

## **Agribusiness Insurance System in Georgia and its Main Tendencies**

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### **Abstract**

Food supply maintenance of the population is a part of global issues and its success is the foundation of the development of any national economy. Georgia is an agricultural country, but the food potential of the country is used only partially. The main determining factors of the problems are the provision of financial resources and specific risk factors. In the given situation, the Ministry of Agriculture of Georgia has developed an agricultural insurance project, which will support and facilitate the adoption of agricultural insurance. Today prospects and problems of the insurance sector are vital issues for agriculture as well as for the economy and employment. In this article, we discussed the performance of agricultural insurance and the necessity of governmental support. On the basis of comparative analysis of the experiences of the current states of The European Union and Georgia, prospects and dangers of the development of agricultural insurance has been detected. Also, based on theoretical and practical analysis, essential recommendations have been designed to eliminate dangers and to promote the development of agricultural insurance in Georgia.

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**Keywords:** Agribusiness, Financial mechanism, Insurance, The European Union

### **INTRODUCTION**

The current situations in the agricultural sector and the economic state of the farmers involved in it are constantly changing for several important reasons. These reasons include the agricultural policy reforms, market liberalization, globalization, and imbalanced relationships between sellers and buyers (<http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#ftn6>). The other distinguished factors are: exchange rates, prices of energy resources and fertilizers, interest rates,

sanitary measures, animal diseases, climate change etc. (Bielza, Conte, Dittmann, Gallego & Stroblmair, 2006).

Insurance is the most famous risk sharing instrument. In order to carry out risk insurance, it has to be performed simultaneously in two conditions. Firstly, it should mitigate side effects of "asymmetric information." Secondly, it must overcome "systemic risk". Čolović Vladimir and Petrović Nataša Mrvić agreed by giving the opinion of Markovic T. and Jovanovic M. that insurance is the best tool for risk management. Thus, this represents guarantees and stability factors for any production (Čolović & Petrović, 2014).

In a country, only the development of the insurance sector is insufficient to develop agricultural insurance, but targeted state agricultural policy and strategy is essential too. The three main models of agricultural insurance mechanism are:

- The insurance system is managed and controlled by the state - a system which is characterized by a strong state support. Only one unified insurance product is supplied to the market by the state monopoly company;
- The system based on private and public sectors partnership is characterized by a large share of agricultural insurance and a well-diversified portfolio of risks;
- Free market system rather than low share of the agricultural insurance in the insurance sector and the level of risk diversification. This system depends entirely on the insurers' interests to operate on the market, as well as on the current state of agricultural policy (Čolović & Petrović, 2014).

Joseph Stiglitz discusses the legitimate reasons for government intervention in the agricultural markets, as well as what determines allocation inefficiencies of the market. Stiglitz has identified a number of determining aspects: 1) Incomplete markets in insurance future and credit; 2) Public goods and increasing returns; 3) Imperfect information (Government supply of information can be thought of as a type of public good); 4) Externalities; 5) Income distribution (Given the initial holdings of assets, this distribution need not, and often does not, satisfy society's ethical judgments) (Stiglitz, 1987).

Despite the urgency justified with rational reasoning, actually the connection between the state policies and the above-mentioned issues is mostly very small. As a result, measures formed to ensure the increase in farmers' income may actually increase the risk of farmers' income in conditions that a large amount of public funds are spent on subsidizing (Stiglitz, 1987).

Experience confirms that for the development of agricultural insurance and penetration rates growth, only premium-based subsidies are not enough factors. According to The Foreign Policy Initiative BH (Bosnia and Herzegovina), the most successful models of agricultural insurance are those which includes, among other things; high activity of government in the sector by policy and institutional development, risk assessment, and transparent methods of extension promoting.

### World Experience

Worldwide agricultural insurance issue has always been important. The number of recently signed insurance policies and the amount of paid claims make it even more highlighted. For example, the volume of gross insurance premiums accumulated by insurers for 2005 equaled 8 billion dollars. By 2014, this figure was 31 billion dollars. From 2005 till 2011, the agricultural insurance premium annual growth was 20%, the penetration rate - 0.83%, and the highest rate the USA had in the year 2014 was 6.49%.

**Table 1. Institutional Framework of Agricultural Insurance**

Scheme type	Characteristics	Examples
Insurance by the Public sector	The government as the insurance provider and holds monopoly on the market	a. Canada: Ten regional insurance companies that are supported by the Federal Government. b. Cyprus: one governmental insurance company within Ministry of Agriculture.
Commercial insurance without participation of the government	Private commercial based insurance	a) Australia: 15 private companies dominant at the market; b) Argentina: 29 private companies that cover agricultural insurance market.
Private-public partnerships	1. National insurance company makes partnership with leading commercial insurance company.	a) Agroseguro fund in Spain; b) Tarsim Pool (Turkey).
	2. Open market with commercial companies with Government holds certain control level by participation in premiums and policy design.	a) Portugal: SIPAC insurance scheme with participation of 15 private companies; b) The USA: participation of 15 private companies
	3. Open market with commercial companies but lower level of control, and the role of the government is chiefly in subsidizing the premiums.	Brazil, France, Italy, Mexico, Russian Federation.

Source: The World Bank

Among countries and regions in terms of accumulated premiums, the US and Canada are leaders with 55%. Thus, this is followed by Asia with

22% and European countries have third place with 18% share. There is a different perspective in developed and emerging markets as well. Insurance premiums accumulated in emerging markets during 2005 were \$ 1 billion dollars. By 2011, it has reached 5 billion dollars. By 2025, the emerging markets are expected to increase agricultural insurance premium volume up to 19 billion dollars. With regards to the structure of the agricultural insurance, 90% of total signed insurance policies are for crop insurance, while the rest 10% are allocated to other types of agricultural insurance (Čolović & Petrović, 2014).

By itself, in this direction, it is of great importance to share the experience of the EU. The European Union in 1962 has developed the common agricultural policy - (CAP), which is aimed at increasing agricultural productivity and biodiversity, climate stability, and food availability to consumers at reasonable prices in terms of creating normal living conditions for farmers. Through the policy in 28 member countries of the EU, 12 million farmers are operating. In addition, 4 million people were employed in the food sector.

The EU policy has three dimensions; market support, financial aid, and agricultural development. The EU's budget spending on the given direction is 39% of the total budget (about 59 billion euros). In 2009, the EU has included the risk management tools in the CAP, which are as follows ([http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#\\_ftn6](http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#_ftn6)):

- Financial support to farmers for the **premiums on insurances** for crops and livestock against losses caused by adverse climatic events and diseases;
- Financial support for **mutual funds** to compensate farmers **for production losses** related to climatic and environmental events;
- An **Income Stabilisation Tool (IST)**, mobilising financial support for farmers who experience severe income losses (exceeding 30% of the average annual income).

Based on risk management, instruments from the EU budget have spent only 1,703,604,478 euros. In total, it is 2,699,300,000 euros in the following proportions:

- 1) Premium subsidy - 2,212,500,000 euros (82%);
- 2) Mutual Funds - 357,000,000 euros (13%);
- 3) Income stability tool - 129,800,000 euros (5%).

In total, 633,850 farms were funded. 206,635 farms received premium subsidy, 418,000 farms received assistance in connection with mutual funds, and 10,450 farms benefited from income stabilization instruments. EU premium subsidy program is carried out in 8 countries and 4

regions. However, the other two instruments are available only in 3 countries. The instruments must be fully implemented by the end of 2018.

In the European Union such an attitude towards the agricultural insurance and risk management, also the slow pace of implementation of these instruments is partly due to a pre-existing policy. This policy was directed at direct payments and its focus was on subsidizing the price (a farmer slightly experienced price fluctuations due to guaranteed payment of the subsidy, with no motivation and interest for the risk management instruments to use).

In Europe, the most advanced and sophisticated agricultural insurance system is in Spain. The central and regional government partly covers 20% to 60% of insurance policy premiums. The system is built between the government and private sector by institutional agreement in which the farmers' unions are actively involved. This system was created in Spain in 1978 and from that period, the insured crop areas and species have significantly increased.

In 2005, Poland legislated the new agricultural insurance act under which the farmer, who receives funding from the EU directly (direct payment), has to insure at least half of the area of land under one risk factor otherwise the fine per hectare is 2 euros. The government subsidizes 65% of premium, till 2016, subsidy was 50% of insurance premium. Insurance tariff imposed was on the maximum point of 6%. These approaches have increased insured land areas and the quantity of new insurance policies. In 2006, 10,738 crop insurance policies were sold with total insured land area 311,740 hectares; in 2008, the policies raised up to 87,150 insured area 1,832,036 hectares; and in 2013, 151,101 policies insured area is 3,398,812 hectares (Sulewski [https://www.wur.nl/upload\\_mm/8/8/a/bbf25350-6dd8-47ed-a63a-333bc6576d97\\_Sulewski\\_Agricultural\\_insurance\\_Poland.pdf](https://www.wur.nl/upload_mm/8/8/a/bbf25350-6dd8-47ed-a63a-333bc6576d97_Sulewski_Agricultural_insurance_Poland.pdf)). As for the livestock insurance, the picture is not so good at all. In 2006, signed policies reached 318; in 2008 – 220 policies; and in 2013 – 307 policies in total. Subsequently, the cause of this situation is majorly due to a lack of attention and subsidy problems for livestock insurance.

### **Agricultural Insurance in Georgia**

As for Georgia, nearly 85 percent of the land is owned by small farmers who do not produce even accounting. At the same time, relatively large farms due to high cost of insurance do not insure the harvest. Therefore, in September 2014, the Ministry of Agriculture developed and implemented agro insurance project which currently subsidizes insurance premiums within 70 - 80% (according to Agro Insurance Program - Decree # 524 of the Government of Georgia on March 28, 2016). Until 2014, only a few insurance companies were offering agricultural insurance products to

farmers and the agricultural insurance penetration rate in the insurance sector was too low (less than 1%). The high cost of the insurance product and the level of insurance culture among farmers influenced the product formation. It guaranteed unprofitable product for insurance companies. Also, they had to cover for the losses of funds accumulated from sales of other insurance products.

In 2014, the experts group of Spanish company, Agroseguro, studied the details of the rural sector and agricultural insurance with Georgian experts who elaborated recommendations for the development of the agricultural insurance strategy. At the same year, agricultural insurance pilot program was initiated by the Ministry of Agriculture. The program compensates the damage caused by hail, excessive rainfall, hurricanes and the autumn frost. During the first year of the project, the budget was 5 million GEL. Co-financing maximum amount of insurance premium is 30,000 GEL and 50,000 GEL in the case of agricultural cooperatives (<http://news.ge/ge/page/saqartvelos-soflis-meurneobis-saministro>). Today, 5 insurance companies are involved in the project: JSC Insurance Company Aldagi BCI, GPI Holding, IC Group, Ardi group, and Insurance Company Unison.

In 2016, several changes were made in the project. According to the amendments, the beneficiary can insure up to 5 hectares of land (30 hectares instead of 15 hectares in case of cereal culture). Each insurer will receive co-funding which is 70% for all the culture envisaged by the program and 50% for the vine. In case of the land registration in the Public Registry, or insure with the existing cadastral code, co-financing will be 10% excessive. Since 2016, minimum and maximum insurance tariffs have been identified. Also, from this year, insurance compensation and deductions - franchise (unpaid minimum) has been improved and adjusted to customer requirements (<http://apma.ge/newsletter/projects/read/agroinsurance>). The budget for the project in 2016 amounted to 10 million GEL (<http://agrokavkaz.ge/axali-ambebi/agrodazghveva-ganakhlebul-proeqts-phermerebi-etsnobian.html>).

Changes also affected the upper limits of insurance tariffs by insured crops. In addition, certain penalties and sanctions were put in the project for the insurance company violating the obligations under the contract. In the first case, for example tariffs for:

- 1) Grain cultures - increased from 8% to 8.50%
- 2) Leguminous crops - decreased from 8% to 7.20%;
- 3) Vegetable crops - decreased from 12% to 11%;
- 4) Citrus - remained unchanged at 11% and etc.

As for the insurance company's liability for the improper performance of the obligations, we can specify the following paragraphs and fines:

1) The insurance company is obliged to submit reports on the issued policies to the Agency for 20 months from the end of each month. In case the term is broken, the Agency may refuse to pay the insurer the subsidy;

2) 100 GEL for incorrect information in the policies;

3) Incorrect GPS coordinates of insured land - 50 GEL for each policy;

4) In case of impossibility of identifying the amount of money paid by the insurer in accordance with the policy - 10 000 GEL for each policy (according to Agro Insurance Program - Decree # 524 of the Government of Georgia on March 28, 2016). Adding the given points in the project was due to a number of technical or organizational flaws made during the pilot program.

Regarding the State Project, Insurance Company Aldagi has offered customers flexible and simplified conditions with the Bank of Georgia and Microfinance Organization Credo. 50-60% of the Vine Insurance premium will be financed by the state. Therefore, a farmer will have an opportunity to pay the remaining amount with interest-free loan and repay it during the harvest. In case of the destruction of crops or seedlings, the farmer will return the insurance premium back (<http://credo.ge/ka/465/>).

**The Project Results:** In 2014, 29,514 plots (with 18,498 hectares) were covered by insurance project and totally 12,409,225 Gel premiums were payed, out of which 11,637,013 GEL was subsidized by the state. Also, the insurers paid 18,498 GEL. The largest amount insured by land area was citrus cultures - 12,391 hectares and by payed premiums leading culture was vine with total 5,376,636 GEL premium. (see **Table 2**). As for the territorial distribution, the largest number of insured land plots were located in Kakheti 9,863 plots, while the lowest is 1 plot in Tbilisi (see **Table 3**). During 2014, damage was caused by natural disaster - hail in Guria and Adjara districts. The total loss amounted to 1,879,298 GEL (6,879 insurance claims).

Cumulatively, 2014-2015 under the project covered 40,013 land plots (with 23,667 hectares of land area) (Source: Association of Georgian Insurance Companies). It should be taken into account that in 2015, an amendment was made in the project. This is according to what the state subsidy share in insurance premium which decreased from 90% to 60%. As a result, it caused 64% decrease of insured land number in 2015 compared to the indicator for 2014.

The premiums accumulated by insurance companies during the two years given amounted to 16,031,039 GEL. In 2015, the indicator was defined by 3,621,814 GEL, 71% less than the 2014 results. As for the paid claims, the total amount was 14,178,445 GEL (20,026 claims number) in two years. The loss ratio was 88%, while the frequency of loss - 51%. According to the

insured risks, most cases were caused by hail,15,334, with total paid claims of 13,414,317 GEL.

The share (penetration rate) of agri-insurance in the entire insurance sector over the last two years is as follows: 2014 - 4.1%. Therefore, this is a good indicator on the background of 1% of the previous periods. In 2015, it still represents 1%. The indicator shows that farmers are not ready to insure the harvest, which, on one hand, is due to financial support problems and low level of insurance culture. On the other hand, it results to distrust towards insurance companies.

**Table 2. Policies issued in 2014 under the Agro Insurance Project**

<b>Insured risk: hail, excess sediment, hurricane, autumn frost for citrus cultures</b>				
<b>Culture</b>	<b>Number of insured parcels</b>	<b>Accumulated premiums (Gel)</b>	<b>Premium paid by the Agency (GEL)</b>	<b>Insured area ha</b>
Citrus	12,391	2,433,866	2,290,621	3,190
Vine	7,353	5,376,636	5,059,132	5,731
Crockery crops	5,797	1,175,582	1,085,057	2,707
Fruit trees	2,762	2,278,802	2,143,958	1,836
Cereal crops	562	430,819	396,168	4,151
Vegetables crops	347	374,669	352,433	363
Berry crops	147	93,881	82,963	140
Parnished crops	104	186,898	171,688	185
Subtropical crops	31	43,963	41,784	45
Strawberry crops	20	14,309	13,208	150
<b>The sum</b>	<b>29,514</b>	<b>12,409,225</b>	<b>11,637,013</b>	<b>18,498</b>

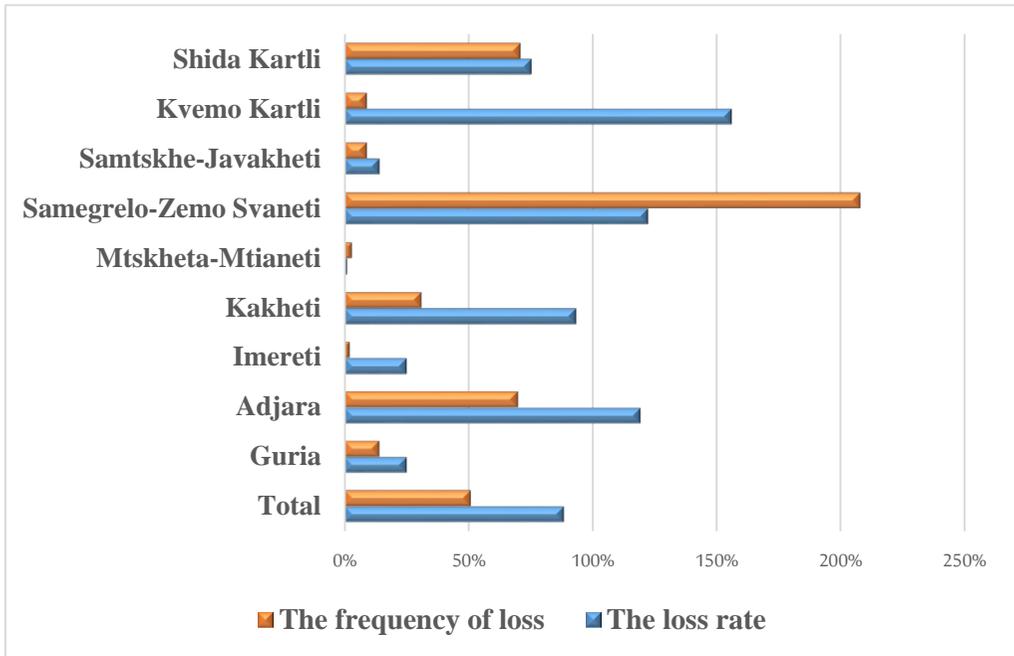
Source: Association of Georgian Insurance Companies

**Table 3. Policies issued in 2014 within the framework of the Agro Insurance Project**

<b>Insured risk: hail, excess sediment, hurricane, autumn frost for citrus cultures</b>			
<b>Region</b>	<b>Number of insured parcels</b>	<b>Accumulated premiums (Gel)</b>	<b>Insured area ha</b>
Kakheti	8,863	7,218,180	9,469
Adjara	9,037	1,673,030	2,523
Guria	7,575	1,453,837	2,274
Samegrelo	1,554	440,469	1,032
Shida Kartli	1,044	1,042,503	1,306
Kvemo Kartli	415	534,943	1,828
Imereti	15	6,021	11
Racha-Lechkhumi	6	10,736	21
Mtskheta-Mtianeti	4	29,057	33
Tbilisi	1	450	0.22
<b>The sum</b>	<b>29,514</b>	<b>12,409,225</b>	<b>18,497.7</b>

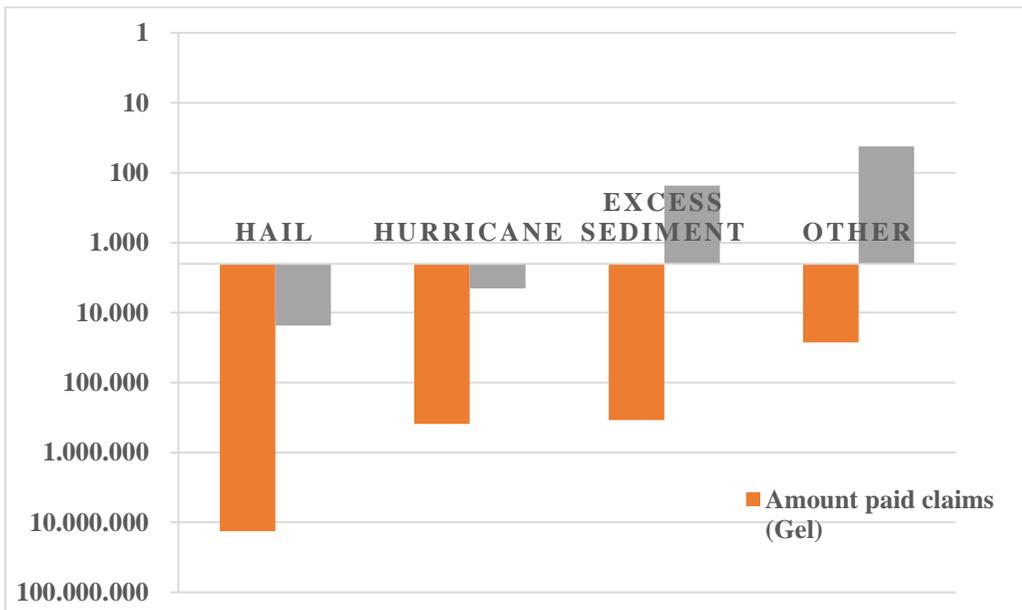
Source: Association of Georgian Insurance Companies

**Chart 1. The loss rate and the frequency of loss by regions in 2014-2015**



Source: Association of Georgian Insurance Companies

**Chart 2. The loss rate and the frequency of loss by natural disasters in 2014-2015**



Source: Association of Georgian Insurance Companies

In addition, we should also consider productivity. Recently, the output of annual crops (maize, potatoes, except wheat) and the size of the cultivated land area have significantly decreased. In perennial crops (fruits, citrus, except for grapes), the same decline was observed. This aspect indicates a truly unfavorable trend for agriculture and agro-insurance in Georgia.

Definitely, natural disasters should be considered. Drought is not insured within the program, but considering it as a significant risk factor, it is necessary for it to be taken into account. The drought is observed on the whole territory of the country. In the early periods, the drought was once in every 15-20 years, while in the recent period, it occurs every 6-7 years. In 1995-2008, the damage inflicted by drought on agriculture reached up to 400 mln GEL. In terms of rainfall, Georgia is a contrasting region. In the Caucasus, Guria-Adjara and Kolkheti lowland, rainfall is more than 1000 mm per year. In other regions, the sediments are less than 300-750 mm. That is why the problem of desertification which is the main cause of the drought is actual for Georgia. Furthermore, it is essential that the risk factor should be involved in the insurance program.

## CONCLUSION

Based on the analysis and compilation of the above, we can conclude:

1. It is necessary for Georgia to evaluate the risk management system in the EU and set it in the agenda for discussion;
2. Consideration of farmers' attitude towards insurance and their solvency problems. By itself, the state agro-insurance project is a step forward in terms of the development of insurance sector as well as the creation of financial stability of the agricultural sector. However, taking into account the hasty execution of the agro-insurance pilot project and the mistakes made by both parties (agency and insurance companies) in the process of implementation at the initial stage, could have negative impact on farmers' incentives and preparedness to re-engage in the project. In addition, the effectiveness of the project in terms of increasing the level of insurance culture was not the result of the effect that would be expected within the project budget. If we look at the comparison between the data of 2014 and 2015, the trend gives the basis for this conclusion. In 2014, the share of the agri-insurance in the entire insurance sector increased up to 4%; and in 2015, it was only 1%;
3. There is a lot of work to be done in marketing by insurance companies. Also, an educational work is not only the prerogative of insurance companies, but also the effective measures of the government should be strengthened;

4. The trend is observed in the insurance market to operate with only a few types of products. It is necessary to analyze the needs of consumers and take into consideration, further refining of the product or offer a new one. In connection with agro insurance, they can also share western experience, even in terms of novelty, Indexed insurance is an innovation offered on the insurance market based on price and aggregate calculations for the index assigned to the particular region. This insurance product includes; satellite mapping, determining the meteorological risks of regions that are characteristic of regions, and granting them the relevant index. This product helps to differentiate the pricing scale according to the risk level for each region.

For example, if we look at the frequency and loss ratio of the claims in the agri-insurance policy issued in 2014-2015, according to the regions, we should note that total loss ratio amounted to 88% and the frequency of loss - 51%. According to separate regions, Samegrelo-Zemo Svaneti was distinguished with 122% and 208% of the losses and frequency rates when the similar indicators of Mtskheta-Mtianeti were equal to 1% and 3%. To create a complete picture of risk factors for natural disasters and predicting them, it is necessary to establish permanent and sustainable cooperation with the National Environmental Agency. This, however, helps to predict the country's natural hydro meteorological and geodynamic processes and events. In cooperation, according to insurance risk factors, mapping can be done for retrospective and forecast analysis. It will be welcomed to form an information platform for agro insurance. This will unify the information received from the contractors engaged in the system and provide the information materials required for the analysis from the stakeholders;

5. For agro insurance, it is highly important to determine exact coordinates of insured land plot. For this purpose, several methods are used: Extract of the Public Registry indicating the cadastral code of the land, land drawings and GPS coordinates. In Georgia, lack of land plots registered in the Public Registry makes it necessary to use the GPS coordinates recording system when insuring. The formatting of these coordinates data is available in different ways: 1) **Degrees, minutes, and seconds (DMS) - 41°24'12.2"N 2°10'26.5"E**; 2) **Degrees and decimal minutes (DMM) - 41 24.2028, 2 10.4418**; 3) **Decimal degrees (DD) - 41.40338, 2.17403**. Using a different system of coordinate formatting and putting into one particular platform/system, which is customized to another particular format, determines the incorrect final coordinates. As a result, the insurance company has insured a different land from the land plot specified in the policy;

6. Gradually, it is necessary to think about the insurance of livestock sector. The annual increase in the number of livestock is 3%, while the

percentage of the falling rate with reference to the previous years varies from 3 to 30% in the previous year. There is quite a big change and the farmer needs help in this regard. For example, involvement of the product "livestock insurance" developed by GPI Holding in the state program will be a step forward in the initial stage. The annual insurance premium is 30 GEL and it will compensate the damage caused by many risks;

**7.** Under the Agro Insurance Project, agent's commission is a maximum 20%. On average, a policy commission rates varies by 10%, while maximization of the commission up to 20% may cause distortion of an insurance agent's incentives and reduction of other insurance products sales. Similarly, there is a risk of distorting market incentives for the entire insurance company by the influence of guaranteed subsidized premiums;

**8.** The physiological and vegetative picture of the plant growth differs by the climatic zones, so that cultural plants should be distinguished by climatic zones, which are related to the specific zone (Georgia is characterized by 11 climatic zones from 14 climatic zones worldwide). Also, there must be defined favorable soil type and region of land for specific crops. This gives the opportunity to reduce the risks of climatic conditions, and to encourage more crop growth in relation to specific crops. Enrolment of existing nuances in insurance policy allows the reduction of the cost of insurance policy according to certain risk factors;

**9.** When considering the EU agro-insurance system, it is necessary to review EU solvency regulations and gradual approach to it. From the 1st of January 2016, The EU has moved to solvency II which includes new regulations and requires an increase of minimum capital and minimum reserve/guarantee funds, as well as supervision and risk margins. The insurance sector in Georgia is still far from these regulations. Minimum capital requirements at least 2 million GEL (for non-life insurance) and 2.2 million GEL (for life insurance and reinsurance - changed in 2015) is very far from the minimum guarantee fund requirements according to solvency II which is 3 million euros. Also, currency exchange rate and consumer price index should be considered (The European Union carries out the minimum capital adjustment in accordance with this index). It is necessary to plan for a time-limit plan to increase the minimum capital gradually, which will be announced to insurance companies to take measures in advance. It is inevitable to resolve this issue to meet EU standards on one hand, and to increase the level of solvency and financial stability of insurance companies on the other hand.

As for calculating the base of the solvency margin, since June 2016, the amendments has been introduced in the Law on Insurance. Also, it has defined the calculation base which is applicable to the requirements of EU

Directive 2009/138/EC. Thus, the solution of this issue should be assessed positively;

**10.** Assets of the insurance sector are growing at a slow pace and very low level of capitalization and investments are made by them. This indicates weakness of financial management and wrong assessment of the risks. In this respect, there is a lot to be done by companies and the government itself. The function of the government in this case requires setting up high standards of education and promotion and licensing of high level specialists in insurance and actuarial activities;

**11.** Weak management, coordination, communication and internal retraining of staff, and corporate management standards. In today's Georgia, many companies are suffering due to weak management in the long term. This applies to insurance companies as well. Time and money expenditure, which cannot be counted in quantitative terms at a glance, is expressed in reduced sales and increased acquisition or administrative expenses over the long term. The weakest link in this case is the lack of coordination at all levels, at the top management or in the middle level. Incomplete systems and methods of communication at the vertical and horizontal level are the main problem of information exchange, This, however, increases the cost of operation or creating and accounting costs of a specific policy.

The level of general qualifications of personnel is also not acceptable. An investment in human capital increases the expected returns in the long term. However, in many cases, the HR policy is not at this level.

Finally, it can be said that there is still much to be done in order to minimize the factors and risks associated with the development of agro-insurance in Georgia. If the relevant legislative-regulatory activity were not started, it is possible that this process cannot give the expected positive results and all efforts could be in vain.

### **References:**

Agricultural Insurance Schemes (2006). Summary report - EUROPEAN COMMISSION, DIRECTORATE GENERAL, JRC JOINT RESEARCH CENTRE – ISPRA, Institute for the Protection and Security of the Citizen, Agriculture and Fisheries Unit, Italy.

Agro Insurance Program (2014). Decree # 1462 of the Government of Georgia on August 19.

Agro Insurance Program (2016). Decree # 524 of the Government of Georgia on March 28.

Amending Council Directive 73/239/EEC as regards the solvency margin requirements for non-life insurance undertakings“ DIRECTIVE 2002/13/EC - European Commission, 2002.

Annual Report (2014). Ministry of Agriculture of Georgia.

- Annual Report (2015). Ministry of Agriculture of Georgia.
- Bosnia and Herzegovina (2014). Agricultural Insurance as Risk Management Strategy: An overview of Agricultural Insurance Schemes in Europe and the World, The Foreign Policy Initiative BH
- Čolović Vladimir & Petrović Nataša Mrvić (2014). CROP INSURANCE – RISKS AND MODELS OF INSURANCE, Economics of Agriculture 3/2014, Original scientific paper EP 2014 (61) 3 (561-573), Belgrade.
- Decree # 306 of the Government of Georgia on February 19, 2015 on approval of Agro Insurance Program.
- "Law of Georgia on Insurance" - Parliament of Georgia, Tbilisi, 02.05.1997.
- Order No. 05 of the Head of the State Supervision Service of Georgia on December 24, 2013 on the introduction of a marginal correlation between the net obligations taken in the form of insured liabilities and their capital.
- Order No. 15 of the Head of the State Insurance Supervision Service of Georgia on September 16, 2016, on the approval of the rule calculating the solvency margin by the Insurer in performing insurance activities.
- Order No. 04 of the Head of the State Insurance Supervision Service of Georgia on April 20, 2015 on approval of the rule defining the minimum amount of capital at all stages for insurance activities in the territory of Georgia.
- Shatirishvili, J. Kakashvili, N. (2012). Insurance. Tbilisi, Publishing House "Iverioni".
- Stiglitz Joseph E (1987). Some Theoretical Aspects of Agricultural Policies, The World Bank Research Observer, Oxford University Press Vol. 2, No. 1 (Jan., 1987), pp. 43-60.
- The World Bank (2010). Government Support to Agricultural Insurance: Challenges and Options for Developing Countries.  
[http://europa.eu/rapid/press-release\\_IP-10-60\\_en.htm](http://europa.eu/rapid/press-release_IP-10-60_en.htm).  
<https://sites.google.com/site/mobiluriteqnologiebi/gps>.  
[http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#\\_ftn6](http://www.farm-europe.eu/travaux/how-to-tackle-price-and-income-volatility-for-farmers-an-overview-of-international-agricultural-policies-and-instruments/#_ftn6).  
<http://apma.ge/newsletter/projects/read/agroinsurance>.  
<http://agrokavkaz.ge/axali-ambebi/agrodazghveva-ganakhlebul-proeqts-phermerebi-etsnobian.html>.  
<http://credo.ge/ka/465/>.  
<http://meteo.gov.ge/index.php?pg=sts&id=20>.  
<http://www.theactuary.com/features/2015/03/new-frontiers-in-agriculture/>.  
<http://www.artemis.bm/blog/2013/01/17/emerging-market-agricultural-insurance-premiums-set-to-grow-fourfold-by-2025/>.  
[http://www.internationalinsuranceforum.com/prop/wp-content/uploads/2014/10/20\\_Marijana-SARAMANDIC.pdf](http://www.internationalinsuranceforum.com/prop/wp-content/uploads/2014/10/20_Marijana-SARAMANDIC.pdf).

[https://www.wur.nl/upload\\_mm/8/8/a/bbf25350-6dd8-47ed-a63a-333bc6576d97\\_Sulewski\\_Agricultural\\_insurance\\_Poland.pdf](https://www.wur.nl/upload_mm/8/8/a/bbf25350-6dd8-47ed-a63a-333bc6576d97_Sulewski_Agricultural_insurance_Poland.pdf).  
<http://news.ge/ge/page/saqartvelos-soflis-meurneobis-saministro>