

Georgia Case Study Prepared for FAO as part of the State of the World's Forests 2016 (SOFO)

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Abbreviations

AF – Adaptation Fund

UNDP - United Nations Development Project

CENN – Caucasus Environmental NGO Network

WWF - World Wide Fund for Nature

IUCN - International Union for Conservation of Nature

ADA - Austrian Development Agency

BMZ - Federal Ministry for Economic Cooperation and Development of Germany

GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit

OSCE - Organization for Security and Co-Operation in Europe

ENVSEC - Environment and Security Initiative

EU - European Union

(ÖBF) AG - Österreichische Bundesforste Consulting

BFW - Federal Research and Training Centre for Forests, Natural Hazards and Landscape

FSDC - Forest Sector Development Center

WB - World Bank

FAO - Food and Agricultural Organization of the United Nations

KfW - the German Credit Bank of Reconstruction

MENR - Ministry of Environment and Natural Resources Protection of Georgia

FDA - the French Development Agency

DCFTA - Deep and Comprehensive Free Trade Area

LEPL – Legal Entity Public Low

IDP - Internally Displaced Person

MoA – Ministry of Agriculture of Georgia

NFA – National Forestry Agency

FD – Forestry Department

GeoStat - National Statistics Office of Georgia

Introduction

The State of the World's Forests (SOFO) 2016 "Forests and Agriculture – Land Use Challenges and Opportunities" examines the competing demands for land for forests and agriculture; and the relationship between forest cover changes and food security. In particular, forests and food security highlight the possibility to meet food security objectives while maintaining or increasing existing forests. FAO has identified about ten countries that have either significantly reduced their deforestation rate or have maintained/increased their forest cover and, at the same time, have increased food security since 1990. Georgia case study was carried out to analyze the key factors that have contributed to these positive trends.

1. Country trend observation: forest condition, agriculture and food security

The goal of this document is to put together and to analyze information and materials which have played significant role in improving forest condition and food safety during last 25 years. In the limits of this short-term task it is impossible to carry out full detailed analysis. Nevertheless, the opportunity to use results of earlier researches has greatly helped correct formulation of basic problems for further discussion.

1.1. Forest condition

Economic crisis of 90-ies of the XX century has caused intensive (often illegal) use of forest and, as a result, degradation of significant part of forest fund of Georgia. The balance between afforestation/reforestation and use of its resources has been disturbed. It should be mentioned that during last 15 years there had been no full inventory of forests done. This is important, because data on forest areas are based on results of forest inventory.

Country,s forested area is 2822.5ha¹. 97% of the forests are located in mountains; more than 80% of them are distributed on steep slopes (21 degrees and more). Approximately 600 thousand ha belong to virgin forests; according to existing inventory data funding of Georgian forests amounts to 454 million cubic meters, annual increament – 4.0 million cubic meters. Average wood fund per hectare is 161 cubic meter, forest area per person – 0.55 ha, wood fund per person – 80 cubic meters.

The main part of the forest areas (almost 50%) is represented by beech species, also large areas are covered by oak, fir, hornbeam, spruce, pine, alder and other forest species (trees and shrubs). The Georgian forests are also rich in other forest resources, in particular, products of forest trees and non-timber (among them herbs, mushrooms etc.) products.

In years 1990-2014 afforestation and reforestation activities were carried out on 806.7 ha of the territory of Georgian forests.

It should also be mentioned that until recent period forest use in Georgia was based on the principle of short-term permits. This was causing excessive cutting of timber resources. The result has been dramatic decrease in density of forest stands and long-term exclusion of large forest areas from further timber

¹ National Forestry Agency, National Statistics Office, FRA 2015

resource use. According to the forest inventory data, entire volume of forest areas damaged and degraded due to the improper use exceeds 200 thousand hectares².



Chart 1. Map of forest areas

Source: WWF Caucasus

1.2. Agriculture and food security status

Georgia is traditional agrarian country and agriculture is considered one of leading branches of Georgian economy. Natural conditions of the country (fertile soils and climate) are very good for farming as well as fund raising. Traditional crops are grapes, wheat, corn, various fruits, citruses and tea. Traditional fund raising branches are sheep and cattle breeding; apiculture is also developed.

Almost half of the population lives in the countryside, where main source of living are entirely or partly self-sufficient farms of low productivity. During the last two decades agriculture has been developing very slowly due to lack of the sector policy. The government had neglected it, which is not the same as the policy of non-interference. This approach was accompanied by steady decrease of agricultural production and crop areas.

In terms of food security general approach and situation were similar. Fragmented plots, ill-conditioned infrastructure, out of date technologies, as well as other problems in agrarian sector accounted for insufficient level of food security. Georgia is very vulnerable from the point of view of food security. Combined with many social or economic factors the agriculture of the country fails to provide the population with monetary income. It should be mentioned that Georgia is not threatened by mass

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² National Forestry Agency

hunger only because all categories of food are produced here. Increase of food security level is possible through economic development, including step-by-step increase of agriculture productivity.

The approach of the state to agriculture and food security has radically changed since 2013, when the Government declared assistance to agriculture development as one of main priorities³. The goal of the Government is to create an environment, based on principles of sustainable development, which will assist stable growth of high quality agricultural production, more competitive products, better food safety and food security, overcoming poverty in villages.

2. In-depth country assessment

2.1. Economic development

2.1.1. The structure of economy and income

Regions of Georgia greatly differ from each other from the point of view of their share in gross domestic product (GDP). The same difference exists between urban and agrarian settlements. Half of the GDP of the country is produced in Tbilisi⁴. Besides much larger share of the GDP is produced by regions where large towns are situated (Kutaisi in Imereti, Rustavi in Kvemo Kartli, Batumi in Adjara, Poti and Zugdidi in Samegrelo), not by agrarian regions, despite their closeness to the towns and major highways.

The regions also vary by structure of economy. Mainly, those are three main sectors: primary sector of the economy – agriculture, hunting⁵, forestry and fishing; secondary sector – industry, domestic goods production and construction and third-rate sector – trade, transport and communication, public administration, education, health protection, social security etc.

2.1.2. Change/trends of GDP in the last 25 years

In 1990-1993 GDP was decreasing in average by 28% a year. It dropped from 4433 US dollars to 1437 US dollars per person⁶. It should also be mentioned that by the year 1995 industry had dropped by 78% compared to 1990.

In fact, from all post-soviet countries, Georgia was the last – at 1995 to start peaceful building of the state and transformation of economy. After 1995 Georgian economy had started overcoming the crisis with the help of institutional reforms. In that period maximum growth of economy was achieved in 1997, when GDP growth rate was 10.7%.

Afterwards the growth rate dropped dramatically. Russian economic crisis of 1998 significantly decreased economic development. In 1996 GDP in Georgia amounted to 3,868.5 million GEL (3,064.6 million US dollars), in 1999 – 5,668.7 million GEL (2,814.1 million US dollars), in 2003 – 8,564.1 million GEL

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³ Annual report of the Ministry of Agriculture of Georgia, 2014

⁴ Program of Regional Development of Georgia for years 2015-2017

⁵ To my opinion, including hunting into statistical data of the agriculture database is incorrect, because according to the Law on Protection of Animal World of Georgia hunting is allowed only for sport and entertainment, while prohibited for trade. Fees from it can be considered negligible – *opinion of the author of the report*.

⁶ www. data.worldbank.org

(3,990.8 million US dollars)⁷. Gross national income in 2003 was 4 022, 1 million US dollars, or 926, 2 US dollars per person⁸.

Besides macroeconomic and institutional reforms, effort of the government was directed towards radically cutting corruption and state interference in economy in order to improve investment environment. As a result growth of the average annual GDP indicator in 2004-2007 was 9.3%. The highest growth was clocked in 2007 and amounted to 12.3%.

During the following period, in particular at the end of 2008 and in 2009 dramatic drop of economic indicators of the country could be noted, mainly caused by the 2008 Georgia-Russia war and the worldwide economic crisis. In 2008 the GDP indicator was 19 074,9 million GEL, which was 2.3 % more than similar indicator of last year, while in 2009 it was 17 986, or 3.6% less than previous year.

According to UNDP report of 2013 Georgia is 72nd (index 0.745) in the Human Development Index among 187 countries, which proves significant political and economic modernization of the country.

According to adjusted data, 2012 GDP index in current prices amounted to 26 167.3 million GEL, which is 7.5% more than the last year similar indicator. In 2013 GDP was 26 824.0 million GEL (2.5%more compared to the previous year). Last year (2014) GDP indicator amounted to 29 187 million GEL (8.7% more than the last year). At this period gross national income amounted to 16 376.8 million US dollars, which was 3647 US dollars per person.

2.1.3. Major contributing sectors to GDP

If we look at structural characteristic features of GDP growth in Georgia (2003 = 100), it will be possible to single out several main large groups.

"Financial activities" and "Indirect assessment of financial mediator service" chain indexes are characterized by high growth rate – accordingly 490.1% and 362.6%. This points to fast growth of financial sector. Construction sector has also developed and the index is 192.2%. This is mainly connected to growth of loans given by bank sector to this one, in other words, directly related to the growth of the above mentioned financial sectors.

In service sector dramatic growth of the "hotels and restaurants" branch should be mentioned -216.7%, which is caused by special accent made by the government on construction and tourist infrastructure, also by growth of prices in this sector.

The growth of "communications" – 276.1% - is result of direct use of this services.

Growth in processing industries is traditionally for Georgia related to growth in ferrous and non-ferrous metals and chemical industries. This tendency was especially obvious before 2008 and was brought about by growing worldwide demand for metal production and by growth of prices. As to education, health and social security branches, their growth was mainly caused by increase of state expenses in these directions.

In agriculture the tendency of alarming decrease was demonstrated and growth chain index here compared with 2003 is only 93.7%.

⁷ www.geostat.ge

⁸ www.geostat.ge

⁹ www.geostat.ge

2.1.4. Public investments

Structure of investments by economy sectors demonstrates that the largest share of investment constantly goes to transport and communication – one fifth in average, while average share of investments to agriculture is 1-2%. Share of investment to energy sector was high in 2007-2008 and had dramatically dropped afterwards, in 2009-2010. According to 2013 data it has grown again and reached 244, 745, 1 thousand US dollars.

Volume of investment is high is processing industries.

In hotels and restaurants sector high indicators of investment are noted in various years. Although they decreased in 2009-2010, in 2014 they grew again and amounted to 124, 851, 8 thousands US dollars. In the real estate sector share of investment has especially grown since 2008 and reached its maximum in 2011 (224, 776, 3 thousand US dollars).

Investment index in construction is unstable: being 105, 218, 8 thousand dollars in 2009, it dropped significantly in 2010 (4, 705, 9 thousand US dollars) then reached its maximum in 2014 and amounted to 316, 588, 1 thousand US dollars.

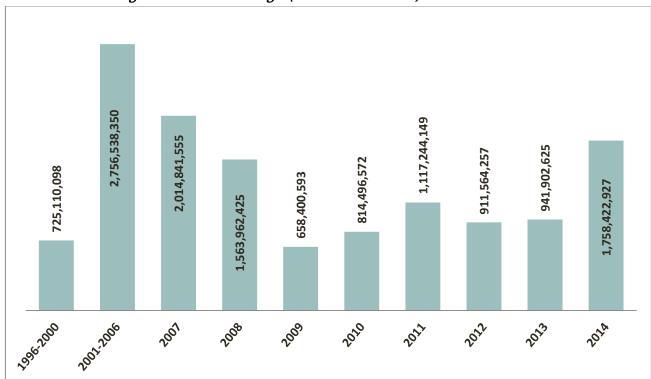


Chart 2. Direct foreign investment in Georgia (thousand US dollars)

Source: GeoStat

2.1.5. Share of agriculture value added in total Gross Domestic Product (% of GDP)

Despite the existence of favorable natural and climate conditions for development of agriculture sector in Georgia, during the recent decades the rate of development here stayed very much behind other sectors of economy.

The situation after declaration of independence has made the areas taken by annual and perennial crops decrease several times. Due to small productivity agriculture was developing very slowly. Real production was decreasing. If in 2003-2012 real GDP growth was in average 6.4%, GDP in agriculture decreased by 0.5%. Practically each year brought decrease compared to the previous one. This sector was facing lots of structural difficulties. Average annual harvest varied and had a tendency to decrease. Its share in the GDP gradually decreased and in 2010 it was 8.4%, while the same indicator in 1996 amounted to 34.1%. According to 2014 data share of agriculture in gross domestic product is 9.2%.

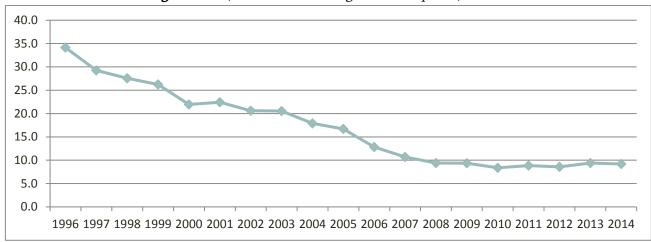


Chart 3. Added value in agriculture (mln. GEL according to current prices)10

Source: GeoStat

2.1.6. Share of forestry sector value added in total Gross Domestic Product (% of GDP)

It should be mentioned that according to the existing statistical system¹¹ forestry together with fisheries is included in general data on agriculture. All this of course makes it more difficult to determine share of forestry in the economy of the country.

In the period of central planning share of forestry in GDP amounted to $4-5\%^{12}$. In 90-ies, its priority directions were: forest extraction – 14%; timber processing – 69%; timber and paper industry – 17% (URS Corporation 2002).

According to the State Department of Statistics, in 2002 share of forestry sector in gross domestic product was much smaller -1.3%. Since 2005 despite general economy growth the share of forestry had not

¹⁰ Quick drop in data on crop areas is supposed to be caused by change of methodology by the Department of Statistics in 2005-2006.

¹¹ Agriculture consists from primary producing, forestry and fisheries

¹² ¹² Forest Policy and InstitutionalChange Analysis in Central Asian and Caucasus Countries, *Regional Project*. FAO-FOEP/FAOSEC. Merab Machavariani. Tbilisi, 2009

grown¹³ and in 2012 it amounted to only 0.32%, while in developed countries this indicator is 10 times higher and amounts to 3-4%. At the same time during the last 5 years the indicator for production has also dropped from 86.0 million GEL to 85.6 million GEL¹⁴.

It should also be mentioned that these data do not include cost of non-timber forestry products. According to existing legislation¹⁵ population has right to gather non-timber forest products and secondary timber products for private use. Often they gather non-timber products (e.g. mushrooms, berries etc.) for commercial purposes, but this is not registered. As a result this income is not described in official GDP statistics and does not enter the exchequer.

2.1.7. The remittance inflow trend in the last 25 years (% of GDP)

Significant role in Georgian economy is played by money orders from abroad, sent by Georgians working in foreign countries to their families and relatives here. Only part of these orders is sent through banks. Entire volume of such orders has been constantly growing and only decreased slightly during the global economic crisis, though had not stopped.

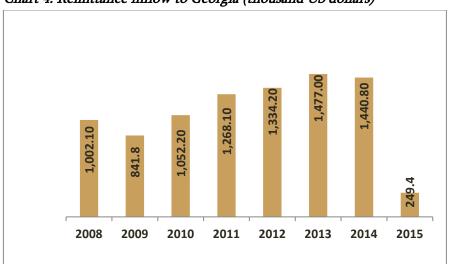


Chart 4. Remittance inflow to Georgia (thousand US dollars)16

Source: GeoStat

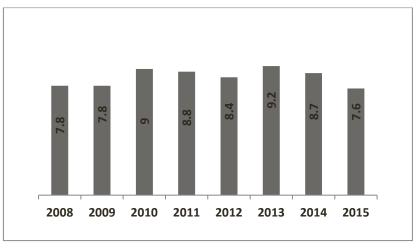
Chart 5. Remittance inflow to Georgia, % of GDP

¹³ Source: National Forestry Agency

¹⁴ RWA International, Plan for Rationalization and Institutional Development of Forestry Sector (1998-2001), the Government of Georgia, 2003.

¹⁵ Forest Code of Georgia, 1999

¹⁶ www.geostat.ge; final exact estimations for 2015 will be published on November 16, 2015



Source: GeoStat

2.2 Demography

2.2.1. General demographic information¹⁷

After Georgia has got independence in 1991, the indicator for population growth has dramatically changed due to acute political conflicts and economic crisis.

In 1990-ies population reduced in whole Georgia, but most of all in mountainous regions and mono-industrial towns.

After the gain of independence as a result of political tension and armed conflicts, quite large number of refugees and internally displaced persons emerged in Georgia.

According to the data of the Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees of Georgia¹⁸, by April 8 2014 there were registered 253 574 IDPs – 85 177 families.

Today demographic problem is one of the most acute in Georgia. Catastrophic drop of birth rate and growth of mortality rate has disturbed reproduction balance of the population and migration process has been added to it. In 1999-2008 negative balance of migration varied from -36.1 thousand persons to -10.2 thousands. High level of outflow of population was clocked as early as in 90-ies of XX century and has amounted to -790.2 thousand persons.

In the period of 1990-2009 the population was reduced by 1.03 million. These were economically difficult years and the reduction happened mainly due to emigration. Russia-Georgia war of 2008 created new wave of emigration. Although by 2009 the negative balance of migration changed to positive (34.2 thousand persons), but in general rate of population flow is still negative (-0.23%).

http://geostat.ge/index.php?action=page&p_id=472&lang=geo

 $^{^{17} \ \}underline{\text{http://data.worldbank.org/indicator/SP.POP.TOTL}}$

¹⁸ Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees of Georgia

The reasons for migration are mainly of economic character. Insufficient jobs in the country, industrial environment not favorable enough, and unemployment make people to look for source of living outside of the country. The money sent by them is an important source of household incomes in Georgia.

2.2.2. Trends of migration in rural and urban population

The most demonstrative example of unequal distribution of population of Georgia is the fact that the significant part of it is concentrated in Tbilisi. More than one quarter of the population are officially dwellers of Tbilisi and if we count also its circumference (including Rustavi and Mtskheta towns) the proportion amounts to almost one half. Nevertheless, according to official statistics after declaration of independence share of the region in the entire population of the country is mainly unchanged. It is possible that these figures express more lack of data than real situation in the regions of Georgia.

During the crisis of 90-ies there was no unemployment in rural areas and there were a lot of opportunities for keeping people employed. In those years rural areas dominated employment segments. But because of labor productivity being low in villages, most families having only small land plots (less than 1 hectare) and credits for enlargement of enterprise being unavailable, intensive migration processes started from the villages. Migration was most active among young people.

The majority of Georgian villages are located near forest. Besides agricultural activities an important source of income for local population was from timber and non-timber forest resources, mainly procured illegally. During the recent years forestry reforms carried out in the country have partly reduced volume of illegal lumbering. This has also intensified migration process from rural areas.

2.3. Agricultural tenure, investment, production, productivity and trade

Currently responsibility for issues related to land resources in Georgia is divided between the Ministries for Environment, for Agriculture, for Economy and Sustainable Development and for Justice.

<u>The Ministry for Environment and Natural Resources Protection</u> is responsible for planning and coordinating activities aimed to mitigation of desertification and land degradation process caused by climatic and anthropogenic factors on the territory of Georgia.

<u>The Ministry of Agriculture</u> functions are policy identification and assistance for implementation of activities with regard to sustainable land use, soil conservation, restoration/improvement of soil productivity.

<u>The Ministry of Economy and Sustainable Development</u> carries out privatization of land owned by the state and approves right of ownership of the privatized state land. The task of the ministry also is to organize creation of zoning maps for ownership rights, development of towns and other settlements, and land tenure planning and carry out methodological management of the work.

The main goal of the *Ministry of Justice of Georgia* National Agency for Public Registry is based on the need to develop real estate market in the country to create user oriented transparent, safe, unified and modern system of land registration.

The important role is also played by <u>local administrations of self-governing units</u>, which are responsible for initiation, preparation and approval of spatial and territorial development plans and general land tenure plan, also for agreement with respective offices of executive authorities.

2.3.1. Tenure19

Georgia is divided into 11 administrative regions and 22 climatic zones. The entire area of agricultural land is approximately 3 million hectares, which are distributed as follows: arable -27%, perennial crops -9%, fields and pastures -64%.

Results of privatization process carried out in 1990-ies (homestead lands, lands of collective and state farms) looks as following: authorized individual persons received unconditionally 0.76 million hectares agricultural land as property; 460 000 hectares remained in state ownership, from which 300 000 hectares were granted on lease. As a result approximately million hectares of land started being used by the new class of so called "farmers". These plots were divided in a lot of small ones according to type of land. This caused intensive fragmentation of land. Besides 1.75 million hectares of grasslands remained on balance of local administrations and have been used by local population for mowing. The population also can use pastures, for which only small annual fee is required. The majority of the pastures are deteriorated and overgrazed. 75% of agricultural land is still state property, but it is allowed to sell them. The Government of Georgia sells land through public auction in the internet (www.privatization.ge, www.eauction.ge). 55% of arable lands have been already privatized.

Entire land fund of Georgia is 7628.4 hectares, 39.6% of them are agricultural land, 26.5% - arable, 8.7% belongs to perennial crops, 4.8% to grasslands and 59.4% to pastures.

The area of land in state ownership amounts to 87% of the whole land, one quarter of agricultural lands is private property, as well as 54.6% of arable land, 68.5% of perennial crops, 30% of grasslands and 4.7% of pastures²⁰.

¹⁹ The second population census was conducted in 2014 and the agricultural census was a part of 2014 census.

The first agricultural census in Georgia was conducted in 2004. The census covered all villages and towns (excluding occupied territories of Georgia); however 5 big cities were not included in the census. In 2014 together with the population census, agricultural census was conducted. This census covered all villages and cities (excluding the occupied territories of Georgia). The census methodology was prepared on the basis of FAO guidelines (A system of integrated agricultural censuses and surveys - World Programme for the Census of Agriculture 2010) and provides data on land use, crops, irrigation, fruits, vines, livefund, reservoirs for aquaculture, greenhouses, usage of agricultural products, and agricultural machinery and equipment. The census identifies agricultural holdings (any economic unit engaged in agricultural production (operating agricultural land, livefund, poultry or beehives) without regards to the scale of production, legal status of the unit and the tenure form of agricultural assets). In addition, Agricultural Census was conducted for legal entities (agricultural enterprises, etc.) in spring of 2015. Preliminary results of the agricultural census were published in April 2015 and the final results of the census (including agricultural census for enterprises) will be published in April 2016.

²⁰ These data have been calculated as a result of agricultural inventory of 2004. After this the authorities have practically kept no land balance

31.80%

Perennial

Chart 6. Distribution of land cover of Georgia

Source: Agricultural census of Georgia, 2004

2.3.2. Investment

Arable

During the last decades share of direct foreign investments in agriculture has been quite low compared to other branches of economy. In 2007-2012 share of agriculture in entire direct investments was 0.8%.

Grasslands and pastures

Maximum investment in this sector was registered in 2009, when direct investment of more than 22.3 million of US dollars was made²¹. In 2007 the volume of investments amounted to 15.5 million US dollars. In 2008 it was in the limits of 7.8 millions, in 2010 - 8.6 million US dollars, in 2011 - 14.9 millions, in 2012 - 16.1 million, after this volume of investment reduced again and in 2013 only 11.8 million US dollars entered in agriculture sector, in 2014 - 12.2 million US dollars, while in 2015 during the first two months the investment was about 8.9 million US dollars.

These statistical data demonstrate that in spite of agriculture being the priority sector in Georgia, investment to it became less active during the last years. This may be related to the decision concerning sale of land to foreign citizens²².

According to data of second quarter of 2015, from the point of view of interest for foreign investors agriculture is on eighth place.

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²¹ http://geostat.ge/

²² During 2011-2012 in Georgia facts of land being sold to foreigners in most cases caused conflict. In number of villages it resulted in controversy between foreign investor and local population thus significantly hampering land cultivation. Protest rallies were started demanding to stop selling land to foreigners. As a result in the spring of 2012 the Parliament passed the law, according to which sale of land to foreigners, foreign legal entities or local ones, founded by foreign citizens, was prohibited. In 2014 the Constitutional Court of Georgia abolished the moratorium stated by the Parliament.

2.3.3. Land productivity

Dynamics of agricultural production in the country of 2002-2009 is changeable. Production in 2002 amounted to 2.02 milliard GEL and reached its maximum in 2005 - 2.33 milliard GEL. In subsequent years the dynamic dropped and in 2009 was close to similar indicator of 2002 - 2.07 milliard GEL. Since 2010 agricultural production in the country had grown and as a result during 2014 it amounted to 3.37 milliard GEL. As a result of processing the agricultural products the goods for 4.5 milliard GEL were produced.

The entire production of agribusiness sector is by 10% more than in 2013. This is mainly caused by growth of processing sector. The indicator of the growth amounts to 13.8%. The indicator for primary production compared to the one of the previous year had grown by 5.2%.

2.3.4. Trade

Together with involvement in international trade both export and import grow in Georgia. Nevertheless, the import growth tendency is much more outlined. The growth of import can be noticed since 2002, when, compared to the previous year it grew by 7 060.6 thousand US dollars and amounted to 164 055.1 thousands, while export was 104 562.8 thousand US dollars. In 2012 import of food products to Georgia exceeded 1.2 milliard US dollars, while export exceeded 500 million US dollars. Compared to previous years highest indicators for both export and import were clocked in 2014 and amounted to 1.3 milliard US dollars for import and 825 630.7 thousand US dollars for export.

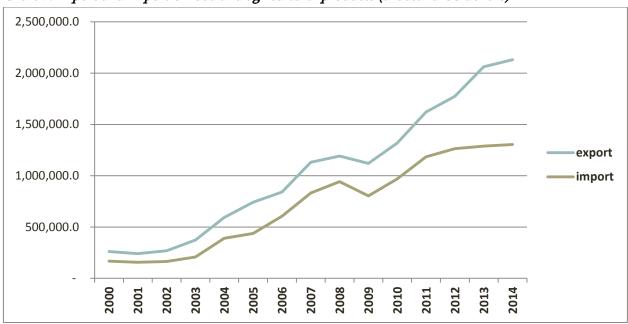


Chart 7. Export and import of food and agricultural products (thousand US dollars)

Source: GeoStat

Dynamics of foreign trade of food and agriculture products is almost exact reflection of general picture of foreign trade of Georgia, here also for years can be observed constant negative balance of trade. Analysis of 2002-2014 dynamics of 10 main import and export groups of goods creates quite good picture for evaluation of existing situation and more or less accurately reflects international competitive position of Georgia.

In the import we can see dependence on wheat, tobaccos, meat products and oils, also on cereal products. Producing most of the above mentioned products requires large land resources. There are also so called "commodities", in producing which the opportunity of creating high value is quite small.

Growth of dynamics for 10 major export products is optimistic, though it should be taken into consideration that the leading product, nuts, which is one of the most important in the export of last years, also is "commodity" type of product, success of which will strongly depend on dynamics of land and workforce costs in the nearest years.

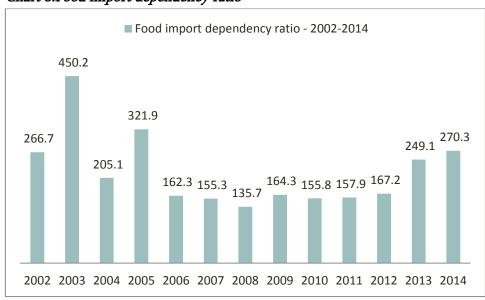
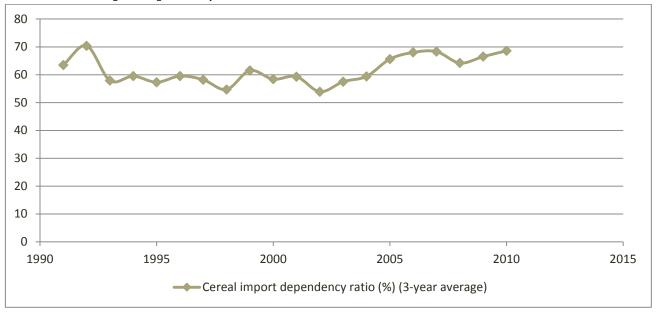


Chart 8. Food import dependency ratio

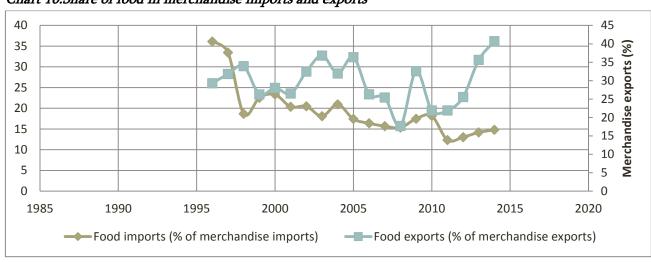
Source: GeoStat

Chart 9.Cereal import dependency ratio (%)



Source: FAOSTAT

Chart 10.Share of food in merchandise imports and exports



Source: http://data.worldbank.org/indicator/TM.VAL.FOOD.ZS.UN

2.4. Forest tenure, productivity and trends

2.4.1. Forest tenure

2.4.1.1. Types of forest tenure

Currently the forest fund of Georgia is state property²³. Bodies, responsible for managing the state forest fund are: at the Ministry of Environment Protection and Natural Resources of Georgia – LEPL National Forestry Agency and LEPL Agency of Protected Areas. Forest fund located in Abkhazia and Adjara autonomous republics is managed by corresponding bodies of the republics.

Green areas of trees and shrubs (former territory of the state forest fund) located in administrative borders of Tbilisi are managed by the Mayor's Office of Tbilisi.

Current Forest Code of Georgia defines "forest of local importance", which, in the framework of authority granted by Georgian legislation and in accordance with requirements of the Code is managed by self-governing unit²⁴.

Some areas of the forest fund are managed by private entities or persons, according to long-term tenure permission granted to them. Small part of the forest fund is given for management to Patriarchy of Georgia.

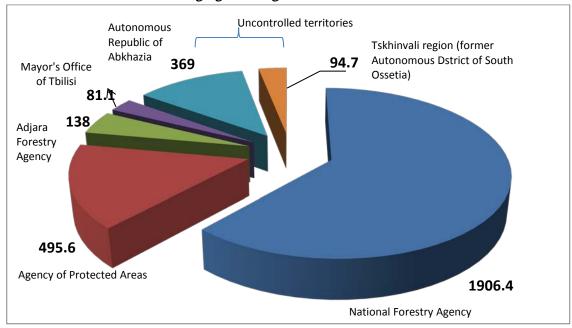


Chart 11. State authorities managing of Georgian forest fund - thousand hectares

Source: National Forestry Agency

²³ Article 9.2, Georgian Forest Code (1999).

²⁴ Currently there in no such practice and special legislation and resources are needed to fulfill this. Specification of forests of local importance according to ownership is planned.

2.4.2. Investment in Forestry Sector

Before 2004 the State Forestry Department, being an independent unit, received money for transaction costs from the Ministry of Finance.

According to the Forest Code passed in 1999, short-term (up to 1 year, including seasonal) forest use licenses could be issued. Accordingly, persons, on entities using forest had no motivation to make investments in their territories. Since 2005, according to Regulations on Forest Use Licensing, the license is granted for term up to 20 years and legal entities have obligation to invest in forest care, protection and restoration on their territories.

It has not been possible to identify entire volume of investment by owners of licenses for forest extraction on the territory of Georgian forest fund due to their confidentiality.

Below are listed licenses issued within the lands controlled by the National Forestry Agency and size of their areas²⁵:

- In 2006-2012 long-term forest extraction licenses were issued on 163.078 thousand hectares;
- In 2002-2012 licenses on 116.048 thousand hectares were issued for organization of hunting management.

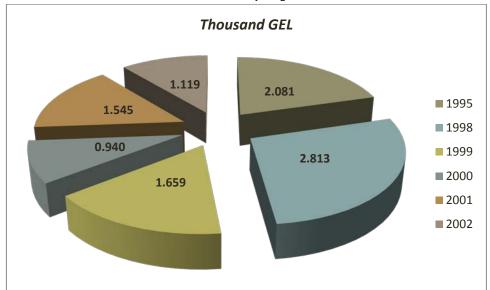


Chart 12. Transaction costs of the forestry department²⁶

Source: GeoStat

Since 2004 Forestry Agency has joined the Ministry of Environment Protection and Natural Resources as a structural unit. From this period financing of all state agencies has been increased including the Forestry Agency.

²⁵ Source: National Forestry Agency

²⁶ Specific costs of activities performed by the National Forestry Agency, such as forest tenure planning, forest restoration, creation of protection zones, protection from fire, protection from pests and diseases etc; also for keeping staff of the Natural Resources Agency.

Thousand GEL 2005 8.007 6.66 2006 6.05 10.524 2007 **2008** 6.179 8.512 **2010** 6.574 ■ 2011 **2012** 2013

Chart 13. Transaction costs of the National Forestry Agency

Source: GeoStat

2.4.3. Major changes in structure of forest institutions since 1990

In 1992-99 in the forestry sector still prevailed Soviet style of management, when administrative body performed forestry operations (logging, planting etc.) and received budget financing as well.

According to the Forest Code of Georgia economic functions have been taken from the regional forestry units, i.e. forest extraction permission has been entirely delegated to private sector.

According to the code, passing of forests from state to private ownership became allowed, with obligatory precondition of adopting special normative act. It also became possible to pass local forest fund to self-governance bodies: according to the Forest Code the state forest fund includes local forest fund, managed by local self-governance and governance bodies through corresponding offices. Nevertheless, no practical steps have been done to either privatization or decentralization.

In 1999-2004 forestry operations were managed by the State Forestry Department, which accordingly issued all documents (forest extraction license, contract, ticket, export permission) related to forest use. Forest fund of protected areas was managed by the State Department of Protected Areas, Nature Reserves and Hunting Farms. The Ministry of Environment Protection and Natural Resources participated in realization of general policy and issued licenses for arrangement of hunting farms. The main form of forest use was still remained logging, carried out on the basis of permits (licenses or tickets) granted for periods up to one year. Since 2004 as a result of legislative changes²⁷ the number of state agencies has significantly decreased. State departments have been eliminated. The Ministry of Environment and Natural Resources Protection was liquidated and the new Ministry for Environment Protection and Natural Resources was created instead. The State Forestry Department and State Department of Protected Areas, Nature Reserves and Hunting Farms went through reorganization and became part of the Ministry as the Forestry Department and Department of Protected Areas. In 2007 the Ministry of

²⁷ In 2004 the structure of executive authorities has changed. The Government of Georgia was established as the Cabinet of Ministers headed by the Prime Minister.

Environment Protection and Natural Resources started - forestry reform, the idea of which was to free the state as much as possible from the obligation of forest management. To fulfill this goal institutional reform was started. The structure of the Forestry Department has been changed, central staff reduced, territorial bodies of the department reorganized.

In March 2008 the responsibility for issuing forest use licenses was taken from the Ministry of Environment Protection and Natural Resources and passed to the Ministry of Economic Development (afterwards the Ministry of Economy and Sustainable Development). The amount (quota) of the natural resources to be obtained through licenses was defined by the Ministry of Environment Protection and Natural Resources and approved by the Ministry of Economy. In 2010 instead of the Forestry Department was created LEPL - Forestry Agency, which was granted permission to carry out certain economic activities. In spring 2011 as a result of structural changes performed by the Government of Georgia instead of the Ministry of Environment Protection and Natural Resources and the Ministry of Energy were created the Ministry of Environment and the Ministry of Energy and Natural Resources. To this one passed the Forestry Agency together with other structural units of former Ministry for Environment Protection and Natural Resources. Later LEPL Natural Resources Agency was formed. Functions of the agency include issues of forest, hunting, fishing and minerals management (defining license quotas, checking license conditions, suppression of illegal use etc). Besides, function of selling the right for using natural resources was taken from the Ministry of Economy and Sustainable Development to the Natural Resources Agency. On May 10 201328 National Forestry Agency was created, as a legal entity of public law in the system of the Ministry of Environment and Natural Resources Protection of Georgia. According to 2014 data, the agency manages the forest fund (1 895 thousand ha.) and carries out forest protection, restoration, physical defense activities, also regulation and control of forest use²⁹.

2.4.4. Employees work for the forest administration

In 1990 there were 11.7 employees working in budget organizations in forestry sector. In the beginning of 90-ies there were 600 hectares of area to be protected per one ranger (total forest fund subject to protection – 2.2 million hectares). From 1995 rapid reduction of number of employees had started and in 2003 it was 2.4 thousand persons. In 2004, when structural reorganization of forestry sector took place (*see above*), the number of employees amounted to 2.1 thousand persons. It should also be mentioned that on the next stage of the reorganization (2006) professional forestry stuff were replaced by non-professional personnel. This approach caused deterioration of general professional level within the branch. After 2006 the number of employees, among them rangers, was unknowingly reduced twice. Accordingly, the protection area per ranger grew in average up to 5000-7000 hectares. Currently there are 869 persons employed in the agency, 83 of them – in central staff, 786 – in regional offices. 569 of the employees are rangers. If we take into consideration the fact that Forestry Agency manages 1 906 thousand hectares, territory of one ranger is 3 350 ha in average³⁰.

²⁸ Decree N25 of the Minister for Environment Protection and Natural Resources of Georgia "On Approving the Statute of the LEPL National Forestry Agency"

²⁹ Report of the LEPL National Forestry Agency activities for 2014

³⁰ National Forestry Agency

Chart 14. Number of employees in Forestry Agency

Source: National Forestry Agency, GeoStat

2.4.5. Forestry production and management

Forests of Georgia provide rural population with timber and fuelwood, which are necessary for their daily life, also with non-timber forest products. For rural population wood is main source of energy for heating and cooking.

In 50-ies of the last century about 1.5 million cubic meters of wood was being cut in Georgian forests. After 1950 the forests were awarded the so called "1st category"31. Accordingly, volume of annually cut timber was reduced to 432 thousand cubic meters, while remaining timber was imported from Russia. In 1990 after gaining independence import of timber from Russia stopped and that caused heavy pressure on Georgian forests, especially because of procuring wood for heating and partially of high quality beech logs aimed for export. It is since this period that intensive economic use of Georgian forests has started. Also timber industry existing in soviet times has been shattered while new factories are still in the process of establishment and development.

It is quite difficult to define factual volume of annual fuelwood produced since 1991 because of the frequent facts of illegal timber procurement by private businesses. According to evaluation by various international or local organizations the volume of harvested fuelwood amounts to not less than 2.5 million cubic meters, which points to large scale of illegal procurement. According to official data, volume of timber cut in 1990 amounted to 392.824 cubic meters, while in 2013 – 702.137 cubic meters³². Currently the processed timber is mainly sold on local market. The majority of Georgian forests are

³¹ According to forest categorization by Soviet system forests of the 1st category were defined as protective ones, limited from the point of view of industry.

³² GeoStat

distributed in mountainous areas, so only 600.000 hectares (21%) of them can be considered as the forests for commercial use³³.

According to existing calculations, through all types of cutting, considering ecological balance of the environment and maintaining and improving of various useful functions of forest (water regulation, soil protection, resort and health function etc.), it is possible to procure 1.090 thousand cubic meters of wood annually, from where 470 thousands are timber (the calculation does not include Autonomous Republic of Abkhazia)³⁴.

Volumes of illegal timber revealed during the recent years vary up to 5-7 thousand cubic meters, but this does not reflect the existing reality at all. The reasons for this are still low level of life and lack of alternative energy sources. Officially, during the last years (2001 - 2013) the volume of revealed illegal logging in total amounted to 349.060 cubic meters. The largest volume was clocked in 2007 - 95.675 cubic meters. Revealed illegal cuttings in 2011 amounted to 7.451 cubic meters, in 2012 - 6.485 cubic meters³⁵, in 2013 - 5.283 cubic meters³⁶.

According to existing data forest harvesting indicators in state forest fund for recent years give us following picture:

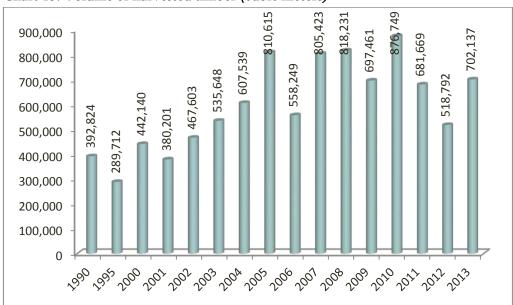


Chart 15. Volume of harvested timber (cubic meters)

Source: GeoStat, National Forestry Agency

³³ Forest Policy and Institutional Change Analysis in Central Asian and Caucasus Countries, *Regional Project.*FAOFOEP/FAOSEC. Merab Machavariani. 2009

³⁴ Forestry Reforms. National Forestry Agency, 2013

³⁵ GeoStat

³⁶ These data are given only in statistics. Based on general observation of forest condition it can be said that they do not reflect reality and the indicator may be much higher.

As was mentioned above, the main part of Georgian forests is managed by the National Forestry Agency of Ministry of Environment and Natural Resources Protection³⁷. The agency in the limits of its responsibility regulates main issues related to management of state forest fund, such as:

- Monitoring of the forest fund;
- Care and restoration of the forest:
- Issuing harvesting tickets;
- Issuing ticket for use of forest resources;
- Protection of forest from illegal logging;
- Timber harvesting etc; also:
- Defining various types of forest use (for example, using non-timber forest products, running of forest plantations, using forest for agricultural purposes, resort, recreation, sports and for other cultural or health purposes, organising fisheries, organizing animal asylums and nurseries; non-agricultural use etc.)³⁸.

2.4.6. Import and export of forest products

Since independence of Georgia starts active export of timber resources. At that time the main export material was hornbeam, but there was also demand for fir and spruce timber.

In 90-ies export of round wood became uncontrollable. At the same period in order to reduce pressure on forest were introduced temporary restrictions, in particular on final fellings (1998-1999) and on log export. Later (in 2001 and 2005) the Parliament of Georgia approved regulations of forest use and export of timber products³⁹. As a result since 2006 growth of import/export volume of timber resources can be noticed.

2.5. Other factors

2.5.1. Natural disasters

Georgia is located on the border of subtropical and moderate climate zones and belongs to climate region of Mediterranean, though its typical characteristics are substantially changed by mountainous landscape, and is characterized by particular variety of climate. The territory of Georgia contains 11 out of 14 existing climate zones due to very complicated merging of climate factors and vast scale circulation processes⁴⁰.

³⁷ The Law on Management of Forest fund of Georgia

³⁸Current legislation does not grant National Forestry Agency any economic functions, so there are no regulations for some types of forest use (e.g. gathering non-timber resources, forest plantations etc.) The new Forest Code (work on which is now in progress) will grant the agency these functions.

³⁹ Decree N1037 of the Parliament of Georgia on Urgent Measures for Regulation of Forest Use and Timber Export, July 20, 2001; Law of Georgia on 'Licenses and Permits'', N1775, June 24, 2005

⁴⁰ Second National Communication to the United Nations Framework Convention on Climate Change, results obtained in 2007. Tbilisi, 2008

Due to complicated mountainous landscape Georgia belongs to one of the most difficult regions in the world from the point of view of dangerous natural calamities, frequency of their reiteration and negative impact of these processes on population as well as infrastructure and economic objects. So it can be said that Georgia is unprotected against natural disasters, such as floods, earthquakes, draughts, landslides and avalanches. The disasters threaten Georgia by economic damage that may exceed 20% of GDP⁴¹. Floods belong to the category of the calamities of high probability. For example, in 1997 in Kvemo Kartli region economic damage resulting from floods amounted to 29.5 million US dollars. In June 2005 in the region of Mtskheta-Mtianeti economic damage caused by floods amounted to 2 million US dollars (ISDR "Central Asia and Caucasus, Initiative for Danger and Risk Assessment", 2007). In 1995-2009 total economic damage from floods exceeded 1 milliard dollars.

On June 13 of this year several-hour long rain in Tbilisi caused rise of river Vere. As a result of the swell the river entirely flooded nearby areas. The calamity killed up to 20 people, while 3 are still considered lost. The flood has destroyed the zoo, as well as road surface and infrastructure.

Forest areas play the most important role in mitigation of natural disasters because their degradation in exactly what assists development of floods, landslides and other elemental processes, which greatly harm rural population and agriculture.

In 1980-2000⁴² Georgia was the least protected country in the wide region of Eastern Europe and Central Asia judged by flood mortality rate. Since 2004 institutional environment of flood risks management and support of timely rehabilitation has significantly improved, though a lot remains to be done and levels of risk and insecurity are still high.

B. Policies and institutions

2.6. Policy and legal aspects

2.6.1. Main policy documents

On December 23, 2011 the Parliament of Georgia approved the National Security Concept, which has replaced the National Security Concept passed in 2005⁴³. Here special attention is given to such natural disasters as flood, landslide, avalanche, and earthquake; also the goal to protect forest resources is set etc. According to a decree of the Government of Georgia⁴⁴ in 2013 the Program of "Regional Development of Georgia for years 2015-2017" was created, which is medium-term governmental document. It defines main goals and objectives of the regional policy of Georgia, relevant priorities and activities and declares as priority N3 development of agriculture and forestry. This priority is oriented on improving level of life in rural areas in general and encouraging diversification of economy (it is entirely compatible with EU

⁴¹ "Adapting to Climate Change in Europe and Central Asia", World Bank (2009).

⁴² "Developing Climate Resilient Flood and Flash Flood Management Practices to Protect Vulnerable Communities of Georgia", AF/UNDP project

⁴³ Decree N1895 of the Parliament of Georgia "On Approval of the National Security Concept of Georgia", July 8 2005

⁴⁴ Decree N1315 of the Government of Georgia "On Preparation of the Program of Regional Development of Georgia for years 2015-2017", September 10, 2013

agriculture development policy). It also includes sustainable development of forestry, which is potentially considered one of major assets from both environmental and economic point of view.

Afterwards, in 2014, by a decree of the Government of Georgia⁴⁵ the strategy of social and economic development of Georgia "Georgia 2020" was approved, which defines priority directions to relevant ministries. The strategy involves introduction of practice of protection and rational use of forest resources, which will significantly improve social and economic situation of the population, because development of agriculture and other sectors of economy depends on health of forest ecosystems.

2.6.1.1. Forest policy

First official document of forest policy – "Main Principles of State Policy for Development of Forestry Sector of Georgia, 2002 - 2010" – was created and approved by the Government of Georgia in May 2002⁴⁶. The document stated that this sector is one of the most important for social and economic development of the country and declared obligation to develop it through creation of national policy. This would be in full accordance with UN requirements in the sphere of sustainable development and management of forests. The above mentioned document also was action plan for national policy of forestry sector.

In 2004 Georgia became first country involved in NFPF process initiated by FAO/UNDP and started the process of working out its forestry policy and strategy. The first working version of the new policy document was ready in 2007, though it was never afterwards considered for approval by relevant state establishments.

In the end of December 2013 the Parliament of Georgia approved "National Forestry Concept of Georgia", based on which the Ministry of Environment and Natural Resources Protection started the process of working out national forestry program.

The main policy documents of Georgia, which define attitude of the state towards forests:

National Forestry Policy shall apply to all forests of Georgia irrespective of their ownership and form of management. One of its priority directions is defined as restoration of degraded forests and reforestation. A large area of the forest fund is severely degraded as a result of inadequate forest use practiced during long period of time. Degraded forest landscapes are more prone to soil erosion and landslides.

According to the same document the first instance the area of degraded forests shall be specified, the areas subject to restoration and reforestation shall be identified and relevant actions need to be planned/implemented.

The goal of the *Forestry Concept of Georgia*⁴⁸ is to establish a system of sustainable forest management that will ensure: improvement of the quantitative and qualitative characteristics of Georgian forests, protection of biological diversity, effective use of the economic potential of

⁴⁵ Decree N 400 of the Government of Georgia "On Approval of Strategy of Social and Economic Development of Georgia "Georgia 2020" and Activities Related to It", June 17 2014

⁴⁶ The document was signed by the State Minister

⁴⁷Approved by the Parliament of Georgia on 11 December, 2013,

http://w3.cenn.org/wssl/uploads/home/National%20forest%20policy%20for%20georgia%20(ENG).pdf

⁴⁸Approved by the Parliament of Georgia on 11 December, 2013

forests taking into account their ecological value, public participation in forest management related issues, and fair distribution of derived benefits.

To achieve this goal the Georgian forests should be used in a way, and at a rate, that ensures maintenance of ecological health and use of their socio-economic potential.

- Priority directions of the concept are:
 - Forest management planning, where in the first instance the area of degraded forests should be specified, the areas subject to restoration and afforestation should be identified and relevant actions would then be planned/implemented.
 - Rational use of forest resources
 - Forest ownership, management and use right
 - Adaptation to the impacts of climate change

2.6.1.2. Agricultural policy

After agriculture took dominating place in political agenda of Georgia, business sector, civil society, NGOs and Orthodox Church (which owns large property and land in Georgia) started activities in order to support it. This assisted preparation of strategy of agrarian sector development for years 2015-2020. Assisting the Ministry of Agriculture in development of the strategy is also priority of European Union, formulated in EU Food Security Program (EU-FSP) 2007 and also later, in European Neighborhood Program of Agrarian and Rural Development (ENPARD) 2012.

Strategic vision of development of Georgian agriculture based on principles of sustainable development includes creation of environment which will assist improvement of competitiveness in agriculture and food sector, stable growth of high quality production, food security, food safety and overcoming poverty in rural areas.

The strategy also involves fulfillment of obligations taken in the framework on Deep and Comprehensive Free Trade Area Agreement between Georgia and the EU⁴⁹ (according to agreed terms of approachment), which will provide for maximum proximity to international standards and norms and improvement of production.

Strategy of development of agriculture in Georgia

In order to put into practice the vision of the Strategy for Agricultural Development in Georgia seven main objectives have been defined:

- Enhanced competitiveness of rural entrepreneurs;
- Institutional development;
- Amelioration and Soil Fertility in this direction of the strategy identified modernization of
 irrigation and drainage infrastructure aims at improvement of water management, water removal from
 flooded areas, increase of the area covered and makes the soil fit for plant growing. The rehabilitated

⁴⁹ On November 28, 2013, within the framework of the Eastern Partnership Summit in Vilnius, Initialing of the Association Agreement and a part of the agreement of Deep and Comprehensive Free Trade Area (DCFTA) between Georgia and the EU was completed, See the document at:

irrigation and drainage infrastructure, as well as carrying out specific activities on restoration of seed-growing sector, will ensure guaranteed harvest of agricultural crops;

- Regional and sectorial development value chain development;
- Ensuring Food Security according to this direction The MoA will continue monitoring food security and also support subsistence farms to reduce their risks. The further encouragement will be given to the process of commercialization of subsistence farms. Special programs will be developed to increase incomes of farmworkers;
- Food safety, veterinary and plant protection;
- Climate change, environment and biodiversity.

In the context of realization of these goals list of specific activities has been worked out⁵⁰. According to the action plan already published by the Ministry of Agriculture for development of the branch following strategic goals have been set:

- Improvement of competitiveness of farmers and employees of agrarian sector;
- Support to development of value chain development
- Institutional development and training;
- Development of regional and agricultural infrastructure;
- Food security;
- Environment and biodiversity.

2.6.2. Main legal documents regulating forestry and agriculture

2.6.2.1. Forestry

Legislation regulating forest management and forest use⁵¹

Legislation of Georgia in the sphere of forest management consists of the Constitution of Georgia, international agreements, laws "On Protection of Environment", "On Protected Areas", "On Protection of Animal World", land legislation, Forest Code, Law on Forest Fund Management and other normative documents.

- Forest Code of Georgia, 1999 (with amendments and additions)⁵²
- Law of Georgia on Licenses and Permits, 2005 (with amendments and additions)
- Law of Georgia on Forest Fund Management, 2010 (with amendments)
- Decree of the Government of Georgia N96 "On Taking out and Adding Areas to the State Forest Fund", May 10, 2007 (with amendment)
- Decree of the Government of Georgia N179 "On Approval of Procedure for Forest Inventory, Planning and Monitoring",

51https://matsne.gov.ge

⁵⁰http://moa.gov.ge/

⁵² According to explanation by Head of Forestry Policy Office Karlo Amirgulashvili, working group is created, which works on new Forest Code. He supposes that the Code will be submitted to the Parliament for approval in spring.

- Decree of Government of Georgia N132 "On Rules and Conditions of Issuing License for Forest Use", August 11, 2005, which establishes procedures and conditions of issuing licenses for harvesting and organizing hunting farms (with amendments);
- Decree of the Government of Georgia N242 "On Approval of Rules for Forest Use", August 20, 2010 (with amendments);
- Law of Georgia "On Fees for Use of Natural Resources", December 29, 2004 (with amendments)
- Law of Georgia "On Ownership of Agricultural Land", March 22, 1996 (with amendments);
- Decree of the Government of Georgia N240 "On Rules of Defining Borders of State Forest Fund",
 August 13, 2010 (with amendments);
- Law of Georgia "On Public Registry", December 19, 2008 (with amendments and additions).

2.6.2.2. Agriculture

Agricultural activities are regulated by following basic legislative documents⁵³:

- Law of Georgia on "Ownership of Agricultural Land", March 22, 1996 (with amendments);
- Law of Georgia on "Licenses and Permits", June 24, 2005 (with amendments and additions);
- Law of Georgia on "Soil Protection", May 12, 1994 (with amendments);
- Law of Georgia on "Agricultural Cooperative", July 12, 2013 (with amendments)
- Law of Georgia on "Food/animal food Safety, Veterinary and Plant Protection", May 8, 2012
- Law of Georgia "On State Property", December 19, 2008 (with amendments and additions);
- Law of Georgia "On Public Registry", July 21, 2010 (with amendments and additions);
- Law of Georgia on "Compensating for Substitute Land Development Value and Sustained Damage When Allocating Agricultural Land for Non-agricultural Purposes", 2 October, 1997, (with amendments and additions).

2.7. Institutional frameworks for land use change governance

2.7.1. Land use planning documents

Land resources and category⁵⁴ of agricultural land plot can be registered (or the existing registration can be changed) according to the Law on "Public Registry"⁵⁵. According to the same law - land plot as agricultural or non-agricultural purpose is registered as stated in ownership document; as well is changed the purpose of the land from agricultural to non-agricultural and category of agricultural land plot ⁵⁶.

⁵³ Land Code of Georgia as complex law regulating land tenure in the country is not completed and approved yet. Last land code was passed in 1971.

⁵⁴ Categories of agricultural land are pastures, grasslands, arable (taken by perennial crops, garden, vegetable garden) and homestead land.

⁵⁵ Law of Georgia on Public Registry, article 15

⁵⁶ Rules and conditions of change of purpose of land plot and of category of agricultural land plot are defined by instruction – Decree N4 of the Minister of Justice of Georgia on approval of the guidelines of the Public Registry, January 15, 2010

Legal relations concerning specification of borders of state forest fund are defined by decree of the Government of Georgia "On rules of Defining of State Forest Fund Borders". Borders of the state forest Fund can be changed or corrected through registration on the basis of application by the Ministry of Economy and Sustainable Development of Georgia. Border can also be corrected on the basis of application by owner of the land plot⁵⁷.

Keeping public registry and availability of information is provided by a LEPL National Agency of Public Registry, in charge of the Ministry of Justice of Georgia, which is public legal registration body defined by law⁵⁸.

2.7.2. Stakeholder involvement in planning process

According to the General Administrative Code of Georgia⁵⁹ public institution is obliged to deliver public information immediately. At the same time, if the information requires processing, 10- day term may be set for giving it. "Immediately", for its part, means indefinite date, so specific and sensible conditions must be determined. For example, public information is considered to be given immediately, if this happens within 3 days from request.

3. Summary and analysis of positive trends

3.1. Forestry sector

In order to solve problems related to management of Georgian forests specific activities were planned, which on various stages have been reflected in following program documents:

With active participation of stakeholders "National Forestry Concept of Georgia" (2013) has been prepared. The document specifies attitude of the state towards forests of Georgia. Based on the concept and on biodiversity policy documents the Ministry of Environment and Natural Resources Protection of Georgia with support of the German Society for International Cooperation (GIZ) in spring 2013 started realization of the National Forestry Program involving all stakeholders.

Currently legislative and statutory acts regulating forestry sector do not comply with principles of sustainable forest management. Shortcomings and collisions occurring in these normative acts account for their controversy with each other as well as with other legislation related to forestry. Accordingly, it is important to start working on new forestry legislation and statutory acts, which will in future assist sustainable management of forests and will be obligatory for all subjects responsible for forest management. So, based on the above mentioned policy documents, work on the new Forest Code has started in 2014.

Since 2013 changes have been made to the forestry system. LEPL National Forestry Agency has been created with employing staff of 869 persons. Number of rangers employed by the agency has also increased. According to data of February 2014, there were 569 rangers working there. So the area to be

⁵⁷Law of Georgia on Public Registry, article 15

⁵⁸ Law of Georgia on Public Registry, article 3

⁵⁹ www.matsne.gov.ge

protected was reduced in average to 3000 hectares per person. At the same year the Forestry Policy Office and the Environmental Supervision Department were created at the Ministry of Environment and Natural Resources Protection. The goal of the reform is to dissociate forest management, physical protection, policy and legislation provision functions from each other.

The positive trend can be considered also the fact that forest inventory work is carried out on large area of the state forest fund. Currently the above mentioned work is being continued by the LEPL National Forestry Agency and the continuation is also planned for future years.

It should also be mentioned that there has been no reduction of forest areas in the country at the cost of enlargement of agricultural plots. In several cases growth of forest cover can be noticed. This is caused by migration of local population, especially from mountainous regions, which has reduced pressure on natural ecosystems caused by forest cutting and excessive, mostly uncontrolled grazing. Under the influence of this factor and also of climate change, forest areas in some mountainous regions (e.g. Khevi, Racha) have increased.

We should also mention separately work by the Ministry of Environment and Natural Resources Protection with support of donor organizations on legislative initiative concerning improvement of sustainable use of non-timber forest resources.

According to Biodiversity Policy and Action Plan of Georgia for 2014-2020, by 2020 forest biodiversity will be protected through introducing best practices of sustainable forestry⁶⁰.

3.2. Agriculture

Since 2013 support of agriculture has been one of the main priorities for the Government of Georgia. The aim of the government is on the basis on the principles of sustainable development to encourage the proper environment for the reliable growth of high quality agricultural production, enhance competitiveness, provide food security and overcome poverty in rural areas.

The government has started several agrarian programs in direction to improve of irrigation systems, awareness rising among farmers, better agricultural enterprises and better financial conditions for farmers.

During the recent years financing of agriculture form the state budget and with additionally co-financing by grants from international foundations and loans grew significantly. Special attention is given to improve amelioration infrastructure, purchase and use of agricultural machinery, realization of assistance program for small farms, preventive measures against cattle diseases, purchasing equipped laboratories to be able to issue international accreditation, diversification of foreign markets.

After signing the Association Agreement in June 2014 quality of relations between European Union and Georgia passed to completely new level. The agreement and the Deep and Comprehensive Free Trade Area (DCFTA) it involves include opportunities of future political and economic integration with EU, significant deepening of political and economic relations, proximity of Georgia to Europe. This agreement makes it possible for agricultural products exported from Georgia to make their way freely to EU market.

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 $^{^{60}}$ National goal C.3.2014-2020. Strategy and Action Plan of Georgian Biodiversity. Decree of the Government of Georgia N343, May 8, 2014

ANNEXES

Figure 1: Chain-linked volume indices of Gross Domestic Products (2003=100,%)61

	200			005 2	•		2008	2009	2010	2011	2012	2013
Agriculture, hunting and	100	92.1	103.2	91.1	94.1	89.9	83.8	79.8	87.5	84.2	93.7	
forestry; fishing	100	72.1	100.2	71.1	71.1	07.7	05.0	77.0	07.5	01.2	70.7	
mining and quarrying	100	80.1	73.8	87.7	105.1	122.7	134.2	140.4	128.4	136.8	140.6	
manufacturing	100	111.6	127.3	155.6	173.6	171	156.5	188.1	211.1	238.9	259.5	
electricity, gas and water supply	100	96	100.9	114.5	122.2	126.7	134.6	137.3	151.9	152.9	160.7	
Processing of products by households	100	98.4	110.6	113.8	145.8	139.2	136.7	130.4	141.6	137.9	147.3	
Construction	100	135.9	155	168.3	192.9	171.5	166.1	176.8	181.7	214.8	192.2	
Trade; repair of motor vehicles and personal and household goods	100	108.2	118.3	141.7	155.3	173.6	145.3	165.8	172.9	185.0	195.0	
Hotels and restaurants	100	103.5	120.7	133.3	148.5	155.7	148.9	168.4	186.0	207.2	216.7	
Transport	100	103.7	107.7	125.9	140.8	127.4	128.1	144.7	158.2	169.2	174.6	
Communication	100	116.9	150.5	170.7	185.6	215	207.8	229.4	248.7	273.8	276.1	
Financial intermediation	100	112.8	172.5	236.1	272.2	283.8	288.1	330.5	398.9	457.9	490.1	
Real estate, renting and business activities	100	128.1	141.7	166.3	204.7	209.6	201.1	221.4	253.6	267.1	292.7	
Imputed rent of own occupied dwellings	100	100.6	101.5	101.7	107.2	110.6	113.7	116.6	120.0	124.5	128.3	
Public administration	100	109.7	102.8	100.4	116.3	127.9	129.4	130.4	135.3	139.8	142.8	
Education	100	101.8	115.9	129.8	142.1	160.8	168.4	173.6	179.6	185.2	189.6	

⁶¹ 1.GeoStat;

^{2.} Nationa Bank of Georgia;

^{3.} Ministry of Economy and Sustainable Development of Georgia;

Health and social work	100	104.2	112.1	129.4	142.8	152.6	165.8	170.7	173.4	178.4	178.4	
Other community, social and	100	106.5	126	135	167.4	170	147.9	165.1	176.4	188.9	192.0	
personal service activities	100	100.5	120	155	107.4	170	147.5	105.1	170.4	100.7	172.0	
Private households employing												
domestic staff and												
undifferentiated production	100	120.5	97.8	106.2	114.1	120.7	124	135.8	205.2	219.0	217.6	
activities of households for												
own use												
Financial Intermediation												
Services Indirectly Measured	100	92.1	145.1	123.4	175.8	222.1	219.8	240.9	294.9	325.0	362.6	
(FISIM)												

Figure 2. Gross National Income (GNI)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Gross National Income (GNI), mil. USD	4,022,1	5,218,9	6,505,2	7,937.6	10,211.8	12,628.2	10,649.4	11,277.2	13,903.6	15,700.5	15,835.3	16,376.8
GNI per capita, USD	926,2	1 209,4	1 505,3	1,803.5	2,323.7	2,881.8	2,428.4	2,542.0	3,111.0	3490.9	3531.7	3647.0

Figure 3. Foreign Direct Investments in Georgia by Economic Sectors. 1000 USD

	2007	2008	2009	2010	2011	2012	2013	2014
Total	2 014 841,6	1 563 962,4	658 400,6	814 496,6	1 117 244,1	911 564,3	941 902,6	1 758 422,9
of which:								
Agriculture, fishing	15 527,9	7 844,3	22 326,9	8 631,9	14 907,6	16 119,3	11 857,4	12 290,3
Mining	86 170,0	18 105,2	15 023,4	53 435,9	40 219,6	4 862,2	43 704,9	42 781,5
Manufacturing	312 070,9	188 287,8	124 781,7	175 334,5	120 339,7	167 906,5	99 765,1	205 417,4
Energy sector	362 581,1	294 864,8	-2 130,6	21 877,9	203 951,6	179 402,6	244 745,1	189 945,0
Construction	171 891,8	56 725,3	105 218,8	4 705,9	48 112,2	41 839,2	49 847,5	316 588,1
Hotels and restaurants	242 075,9	181 939,2	37 542,3	17 121,8	22 705,6	17 652,3	-13 360,1	124 851,8
Transport and Communication	416 694,7	422 690,0	98 432,0	215 116,2	126 517,2	72 828,9	140 104,4	433 654,7
Health and social work	458,3	550,6	289,1	1 182,4	16 827,0	17 550,8	720,0	-9 507,6
Real estate ⁶²	30 543,9	277 837,7	147 410,3	119 253,0	224 776,3	52 805,6	42 294,6	138 654,8
Financial intermediation 63	157 723,1	10 891,7	49 663,4	107 406,4	167 701,8	162 552,2	166 386,3	115 322,6
Other sectors ⁶⁴	219 104,1	104 225,8	59 843,3	90 430,7	131 185,5	178 044,8	155 837,4	188 424,2

Figure 4. Main trends of Agriculture sector in 1990-2014

Year	Sown areas, ha.	Share of agriculture in GDP (%)
1990	701,9	31,6
1995	453,1	44,4
2000	610,8	20,2
2005	539,6	16,8
2006	330,2	11,2
2007	297,2	10,7

 $^{^{62}}$ Real estate, renting and business activities; 63 Since 2009 data for the financial sector besides banks include FDI data in insurance and microfinancial companies;

⁶⁴ Trade; Education; Research and experimental development; Other community, social and personal service activities.

2008	329,3	9,4
2009	308,3	9,4
2010	275,3	8,4
2011	281	8,8
2012	259,6	8,6
2013	310,7	9,4
2014	316,6	9,2

Figure 5. Share of forestry sector in GDP (%) mln. GEL

	•									
	1998	1999	2000	2001	2005	2008	2009	2010	2011	2012
Forestry and wood processing	80.7	113.3	78.2	86.0	86.0	70.2	64.0	63.1	82.6	85.6
GDP	5,040.6	5,666.0	6,015.5	6,618.8	6, 618.8	19, 074.9	17, 986.0	20, 743.3	24, 344.0	26, 138.9
Share %	1.6	2	1.3	1.3	1.3	0.4	0.35	0.3	0.34	0.32

Figure 6. Money transfers and share in GDP

	2008	2009	2010	2011	2012	2013	2014**	I 2015 ⁶⁵
Inflow (mln. USD)	1 002,1	841,8	1 052,2	1 268,1	1 334,2	1 477,0	1 440,8	249,4
GDP (mln. USD)	12 800,5	10 767,1	11 636,5	14 438,5	15 846,8	16 139,9	16 528,5	3 298,9
Share of inflow money in GDP (%)	7,8	7,8	9,0	8,8	8,4	9,2	8,7	7,6

⁶⁵ National Bank of Georgia, https://www.nbg.gov.ge/uploads/sagareoseqtori/money_transfers_by_systems_geo.xls

Figure 7. Resident population of Georgia⁶⁶

Years	Total population, thousands	on w	hich:	In total population, per cent			
		urban	rural	urban	rural		
1989	5400.8	2991.3	2409.5	55.4	44.6		
1990	5424.4	2998.5	2425.9	55.3	44.7		
1991	5453.3	3004.6	2448.7	55.1	44.9		
1992	5467.4	2983.4	2484.0	54.6	45.4		
1993	5345.8	2914.1	2431.7	54.5	45.5		
1994	4929.9	2652.8	2277.1	53.8	46.2		
1995	4794.2	2568.4	2225.8	53.6	46.4		
1996	4674.5	2483.2	2191.3	53.1	46.9		
1997	4558.4	2412.5	2145.9	52.9	47.1		
1998	4504.9	2365.8	2139.1	52.5	47.5		
1999	4469.8	2338.2	2131.6	52.3	47.7		
2000	4435.2	2308.2	2127.0	52.0	48.0		
2001	4401.4	2280.7	2120.7	51.8	48.2		
2002	4371.5	2284.8	2086.7	52.3	47.7		
2003	4342.6	2266.8	2075.8	52.2	47.8		
2004	4315.2	2252.5	2062.7	52.2	47.8		
2005	4321.5	2257.5	2064.0	52.2	47.8		
2006	4401.3	2310.4	2090.9	52.5	47.5		
2007	4394.7	2308.9	2085.8	52.5	47.5		
2008	4382.1	2303.8	2078.3	52.6	47.4		
2009	4385.4	2309.1	2076.3	52.7	47.3		
2010	4436.4	2350.5	2085.9	53.0	47.0		
2011	4469.2	2371.3	2097.9	53.1	46.9		
2012	4497.6	2391.7	2105.9	53.2	46.8		
2013	4483.8	2410.8	2073.0	53.8	46.2		
2014	4490.5	2411.7	2078.8	53.7	46.3		

http://www.geostat.ge/cms/site_images/_files/archive/yearbook/Statistical%20Yearbook%20Georgia_2009.pdf

⁶⁶ Hereafter population data are given: for 2002– according to the Census of January 17; for 1989 – the Census of January 12, for other years – at the beginning of the year. Population for 1994-2014 is given excluding the population of Abkhazia and Tskhinvali region.

Figure 8. Balance of the international migration of population (thsd. person)67

Years	Net migration
1991- 1998	-790.2
1999	-36.1
2000	-35.2
2001	-32.6
2002	-27.8
2003	-27.5
2004	5.5
2005	76.3
2006	-12.1
2007	-20.7
2008	-10.2
2009	34,2
2010	18.1
2011	20.2
2012	-21.5
2013	-2.6

Figure 9. Land cover of Georgia (thsd. ha.)68

	Total area	Agricultural land	Arable land	Permanent crops	Meadow	Pasture
Area, total: on which:	7628,4	3025,8	801,8	263,8	143,8	1796,6
Private land	948,9	767,3	438,5	180,5	44,5	84,5
Public land	6679,5	2258,5	363,3	83,3	99,8	1712,1

⁶⁷ http://www.geostat.ge/cms/site images/ files/yearbook/Yearbook 2014.pdf

⁶⁸ Natural Resources of Georgia and Environmental Protection, 2014. Statistical Publication. GeoStat. http://www.geostat.ge/cms/site images/ files/georgian/agriculture/sakartvelos%20bunebrivi%20resursebi%20da%2 0garemos%20dacva 2014.pdf

Figure 10. Output of agriculture (mln. GEL)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	201469
Plant growing	968.3	1149.7	1047.9	1184.5	911.4	1051.6	918.1	868,3	932,1	1237,9	1087,0	1405,2	1485,7
Animal husbandry	1013.0	1070.9	1095.4	1105.3	1165.3	1138.8	1227.6	1140,5	1240,3	1336,8	1610,3	1665,8	1731,8
Agricultural services	41.5	41.5	40.6	40.5	57.5	60.5	57.2	63,4	69,4	99,3	109,9	139,0	160,7
Output of agriculture, total	2022.8	2262.1	2183.9	2330.3	2134.2	2250.9	2202.9	2072,2	2241,8	2674,0	2807,2	3210,0	3378,1

Figure 11. Import dynamics of major import products – thsd. USD (2000-2006)

	2000	2001	2002	2003	2004	2005	2006
Wheat and meslin	29 152,1	14 395,5	20 056,5	27 950,7	75 021,8	45 130,1	99 063,1
Cigars, cheroots, cigarillos and cigarettes	29 390,5	18 717,6	18 915,4	20 790,0	27 793,1	14 604,3	22 895,2
Sugar	25 368,9	24 137,9	34 690,2	52 959,3	50 833,8	78 194,2	65 589,1
Meat and edible offal, of the poultry, fresh, chilled or frozen	8 729,9	8 813,5	11 106,8	9 782,1	9 689,9	13 803,3	22 169,8
Sunflower-seed, safflower or cotton-seed oil and fractions thereof	3 274,6	2 699,6	3 142,8	3 501,7	15 956,9	21 889,8	23 582,8
Chocolate and other food preparations containing cocoa	1 825,5	3 293,6	5 914,9	10 393,7	19 624,9	24 820,8	33 694,4
Frozen fish	1 161,7	980,4	1 264,2	1 930,7	4 012,0	7 645,6	20 338,5
Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages below 80% alcohol content	574,7	1 066,6	1 549,7	4 300,3	5 513,1	9 921,1	20 632,3

⁶⁹ Preliminary data. GeoStat

Bread, pastry, cakes and the like	1 204,4	904,6	1 171,6	1 886,3	7 735,7	11 042,4	14 261,4
Meat of swine fresh, chilled, or frozen	181,7	281,6	596,5	879,8	1 469,5	2 836,8	11 778,6
Margarine	1 580,9	2 360,0	2 413,6	2 428,7	4 724,5	6 523,6	9 607,7

Import dynamics of major import products – thsd. USD (2007-2014)

	2007	2008	2009	2010	2011	2012	2013	2014
Wheat and meslin	139 188,9	108 851,7	105 506,0	174 156,0	184 232,2	239 961,7	184 806,9	151 755,5
Cigars, cheroots, cigarillos and cigarettes	38 075,0	60 048,0	57 424,7	78 990,2	86 742,7	90 578,5	95 717,3	115 474,2
Sugar	90 457,4	66 023,6	50 407,8	74 233,4	92 947,3	84 509,7	67 382,6	63 391,1
Meat and edible offal, of the poultry, fresh, chilled or frozen	36 256,5	44 763,0	37 229,5	47 954,3	66 064,8	69 844,4	71 428,7	71 955,8
Sunflower-seed, safflower or cotton-seed oil and fractions thereof	29 334,3	45 730,8	28 788,9	46 878,2	54 179,8	51 252,7	53 782,9	37 534,1
Chocolate and other food preparations containing cocoa	41 441,1	49 735,6	42 862,9	46 615,9	50 518,6	53 087,0	61 501,2	59 594,5
Frozen fish	26 306,0	26 599,1	22 504,8	26 881,2	30 893,8	33 679,7	35 315,2	31 161,3
Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages below 80% alcohol content	14 556,6	21 005,3	26 662,3	27 435,0	32 634,3	32 838,8	39 609,0	54 749,4

Bread, pastry, cakes and the like	18 580,1	25 376,8	19 221,5	22 352,4	29 223,0	30 071,5	32 695,1	34 045,5
Meat of swine fresh, chilled, or frozen	9 918,1	16 518,7	12 667,7	13 454,4	18 858,3	28 880,3	34 081,4	38 098,9
Margarine	11 667,9	16 247,7	15 814,1	20 846,5	27 280,6	28 525,1	27 372,8	28 231,7

Figure 12. Export dynamics of major export products - thsd. USD (2000-2006)

	2000	2001	2002	2003	2004	2005	2006
Other nuts, fresh or dried	221,1	334,8	178,7	212,4	1 276,0	486,2	449,8
Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages below 80% alcohol content	574,7	1 066,6	1 549,7	4 300,3	5 513,1	9 921,1	20 632,3
Wine of fresh grapes	149,8	333,9	303,6	529,3	346,9	971,2	6 952,9
Waters, natural or artificial mineral	28,0	11,1	13,8	60,8	106,1	300,0	1 123,6
Wheat and meslin	29 152,1	14 395,5	20 056,5	27 950,7	75 021,8	45 130,1	99 063,1
Live bovine animals	58,6	0,9	ı	105,5	-	-	52,2
Live sheep and goats	38,9	-	-	-	-	-	4,8
Waters, mineral and aerated waters, containing added sugar	184,1	150,1	159,0	326,1	785,9	1 766,2	4 002,5
Fruit and vegetable juices	568,4	410,4	671,6	1 621,9	3 007,5	4 306,1	2 829,3
Maize	5,7	6,5	1,0	170,5	177,0	1 063,1	4 554,6
Citrus fruit, fresh or dried	2 450,1	1 606,5	1 556,9	2 131,6	2 620,4	5 897,1	2 545,5

Export dynamics of major export products - thsd. USD (2007-2014)

continue

	2007	2008	2009	2010	2011	2012	2013	2014
Other nuts, fresh or dried	1 253,1	851,0	1 245,6	581,3	779,3	1 994,9	2 197,2	3 196,4
Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages below 80% alcohol content	14 556,6	21 005,3	26 662,3	27 435,0	32 634,3	32 838,8	39 609,0	54 749,4
Wine of fresh grapes	2 087,2	393,8	1 046,3	2 036,2	738,7	1 526,6	2 066,1	2 568,9
Waters, natural or artificial mineral	323,1	339,6	379,5	246,5	344,8	223,8	360,2	480,9
Wheat and meslin	139 188,9	108 851,7	105 506,0	174 156,0	184 232,2	239 961,7	184 806,9	151 755,5
Live bovine animals	1 352,4	1 886,9	550,6	181,6	259,2	420,7	1 379,2	2 379,0
Live sheep and goats	ı	785,3	4,1	-	363,5	1 588,1	904,1	4 125,9
Waters, mineral and aerated waters, containing added sugar	7 114,6	11 407,9	9 291,8	11 835,3	14 419,1	17 153,5	21 605,2	24 213,7
Fruit and vegetable juices	3 599,3	3 570,7	3 188,1	2 935,3	3 102,2	3 547,8	6 288,3	6 124,6
Maize	4 064,3	1 993,1	1 096,7	2 650,3	994,8	7 677,5	12 581,8	7 790,6
Citrus fruit, fresh or dried	4 619,1	3 877,8	15 702,7	12 142,9	5 263,2	7 669,8	20 187,7	14 722,8

Figure 13. Dynamic of foreign trade (mln. USD)

	Foreign trade, Total			Ag	rarian secto	r	Share of agrarian products (%)		
Year	Export Import Balance		Export	Import	Balance	Export	Import		
2009	1 134	4 500	-3 367	316	803	-487	27,9%	17,9%	
2010	1 677	5 257	-3 580	349	968	-619	20,8%	18,4%	
2011	2 189	7 065	-4 876	437	437 1 194	-757	19,9% 16,99	16,9%	
2012	2 375	8 049	-5 674	513	1 274	-762	21,6%	15,8%	
2013	2 908	2 908 8 026 -5 117 2 861 8 596 -5 735		774	1 292	-517	26,6%	16,1%	
2014	2 861			826	826 1 306 -480		28,9%	15,2%	

Figure 14. Cereal import dependency ratio⁷⁰

Figure 15. Share of food in merchandise imports and export 71

Year	Graph year	Value (%)
1990-1992	1991	63,5
1991-1993	1992	70,4
1992-1994	1993	57,9
1993-1995	1994	59,5
1994-1996	1995	57,3
1995-1997	1996	59,5
1996-1998	1997	58,2
1997-1999	1998	54,7
1998-2000	1999	61,5
1999-2001	2000	58,4
2000-2002	2001	59,3
2001-2003	2002	53,9
2002-2004	2003	57,5
2003-2005	2004	59,4
2004-2006	2005	65,6
2005-2007	2006	68
2006-2008	2007	68,3
2007-2009	2008	64,2
2008-2010	2009	66,5
2009-2011	2010	68,6

Food imports (% c	of merchandise imports)	Food exports (% of merchandise exports)
Year	Value	Value
1990		
1991		
1992		
1993		
1994		
1995		
1996	36,11872427	29,29245525
1997	33,47010357	31,80958235
1998	18,67954079	33,92912213
1999	22,53344596	26,26521232
2000	23,33543779	28,02987513
2001	20,36149944	26,50202753
2002	20,47973061	32,44508394
2003	18,08921693	36,81997168
2004	20,93906945	31,96485229
2005	17,4231512	36,36262484
2006	16,37051041	26,30217299
2007	15,69030185	25,43106878
2008	15,33337597	17,69055887
2009	17,46869311	32,55151933
2010	18,16640327	21,91417911
2011	12,3389174	21,89441672
2012	13,04485871	25,56089088
2013	14,1811235	35,64148517
2014	14,81209349	40,71115568

⁷⁰ http://faostat3.fao.org/download/D/FS/E

⁷¹ http://data.worldbank.org/indicator/TM.VAL.FOOD.ZS.UN

Figure 16: Structure of the SFD

Organisation Chart of the State Forest Department (as authorised by the Chairman of the SFD on 15 November 2002)

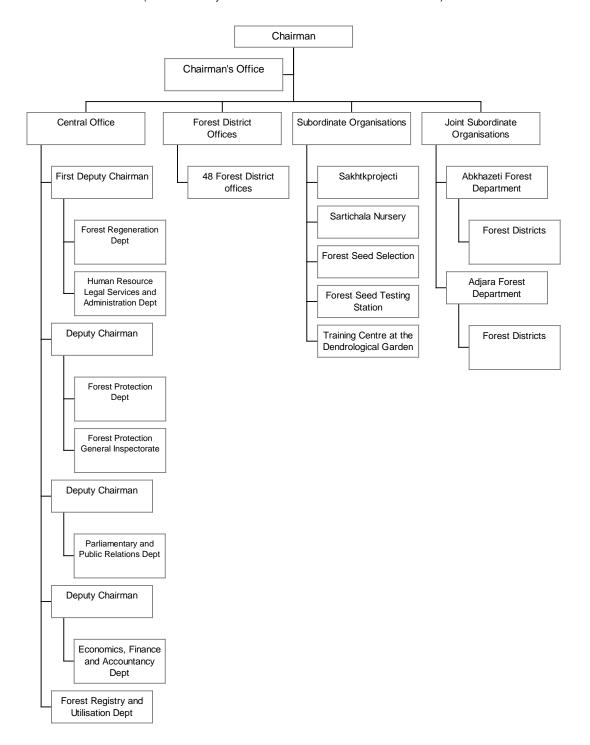


Figure 17: Structure of NFA

MANAGEMENT

- Head of the Agency
- Deputy Head (3 Deputies)

DEPARTMENTS

- Maintenance and Reforestation Department
- Forest Inventory Department
- Forest Use Department
- Financial Department
- Legal Department
- Administrative Department
- Department of Internal Control

REGION

- Kakheti Forestry Service
- Kvemo Kartli Forestry Service
- Mtskheta-Mtianeti Forestry Service
- Shida Kartli Forestry Service
- Samtskhe-Javakheti Forestry Service
- Imereti Forestry Service
- Guria Forestry Service
- Racha Lechkhumi-Kvemo Svaneti Forestry Serice
- Samegrelo-Zemo Svaneti Forestry Service

Figure 18. Number of employees in Forestry Agency

Year	Employed, total - thousand	In which forest rangers - thousand	Forest ranger's controlled area, average, ha.
1990	11,7	-	-
1995	3,5	-	-
2000	7,4	-	-
2001	3,6	-	•
2002	3,5	-	-
2003	2,4	-	-
2004	2,1	1,05	1978
2005	2,1	1,06	1960
2006	1,6	1,05	2087

2007	0,67	0,47	4440
2008	0,67	0,52	3953
2009	0,68	0,47	4358
2010	0,68	0,47	4358
2011	0,46	0,22	8398
2012	0,59	0,35	5310
2013	0,87	0,57	5310

Figure 19. Illegal logging (cubic meters)⁷²

2001	2005	2006	2007	2008	2009	2010	2011	2012	2013
43 287	62 764	40 924	98 675	21 331	30 684	32 948	7 060	6 104	5 283

Figure 20. Volume of harvested timber (cubic meters)73

	· · · · · · · · · · · · · · · · · · ·
Year	volume m³
1990	392 824
1995	289 712
2000	442 140
2001	380 201
2002	467 603
2003	535 648
2004	607 539
2004	810 615
2006	558 249
2007	805 423
2008	818 231
2009	697 461
2010	876 749
2011	681 669
2012	518 792
2013	702 137

 73 Ministry of Environment and Natural Resources Protection of Georgia

⁷² GeoStat

Figure 21. Export of wood and wood products – thsd. USD

	1995-2000	2001-2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	27 040,2	48 223,8	18669,0	22807,2	22563,6	22758,5	16902,8	20500,3	23841,4	23268,1	21788,7
of which:											
Fuel wood, wood waste and scrap,											
briquettes, pellets or similar forms	267,7	18,8	-	-	33,0	17,4	-	0,2	15,7	11,1	-
Wood charcoal	-	1,8	0,0	-	-	-	16,0	24,8	-	16,1	17,8
Wood in the rough, whether or not	4= 4040										
stripped of bark or sapwood	15 406,3	931,9	256,8	152,5	555,1	7,0	-	3,1	15,3	-	0,0
Hoopwood; split poles; piles, pickets	4.7	11 5	15.0	10.6		1.6					
and stakes of wood	4,3	11,5	15,8	18,6	-	4,6	-	-	-	-	- 1
Railway or tramway sleepers of wood	3,5	356,2	73,8		190,9	521,1	444,8	232,1	127,3	EE	1 091,0
Wood sawn or chipped lengthwise,	3,3	330,2	73,0	-	190,9	321,1	444,0	232,1	127,3	556,4	091,0
sliced or peeled, sanded or finger-											
jointed	6 438,8	42 157,4	16407,0	20775,2	19563,1	13786,9	7480,4	8932,2	9516,3	11705,7	11331,0
Veneer sheets and sheets for plywood	0 150,0	12 137,1	10107,0	20773,2	17505,1	10700,7	7 100, 1	0,02,2	7310,0	11705,7	11001,0
and other wood sawn lengthwise	813,1	1 363,8	540,5	680,6	727,3	105,9	_	_	32,0	_	_
Planed (shaved) wood	3 479,2	2 123,9	534,5	566,4	446,3	526,0	221,5	372,6	389,9	177,4	522,8
Particle board and similar board of	3 17 7,=	_ 1_0,,	33 1,3	300,1	110,0	320,0		0,2,0	507,7	177,1	322,0
wood or other ligneous materials	45,0	2,7	255,7	28,6	238,4	6564,6	6833,6	8020,5	10963,7	7848,0	6457,9
Fibreboard of wood or other ligneous											
materials	62,6	_	35,3	8,6	50,1	693,9	1067,1	1971,4	2072,8	2071,9	1274,0
Plywood, veneered panels and similar											
laminated wood	8,2	321,0	218,2	65,5	-	11,6	0,1	4,2	15,7	30,6	108,7
Densified wood	-	5,0	1,4	1,1	-	73,9	231,1	216,3	127,5	105,1	58,5
Wooden frames	1,8	7,0	3,7	0,3	0,6	0,7	0,1	0,2	5,3	0,2	4,8
Packing cases, boxes, drums and											
similar packings, cable-drums, pallets											
of wood	71,3	29,9	34,2	20,8	15,3	48,6	54,7	14,3	68,2	107,6	61,4
Casks, tubs and other coopers'											
products and parts thereof, of wood	2,6	1,7	0,0	0,2	43,1	0,1	0,1	2,5	9,5	-	0,0
Tools, tool bodies, tool handles,	F.0			440 :	222.2	1.00	100 -	22.5		0.4.5	=0 -
broom or brush bodies, of wood	5,2	-	-	118,4	223,9	168,2	180,6	80,8	55,2	84,0	79,1
Builders' joinery and carpentry of	291,7	796,5	277,1	366,7	441,7	153,4	327,2	588,3	336,9	285,0	434,9

wood											
Tableware and kitchenware, of wood	-	0,5	0,2	0,1	5,1	0,7	8,6	0,7	0,1	0,4	2,1
Marquetry and inlaid wood; caskets, cases and other articles, of wood	47,4	55,7	0,2	0,8	4,1	1,9	10,4	1,6	13,7	20,3	15,0
Other articles of wood	91,5	38,6	14,6	3,0	25,7	72,1	26,5	34,4	76,3	248,4	329,8

Figure 22. Import of wood and wood products – thsd. USD

	1995-2000	2001-2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total of which:	13406,6	32013,3	22872,8	45355,2	73869,1	52051,4	55762,9	79623,8	100523,4	91199,0	107586,6
Fuel wood, wood waste and scrap, briquettes, pellets or similar forms Wood charcoal	29,9	138,6	44,7	85,4	114,5	108,3	114,1	191,4	255,7	381,9	390,8
	2,7	12,7	7,3	6,4	23,8	79,1	164,0	109,6	100,1	160,4	134,0
Wood in the rough, whether or not stripped of bark or sapwood Hoopwood; split poles; piles, pickets	58,6	1 358,5	439,3	709,1	2763,8	1255,0	2222,8	4571,8	5363,0	2207,3	5788,5
and stakes of wood	36,3	3,9	1,1	0,5	4,0	26,0	0,0	1,7	0,7	-	1,9
Wood wool; wood flour	0,5	8,0	5,0	-	0,0	0,1	-	0,4	-	-	-
Railway or tramway sleepers of wood	5 749,4	2 590,2	1285,4	2377,0	286,1	1756,1	1196,2	1317,7	3026,8	1547,6	1219,9
Wood sawn or chipped lengthwise, sliced or peeled, sanded or finger- jointed	437,9	421,1	323,6	635,6	1704,4	1116,9	530,6	1303,6	4945,6	1853,4	3277,2
Veneer sheets and sheets for plywood and other wood sawn lengthwise Planed (shaved) wood	201,1	98,7	86,6	163,7	392,5	194,5	159,2	258,4	375,2	218,4	289,7
Talled (one rea) week	306,7	410,3	629,0	858,6	1155,4	1119,9	1386,8	1877,6	2132,2	966,4	1442,1
Particle board and similar board of wood or other ligneous materials Fibreboard of wood or other ligneous	2 148,3 799,3	12 447,8 4 423,1	8980,7 4011,1	15289,9 9897,4	24711,6 18678,2	17368,4 13188,1	20008,1 14839,6	21842,8 21581,7	28030,4 25328,0	26704,4	27498,5 31666,2

materials										30383,8	
Plywood, veneered panels and similar											
laminated wood	893,2	3 939,2	2943,8	4776,2	6762,4	2374,1	4437,3	6560,0	8904,0	7186,4	11401,5
Densified wood											
	258,1	446,2	122,9	1333,4	3131,8	2182,5	1930,2	2311,6	2201,8	1953,5	1633,3
Wooden frames											
	31,1	88,7	64,8	94,6	164,2	83,5	66,7	79,5	147,2	122,7	353,1
Packing cases, boxes, drums and similar	247.2	202.0									
packings, cable-drums, pallets of wood	367,3	282,8	386,9	414,7	472,7	172,5	151,4	633,0	1408,0	1055,9	1004,2
Casks, tubs and other coopers' products	1160	E 4E D	0.44	44=0	40.40		4.00	2212	40= 0		
and parts thereof, of wood	116,0	545,3	361,6	117,2	124,8	92,5	160,8	386,3	405,3	442,9	300,7
Tools, tool bodies, tool handles, broom	22.2	21.1	D 4	4.4	00.5	0.0	00.0	20.4	10.5	20.0	10.0
or brush bodies, of wood	23,3	21,1	3,4	4,4	32,5	9,3	30,3	22,6	19,5	30,8	19,8
Builders' joinery and carpentry of wood	1 654,1	3 640,1	2704.2	(7(5.7	7025 (0645 1	7017 F	14010 4	145040	12700 1	10000 1
Tableware and kitchenware, of wood	1 054,1	3 040,1	2704,2	6765,7	7935,6	9645,1	7217,5	14218,4	14584,9	13708,1	18898,1
rableware and kitchenware, or wood	16,8	61,8	61,7	162,9	190,6	156,4	243,9	272,1	415,8	415,4	409,6
Marquetry and inlaid wood; caskets,	10,0	01,0	01,7	102,9	190,0	130,4	243,7	272,1	413,0	413,4	407,0
cases and other articles, of wood	7,0	40,4	69,0	244,0	174,4	107,8	200,1	289,4	398,7	373,9	470,6
Other articles of wood	7,0	10,1	07,0	277,0	177,7	107,0	200,1	207,4	570,7	575,9	470,0
omer articles of wood	269,2	1 034,7	340,8	418,4	5045,7	1015,2	703,2	1794,4	2480,4	1485,8	1386,9

Figure 23. Mobilized amounts in Forestry Sector

Donor	Project Implementer	Project Title	Start Date	End Date	Total Project Budget	Total Grant for Georgia
BMZ, ADA	GIZ	Sustainable Management of Biodiversity, South Caucasus	September 2011	November 2015	EUR 6,500,000	EUR 6,500,000
EU, ADA	WB, WWF- Caucasus, IUCN	ENPI FLEG II	01-10-2013	31-12-2016	1910429 USD	1910429 USD
ADA	CENN	Sustainable Forest Governance in Georgia: Strengthening Local and National Capacity and Developing Structured Dialogue	01.07.2012	01.07.2015	USD 602,206	USD 489,691
ENVSEC	OSCE	Enhancing National Capacity on Fire Management and Wildfire Disaster Risk Reduction in the South Caucasus	2014	2016	EUR 283,743	EUR 283,743
BMZ, ADA	GIZ	Sustainable Management of Biodiversity, South Caucasus	01-06-2008	01-11-2017	EUR 20597000	EUR 6865666
(ÖBF) AG, BFW	(ÖBF) AG, BFW	Adaptive Sustainable Forest Management Planning in Borjomi-Bakuriani Forest District	2013	2015	EUR 2,000 000	EUR 1.500 000
GIZ	Environmental Information and Education Centre	Improvement of awareness and capacity for staff of National Forest Agency and Bachelors on forest inventory methodologies	29-08-2014	30-11-2014	33111 GEL	33111 GEL
FDA, KfW	MENR	Communal Forest Pilot Project	11.07.2003	10.11.2011	EUR 1.200000	EUR 1.200000

		Kharagauli				
WB	FSDC	Establish sound	2002	2008	USD	USD
		forest management			21.000000	21.00000074
		systems that				
		maximize the				
		contribution of				
		Georgia's forests to				
		economic				
		development and				
		rural poverty				
		reduction on an				
		environmentally				
		sustainable basis.				

Bibliography

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 $^{^{74}}$ 16 million USD - World Bank, 5 million USD – Government of Georgia.

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