
  - Essay Contest - with the purpose of raising the public awareness on desertification issues, also for giving incentives to the schoolchildren interested in environmental issues, there was an essays contest “Desertification in My Area” arranged for the schoolchildren of Sartichala (19 persons).

- posters contest - there was a posters contest “Prospects for combatting the desertification and a sustainable land usage in Georgia ” (13 persons).

There were information meetings held for contest participants (15 people), where they heard a lecture-seminar on desertification issues. The contest winners were revealed and awarded at the meeting.

- There was an event for raising awareness on land degradation in Gardabani Municipality. The attending guests, including the schoolchildren of public schools and other interested locals (41 people) visited the windbreaking lines planted in the village Sartichala. They also heard a lecture on the problem of land degradation, activities to combat it and the significance of raising awareness and involvement of the local population, especially the youth. Winners of the essay contest dedicated to the World Desertification Day “Desertification in My Area” were revealed and awarded at the event.
- There were 2 radio programs prepared: how to combat desertification - The radio Imedi; “problems of land degradation and desertification in Georgia and combat measures ” – Radio 1.
- With the purpose of informing the public and raising their awareness, thematic banners and online questionnaire “what do you know about desertification“ were developed. The questionnaire was disseminated via the center’s Facebook page, and it was filled out by 200 users of the social network.
- International Day for the Preservation of the Ozone Layer - there was a lecture-seminar organized with schoolchildren dedicated to the International Day for the Preservation of the Ozone Layer. 154 schoolchildren attended the event. Besides, a thematic banner was produced and posted on the center’s social network.

There was a contest announced within the framework of the International Day for the Preservation of the Ozone Layer “Preserve the ozone layer - protect life on Earth” for schoolchildren and students. Authors of the best essays and video statements received awards and memorable gifts at the events specially arranged for this purpose. 24 people participated in the contest and 65 people attended the award ceremony.

- Car-Free Day - with the purpose of informing the public and raising their awareness, there was a thematic banner prepared and an online questionnaire produced - “how well do you know the eco management rules ?” The questionnaire was disseminated via the center’s Facebook page and it was filled out by 36 users of the social network.
- Foresters day - there was a student conference “Profession - Forrester”, where 98 students participated.

- Environmental Education Week - there were lecture-seminars on environment for schoolchildren within the framework of the week. About 300 schoolchildren attended the lectures.
- Earth Day - there was a conference “Challenges of environmental policy and management in Georgia” held for students and young scholars to mark the Earth Day. Poster-presentations of all participants were presented to the conference participants. 64 people attended the conference.

### **Public discussions and workshops/information meetings**

With the purpose of promoting the access to environmental information and involving the public in decision-making processes, the Environmental Information and Education Center organized the following public discussions and workshops /information meetings in 2019:

- Public discussions of the draft law of Georgia on water resources management and the Alazani-Iori river basin management plan - public discussions were organized in Kvareli and Telavi Municipalities.
- Public discussion of the national report on the environmental situation in 2014-2017;
- Series of public discussions on the draft law of Georgia on biodiversity. About 150 people attended public sessions.
- Workshops within the framework of the project “support to drafting the six national reports of the convention on biodiversity ” - the center organized 13 workshops participated by 194 people. The project is implemented with the technical and financial support of the Global Environment Facility GEF). The project aims at producing a high quality evidence-based report, which will improve the fulfillment of the national strategy on biodiversity and its action plan, facilitate the decision-making process at the national level, and support the achievement of our goals under Aichi Biodiversity Targets. Currently the final draft report is produced and sent for remarks and comments.
- There were information meetings organized within the framework of the EU-funded projects on territories within the Emerald Network - “Support to the implementation of environmental provisions under the EU-Georgia Association Agreement”; the Environmental Information and Education Center organized the information and consultation seminars from October 21 to October 23, 2019 in Zugdidi, Tsageri and Ambrolauri municipalities, where the issues were discussed on the elaboration of management plans for the territories in the Emerald Network of “Samegrelo 2”, “Racha-Lechkhumi” and “Svaneti-Racha”. 72 participants attended the seminars.
- There was an information meeting organized with non-governmental organizations - with the purpose of discussing the draft decree of the environmental ombudsman, informing the public about the need to introduce the institute of environmental ombudsman, and getting familiar with

functions and authorities related to this institution. There were three meetings held with the representatives of NGOs (57 people).

### **Information Campaigns**

Within the framework of the campaign of environmental democracy – rights and obligations of people:

- There was a training “Environmental Democracy - Human Rights and Obligations” organized in all the regions of Georgia and in Tbilisi for the representatives of public agencies, local NGOs and media. The training addressed the issues about access to environmental information under the Aarhus Convention, public engagement in decision-making and access to environmental control or justice (475 people).
- There was an information flyer produced “Environmental Democracy - Human Rights and Obligations” about the importance of the access to environmental information under the Aarhus Convention, public engagement in the decision-making process and the access to justice.

### **Regulation of predators and wild animals with the purpose of raising awareness of local population:**

- There were information meetings with local population organized in 23 municipalities (Kakheti, Kvemo Kartli, Shida Kartli, Mtskheta-Mtianeti) to discuss legal regulatory norms, procedures, causes of attacks by wild animal, prevention activities, role and importance of reptiles/snakes in the ecosystem (more than 600 participants).
- There was an information flyer produced “Learn More” about snakes, their habitats, way of life, and their role and importance for the ecosystem.

### **Information campaign on forest and biodiversity**

Within the framework of the campaign:

- There was a social campaign “Forest - the source of life” for raising public awareness on forest and biodiversity and for informing the public about the achievements of the forestry sector, challenges, current processes and future plans. There was an action plan elaborated within the framework of the campaign and consistent activities were planned. In total, 16 information educational banners were prepared from September 17 - November 8, inclusive, which were uploaded on the official Facebook website of the Environmental Information and Education Center. Within the framework of the campaign, more than 600,000 users had access to the banners.
- There was a radio program “Green Air” on the radio Imedi, where the subject matter specialist, experts and NGO representatives talked about the current situation and challenges in the forestry

sector. The program format envisaged receiving calls from the interested public during the live broadcast, where they could get competent answers to the issues of their interests from subject matter experts. In total, there were 16 radio programs prepared.

### **Information Campaign on Ambient Air**

Within the frameworks of the campaign:

- There was an information video clip prepared on ambient air protection policy, which provides information to the public about main pollutants of ambient air, and ongoing or planned activities under the governmental program targeted to the air quality improvement. The information video is disseminated via the official Facebook pages of the Ministry and the center. the video has reached 54,859 people through the Facebook page all the center.
- There was a video “Reduce air pollution with your actions” prepared and posted in social network, where the celebrities were talking about the role of the public in reducing the air pollution.
- There was a series of videos “Green Minute” prepared and uploaded in the social network, where the representatives of the media, government and non-governmental organizations and private sector were talking about the role of the public in reducing the air pollution (129,199 social network users accessed it).
- Online questionnaire - with the purpose of informing the public and raising their awareness, there was an online questionnaire “What do you know about ambient air pollution” prepared and disseminated via the center’s Facebook page. 87 social network users filled out the questionnaire.

### **“Do Not Cut, Trim!” – Campaign for the prevention of cutting the coniferous trees during Christmas**

The Environmental Information and Education Center organized the campaign Do Not Cut, Trim! for the prevention of frequent cutting of coniferous trees during Christmas. Educational institutions, municipalities, representatives or private sector and citizens got engaged in the campaign throughout the country.

### **Services**

Educational course “Environmental Manager” - in 2019, the Environmental Information and Education Center conducted 5 training courses of Environmental manager, and awarded Environmental Management Certificates to 72 persons.

The center has been providing the Environmental Manager training program since 2015, and 400 human resources were trained so far within the framework of the course.

The training course will equip the individuals and company employees with the knowledge that will enable them to produce the company's waste management plan, to organize its implementation, to conduct control and self-monitoring activities and to fulfill other obligations specified for the environmental manager.

Certification of refrigerant service technicians - since 1<sup>st</sup> January 2018, the Environmental Information and Education Center organized certification exams, and issued respective certificates to the refrigerant service technicians. 39 technicians were certified in 2019, and in total there are 92 technicians already certified.

## **Projects**

In cooperation with international donor organizations, the Environmental Information and Education Center has been implementing projects and/or project components in various directions. During 2019, the center was actively working within the framework of the following projects:

### **2014-2017 National Communication on Environment**

There were so called Green Chapters (biodiversity, forest resources, fishery and hunting), prepared under the project. Comments and remarks on various agencies are reflected in the document.

### **Facilitation to drafting the 6<sup>th</sup> national report on biological diversity**

There were 13 workshops organized within the framework of the project, participated by 194 persons. Currently the draft report is elaborated and sent for remarks and comments.

### **Coordination of the forestry sector communication strategy**

Within the framework of the project, the forestry sector communication strategy 2020-2024 and action plan 2020-2021 were drafted. The following events were organized during this process:

- Workshops with stakeholders (33 people);
- Coordination meeting with the public relations representatives of the Ministry of Environmental Protection and Agriculture and its subagencies (40 people);
- Information meeting about the environmental supervision held with the media representatives working on environmental issues (35 people).
- Information meeting with media representatives concerning the Communication Strategy and Action Plan document of the forestry sector (35 people).

### **Expansion of early warning system for multiple hazards and usage of climate-related information in Georgia**

The following Activities were carried out within the framework of the project:

- Information meetings with the municipality representatives with the purpose of presenting the project to them (107 people).
- Information meeting with media representatives 45 people).
- Community forum, participated by the representatives of local governments of 13 municipalities of Georgia, NGOs and community organizations and regional universities (141 people);

6,246 people participated in environmental and agrarian education and awareness raising events, also in public discussions, information meetings and workshops organized by the center in 2019.

### **Information technologies**

The following types of works were planned and implemented at the Ministry of Environmental Protection in Agriculture of Georgia and its subagencies:

- To update the headquarters program for fighting against the marmorated stink bug and the monitoring site;
- An interagency monitoring system of the rural development strategy was created;
- TrendMicro - antivirus was launched on 4,000 computers;
- The following agencies were connected to the central network of the ministry: DES, APA, NFA;
- Configuration of network appliances were replaced and installed and, network racks were set up. There was a central router installed that ensures the connection of agencies to the central network. Operating systems of users' computers and other software were updated on about 150 computers;
- Regional services of ANRS (central office), LMA (central office), ELEC (central office), Forestry (central office), SRCA (3), ARDA (8), APA (7), DES (12) and NFA (45) were connected to the central network, which made it possible to access existing services of regional services. Software was updated. Security requirements were introduced;
- Trainings were held for the staff of the IT department;
- IT and IT securities 30 policies were elaborated.

### **The following software were installed:**

- Support program at all the agencies;
- A module of tenders registry and market research was added to the financial control system;
- Rural development indicators monitoring system - for the policy department;
- System for monitoring the indicators of ENPARD 3 - for the policy department;

- Rural development monitoring system - for the government of Adjara;
- In regard to the wine residues: laboratory module is updated; integration of the customs module is being reviewed and the report system is set up;
- Module of regional offices of the amelioration site was launched;
- System of monitoring the rural development agricultural development indicators - for the policy department;
- New information files were uploaded on apma.ge, a new functionality was added to the panel;
- Changes were introduced to the mechanization website; the intranet website was updated;
- The functionality was updated in the marmorated stink bug monitoring project;
- Changes were introduced to the website of the laboratory of the Ministry.

**The following updates were made to:**

- administration website of the environmental supervision department;
- laboratory module for the National Wine Agency;
- Modules for registering the cooperative programs of the Agricultural Cooperatives Development Agency;
- Waste management program;
- Farmers registry;
- Service of agroinsurance policies were prepared;
- claims protocol of agroinsurance was developed;
- farmers registry service was integrated in the agroinsurance program;
- the claims panel was introduced to at the insurance companies, for agroinsurance personnel;
- audit page was added to the dismissal registration service;
- automated system for sending emails was launched;
- information website for the Forestry Agency was launched.

**At the same time:**

- Indicators were combined for the air quality reported through the automated stations;
- Existing information about the ambient air quality was digitalized throughout Georgia;

- A common, electric, publicly accessible system of monitoring the ambient air quality was created for the entire Georgia;
- New data were integrated into the common environmental information and knowledge management system.



## LEPL National Agency of Wildlife



# LEPL National Agency of Wildlife

The LEPL National Agency of Wildlife of the Ministry of Environmental Protection and Agriculture carries out its activities for restoring flora and fauna, also the endemic rare species of Georgia, registration and monitoring of local varieties and their habitats.

In 2019, with the resources of the LEPL National Breeding, as a result of the program of the United Nations Food and Agriculture Organization (FAO) - Strengthening the sustainable management of wildlife in Georgia, the LEPL National Agency of Wildlife was established with the following goals and objectives:

- to register and monitor the varieties and their habitats;
- to create the required working gene pool for reproducing the varieties;
- to provide original breeding groups and consultation services to the private sector;
- to identify licensing areas, into elaborate licensing terms and conditions in regard to varieties and habitats;
- to certify hunters and fishermen;
- to support the development of various types of ecotourism;
- to raise the environmental awareness of public.
- the agency has been working on the law of Georgia on the registration and management of hunting varieties since 2019, which had a new approach to the issues regarding the management of hunting license holdings, hunting in general, traditional falconry, producing the hunting varieties and the management of community fields, which will support the assessment and reproduction of populations of wild animals, birds and ichthyo-fauna.

**The Wildlife Agency has expanded in 2019 in the following directions:**

- The Krtsanisi Forest-Park joined the Wildlife Agency in 2019. Currently the agency plans to fence the forest-park, to conduct a detailed inventory of forest grooves, sanitary maintenance activities and plant replacements. Along with the current forests arrangements and maintenance works, large amounts of rare varieties of trees and plants will be planted, specifically those that are listed as endangered in the Georgian Red List. the agency works for the restoration and preservation of biodiversity of Krtsanisi Forest-Park. There is an operational cottage opened at the forest-park, where the agency employees will be located to perform following functions: to plant new trees in the territory of Krtsanisi Forest-Park, to conduct primary cleaning of the park, to control the cutting of withered trees and to plan irrigation communications.

### **More Focus on Fauna**

- There was a chicken hatchery arranged in the holding of the village Nojikhevi in Khobi district, with the funding of Kolkheti Development Fund, together with additional large aviaries for breeding the endemic Kolkhetian pheasant, also the endangered western swamphen. In 2020, the Wildlife Agency plans to introduce the Kolkhetian pheasant into the territory and to start works for restoring this variety.
- The agency significantly intensified its work in 2019 in regard to the reservation of rare varieties of fauna. At this stage there are 500 families of Kolkhetian pheasant; about 3,000 partridges and more than 20 western swamphens residing at the Agency. the works have started for creating the original breeding group of grey partridges
- Chickens of Kolkhetian pheasant, partridges and western swamphens were hatched in 2019.
- The LEPL National Agency of Wildlife implemented project that envisages the reproduction of spring trout too, which is taken into the Georgian Red List. The spring or river trout was introduced into the Red List and belongs to the vulnerable category. This trend is present in many countries of Europe, because of which the population is reproduced artificially, and the fish are introduced into the rivers. If no such activities are in place, the variety will vanish from the rivers of Georgia after some time. This is why the Wildlife Agency works for reproducing various populations of spring trout and then for introducing the fish in rivers. After being fertilized, the fish egg is placed in incubators with the purpose of breeding the future generation.
- In 2019, the Wildlife Agency introduced more than 10,000 spring trout, which were in the Georgian Red List, into the River Ritseula and Shaori Lake with the purpose of restoring the population, with the presence of the staff of the Environmental Supervision Department.

### **More Focus on Flora**

- Various plants were cultivated from the Georgian Red List with the purpose of reproducing the forest generating and urban plants, among them: zelkova, bot hop hornbeam, pistacia atlantica, quercus macranthera, quercus hartwissiana, quercus pontica, Kolkhetian box tree, forest chestnuts, etc., as their number was very decreasing the nature, and the agency will work to restore these varieties in the nature.

**With the purpose of reorganizing in development of hunting sector, the agency is working in the following directions:**

- prepares theoretical and practical tests;
- provides hunting permit after relevance tests are completed;

- revokes the hunting right and expels hunters;
- produces recommendations for the development of the sector;
- supports the environmental supervision department to fight against the poaching;
- engages in public relations.

### **Raising public awareness in environmental education**

With the purpose of raising the environmental awareness, the Wildlife Agency conducted trainings for schoolchildren from various schools during the year in the area of the plant cultivation, procreation, care and growth. After acquiring the theoretical knowledge, the students had an opportunity to get some practical experience as well.

Statistical data of 2019:

Funding in 2019:

State budget – 1,169,500

Own finances – 700,550

Additional revenues (as grants) 100,000 GEL

Sales

99,760 young trees of different varieties were sold in 2019.

About 25,000 young trees were provided for public purposes for free.



Environmental Supervision Department



# Environmental Supervision Department

## Strengthening the State Environmental Control

The Department's authorities and remit cover the following fields:

- Preservation of ambient air, water, land, mineral resources and biodiversity, including the adherence to the requirements of the forest legislation of Georgia;
- Control of usage of natural resources;
- Control of chemical safety and waste management state control over the usage of genetically modified living organisms;
- Control of unlawful export, import, re-export and introduction from the sea of the varieties included in the schedules of CITES, their part or derivatives;
- Control of issued licenses (other than mining licenses) / permit, terms and conditions of environmental decisions.

Since 2019, the department started more intensive activities in the following directions:

- control or compliance of vehicle fuel to quality norms;
- control of the production of plastic and or biodegradable plastic bags;
- control of servicing the refrigerant-containing appliances.

capacities of the environmental supervision departments were built:

- number of staff of the Department increased from 411 to 870 in 2019.
- technical upgrade of the crews was implemented – car fleet increased, 65 SUVs and 2 SSVs were purchased.
- The crews were provided with uniforms, body cameras, field tablets and laptops, night vision binoculars and other appliances.
- 156 personnel of Environmental Patrolling and Rapid Response Unit attended a training at the department by the trained trainers, and 350 more personnel will be trained on the issues that fall within the competencies of the Department.

There were activities for providing social guarantees for the staff

- In accordance with the amendment made to the Law of Georgia on Environment Protection, the Department employees who carry out their authorities for identifying-eliminating the effects of violating the environmental legislation, will be provided with social security, life and health insurance.

Consequently, 756 employees of the Department will get life and health insurance packages starting from 2020.

### **Inspection and patrolling results**

As a result of environmental patrolling and inspection carried out by the Environmental Supervision Department, 2,553 facts of environmental violations were revealed in 2019, among them:

- 9,795 facts of administrative offenses, which were sent to respective judicial bodies for the review;
- 758 facts with the elements of crime, in the cases were sent to the law enforcement bodies for their follow-up.

### **Structure of legal violations, 2019**

Violation of rules on forest use	2,088 facts
Violation of rules on timber transportation	1,641 facts
Illegal mining	680 facts
Violation of hunting rules	596 facts
Violation of fishing rules	499 facts
Violation of the waste management code	2,090 facts
Violation of technical regulations on sawmills	789 facts
Violation of licensing conditions of timber production / hunting holdings	67 facts
Violation of licensing conditions of fishing	18 facts
Violation of the legislation on ambient air	1,119 facts
Violation of land legislation	192 facts
Violation of water legislation	246 facts
Violation of conditions of permit for environmental impact / illicit activity	186 facts
Sea pollution from vessels	7 facts
Violation of registration Procedures regarding hazardous substances in vessel documents	32 facts
Other violations	303 facts
<b>Total</b>	<b>10,553 facts</b>

### Structure of cases with the elements of crime

758 cases with the elements of crimeware sent to the law enforcement bodies for the follow up. Among them:

Violations of registration requirements for sawmills	226
Illicit production of timber	202
Illicit fishing /hunting	172
Illicit mining	65
Soil pollution, Degradation, Removal of the fertile layer	12
Illicit transportation of timber	9
Other violations	72
Total	758 cases

### Fine and damage to the environment

In 2019, the amount of fines imposed for legal violations amounted to 2,887,580 GEL. Environmental violations were assessed to have caused the damage of 7,619,221 GEL.

Year	Fine	Damage
2013	1,980,790	6,707,558
2014	4,593,150	52,530,342
2015	4,032,108	110,277,067
2016	4,731,090	10,339,744
2017	5,407,830	9,282,496
2018	3,850,800	10,033,170
2019	2,887,580	7,619,221

### Inspection of regulated sites

In 2019, the department inspected 2,884 regulated sites (holding the license for using natural resources, sites of environmental permit/decisions, sites subjected to environmental technical regulations):

Scheduled inspections of regulated sites were carried out in accordance with the inspection plan for 2019, which was developed based on the methodology for setting priorities for inspecting the regulated sites.

Non-scheduled inspections of regulated sites were performed based on the decision of the Department head, among them, based on the complaints received from citizens, information provided via the hotline (153), referrals of agencies /organizations, and with the purpose of doublechecking the performance of obligations imposed based on the previous inspections.

Activities of regulated sites were monitoring-studied with the purpose of following up on the notifications received via the hotline, obtaining general information about the activities of the site, and carrying out the preventative measures.

#### **Scheduled /non-scheduled inspection**

Activities of 400 regulated objects were inspected in 2019 in regard to their compliance with the environmental legislation:

- 106 - environment impact permit / report of the environmental expertise, sites subjected to environmental technical regulations;
- 9 - special license for timber production;
- 1 - territory of the state forest fund;
- 10 - license for hunting activity and fishing;
- 20 - with the purpose of taking samples for the identification of the types of genetically modified organisms / inspection;
- 254 - inspection on the vessel coming into the ports of Georgia with the purpose of establishing their compliance with environmental requirements.

#### **Preventative measures**

##### **Control of fuel quality**

With the purpose of establishing the compliance of vehicle fuel quality with statutory norms, diesel fuel samples were taken from reservoirs of 188 gas stations located in Tbilisi and other regions, and respective lab tests were performed;

In total, 188 gas stations were inspected, and 270 samples were taken.

##### **Control of genetically modified organisms**

In accordance with the Law of Georgia on Genetically Modified Living organisms, 20 inspections were performed in 2019, with the purpose of taking samples from seeds planted in agricultural land plots owned by individuals and legal entities, and/or at warehouses, with the purpose of identifying the types of genetically modified living organisms in them. In accordance with the results of laboratory tests, the samples do not contain GMO markers.

##### **Control of plastic and biodegradable plastic bags**

36 sites were inspected in 2019, with the purpose of establishing the compliance with statutory requirements while producing plastic and or biodegradable plastic bags. In total 1,808,000 items or plastic bags were sealed as a result of inspection and laboratory tests.

#### **Control of enterprises processing round timber**

There were preventative measures carried out in 2019, with the purpose of preventing, identifying and eliminating the functioning of unregistered sawmills, and the facts of processing unlawfully obtained timber. As of 2019, there were 691 round timber processing enterprises registered in the timber resources management electronic system. Besides, 226 unlawful sawmills were identified, which were not registered in the electronic system.

#### **Control of Black Sea Pollution and Fishing**

**In accordance with the MARPOL 73-78 Convention, the Black Sea Conventional Service performed the following activities:**

- 254 vessels coming into the ports of Georgia were inspected with the purpose of establishing the compliance with environmental requirements;
- Measures envisaged under the Administrative Offences Code were applied against the persons in charge of 32 vessels for the failure to meet the vehicle documents registration obligations for the operations linked to the hazardous substances and additives;
- 6 cases of sea pollution from the vessels were identified. Responsible persons were fined with the amount of 65,000 GEL each. The environmental damage was assessed at 10,806.90 GEL. Control was instituted on the implementation of measures for eliminating the sea pollution.

25 facts of violation of fishing rules were identified as a result of raids carried out in the Black Sea aquatoria.

#### **Hotline**

The Department receives notifications from citizens and organizations about legal violations in the field of environment protection via the round-the-clock hotline – 153, which are followed up promptly; the citizens are also able to get the information and consultation they need regarding the issues that fall within the competencies of the Department.

- In 2019, the Department received 3,259 notifications via the hotline regarding the violation of environmental legislation, to which the Department responded and took statutory measures.

Subject of notifications to be followed up	Number
Issues related to keeping the e-log of the sawmill	861
Violation of forest legislation	525

Pollution of environment with waste	309
Ambient air pollution	497
Spread of odor	388
Violation of the legislation on animal protection	144
Violation of technical regulations on sawmills	69
Illicit fishing	147
Violation of mining legislation	105
Violation of water legislation	43
Illicit hunting	80
Violation of land legislation	42
Damaged hatch cover	4
Spread of noise	14
Illicit activity (violation of permit terms and conditions)	9
Issues related to the activities of the Department	22
Total	3,259

### **Development of effective control mechanisms**

With the purpose of supporting the fulfilment of environmental requirements and enhancing the effectiveness of state control, the Department carried out works for elaborating and developing electronic tools:

- E-System to Control Timber Transportation – was completed and has been uploaded on the portal of the environmental information management system <https://ms.emoe.gov.ge>. The launch is envisaged for 2020. As a result, instead of writing documents in paper, the Vehicle Inspection Electronic Report will be introduced. It will be possible to save significant amount of time and resources while performing the vehicle inspection; incompliances will be identified and followed up on time. The information will be immediately accessible online for the leadership, interested services and agencies;
- E-system for inspection management and the e-module for inspection risk quantification – terms of reference was elaborated; it is envisaged to develop/launch the software for 2020. The electronic system will ensure the implementation of environmental state control and will provide technical capabilities for the collection, systemization and reporting of numerous information, also to plan the inspection as well.

- Electronic system for refrigerant management – there are works underway for elaborating the electronic system. Instead of paper-based registries, the entrepreneurs will be able to perform registration and maintenance of refrigerant-containing appliances, and refrigerant usage procedures electronically. It is envisaged to develop the electronic system for 2020.
- Electronic module “Treasury Code – 3033 on the payment of fee for the removal of migrant birds from the environment” – is completed and connected to the electronic environmental information management system. A citizen will be released from responsibility - to have the receipt (original copy) proving the payment of the fee for hunting the migrant birds during the hunting process and hunting season.

### **Activities planned in 2020**

#### **It is planned to carry out the following activities in 2020:**

- To increase the number of crew members of environmental patrolling and rapid response mobile teams (by announcing the vacancies) and to fully equip them;
- to conduct trainings, among them with the purpose of building the capacities of rapid response personal (350 personal of rapid response will attend the training); to train inspectors within the framework of various projects, with the purpose of getting familiar with best practices and applying them during the inspection;
- to introduce/develop the electronic information management systems of the Department;
- to submit legislative initiatives with the purpose of improving the law enforcement mechanisms; among them to elaborate activities for attracting the experienced human resources and to provide incentives to the staff;
- to build and equip offices in Kutaisi and Telavi, with the purpose of improving the working conditions of employees.

# Agency of Nuclear and Radiation Safety



LEPL Agency of Nuclear  
and Radiation Safety

# Agency of Nuclear and Radiation Safety

Main goal of the LEPL Agency of Nuclear and Radiation Safety is to protect the humans and the environment from harmful effects of radiation currently and in the future.

**For reaching the main goal, the agency carries out the following activities:**

- to draft laws in the area of nuclear and radiation safety;
- to authorize the nuclear and radiation activities - to issue licenses and permits;
- to carry out control – inspection;
- to respond to nuclear and radiology emergencies;
- to manage radioactive waste.

## **Authorization**

One of the most important components of state regulation of nuclear and radiation activities is to authorize the activities linked to the issuance of licenses and permits.

In 2019 there were 80 licenses of nuclear and radiation activities issues.

Changes were made into the licensing terms and conditions of the nuclear and radiation activities of 142 licensed entities, based on their own request. Before producing the retrospective opinion, the agency specialists studied and presented documentation, and double-checked the compliance awful radiation safety and physical protection with the current situation.

There were 70 permits issued within the framework of the license for nuclear and radiation activities in regard to the import-export, translate and purchase -distribution of ionizing radiation sources.

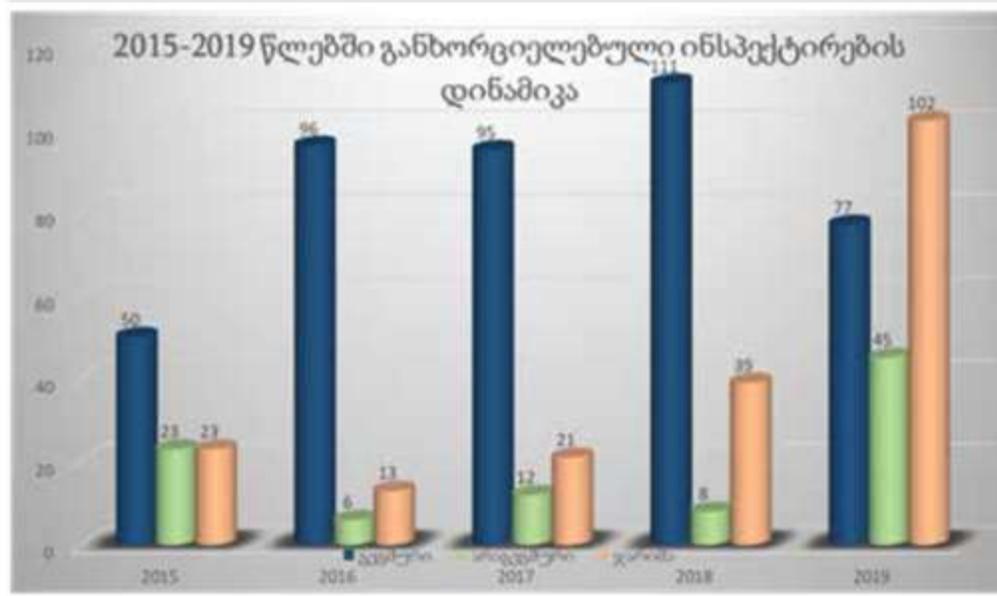


## **Inspection and response**

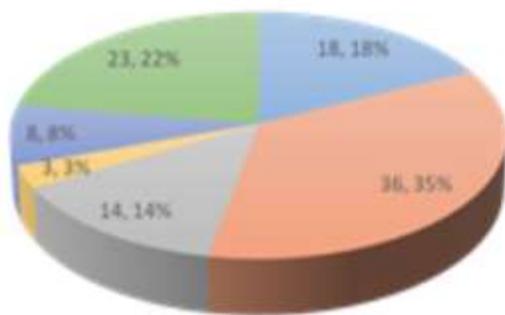
The Agency of Nuclear and Radiation Safety controls the nuclear and radiation activities through scheduled and ad hoc inspections.

There were 122 inspections, among them 45 ad-hoc ones arranged in 2019 with the purpose of radiation safety of population, patients and personnel. The inspections identified incompliance with statutory requirements at 63 organizations, based on which 102 reports on administrative offenses were drawn up, resulting in the fine in the amount of 86,000 GEL.

Inspections Organized in 2015-2019



Amount of Fines according to the sections of the Article 59-1



- Part 1 – training in radiation safety
- Part 2 – Document keeping
- Part 3 – Using of monitoring tools
- Part 4 - Unsubstantiated radiation
- Part 6 – Expansion of activities
- Part 8 – Activities performed without a license

In 2019, the agency specialists responded to one fact of intercepting the illicit traffic of nuclear materials, and alerts of radiation monitoring portals at the border checkpoints.

Based on the request of the population, there were radiation measurements performed at residential buildings and currently ongoing constructions, land plots, various types of items, vehicles, etc.



### **Management of radioactive waste**

The agency conducts the safe management of state-owned radioactive waste.

In this respect, the agency was mostly focused on the implementation of activities envisaged in the 2017 2031 national strategy on radioactive waste management, and in the respective international projects.

### **Arrangements of the radioactive waste infrastructure**

With the support of the European Union and Swedish Radiation Safety Regulatory Authority, currently there is a project being implemented, with the purpose of placing the radioactive waste management sites at one location.

Currently, there is a report produced “Assessment of the origin of radioactive waste, capabilities for the management and accommodation of current and future streams in Georgia”.

### **Other activities implemented during the reporting period**

- Updated legislation in the area of nuclear and radiation safety;
- Specialized vehicle was donated to the Agency of Nuclear and Radiation Safety for the transportation of radioactive waste and radioactive sources, which is equipped with modern systems of safety and security.



- Technical capacities of the Agency of Nuclear and Radiation Safety were built (within the framework of the AESS national project, the modern dosimeter equipment was donated to the agency).
- Within the framework of the AESS national project, the radioactive waste conditioning equipment was received;
- The agency organized workshops and trainings both at the national and international levels;
- With the support of the International Atomic Energy Agency, the agency hosted the delegations of Kyrgyzstan and Bosnia-Herzegovina to Georgia with the purpose of getting familiar with radiation safety systems available in Georgia, as one of the successful models.



# Agriculture, Food and Rural Development Department of the Ministry of Environmental Protection and Agriculture

Main functions of the department are - to identify priority directions of the development of agrarian sector, to elaborate programs for developing the cattle breeding, plant growing and fishery, to support the introduction and application of up-to-date agricultural equipment and technologies, to elaborate the rural development policy and to participate in its implementation, to elaborate/participate in the elaboration of policies in the areas of food safety, veterinary and plant protection in the country, and to draft normative acts with the purpose of improving the respective regulatory legislation.

- In the areas of food safety, veterinary and plant protection, there were 25 normative acts drafted in accordance with 24 EU legislative acts, according to the legislation approximation lists within the framework of the DCFTA;
- Two sectorial technical regulations were prepared for the protection of consumer interests and rights, and for the functioning of effective internal markets - regarding the frozen poultry meat, and cocoa and chocolate products intended for human consumption;
- Business operators were assigned various quality marks with the following purposes: support to the development of food quality schemes in Georgia, product branding and introduction of international marketing practice; improvement of legislative and institutional mechanisms for their protection, promotion of foodstuffs labeled according to the quality mark, and building the consumer confidence in foodstuffs produced in Georgia;
- Information was processed about the current situation in the country in regard to cattle breeding, plant growing and fishery, economic assessments of technological processes were carried out, and relevant recommendations were produced based on them; besides, analytical documents were prepared in 19 sectors for the elaboration of targeted stage programs;
- Relevant information was obtained and processed, and proposals were elaborated in connection to the warehouse and cooling infrastructure for agricultural crops, warehouse facilities, processing enterprises, modern technological lines and technologies;
- Information was analyzed about the lands leased/sold by the LEPL National Agency of State Property (more than 1,000 referrals), and converted into the digital format;
- Machinery-based technology for potato growing was elaborated with the specialists of the Belarusian company Gomselmash (Гомсельмаш); potato harvester and loader vehicles were produced and tested in the field;

- Based on the study of current situation in regard to the agricultural equipment in the country, and with the purpose of increasing the access to machinery, relevant recommendations and proposals were elaborated;
- Works were initiated and are still underway for the program “enhancing the sustainability in rural territories based on the development of farming aquaculture”;
- Recommendations are being produced in the following directions: “development of agrarian and ecological tourism”, “Ecological marking and marketing of ecological and regional products in rural areas.”

## **2019 Report of the Waste and Chemicals Management Department**

Competences of the Waste and Chemicals Management Department include: elaboration and implementation of common state policy on waste management, which is focused on the prevention and reduction of waste generation and its negative impacts, creation of effective mechanisms of waste management, support to the effective utilization of waste as resources, and ensuring their safer accommodation in a way which is safe for human health and environment. The Department also participates in the elaboration of chemicals management policy, and it represents the main competent body of Basel, Rotterdam, Stockholm and Minamata conventions.

In accordance with the Law of Georgia Waste Management Code, which is based on the requirements of directives and regulations under the EU-Georgia Association Agreements, also the best international practices, the extended producers responsibility (EPR) is about to be enforced, which means that the direct producers of commodities and companies that place the goods on the market, which becomes a specific waste afterwards, should ensure that the goods are produced in a way that reduces the waste and therefore minimizes the negative impacts on the environment. Besides, producers of the goods/companies placing them onto the market are responsible for collecting and treating the waste produced from the used commodities.

Introduction of the extended producers responsibility will support waste separation and its usage as a resource, waste recycling, introduction of recycling and restoration technologies, reduced number of waste disposed of to the landfills, introduction of a circular economy etc. the EPR is focused on the streams of waste of the following six types: batteries and accumulators, tyres, electric waste and electronics. Resolutions of the government of Georgia are drafted for each waste stream.

Draft law on the “import, export and transit of waste” was drafted in accordance with the “Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal”, which established procedures and control mechanisms for the transboundary movement of hazardous and other types of waste, which reduces the risk to human health and damage to environment. The new law on the

import, export and transit of waste is in full compliance with the Basel Convention, and its requirements will be fully reflected. Currently the draft has been tabled to the Government of Georgia.

A technical regulation was drafted and approved with the Resolution 346 of the Government of Georgia dated July 26, 2019 on Making Amendments to the Resolution 472 of the Government of Georgia on the Approval of the Procedure for Regulating Plastic and Biodegradable Plastic Bags, dated September 14<sup>th</sup>, 2018. The technical regulation was amended because of the necessity to define the norms and terms on the one hand, and to set simplified regulations related to the production of biodegradable and/or compostable plastic bags for local producers, on the other.

Currently the legislation is being drafted on chemicals management and the introduction of contemporary systems of waste management. The EU Association agreement envisages to elaborate and pass the legislation in the area of chemicals management. The first draft law of Georgia on chemicals and mixtures was prepared, and now there are works underway in regard to the draft normative acts “On the classification, labeling and packaging of substances and mixtures”. Elaboration of this legislation will support to introduce the European approaches to the chemicals management in the country, and will build the capacity at the national level.

Amendments were made to the Resolution No. 263 of the Government of Georgia on Rules and Procedure of Export-Importing Certain Hazardous Chemical Substances and Pesticides dated June 13, 2016, based on the Resolution No 593 of the Government of Georgia dated December 3, 2019. According to the amendments, certain pesticides and industrial substances were added to the Part 1 (List of chemicals and pesticides, which are covered by the Prior Informed Consent (PIC) procedure within the framework of the Rotterdam Convention) of the Annex #1 (List of chemicals and pesticides subjected to the prohibition or strict limitation of the production, application, import and export in the territory of Georgia). With this committee above-mentioned resolution became compliant with the decision made by the conference of parties of the Rotterdam convention in 2017 and 2019.

Within the framework of the project PCB-Free Electricity Distribution in Georgia, there is an inventory carried for the PCB-containing oils found in old electricity transformers and other devices within the electricity distribution system of Georgia. Within the framework of the project, trainings were held in Kakheti and Kvemo Kartli for the representatives of electricity distribution companies and other stakeholders; In September there was a training held at the Technical University of Georgia about the lab analysis of PCB in transformer oils. There are works underway for drafting the legislation on the regulation of PCB.

Within the framework of many projects, various activities were carried out for building the capacity of municipalities in 2019: support to the elaboration of municipal plans, trainings in the legislation on waste management and cutting edge technologies.

There is an electronic waste management system functioning at the Department where the following activities are carried out:

- fill out/submit the hazardous waste transportation forms;
- submit the company's waste management plans;
- file the application regarding the activity requiring registration, and reach an agreement;
- submit the annual forms for waste registration-reporting (among them, annual report about the amount of regenerated waste, waste disposal to the landfill, information on waste collection and treatment).

More than 40 organizations registered their activities related to waste management in the electronic waste management system during 2019, and about 60,000 forms of waste transportation were submitted.

The companies elaborate the waste management plans of the company and agree them with the ministry (currently there are more than 1,000 waste management plans of companies submitted to the ministry). this process will continue in the future as well.

Other than reviewing the correspondence related to the waste and the chemicals management, and preparing respective answers, the Department also reviews the correspondence about the transboundary movement of waste, and drafts documents for waste import, export and transit permits. There were 40 permits issued during 2019.

## **Results of Main Activities Carried out by the Biodiversity and Forestry Department in 2019**

Main functions and objectives of the Biodiversity and Forestry Department are: within the framework of its remit, to elaborate a state policy in the area of management and regulation of biological resources, based on the principles of sustainable use, preservation and conservation of biodiversity components throughout the entire territory of Georgia; to coordinate the creation, management and monitoring of protected areas engaged in the international network; to elaborate a state policy in the area of forest management, and to coordinate/support its implementation. Besides, to draft proposals for the implementation of state reforms in the forestry field, and to coordinate the forestry reform process; to review the issues on reasonability to assign and suspend the forest status; to coordinate the performance of obligations taken under international treaties and agreements of Georgia in the field of biodiversity protection, and many other directions.

With the purpose of carrying out the above-mentioned and other objectives/functions, the Department carries out multiprofile activities in many different directions. The following activities can be singled out from the activities implemented in 2019:

1. A new draft law on forestry code was elaborated, which creates legislative grounds in accordance with the principles of sustainable forest management for the purposes of modernizing the forest management practices. In February 2019, the Government of Georgia tabled the draft forestry code to the Parliament, and the parliamentary committee hearings were held. In October 2019, the Parliament passed the bill at the plenary session with the first hearing.
2. A document was elaborated in regard to sustainable forest management principles, criteria and indicators, as a guidance for the country for collecting, saving and disseminating the reliable and evidence-based information about forests in the country. The document is used for monitoring and evaluating the condition of forests. Explanatory notes for 2020 indicators will be prepared with the support of UNECE/FAO.
3. National registration of forests aims at the evaluation and analysis of basic forest characteristics, such as the forest area, biological diversity, forest structure, degradation status, reserves of tree-forest, stocks of fallen tree-forests, forest renewal, topography, etc. The national forest registration methodology was elaborated and tested in 2016-2018. Field works were carried out in 2019 in Adjara, Guria and Mtskheta-Mtianeti regions; at this stage, only the data from the Mtskheta-Mtianeti region are processed.
4. The government of the Federal Republic of Germany provides technical support to Georgia through GIZ in regard to the implementation of national forest registration, improved forest management, and introduction of forest information and monitoring system. The Government of Germany allocated 5.4 million EUR in 2017 for implementing the above-mentioned activities. Within these frameworks, and with the purpose of effective management of forest resources, the Ministry is creating a centralized forest information and monitoring system. The forest information and monitoring system of Georgia will combine information on the forests of Georgia, their protection, forest restoration-regeneration, renewal, forest usage etc. The design of the forest information and monitoring system was elaborated in 2016-2018. There were technical works initiated at the Ministry for introducing the system in 2019, and IT equipment with the value of about 1.3 million GEL was purchased with GIZ support.
5. Within the framework of the Global Forest Watch project, the forest and land use Atlas (<https://atlas.mepa.gov.ge/>) was developed, which represents a tool for enabling all the stakeholders to access and use the data. The system includes some spatial, attributed, also documentary data about forest and land use, which provides an opportunity for analysis and reporting. Usage of the above mentioned tool will significantly assist the groups of various users to make decisions in connection to the forestry sector.

6. Within the framework of the National Forestry program, there were 12 workshops arranged in 2019, with participation of 267 people. The discussed issues were: activities to fight against the pests-diseases of Kolkhetian box tree and European spruce bark beetle; activities to fight against the oriental spruce pest - spruce bark beetle; withering of tree-plants of pine varieties; national principles of sustainable forest management; presenting the criteria and indicators; support to forest education at institutions of higher education; support to the nomination of the establishment of Kakheti biosphere regions in the East Georgia, and launching the third phase of the project; forest information and monitoring systems; minutes of the meetings were produced and future plans were elaborated.
7. There was a memorandum of understanding made with the Ministry of Agriculture and Forestry of Slovenia. Within the framework of the Memorandum, it is planned to establish the sustainable forest management in Adigeni Municipality of Javakheti region, to conduct the forest inventory and to support the activities envisaged in the management plan.
8. The final phase of the creation of biosphere reserve started in Dedoplistskaro, Akhmeta and Telavi municipalities; the EU financed a project for the Vashlovani protected area, which aims at reaching the goals set for Dedoplistskaro municipality in 2016-2018. The German Ministry of the Environment, Nature Conservation and Nuclear Safety financed a project – “UNESCO biosphere reserve establishment in the climate-vulnerable regions of Kakheti in Eastern Georgia – working towards the nomination”, which aims at achieving the respective goals of the project for Tusheti historical region, also nearby, in Akhmeta and Telavi municipalities in 2019-2021. The grantee is Mikhail Zhukov Foundation, through the GIZ.
9. The following documents were produced: 2015-2020 Global Forest Resources Assessment (FRA) to be submitted to the UN Forum on Forests; 2015-2020 report on the condition of forests of Georgia Ministerial Conference on the Protection of Forests in Europe regarding the political process (Forest Europe), Report on the condition of forests of the Caucasus and Central Asia (FAO/UNECE); Communication strategy and action plan of the forestry sector;
10. With the purpose of fulfilling the commitments taken under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (The Ramsar Convention), factsheet of one of the Ramsar territories (Ispani wetlands) was updated in 2019. Besides, the factsheets were produced for the following potential Ramsar territories: Lake Bughdasheni, Lake Madatapa, Lake Khanchali, Chorokhi delta and Rioni-Samtredia, which will be submitted to the Convention Secretariat in the nearest future for enlisting them to the list of wetlands of international significance. Factsheet for the second Ramsar Territory (wetlands of Central Kolkheti) are being updated and the required information are collected.
11. With the purpose of creating an Emerald Network – a main tool for the implementation of the Convention on the Conservation of European Wildlife and Natural Habitats, 7 territories of special conservation significance were submitted to the Secretariat of Bern Convention in 2019 for

approval, and they were approved at the 39<sup>th</sup> session of the standing committee of the Convention. Correspondingly, there are 46 approved emerald territories and 12 nominated territories in Georgia, for which the respective studies are underway.

12. There were scientific studies carried out on 7 emerald sites, which showed that these areas are of high conservation value and needs protection. The information prepared as a result of this study will be used while drafting the territory management plans as well.
13. In accordance with the 8<sup>th</sup> resolution of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), there were reports produced on 12 species of birds, 8 habitats and other species (total 16). The report will be submitted to the secretariat of the convention until the 31<sup>st</sup> of December 2019.
14. The first management plan for the emerald site was drafted (Gliana Cave – prepared). Works are underway for drafting the management plans for 3 compensation emerald sides (Samegrelo 2, Racha-Lechkhumi and Svaneti, Racha), in the framework of the ongoing project supported by the EU.
15. In accordance with the Convention on the Conservation of European Wildlife and Natural Habitats, a two-year report was drafted and sent, on the species removed from Georgia as an exception (wolf).
16. Report of several indicators was produced with the purpose of improving the biodiversity monitoring system:
17. Visitors impact on protected areas, in order to plan and implement equal tourist activities more effectively based on the available information, while future planning and decision making.
18. Transboundary cooperation of protected areas – this indicator aims at ensuring that the neighboring countries implement the species conservation activities in a coordinated manner, among them, ensure the consistency of actionable and strategic documents in this respect;
19. Representation of habitats in the European Nature Information System (EUNIS) in protected areas – which defines the proportionate indicators of coverage of every habitat in protected areas.
20. Three indicator reports were produced in regard to agri-bio-diversity – biodiversity of endemic species; intensity of pesticides application; change of total area of agricultural territories managed based on the biodiversity principles;
21. Within the framework of the masters theses of the Ilia State University, report of several indicators were elaborated: status of selected species; raising public awareness on biodiversity; change of habitat fragmentation;
22. The report of Indicator D1 was drafted – on the change of the size of protected areas, with the purpose of international reporting;

23. There were some works underway with the purpose of reviewing the drafts legislative acts regulating the hunting and producing the final draft law;
24. Draft law on Biological Diversity is being finalized;
25. Draft policy document on protected areas was elaborated, for which the works should continue;
26. There were works underway for drafting the law on aquaculture. The aquaculture expert of the General Fisheries Commission for the Mediterranean (GFCM) participated in the elaboration of the final draft law. The draft law takes into consideration the requirements and standards of GFCM and the European Union.
27. There were works underway for joining the GFCM, regarding which the positive decision was made. Recommendations of this organization are consistent with the 14<sup>th</sup> Sustainable Development Goal of the United Nations and it will represent a certain guidance for the sustainable development of fishery and aquaculture sectors. The text of the agreement was translated into the Georgian language and sent to the ministry of foreign affairs with the purpose of agreeing the issue of joining the GFCM with other agencies of Georgia.
28. The 6<sup>th</sup> national report of the convention of biodiversity (CBD) was drafted;
29. With the initiative of Georgia and its active involvement, amendments were made into the resolutions of the CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora. These amendments will significantly support the export of bulbs of *Galanthus woronowii* and *Cyclamen coum* from Georgia.
30. The resources of *Cyclamen coum* were studied in the selected population, with the purpose of facilitating the export of bulbs from Georgia;
31. The license terms and conditions for *galanthus woronowii* were drafted based on the study implemented in 2018;
32. Based on the amendments to the national legislation, justification was prepared for the Secretary of the CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora with the purpose of shifting the Georgian legislation into the first category. As a result, Georgia was transferred to the first category, which means that the domestic legislation is fully compliant with the requirements of the Convention.
33. The biodiversity financing plan was approved, which will support the identification of ways for funding the biodiversity conservation. Main goal of the plan is to ensure the protection and conservation of the unique and valuable biodiversity of Georgia through adequate financial support, which is required for implementing the necessary interventions for the conservation and management of biodiversity.

# Hydro Amelioration and Land Management Department

## Updated land legislative basis and institutional arrangement

There were two new laws related to the land issues drafted together with the Agrarian Issues Committee of the Parliament of Georgia, approved by the Parliament;

- law on The Ownership of Agricultural Land
- law on Defining the Purposeful Use of Land and Sustainable Management of Agricultural Land.

Based on the new legislation, the LEPL National Agency for Sustainable Land Management and Land Use Monitoring was established under the Ministry of Environmental Protection and Agriculture of Georgia. The function of the Agency will be to register the agricultural land resources, to keep the land balance and to create unified databases, which has not been done for many years. Establishing the Agency will facilitate the development of land market in the country, introduction of modern technologies for quantitative and qualitative registration of the land fund, land consolidation and better planning of land use. There was an agreement reached with the World Bank on the location of funding from the beginning of 2020 with the purpose of institutional capacity building of the Agency.

## Updated legislative basis on irrigation and institutional arrangement

Management of amelioration infrastructure and water distribution at the local level is one of the important challenges in the area of hydro-amelioration in Georgia. Georgian Amelioration Ltd, which is responsible for supplying water from main building to the holdings, has to work with more than 50,000 farmers. The situation gets even more complicated every year as the irrigation area keeps growing. With the purpose of decentralizing and dividing their managerial functions, a new law on water users organization was passed. Based on the law, the membership-based farmers unions – water users organizations will be formed, to whom the restored irrigation infrastructure will be handed over with the enjoyment rights, and who will be responsible for supplying water to the area designated to them, maintenance and operations of irrigation infrastructure. Water users organizations are formed at the local level, directly by the farmers, which is a well-tested method of rational water management and disposal globally, to be implemented gradually in Georgia from 2020.

## Expansion of the network of water reservoirs

There is an abundance of water resources in Georgia; however, the problem is about its uneven distribution, because of which a big part of the east Georgia experiences shortage of water. Currently there are six operational irrigation reservoirs, which have a capacity of less than 4% of the yearly flow of the rivers in the east Georgia. This is complemented by the sharp production of natural water supplies due to the climate change. Correspondingly, the expansion of water reservoirs network and the expansion of reservoir volume are high on the agenda. With the initiative of the Government of Georgia, preparatory

work started for the construction of a new water reservoir in 2019 in Kaspi municipality, in the ravine of the river Tedzami, in the selected area between the village Chachubeti and village Rkoni. By constructing the Tedzami reservoir, 7 hectares of agricultural land will be supplied with water. Based on the preliminary selection, the French Development Agency will finance the project implementation. This will be the construction of the first irrigation reservoir in the history of independent Georgia since the 70s of the previous century.

There was an agreement reached with the World Bank for studying the overall situation regarding the creation of water resources in the country, and concerning the pre-feasibility study for small and medium size water reservoirs, and for conducting more detailed feasibility studies at 4 reservoirs. The study aims at exploring the potential of arranging water reservoirs in Georgia, also for identifying reasonability and cost-effectiveness.

### **Land consolidation**

Fragmentation of agricultural lands, which was the result of the land reform implemented in the 90s, represent a significant hindering factor for the existence of farming entities. According to the 2014 data of the GeoStat, only 73.1% of landowners own the land with the area of less than a hectare, 25.4% - from 1 to 5 hectares, and only 1.5% own the land with the area of more than five hectares. The problem is even more exacerbated by the fact that the lands of land users with the area of less than 1 hectare are even further divided into 2-3 plots on average. It means that both the land and the title to it are fragmented. Based on the agreement reached with the World Bank in 2019, within the framework of the project “Irrigation and Land Market Development”, a land consolidation expert will be added to the land systemic registration group, who will work on enlarging the land parcels, while addressing the registration issues. The expert will also produce a report (recommendations) on the favorable and hindering factors for consolidation, which is the precondition for drafting the consolidation policy document and for taking further effective steps.

## **Environment and Climate Change Department**

As of 2019, the Environment and Climate Change Department participated in the elaboration and implementation of state policy on water and land resources management throughout the entire territory of Georgia, protection of ambient air and climate change, also in the implementation of sustainable development goals at the national level that fall within the remits of the Ministry. the Department was comprised of five divisions.

**(I) Georgia is very vulnerable to climate change, therefore, the climate change policy – adaptation to it and mitigating the emission of greenhouse gases represent important directions.**

In 2019, the Government of Georgia started to work in accordance with the Paris Agreement of the United Nations Framework Convention on Climate Change, and drafted a document on Nationally Determined Contributions, which discusses the political, economic and social factors of climate change, assesses the potential of the country for reducing the greenhouse gas emissions, and defines a new more ambitious commitment of the country in regard to limiting these emissions. A 2021-2030 Climate Change Action Plan (CAP) is being drafted for fulfilling the commitments under the NDC, which will specify climate-friendly activities in the following sectors: transportation, energy, construction, agriculture, forest, waste management and industry.

The updated bi-annual report of Georgia has been finalized in regard to the Framework Convention on Climate Change, and it will be sent to the Convention Secretariat together with the national greenhouse gas inventory report, containing the information about: (1) emission trends in the country for the last 25 years, (2) mitigation measures taken for reducing the emission of greenhouse gases, and (3) support received during the process of implementing the Paris Agreement, and the need to eliminate the gaps.

As a result of negotiations between the representatives of the Ministry of Environmental Protection and Agriculture of Georgia and the German Government, a memorandum was drafted for becoming a member of the Nitric Acid Climate Action Group (NACAG). By providing technological and technical support of the producer, the emission capturing technologies will be installed at Azoti Plant, resulting in the reduced emission of greenhouse gases causing the climate change. Implementation of NACAG project and launching the monitoring system within the framework of the project will be financed by the German Society for International Cooperation.

## **(II) Ambient air protection is one of the priority areas of the country.**

In 2019, the draft amendments to the Law of Georgia on Ambient Air Protection were prepared and tabled to the Parliament of Georgia, which was passed with second hearing.

There was an ambient air protection portal [air.gov.ge](http://air.gov.ge) created, which provides permanent access to information about ambient air quality for the public. Georgia has become the first EU non-member and non-candidate state, which placed the station measurement results at the European air quality portal.

Since January 1<sup>st</sup>, 2019, the diesel quality standard has improved up to the Euro 4, and it will be equal to Euro 5 based on the respective legislative amendments since January 1<sup>st</sup>, 2021. The diesel and petrol quality control has been activated significantly, and the number of samples taken in 2019 became equal to the average European indicator.

With the purpose of reducing the emissions of volatile organic compounds from the petrol storage and loading-unloading operations, amendments to the Resolution (No60 and No65) of the Government of Georgia were drafted.

These actions facilitate the introduction of European principles of ambient air quality management, reduction of the emission of harmful substances in the air, collection of accurate information on the ambient air quality and raising public awareness, which will support the improvement of ambient air quality in the country.

**(III) One of the main objectives of the department is to support the status of water resources in the country, and to identify solutions to the problems identified in regard to water usage and protection.**

With this purpose, the water resources management system is being reformed. In fact, drafting of the law on Water Resources Management was completed in 2019, which aims at introducing the basin management system of water resources in the country, and which is based on the European principles of water resources basin management and the internationally recognized and widely applied up-to-date requirements, and which reflects the requirements derived from the commitments under the Association Agreement, namely, those of the EU directives: on establishing a framework for community action in the field of water policy; on the assessment and management of flood risks; on urban waste water treatment; on the quality of water intended for human consumption; on the protection of waters against pollution caused by nitrates from agricultural source.

With the purpose of implementing the integrated water resources management principles at the national level in accordance with the Association Agreement, it is planned to elaborate the basin management plans by 2024 for 6 basin areas identified in the country. With the support of the project “European Union’s Water Initiative Plus”, a basin management plan was drafted for Chorokhi-Adjaristskali basin sections and in 2019 elaboration of Alazani-Iori and Khrami-Debeda basin management plans started, which will be finalized by the end of 2020.

**Water resources management reform will have the following results:**

- Prevention of conflicts in connection to water usage between the water-using sites located upstream and downstream;
- Reduced risks of degradation of water sites caused by improper planning;
- Prevention of conflicts connected to the water usage among the economic sectors (irrigation, energy, industry, water supply);
- Observing the conditions for supplying safe water to the population;
- Right to water use of entrepreneurs, which are safeguarded by the law.

Considering that the development of Black Sea coastline infrastructure represents a priority for Georgia with the purpose of enhancing the potential of economic and tourism sectors, a big importance is assigned to the improvement of its environmental condition.

With the EU support, elaboration of the “National Strategy for Black Sea Protection and Program of Action for Achieving Good Quality State of Marine Environment” started in April, 2019. Final draft of the document will be available in summer, 2020. Pursuant to the Association Agreement, the document is expected to be approved by 2022.

Approval and implementation of the Strategy and the Program of Action will support the creation of healthy and safe environment in the Black Sea within the boundaries of Georgia, protection of the importance marine habitats and species, reduction of anthropogenic burden.

With the purpose of creating the database on the quantitative and qualitative states of water, there was a report produced on 7 quantitative and qualitative indicators of water (renewable water resources of Mtkvari, water uptake from water science, water usage, water consumption in the water supply sector, number of population connected to the water supply systems, concentration on organic substances in water bodies, concentration of nutrients in water bodies ), which were uploaded on the website of their respective in your project.

Water information system (national portal) is being elaborated - a database on quantitative and qualitative state of water, created in accordance with the Water information Systems of Europe (WISE), which combines quantitative and qualitative data on water in sectorial agencies and will be available for all the stakeholders.

#### **(IV) Protection of land resources is the main foundation for the development of economy in every culture of the country**

- Draft Law of Georgia on Windbreaking (field protection) Lines, and its regulatory impact assessment (RIA).

In 2019, the Law of Georgia on Windbreaking (field protection) Lines was drafted together with the Agrarian Committee of the Parliament, with the purpose of protecting soil from degradation. The law will regulate legal relations related to the inventory of windbreaking lines at agricultural lands in the territory of Georgia, such as granting the status, registration, restoration-planting, management and usage, despite the form of their ownership. There was a regulatory impact assessment document produced in 2019 for the draft law on windbreaking (field protection) lines; the draft law will be table to the Parliament of Georgia in 2020 by the Agrarian Issues Committee of the Parliament.

#### **Draft Law of Georgia on Soil Protection**

A draft Law of Georgia on Soil Protection was produced. The draft law combines the laws of Georgia on soil protection and the law of Georgia on soil conservation and restoration-improvement of fertility. The definition of terms was improved in the law. By passing this draft law, rights and obligations in regard to soil protection will be clearly divided between the state agencies and owners of land plots. With the purpose of the soil layer protection, the draft law envisages the creation of a monitoring system, both in

regard to qualitative indicators of soil also on soil pollution. While carrying out entrepreneurial or other activities, the mechanism for the management of fertile layers of soil will be stiffened, and issues related to the soil export will be regulated; a regulatory impact assessment document (RIA) is being drafted for the draft law of Georgia on the soil protection, which will be finalized by the end of the year. The draft law will be tabled to the Parliament of Georgia for the fall session in 2020.

**Project: Applying Landscape and Sustainable Land Management for Mitigating Land Degradation and Contributing to Poverty Reduction in Rural Areas**

There is a 6.5 km-long windbreaking line in Dedoplistskaro Municipality, which will protect 210 ha of agricultural land. There was also a crop rotation pilot project implemented in the Dedoplistskaro Municipality. Chickpea and buckwheat seeds were donated to 21 farmers for free on 100 ha, and trainings were held on the best practices of sustainable land management. Every year the farmers used to sow only wheat. By alternating chickpeas and buckwheat, the farmers will receive the economic benefit of 4,000 USD per 1 ha. This pilot project was selected as one of the best pilot projects of sustainable land management, and it was presented at the 14<sup>th</sup> Conference of the Parties (COP) to the United Nations Convention to Combat Desertification. A publication was issued.

Pasture restoration pilot project was implemented in Akhmeta Municipality, which aims at introducing a rotational grazing on the area of 15 ha, improvement of pasture quality and elaboration of management plans for the pastures of the village Kasristskali in the area of about 300 ha and of the village Shenako in the area of about 7 ha. Besides, a windbreaking line of about 7 km-long was planted in the Gardabani Municipality as well, in the land owned by a successful farmer.

There was a plot-rotation, crop rotation pilot project implemented in Gardabani Municipality. Seeds of alfalfa, corn, esparto, oat and chickpeas, also organic fertilizers were distributed to 6 farmers for free in the area of 50 ha. Other than improving their yield, the farmers also received fodder materials.

**The project proposal for the management of pastures and restoration of degraded pastures (for Kazbegi, Dmanisi, Gurjaani municipalities).**

There were works carried out together with FAO in 2019, for submitting the project proposal to the Global Environment Facility (GEF). The project proposal was drafted in connection to the issues of pastures management and restoration of degraded pastures. Within the framework of the project, the policy document and legislation will be drafted in connection to the management of pastures. The pilot project for restoring the degraded pastures will be implemented in the Kazbegi, Dmanisi and Gurjaani municipalities. Awareness-raising activities related to pasture management will be held in these municipalities, with the involvement of local farmers and population. The full documentation of the project was submitted to the Global Environment Facility for funding in December. Supposedly, the project implementation will start in June.

**The project proposal “Restoration and planting the windbreaker lines with the purpose of mitigating the soil degradation caused by climate change in vulnerable territories of Georgia”**

Within the framework of the preparedness project financed by the Green Climate Fund (GCF), which was implemented by the GIZ, there was a project proposal developed for submitting to the GCF - “Restoration and planting the windbreaker lines with the purpose of mitigating the soil degradation caused by the climate change in vulnerable territories of Georgia”. The project proposal aims at conducting the inventory of windbreaker lines, their planning and planting in the regions of Shida Kartli, Kvemo Kartli and Kakheti. The total budget of the project is 10 million USD. IFAD was selected as an accredited body, which has experience in planting the windbreaker lines. The IFAD planted about 27-km long windbreaker line in Gori and Kareli municipalities in 2018. As of today, the windbreaker lines are being planted in Dedoplistskaro with their support.

The Global Mechanism is a financial mechanism of the UN Convention to Combat Desertification. Its main function is to assist the countries in attracting donors. The Global Mechanism can allocate small amounts with the purpose of producing final project documents. The Global Mechanism expressed its readiness to support Georgia in preparing the full documentation for the above-mentioned project proposal and in regard to its submission to GCF as well. As of now there are vacancies announced for recruiting a national and international expert, and with their support and in cooperation with GCF, the total project documentation will be drafted for 8 months.

**(V) The following activities were carried out for supporting the implementation of Sustainable Development Goals in Georgia:**

- “The Action Plan for the performance of recommendations of the performance audit” of the State Audit Office was elaborated concerning the SDG implementation, and its implementation report was produced;
- The updated report on SDG implementation, was produced and submitted to the administration of the government, including those SDGs, which are reasonable to be nationalized in the future.

**National State of the Environment Report (SoE) for 2014-2017 was elaborated and approved.**

With the support of the German Society for International Development (GIZ) and US Agency for International Development (USAID), the National State of the Environment Report (SoE) for 2014-2017 was produced, which represents a summary document gathering the available information about the environment in Georgia. The document was approved by the Decree #2-194 of the Minister of Environmental Protection and Agriculture of Georgia on December 30<sup>th</sup>, 2019. The document will be available in English as well in 2020.

## **International Relations Department**

The International Relations Department of the Ministry of Environmental Protection and Agriculture of Georgia, within the frameworks of the Georgian Agri-Foodstuffs Promotion Program, makes up the schedule of exhibitions for the next year, together with the Finance Department in the last quarter of every year, and then plans these events.

In 2019, the International Relations Department organized 7 (seven) international fair/exhibitions and 6 (six) local exhibitions/fora, namely:

### **International Exhibitions:**

1. Green Week 2019 (Berlin, Germany, January 18-27);
2. Sihra 2019 (Lyon, Republic of France, January 26-30);
3. Fruit Logistica 2019 (Berlin, Germany, February 6-8);
4. TIPICITA 2019 (Marche Region, Italy, March 9-11);
5. Caspian Agro 2019 (Baku, Republic of Azerbaijan, May 15-17);
6. RIGA FOOD 2019 (Riga, Republic of Latvia, September 4-7);
7. APIMONDIA 2019 (Montreal, Canada, September 8-12).

### **Local Exhibitions**

1. Tea and honey festival (May 5, 2019);
2. International festival of fish and sea products (April 7, 2019);
3. 26 May event (May 26, 2019);
4. Agri-investment business forum of Shida Kartli (October 11, 2019);
5. Georgian cheese and culinary festival (October 26, 2019);
6. Selection for Bocuse D'Or Gastronomic Competition (November 2-3, 2019).

The list of companies interested in taking part in the international and local exhibitions is increasing every year, which facilitates the promotion of Georgian agricultural food products in foreign countries, and increases the product export to international markets.

In 2019, within the framework of the Georgian Agri-Foodstuff Promotion Program, with the engagement and organization of the International Relations Department, it was for the first time for us to participate in the 46<sup>th</sup> international beekeeping exhibition–congress Apimondia 2019 held in Montreal, Canada. There was a stand installed at this event, where the Georgian honey was displayed.

Besides, Georgia joined the International Agreement on Olive Oil and Table Olive in 2019, and at the same time Georgia assumed presidency of International Olive Council. Joining this agreement will facilitate the development of the cooperation among the member states of the Council, protection of geographic marking of olive products and introduction of up-to-date technologies of oil production, also technical cooperation in the olive sector, and scientific research and development.

Besides, in 2019 the delegation of the upper Austrian government paid an official visit to Georgia, within the framework of which the Memorandum of Understanding on Cooperation in the agricultural field was signed. Main goal of the Memorandum is it to deepen cooperation between the two countries in the areas of cattle breeding, plant growing, food processing etc.

In 2019 the memorandum of understanding was signed between the Ministry of Environmental Protection and Agriculture of Georgia and Ltd Georgian Tea regarding the corporation in the tea sector, which aims at developing the tea sector, reviving tea plantations and supporting the experts of tea products.

In addition to this, in 2019 the leadership of the Ministry of Environmental Protection and Agriculture of Georgia had some working and official visits to various countries abroad, namely: German Federal Republic, where Levan Davitashvili participated in the annual global forum and ministerial in Berlin; a ministerial and exhibition held in Izmir in Turkey; a visit to Rome, the Republic of Italy, where the minister Levan Davitashvili participated in the 42<sup>nd</sup> session of the governing council of the International Fund for Agricultural Development (IFAD). Within the framework of this visit, the minister had meetings with the representatives of official delegations from about 20 countries; also, in the 2019 the minister participated in the 41<sup>st</sup> session of the UN FAO, where the elections of the general director of the Food and Agriculture Organization of the United Nations was held. Davit Kirvalidze was nominated for the position of Director General of the UN FAO. Levan Davitashvili participated in the project “Georgia – Homeland of Wine” in Tokyo, Japan; Levan Davitashvili had a business trip to Marrakesh, Kingdom of Morocco, where the ministerial delegation participated in the session of the International Council of Olive. During this visit it was decided that Georgia would join the International Agreement on Olive Oil and Table Olive; besides, within the framework of the 60<sup>th</sup> anniversary meeting of the International Olive Council held in Madrid, Kingdom of Spain in November, attended by Khatia Tsilosani, Deputy Minister of Environmental Protection and Agriculture of Georgia, Georgia was officially declared to be the president of this organization; within the framework of the visit of Khatia Tsilosani, deputy minister to Beijing, People's Republic of China, a memorandum of understanding was signed for the corporation in the tea sector.

Projects initiated with the financial support of donor organizations in 2019 in the field of environmental protection and agriculture:

**Food for Progress**

Donor - United States Department of Agriculture (USDA)

A 5-year project (2018-2023) “Investing in safe and quality cattle breeding”, which aims at enhancing the competitiveness of representatives of cattle breeding, dairy and meat producing industries in Georgia, and enhancing the volume of added value created locally in these sectors. In order to reach this goal, the project will support to improve food safety and quality standards, develop the business models, enhance the product quality, and introduce innovative and marketing instruments.

### **Rural and Agriculture Development Project**

Donor: Austrian Development for a Corporation (ADC)

A 4-year project aims to elaborate a rural development policy in Georgia, to improve the value chain, sustainable use of natural resources, and to develop environment friendly agricultural practices.

### **EU for Environment**

Donor - European Union

Goal of the 4-year project is to assist the EU partner states to maintain and better use their natural capital, enhance the environmental welfare of all population and seize new opportunities emerged in regard to the development.

### **Hazardous Waste Management Project of Georgia - Investments**

Donor: EBRD European Bank for Reconstruction and Development

The project will support the establishment of management system for non-hazardous waste, which is not harmful for the environment, and will ensure a clean and safe environment. Within the framework of the project, the hazardous waste will be collected, treated and separated in accordance with the European standards.

### **Hazardous Waste Management Project of Georgia - to support the project implementation, corporate development and stakeholder engagement**

Donor: EBRD - European Bank for Reconstruction and Development

The project will support the implementing partner in regard to sales, tender preparation and evaluation, financial control, project management and reporting.

### **Capacity Building for the Ministry of Environmental Protection and Agriculture while Nationalizing the Sustainable Development Goals, for Speeding up the SDG Implementation**

Donor: Food and Agriculture Organization

Goal of the project is to raise awareness of the Ministry of Environmental Protection and Agriculture and other stakeholders, into building capacities in regard to sustainable development goals, to ensure that the

goals are implemented, and monitoring is carried out in a focused way, with more engagement of agencies, under a clear coordination. As a result, the Ministry will be able to overcome the difficulties identified in the process of nationalization of Sustainable Development Goals, their implementation and monitoring. Within the framework of the project, technical seminars will be held for the representatives of the Ministry and local stakeholders on awareness raising and capacity building. Also, the project will assist the Ministry to implement SDGs related to agriculture, and to carry out the biannual monitoring action plan.

### **Conservation of landscape biodiversity at Chachuna protected area, in support to its revival**

Donor: Society for nature conservation (SABUKO)

The project aims at implementing the procedures related to the restoration of rainforests at Chachuna protected area (Chachuna sanctuary); to conduct restoration works at the pilot pasture with the area of 900 hectares, with the purpose of restoring the environmental processes, biodiversity and productivity in this section. With the purpose of long-term sustainability, to manage the grazing process by involving shepherds and other local stakeholders dinner regeneration activities.

### **Youth for Sustainable Development: Establishment of Democratic and Peaceful Society Based on Environmental Activities.**

Donor: EUMM mission of the European Union to Georgia

There were eco-clubs created at schools in the occupied/breakaway territories (Gali and Ochamchire), which carried out community-based environmental initiatives and participated in joint activities, among them, in cooperation with Georgian schools.

### **Updating the Law of Georgia on Nuclear and Radiation Safety**

Donor: US Nuclear Regulatory Commission and (AdSTM/Qi Tech, LLC)

The project aims at drafting the amendments to the Law of Georgia on Nuclear and Radiation Safety, and reviewing it by experts; producing the final draft in consideration of expert recommendations; reviewing the amended version by the respective agencies and ministries; elaborating the final draft in consideration of the recommendations of respective agencies and ministries; technical support for tabling the draft amendments to the Parliament of Georgia.

### **Update the procedure for conducting the nuclear and radiation activities approved by the Decree of the Minister of Environmental Protection and Agriculture of Georgia.**

Donor: US Nuclear Regulatory Commission and (AdSTM/Qi Tech, LLC)

The project aims at updating the procedure for inspecting the nuclear and radiation activities, elaborating the final draft in consideration of the recommendations of respective agencies and ministries; providing technical support for approving and adopting the decree.

### **Projects completed in 2019:**

#### **The European Neighbourhood Programme for Agriculture and Rural Development – ENPARD II**

Donor – European Union

Assessment was carried out in regard to the indicators planned for the third (last) installment of the second phase of ENPARD (ENPARD, Phase I, Phase II), also for the indicators of the second instalment of the third phase, after which the instalment for the second and the third phases were transferred in September. At this stage there are negotiations underway for initiating the fourth phase of the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD, Phase IV).

Within the framework of ENPARD II, staff from the Ministry of Agriculture were trained, local action groups were formed in 10 municipalities, 95% of food inspectors were trained, food business operators who registered in the registry of economic activities, will be inputted into the database of the National Food Agency. The farmers registry program was elaborated, and currently more than 107,000 farmers / holdings are registered there; law on the seed production was drafted and approved too; and national strategies for rural development in extension were drafted and approved.

#### **Capacity building for sustainable wildlife management**

Donor - Food and Agriculture organization (FAO)

“Proposals and recommendations for the regulatory policy on sustainable management of the hunting sector“ were drafted and submitted to the Ministry. Based on the recommendations contained in the above-mentioned document, the LEPL National Wildlife Agency was created with the purpose of regulating the field of wild animals and flora management. An instrument was developed for diagnosing the legislative gaps for separating the sustainable hunting in Georgia. The diagnostic instrument for gap analysis represents a conceptual framework, which makes it possible to compare and establish consistency of the Georgian legislation on hunting with the existing international legal instruments (conventions, treaties, directives, etc.). The above-mentioned documents have laid foundation for drafting the law on hunting in Georgia, which is currently underway. In the selected pilot territory in Racha, namely in the gorges of Lukhuna and Tskalmachara, species of wild animals were registered and monitored with video traps, based on which the sustainable wildlife management plan was drafted in Ambrolauri municipality.

The local and international gender consultants drafted the document “Women’s economic empowerment by engaging them in hunting and fishing tourism”. There was a training held in Ambrolauri on the

economic empowerment of rural population based on the development of hunting sector. There was a scientific popular album “Hunting and Forest Management Customs in Ancient Georgia” published with the engagement of Korneli Kekelidze Georgian National Centre of Manuscripts <http://www.fao.org/3/CA1769B/ca1769b.pdf>

### **Support to the improved management of forest and landscape in Georgia**

Donor – Global Environment Facility, United Nations Development Programme (UNDP), World Resources Institute (WRI)

The Forest and Land Use Information and Decision support system (FLUIDS) was created based on the web technology (Forest and Land Use Atlas <https://atlas.mepa.gov.ge/>) and a portal (server) of Geographic Information System <https://gis.mepa.gov.ge/>.

### **Dynamics of Tree Cover Loss / Monitoring and Analysis of Trends**

Donor: World Resources Institute (GFW)

The project implementation made it possible to validate and classify the causes of shrinking the forest cover, and to create the geo-database within the framework of the data on forest cover loss of GFW, to create and analyze the geo-database on fire-affected forest cover, through NASA data and satellite images, to study the fire-affected areas and to produce a report on the processes for the natural renewal of forest cover and soil erosion.

### **Sustainable Forest Management in Georgia (Phase II)**

Donor – Austrian Development Cooperation (ADC)

Drafting the Law on Forest Code was completed.

### **Green Cities: Integrated System for Batumi and Adjara Region (IST-BAR)**

Donor – Global Environment Facility (GEF)

For the first time in the history of Batumi, the household urban mobility (movement) was studied with the method of face-to-face surveys. The four-step transportation model for Batumi was developed. A transport modelling software for macro and micro modelling was provided to the Batumi City Hall. The staff were trained to use the transport modelling software.

### **Applying landscape and sustainable land management for mitigating land degradation and contributing to poverty reduction in rural areas**

Donor – Global Environment Facility (GEF)

Adequate legal, policy and institutional framework on landscape - sustainable management of land resources was developed at the national level, and awareness was raised on the issues of sustainable management of land resources.

### **Small Grants Program**

Donor - Global Environment Facility (GEF)

18 new initiatives of NGOs and community organizations started in various regions of Georgia within the framework of six the working phase of the small grants program in 2019, which will make a significant contribution to the protection of the unique natural environment of Georgia, also to the activities related to climate change.

**“Capacity building and support measures towards the implementation of integrated waste management system in Georgia in 2016-2019, with a focus on hazardous and biodegradable waste management as well as extended producers’ responsibility”**

Donor – Swedish International Development Cooperation Agency

The following activities were carried out within the framework of the projects: elaboration of guidelines for the inventory of hazardous waste; elaboration of recommendations for further action about the approaches of Swedish EPR system, sharing the experience of business and public sector; elaboration of technical safety methodologies; elaboration of general guidelines for the implementation of EPR in Georgia; enhancing the knowledge of the management of solid waste management companies and landfill operators, Tbilservice Group Ltd and autonomous Republic of Adjara about how the criteria on waste collection should be introduced.

### **Establishment of the national system for pest monitoring and forecasting**

Donor - United Nations Food and Agriculture Organization (FAO)

A list of pests with so called economic significance was made within the framework of the project. Relevant manuals were elaborated in accordance with this lists, with the purpose of monitoring the pest population and forecasting their development. Specialists of the regional division of the National Food Agency were trained for ensuring the effective usage of manuals. The project’s important components were also the promotion of contemporary plant protection methods in Georgia, namely, Integrated Protection Methods (IPM) were used in two pilot plots (for vegetables and fruits), and then based on these plots, a so-called the farmers schools practice was introduced in the country for the first time. Videos were produced for promoting the contemporary approaches. Respective manuals were also prepared in connection to the IPM methods for farmers; two manuals were published by the FAO, and were provided to the National Food Agency to be distributed among all the stakeholders. It is planned to upload the

electronic versions of these manuals and videos on the website of the National Food Agency, for ensuring more access to them.

### **Adaptation of remote sensing methods in water resources management and assessment of extreme hydrometeorological situation in Georgia**

Donor - Slovak Agency for International Development Cooperation (SlovakAid)

There were trainings held in the field of meteorology. Information was integrated and visualized in the integrated satellite and radar meteorology, for the sake of accurate weather forecasting.

### **Improving Trade Opportunities in Horticulture**

Donor - EU-EBRD-FAO European Union - European Bank for Reconstruction and Development – United Nations Food and Agriculture Organization (UN FAO)

The project significantly supported the development of horticultural sector in Georgia through various activities, information sharing about technologies, and markets or other activities. It is noteworthy that this initiative is fully compliant with the program Plant the Future of the Government of Georgia, which subsidizes planting the walnut and almond orchards.

### **Support to Sustainable Value Chains through the Development of Geographic Indications in Georgia**

Donor - European Bank for Reconstruction and Development / United Nations Food and Agriculture Organization

Institutional capacities in geographical indications was strengthened; the first draft was produced for updating the Law on Geographical Indications, and local foodstuffs were studied in connection to the appellations of origin of Georgia. Besides, with the purpose of supporting two pilot products of geographical indications and their value chain in the dairy sector, the project team had tight cooperation with the producers of Sulguni and Tushetian Guda cheese. As a result, specification of these geographical indications were updated - taking into consideration the details of existing production practice and food safety issues. As a result of the changes made into the specifications, for the first time ever, the cheese status was changed with Georgian geographical indication, and Tushuri Guda became the first cheese of the Georgian appellation. Producers and other stakeholders upgraded their qualification in regard to food safety, cheese tasting, certification and marketing. Creation and promotion of other indications related to geographical locations and appellations will support the country to preserve its rich food heritage and its distinguished biodiversity, also, to increase the revenues of producers and thus support the economic growth.

### **Agricultural Education**

Donor – United States Department of agriculture (USDA)

Training courses were held for the specialists engaged in the agricultural sector.

### **Cochran Fellowship Program (CFP)**

Donor - United States Department of agriculture (USDA)

Within the framework of the project, there were short-term training courses organized in the US, participated by the mid-level and senior specialists of agriculture and farmers who are engaged in the development of agriculture and trade, agri-business management and marketing, both from private and public sectors.

### **Honey Studies**

Donor – World Bank

New methods of honey diagnostics were introduced.

### **Identification of typical Georgian foodstuffs “terroirs”**

Donor – Czech Republic

Within the framework of the project, the typical Georgian foodstuffs/terroir-based products were studied/inventorized in Tusheti and Mtskheta-Mtianeti regions.

The study will create a basis for the promotion of identified terroir products and for advancing the business initiatives of local communities.

### **Agricultural statistics**

Donor - US Department of agriculture (USDA)

The project has supported the National Statistics Office of Georgia to elaborate, publish and conduct quarterly surveys.

## **Results of Main Activities Carried out by the Euro-Integration Department in 2019**

In 2019, the Euro-integration Department coordinated the implementation of EU Association Agreement and the Agreement on Deep and Comprehensive Free Trade Area, preparation of 2020 Action Plans for Georgia's integration in the EU, and preparation of both quarterly and annual reports of 2019 plans.

The Department drafted a resolution of the Government on making amendment to the Resolution No. 423 of the Government of Georgia on the Approval of Technical Regulation on Fishing and Protecting Fish Stock dated December 31, 2013, which was approved by the Government of Georgia; also, the draft law of Georgia on making amendments to the Code on Administrative Offences. These drafts aim to establish the requirements that are approximated to the EU legislation in regard to fishing/fishery vessels, to introduce respective types of administrative offences and administrative penalties, which will eventually support the fight against illegal, undeclared and unregulated fishing not only in the territorial waters of Georgia, but also in the open sea and territorial sea of a foreign country, also, in a special economic zone.

In order to ensure the implementation of commitments undertaken during the EU integration process, the Department was actively involved and participated in the sessions of committee and/or subcommittee, where the respective report was submitted to the European Commission regarding the outcomes of their reforms. Also, the issues were discussed where the EU support and relevant consultations are important. The Department also participated in the meetings between the special environment group of the energy community and the Council of Ministers.

Legal approximation program envisaged under the DCFTA was fully implemented. Namely, with the purpose of a implementing the EU regulatory legislation on agriculture, more than 100 EU legal acts have been approximated in the areas of food safety, veterinary and plant protection from 2015 to 2019. There were 22 EU legal acts approximated in 2019 only, among them: 7 legislative acts in the area of food safety, 7 – in veterinary and 8 - in the area of plant protection.

There were some issues regulated, which are new for Georgia, also there are some issues that have been modified in the existing legislation.

The Department was actively involved in the process of approximation with the EU legislation on environment. Namely, the Department participated in the elaboration and revision of the draft law of Georgia on industrial emissions elaborated with the purpose of approximation with EU directives, draft law of Georgia on water resources management, draft law of Georgia on environmental responsibility and resolution of the Government of Georgia on the approval of the procedure for accessing the environmental information.

With the purpose of establishing the compliance with the EU legislation, compliance tables were prepared for draft laws of Georgia and drafts resolutions of the Government of Georgia. The agricultural compliance tables were also sent to the European Commission.

The Department also reviewed and prepared information on the amendments proposed to the Annex XXVI (Environment Protection) and the Annex XXVII (Climate Change) of the Association Agreement, and prepared the common position together with the respective sectorial departments. It also participated in video conferences held with the purpose of negotiating the amendments with EU representatives.

Within the framework of the Association Agreement, there was a communication/assistance provided to the private sector with the support of the European Union. In the legislative approximation process the engagement of civil society was ensured, besides, in accordance with already approximated legislation of Georgia, assistance was provided to entrepreneurs with the purpose of to assist them to adapt to the statutory requirements through various trainings, capacity building activities or information meetings.

Besides, there were information meetings about the requirements related to the entry into the European market with the representatives of the public and business sectors. In particular, they were provided with the information about what kind of products can be introduced to the European Union, and what specific requirements should be met for this purpose.

### **Activities planned for 2020**

The Department still continues the implementation of EU Association Agreement in the area of environmental protection and agriculture.

Within the framework of the legislative approximation action plan (DCFTA) in the sanitary and phyto-sanitary areas, and with the purpose of implementing the EU legislation in Georgia, the laws of Georgia will be approximated to 26 legal acts of the European Union in the areas of veterinary and plant protection.

This will support the effective functioning of the domestic market, protection of human health and consumer interests, health of animals and plants, also the export of agricultural products, among them to the EU member states. Besides, the situation in regard to environment protection and climate change will improve; respective control measures will be strengthened by the states, public engagement will be improved in the decision-making processes, and other commitments will be fulfilled that have been taken under the Association Agreement and other multilateral environmental treaties.

## **The Environmental Assessment Department**

The Environmental Assessment Department ensures the implementation of procedures of environment impact assessment for the activities regulated by the Environmental Assessment Code, also the strategic environmental assessment for the strategic documents envisaged in the Code. In addition, the Department also reaches an agreement on the air and water protection documentation. Correspondingly, the Department is responsible for the prevention, reduction and mitigation of anticipated impact on the environment and human health as a result of activities, and for the integration of aspects related to environmental and human health in the strategic documents.

The Environmental Assessment Code regulates the matters related to the public participation in making the decisions while conducting the environment impact assessment procedures, when the public engagement is ensured at the earliest possible stage of environmental impact assessment. This will ensure that the opinions of all the stakeholders are taken into consideration in the decision making, and adherence to the high standards of public engagement.

The Ministry is obliged to provide information to the public through timely, effective and adequate means, about the initiation of administrative proceedings and the opportunities of public participation in these proceedings, and to provide access to documentation. The documentation on the procedures related to the environmental impact assessment / strategic environmental assessment is uploaded on the official website of the Ministry within 3 days by the Department [WWW.MEPA.GOV.GE](http://WWW.MEPA.GOV.GE), and it is also sent to the respective municipalities with the purpose of displaying it on information board and/or posting on the websites of executive and/or representative bodies.

The Code establishes the ways for the public to submit their comments and opinions electronically or in writing. Opinions and comments can be submitted to the Ministry: in writing (at the Ministry of Environmental Protection and Agriculture of Georgia at the address: 6 Marshal Gelovani Avenue, Tbilisi, or electronically, to the email of the Environmental Assessment Department: [eia@mepa.gov.ge](mailto:eia@mepa.gov.ge)), and verbally, during public reviews.

Decisions made by the Ministry are uploaded on the official website of the Ministry within 5 days, and are sent by the Department to the respective municipality in order to display them on the information board of executive and/or representative bodies.

In 2019, the following documents were prepared by the Environmental Assessment Department and issued by the Ministry, in accordance with the environment impact assessment procedure envisaged in the Environmental Assessment Code:

- 261 screening decisions;
- 143 scoping reports;
- 72 environmental decisions;
- 7 decisions on extending the current activities;
- Recommendations on exempting the 3 projects from environmental impact assessment.

The Environmental Assessment Code envisages that the Ministry organizes and holds public reviews at the stage of reviewing the EIA scoping report and EIA report. The public reviews are open, and any representative of the community can participate in it.

- During 2019, the Environmental Assessment Department organized and held 269 public reviews in total, attended by about 3,200 people.

If the grounds established by the Environmental Assessment Code exist, the Ministry has the right to refuse to carry out the activity both at the stage of scoping and EIA and screening as well. Considering these grounds, the Department produced and issued its decision not to carry out the activity regarding three projects during 2019.

The Department drafted the screening decision in regard to three strategic documents in 2019, and scoping opinion of the strategic environmental assessment regarding three strategic documents on spatial arrangement and planning sector – master plan of Mtskheta town, Gori land use plan and the regulation plan for the development of resort Lebarde.

The Department reached an agreement on 716 air protection and 220 water protection documents. Besides, the Department also issued 6 permits for the import, export, re-export and transit of ozone-depleting substances, in accordance with the import quota (58.17 tons) approved by the Decree of the Minister in 2019.

The department produced the draft Law on Industrial Emissions, which aims to prevent the emissions to ambient air, water and soil as a result of industrial activities, or, where it is not practicable, to reduce and control the emissions, also to prevent waste generation.

On the grounds of the cooperation between the United Nations Economic Commission for Europe (UNECE), Czech Republic and the Ministry of Environmental Protection and Agriculture of Georgia, there were trainings held on May 16-17, 2019 and on September 19-20 on the following topics: strategic environmental assessments screening and scoping procedures, producing recommendations on strategic environmental assessment reports, and the strategic environmental assessments in the area of spatial planning in spatial arrangement sectors. Purpose of these trainings was to build the capacity of the employees of the ministry and planning bodies, with the purpose of effective introduction of the strategic environmental assessment instrument, and for sharing the best international practices. Hence above-mentioned, other than the staff of the Ministry of Environmental Protection and Agriculture of Georgia, representatives of other ministries and municipalities attended the training seminars.

Besides, a new project European Union for Environment (EU4environment) was launched in Georgia with the financial support of the European Union In 2019, which aims at providing assistance to six countries of the Eastern Partnership (Armenia, Republic of Azerbaijan, Republic of Belarus, Georgia, Republic of Moldova, Ukraine), regarding the issues such as the development of green economy, sensible usage of natural resources, reduction of adverse impact on the environment and mitigation of environmental risks. Within the framework of this project, with the purpose of the effective implementation of the environmental impact assessment and strategic environmental assessments instruments, the Department identified priority directions, among them: elaboration of sectorial guidance documents on EIA/SEA

issues, implementation of SEA pilot project, also, holding trainings for municipalities and planning agencies.

## Rural Development

There are three main priority directions presented in the 2017-2020 Rural Development Strategy of Georgia, namely: economy and competitiveness, social conditions and quality of life, environment protection and sustainable use of natural resources. The 2017-2020 Rural Development Strategy of Georgia and the 2018-2020 Action Plan includes 67 activities for 2019.

The 2018-2020 Action Plan of the 2017-2020 Rural Development Strategy of Georgia envisaged 24 activities that fell under the responsibility of the Ministry of Environmental Protection and Agriculture of Georgia, with a total budget of 153,867,100.0 GEL. As of 2019, actual budget expenditure amounted at 162,687,757.6 GEL.

Main indicators of activities under the Ministry of Environmental Protection and Agriculture of Georgia for 2019:

Objective	Activity	Budget of 2019	
		Estimated Budget (GEL)	Actual Budget Execution (GEL)
Priority area 1: Economy and Competitiveness			
Objective 1: Competitiveness, Economic Recovery of Farming, Restructuring and Modernization through the Diversification and Development of Effective Supply Chains	1.1.1 Preferential Agricredit	49,000,000.0	71,257,000.0
	1.1.2 Young Entrepreneurs Support Program	5,450,000.0	3,972,586.0
	1.1.3 Plant the Future	10,000,000.0	15,613,498.8
	1.1.4 Co-financing of Storage and Processing Enterprises	10,000,000.0	10,671,056.0
	1.1.5 Support to Bee-keeping Agricultural Cooperatives	150,000.0	2,700.0
	1.1.6 Introduction of International Standards at Cooperatives and Promotion of the Produced Output	200,000.0	8,490.0
	1.1.7 Development of the Infrastructure of Agricultural Cooperatives	4,500,000.0	247,734.9

	1.1.10 Agriculture Modernization, Market Access and Resilience	10,000,000.0	10,671,290.0
	1.1.11 Construction and Rehabilitation of Amelioration Systems	36,000,000.0	22,827,355.0
	1.1.12 Improvement of Irrigation and Drainage Systems	9,800,000.0	7,571,811.5
	1.1.13 Support to the Georgian Tea Production	500,000.0	471,046.0
Priority Area 2: Social Conditions and Standard of Living			
Objective 3. Local population engagement. Increase the involvement of rural population (especially the youth and women) in identifying local needs and the determination of solutions to these needs.	2.3.1 Meetings with community groups	0.0	0.0
Priority Area 3: Environment Protection and Sustainable Management of Natural Resources			
Objective 1: Water, forest and other resources. Improve the management of water, forest and other resources in targeted rural areas.	3.1.1 Protection of protected areas and management of resources	200,000.0	197,724.3
	3.2.1 Development of ecotourism in protected areas and effective communication with the public	300,000.0	544,542.2
	3.1.3 Improved management of protected areas	0.0	0.0
	3.1.4 Sustainable utilization of forest resources	10,000,000.0	10,400,179.0
	3.1.5 Forest care and restoration	900,000.0	1,227,486.0
	3.1.6 Forest accounting and inventory	400,000	418,366.0
	3.1.7 Implementation of annual geological monitoring	45,900.0	137,136.0
	3.1.8 Implementation of geological surveys	28,900.0	38,719.0
	3.1.9 Monitoring of underground waters	119,700.0	116,337.9
	3.1.10 Monitoring of environmental pollution	17,700.0	27,095.0

Objective 3. Climate change. Implementation of activities to mitigate adverse impact caused by climate change. Risk assessment	3.3.1 Carrying out the hydro-meteorological observation and expanding the observation network	954,900.0	356,734.0
	3.3.2 Agricultural insurance measures	5,300,000.0	5,908,870.0
TOTAL		153,867,100.0	162,687,757.6

Detailed information about the performance of activities falling within the responsibility of the Ministry of Environmental Protection and Agriculture of Georgia is provided in the “2019 Progress Monitoring Report of the 2018-2020 Action Plan of the 2017-2020 Rural Development Strategy of Georgia”.