Abstract—The article discusses the consumer market of agricultural products and agricultural policy in Georgia. It is noted that development of the strategic areas of the agricultural sector needs a special support. These strategic areas should create the country’s major export potential. It is important to develop strategies to access to the international markets, form extensive marketing network etc., which will become the basis for the promotion and revenue growth of the country. The Georgian agricultural sector, with the right state policy and support, can achieve success and gain access to the world market with competitive agricultural products. The paper discusses the current condition of agriculture, export and import of agricultural products and agricultural policy in Georgia. The conducted research concludes the information that there is an increasing demand on the green goods in the world market. Natural and climatic conditions of Georgia give a serious possibility of implementing it. The research presents an agricultural development strategy in Georgia and the findings and based on them recommendations are proposed.

Keywords—Agriculture, agricultural cooperative society, agricultural insurance, agricultural policy, export-import of agricultural products.

I. INTRODUCTION

Development of the agrarian sector is one of the ways of overcoming poverty and achieving economic growth for economically backward countries. The main objective of agrarian policy is to supply people with agricultural products and ensure healthy eating [1, p. 180]. For this purpose it is important to promote safety of food production, fight against plant and animal diseases, create state reserves of food products for special occasions, promote anti-flood measures, protect villages and rural areas, reduce water and environmental pollution, and protect the sea, including its flora and fauna. The most important objective is the development of agricultural, food industry and fishing economy.

According to the data of 2016, 54% of the workforce of the Georgian population is employed in the agricultural sector; however, this sector accounts for only 9.3% of the country’s GDP. In comparison, 1.6% of the population is employed in agriculture in the USA, 2.9% - in Germany, 5% on average in EU countries. One farm provides food for 126 people on average in the US, 144 people in Germany and 51 people in the EU countries. As for Georgia, a person employed in agriculture cannot provide enough food even for himself/herself. According to data of 2016, the self-sufficiency rate is high only for some products, in particular, 130% for grapes, 100% for potatoes, 96% for maize, 91% for milk and dairy products, 85% for sheep and goat meat, and 75% for vegetables [2].

Import of agricultural food products increased every year from 2012 to 2014; however, since 2015 it began to decrease and in 2016 it decreased by 1.2 times compared with 2012. As for the export of agricultural food, in 2016 it increased 1.4 times compared to 2012 [3].

The export increased mainly due to high export rate of four export products (see Fig. 1):

- Alcoholic drinks
- Wine
- Live cattle
- Poultry meat

According to the National Wine Agency, 8,777,275 bottles...
.....(of 0.75 l) of wine were exported to 32 worldwide countries in the first two months of 2017, which is 94% higher compared with the corresponding figure for 2016. The value of the wine exported in the reporting period amounted to 20.5 million USD, which is 91% higher compared with the corresponding figure for 2016. According to the data of February, export has progressive tendency, which is primarily due to the sequential work of the viticulture and winemaking field. Export has increased in the markets of the European Union, China, USA, as well as on the traditional markets (Russia, Ukraine, Kazakhstan and others). The top five exporter countries are: Russia (5,717,289 bottles), Ukraine (859,756 bottles), China (832,552 bottles), Kazakhstan (389,040 bottles) and Poland (312,650 bottles) [4].

Fig. 3 illustrates the growth of wine exports in major export countries at the beginning of the year. In addition, 2,162,305 bottles (of 0.5 l) of brandy were exported to nine countries worldwide in the reporting period, which is 51% higher compared with the corresponding figure for 2016. The total value of the brandy exported amounted to 5.2 million USD – a 53% of increase compared with the corresponding figure for 2016. Export of Chacha has also increased by 138%. Totally, 33,874 bottles of Chacha were sent to 13 countries worldwide. The value of the Chacha exported amounted to 99 thousand USD, which is 11% higher compared with the corresponding data of the January and February of the last year.

In total, income from the export of wine, brandy, Chacha, wine material, brandy in pour and brandy alcohol totaled 40.1 million USD, which is almost doubled compared with the corresponding figure for 2016 when the income reached 20 million USD.

Production of the most livestock products (including meat) decreased in Georgia in 2006-2016. In particular, the self-sufficiency rate for red meat is 39% and for poultry meat – 18%. Production of wheat has also sharply decreased and self-sufficiency rate for this product is only 12% [5]. Production of a number of products has fully stopped. As a result, almost 80% of agricultural products consumed by Georgian population is imported. Consequently, the currency from the sale of food products in the country flows abroad, which significantly hinders local production. Poverty and unemployment still remain critical problems of the country. Georgi has resources to grow enough wheat to satisfy most of the demand of the country’s population for this product. This refers not only to wheat, but to almost all the agricultural products [6].

Georgian flora has always been rich in medicinal plants. Georgia can take a strong place on the international market for producing and supplying of medicinal plants. The state should encourage production of ecologically friendly drugs and attraction of foreign investors interested in this sector. Rational use of resources of medicinal plants will contribute to the recovery of the country’s economy, growth of export revenues, creation of new jobs, and reduction of the share of the population living below the poverty line [7].

Georgia holds one of the last places in terms of the share of arable land in the total area of the country. The corresponding data for Armenia is 22.7%, for Turkey – 27.7%, and for Ukraine – 56.1% [8]. It is worth noting that the area of the land owned by almost 75% of the farms in Georgia is less than 1 hectare. The application of modern agricultural machinery and technologies is practically impossible on such small land areas. This category of farms focuses only on self-satisfaction and even this is a problem for them. Although this sector has enormous potential in Georgia, it has plenty of problems, which is mainly caused by insufficient support. Financial support from the state, developed infrastructure, high level of mechanization, development of insurance system, etc. are necessary.

In 2010, 40 million GEL was allocated for agricultural sector from the state budget of Georgia, and in 2011 the sum increased to 86 million, 119.9 million was allocated in 2012, 182.2 million in 2013, 265 million in 2014, 311.1 million in 2015, and 334 million in 2016 (see Fig. 4). Most of these funds will be used directly on agriculture development programs; part of it will be used for food safety and plant protection and some part for the development of viticulture and wine. Increasing funds from the state budget for the agricultural sector is indisputably a good tendency but it is also important to provide credits and insurance for agriculture.

The role of foreign direct investments in the development of agriculture is very low. The share of agriculture in total foreign direct investments in the country was 0.8% in 2007, 1.2% in 2009, 1.1% in 2010, 1.2% in 2011, 1.8% in 2012, 1.3% in 2013, 0.7% in 2014, 0.9% in 2015, and 0.6% in 2016.
(see Fig. 5) [9]. This is due to the riskiness and low profitability of the sector; results of agricultural production are still unpredictable - droughts, floods, plant and animal diseases, and pests make agriculture a risky sector for investments. One of the most important factors for the development of agriculture is the development of agro insurance in the country. Some positive shifts are already seen in this regard. This will significantly reduce risks in the agricultural sector and encourage an increase in agricultural lending.

![Fig. 5 The share of foreign direct investments in agriculture](image)

II. METHODOLOGY

This paper uses general and specific methods, in particular, analysis, synthesis, induction, deduction, scientific abstraction, comparative and statistical methods, also, experts' evaluation. Publications of National Statistics Office of Georgia are used to determine the regularity between analytical and statistical estimations. Also, theoretical and applied research of international organizations and scientist-economists are used.

III. DISCUSSION

Development of the agricultural sector in Georgia is hindered by low level of agricultural lending. The risks in agriculture make commercial banks restrain from lending to this sector. This very important sector of the economy amounts to only less than 2% of the bank lending. Farmers are the subject of special attention in almost all developed countries, which is primarily expressed in providing them with interest-free loans. Georgian farmers have experienced no such support so far.

The Ministry of Agriculture of Georgia has developed a Preferential Agro Credit Project, which will be funded by the Rural and Agricultural Development Fund and implemented by the Agricultural Project Management Agency. The project was launched in March 2013. The project will provide interest-free (0%) commodity credit (installment) for small farmers; preferential agro-credit for medium and large farmers - not more than 8% (financing purchase of working assets and supplies for short terms); preferential agro-credit for agricultural enterprises - not more than 3% (financing tangible assets and technologies for long terms). Eleven banks and two microfinance organizations are involved in the project and 14,100 preferential agro-credits to the value of GEL 318 million were allocated from March 2013 to September 2014. As banks (TBC, Constanta, etc.) say, they practically do not have problem loans, and borrowers have no problems in paying money back. In addition, the European Union developed the European Neighborhood Program for Agriculture and Rural Development aiming at increasing food production and reducing poverty in rural areas in Georgia. It was launched in March 2013 and will last until March 2016. The main partners of the project are the Ministry of Agriculture of Georgia together with other ministries/public sector and agricultural service centers. It promotes deepening of cooperation between small farmers, improvement of the functioning of institutions engaged in the agricultural sector, implementation of the national strategy of agriculture. The objective of the program is to strengthen small farmers, who might become the backbone of the agricultural sector in the country. Development of agriculture is the basis for the development of the food safety system, which, in turn, is the key element of the negotiations in the Deep and Comprehensive Free Trade Area Agreement (DFCF) between the EU and Georgia. The budget for the program is 40 million euro [10].

It should be also noted that significant amount of money has been allocated for the development of agriculture since 2013, which provides stimulus for farmers to engage in long-term activities. Therefore, a real demand occurred for the creation and development of agro insurance system.

Agro insurance will help people living in villages to reduce losses caused by natural disasters and make their income more stable. Introduction of the agro insurance system will increase the interest of financial institutions in the agricultural sector. Financial resources will become available for farmers, which will contribute to stable development of the sector. Since September 2014, private sector and non-governmental organizations, along with the public sector, have been involved in the formation and development of agro insurance system. At this stage, the government will give subsidies up to 70-95%. When a contract is signed, the farmer will pay 5-30% of the cost of a one-year packet. When subsidizing the cost of the insurance package, the state will pay up to 30 thousand GEL in case of individuals and up to 50 thousand GEL in case of the cooperatives. In the frames of the program, insurance covers damage to the harvest caused by natural disasters, such as hail, excess sediment, hurricane and autumn frost (only for citrus cultures).

A pilot agro-insurance project was launched on September 1, 2014. Its budget is 4 million GEL. Four insurance companies, GPI Holding, Aldagi, IC Group and Irao, are involved in the project. According to the Agricultural Project Management Agency of the Ministry of Agriculture, more than 6,000 insurance policies have been issued since March 2013 to September 2014. As banks (TBC, Constanta, etc.) say, they practically do not have problem loans, and borrowers have no problems in paying money back. In addition, the European Union developed the European Neighborhood Program for Agriculture and Rural Development aiming at increasing food production and reducing poverty in rural areas in Georgia. It was launched in March 2013 and will last until March 2016. The main partners of the project are the Ministry of Agriculture of Georgia together with other ministries/public sector and agricultural service centers. It promotes deepening of cooperation between small farmers, improvement of the functioning of institutions engaged in the agricultural sector, implementation of the national strategy of agriculture. The objective of the program is to strengthen small farmers, who might become the backbone of the agricultural sector in the country. Development of agriculture is the basis for the development of the food safety system, which, in turn, is the key element of the negotiations in the Deep and Comprehensive Free Trade Area Agreement (DFCF) between the EU and Georgia. The budget for the program is 40 million euro [10].

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Providing insurance for agricultural products has become a pressing issue since 2014, when drought destroyed a large part of the crop.

According to official statistics, there are 700 000
controlled by the state. On June 26, 2012 all the restrictions on
agricultural land to foreigners. The acquisition of agricultural land were abolished in favor of
worsened situation for farmers and all the other people
them, increased tax on land should be reduced. According to
2014. With the purpose of encouraging investment activities,
individuals and legal entities was stopped until December 31,
rights of ownership on agricultural land to the above
preconditions. Under the law of June 28, 2013, granting
foreigners and legal entities registered in foreign countries.
They were granted the right to own agricultural land without
any preconditions. Under the law of June 28, 2013, granting
the right of ownership on agricultural land to the above
individuals and legal entities was stopped until December 31,
With the purpose of encouraging investment activities,
amendments have been made to the above law on February 20,
2014 and the restrictions were abolished for the commercial
banks operating in Georgia and the foreign individuals and
legal entities whose investment projects would be approved by
the government. Such frequent changes in the law in such a
short period show that the government has no common policy
on this issue.

There is no normative price for land in Georgia. It is
determined only in administrative boundaries of Tbilisi. The
document determining the policy of land management is
important not only from the perspective of land ownership, but
also from the perspective of implementation of further
economic reforms.
The first and the most important support for the farmers
would be the removal of an increased tax on land. The
vouchers provided to the people living in rural areas cannot
revive the agricultural sector. For the redevelopment of
agriculture, it is necessary to integrate small farms and provide
them with agricultural techniques and chemicals, ensure
storage and realization of harvest, as well as establishment of
processing enterprises.
Realization of the product, along with production, remains
one of the most important problems. As international practice shows, if a farmer begins to care for the realization of the
product himself, he will neither be able to develop his farm
properly, nor to sell goods profitably. In this regard, there is a
deplorable condition in Georgia. Small farmers or small
resellers sell agricultural goods violating all the recording,
food safety and other norms. In fact, there are no intermediate
companies between producers and consumers in the country,
which collect agricultural products, give them the desired
commodity form, and ensures safety control and normal
distribution.

IV. CONCLUSION AND RECOMMENDATIONS
Georgian agricultural products must gain popularity, both in
quantitatively and qualitatively, and firstly on the domestic
and then on the foreign market. The agricultural policy
strategy of Georgia includes a vision of how this sector should
look in the perspective. It should be directed towards
achieving the following goals:

- Full utilization of the agricultural potential of Georgia;
- Increasing competitiveness of products;
- Production of ecologically friendly products;
- Replacement of imported products with locally produced
ones;
- Increasing production of export goods and entrance on
new markets;
- Renewal of agricultural machinery;
89].
The following factors are needed for the development of
agricultural sector in the country:

- Rapid development of the agricultural insurance system in
the country;
- Accessibility to long-term and low interest loans for
farmers;
agricultural farms in Georgia. [11, p. 89]. The average area
of one farm is 2.3 ha. Such small scales significantly increase
the cost of production of agricultural products in Georgia and
make it difficult for investments and new technologies to enter
the market. That is why one of the recommendations by
economic experts and the European Union is the development
of farm cooperatives in Georgia. For this purpose the Law of
Georgia on Agricultural Cooperatives was adopted on July 12,
2013, which sets requirements for establishing agricultural
cooperatives and preferences for them.

Intensive process of creation of agricultural cooperatives
has already begun in Georgia. Currently, there are 1,600
agricultural cooperatives in the country. For the country,
where more than half of the population is self-employed,
modernization of this field is of particular importance. Thus,
establishment of social enterprises with the status of
agricultural cooperative will have a number of advantages; in
particular, such enterprises can benefit from receiving grants;
there are free training and qualification enhancement programs
for those employed in agricultural cooperatives; they are considered to be creditworthy and loans are more accessible
for them; they are not subject to property tax; grants and income from agricultural activities are not subject to profit
taxes; profit tax based on annual upper limit of revenue is not
imposed on agriculture cooperatives; profit tax rate threshold
based on annual turnover is not fixed for agriculture cooperatives, which is 200 thousand GEL in the case of LLC;
they also enjoy tax benefits that apply to agriculture.

For establishing an agricultural cooperative, the number of
members shall not be less than three in Mountainous Regions,
and not less than five in the rest of Georgia. Areas of activity
of agricultural cooperatives are production, processing,
packing, packaging and storage of agricultural products.
Nowadays in Georgia, there are the following types of
cooperatives: crop producing cooperatives, apiculture
cooperatives, vegetable cooperatives, viticulture cooperatives,
livestock cooperatives, as well as milk processing
cooperatives, mushroom production cooperatives,
cooperatives for growing hazelnut trees, for building product
storage facilities, and for the creation of retail and wholesale
trade networks.
Farmers think that if the government really wants to help
them, increased tax on land should be reduced. According to
the government's decree of 2010, tax on arable land increased,
and tax on pasture land increased by 500%. This eventually
worsened situation for farmers and all the other people
connected with the agricultural sector and resulted in selling
of agricultural land to foreigners.
The process of selling agricultural land should always be
controlled by the state. On June 26, 2012 all the restrictions on
the acquisition of agricultural land were abolished in favor of
foreigners and legal entities registered in foreign countries.
They were granted the right to own agricultural land without
any preconditions. Under the law of June 28, 2013, granting
the right of ownership on agricultural land to the above
individuals and legal entities was stopped until December 31,
2014. With the purpose of encouraging investment activities,
• Promoting cooperatives and agricultural associations;
• Providing rural areas with small and medium agricultural machinery; creation of car and tractor centers; and leasing;
• Restoration of new cultivar breeding centers and operating them in accordance to new standards;
• Guaranteed purchase of products from farmers by the state;
• Creation of intermediate structures, which will connect farmers with sellers;
• Broadening of advisory services centers for farmers and what’s most important, introduction of scientific research-based production. All this will create a basis for the production of local competitive products;
• Special support is required for the development of strategic sectors of agriculture. These sectors should create main export potential of the country. It is very important to develop strategies for entering international markets, create a wide marketing network, etc. This will become the basis for the popularization of the country and the growth of revenues.

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