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The Role and Challenges of Agricultural Insurance in Georgia

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Abstract. Agricultural insurance, as an economic and financial mechanism, protects farmers and agricultural producers from financial losses caused by natural events. Agricultural insurance plays a significant economic and social role for Georgia, as agriculture is one of the country's most important sectors and is often damaged by natural disasters. The importance of the state agricultural insurance program is manifested in the following: financial protection for farmers, income stability, agricultural development, strengthening food security, and state support. Consequently, insurance mitigates the impact of economic losses caused by natural disasters and helps maintain employment and population income. This serves to mitigate these very risks, which in turn creates social stability for farm households and rural populations.
Keywords: *Agricultural insurance; Farming, Insurance risk; Financial mechanism.*

Introduction

Agriculture is a critical and highly vulnerable sector of the economy, especially in agrarian societies where the sector's share of the economy is high. This is due to the existence of natural disasters and various other unpredictable risks. It was for this reason that the concept of agricultural, or agro-insurance, first emerged in the 18th century. Over time, the system was refined, developed, and spread throughout the world. In Georgia, agro-insurance, as a risk management tool for the agricultural sector, is a relatively new mechanism. Since 2014, a government program has been in effect that supports and subsidizes agro-insurance. This process, along with crop insurance, has made guarantees of stability more accessible to farmers. In farming, crop insurance is of paramount importance. Therefore, implementing the agro-insurance program is vitally important for current producers. A well-managed Reforming the agricultural sector and developing agribusiness will contribute to the socioeconomic growth of farmers, the development of the country, and the well-being of the population. The development of agricultural insurance products gives farmers access to more financial resources, which contributes to the stable development of the sector. The great importance of agro-insurance is evidenced by the fact that every year, farmers lose their entire year's livelihood due to damages caused by various natural disasters. These natural disasters not only severely hinder farmers' income but also impede their economic progress over time. Agricultural insurance is a growing business product, driven by the commercialization of agriculture, international trade, and new insurance products. The creation and marketing of new insurance products has a positive impact on the farming sector. To increase productivity and income, farmers also need to invest in the professionalization of their farms and modern digital technologies. It is also particularly important for the government to work on improving their education. The main objectives of agro-insurance can be considered as follows:

Reducing financial risks for farmers;
Protecting crops and income;
Promoting sustainable agricultural development;
Encouraging investment in the agricultural sector;
Reducing economic losses caused by natural disasters.

Discussion

The importance of the state agricultural insurance program is reflected in the following main areas:

Farmers' financial protection - In the event of losses caused by natural disasters, farmers receive insurance compensation, which helps them continue their activities.

Income stability - Insurance reduces the financial risk caused by crop loss and helps farmers maintain their income.

Agricultural development - When risks are lower, farmers are more willing to invest in modern technologies and high-quality production.

Strengthening food security - Crop protection mechanisms help preserve local agricultural production and ensure the country's food supply.

State support - The government finances a significant portion of the insurance premium, making agricultural insurance more affordable for farmers.

The agricultural insurance sector is characterized by its unique dynamics. Its economic production processes are closely linked to natural production processes. Agriculture is highly dependent on:

a) natural environmental conditions, soil, water resources, climate conditions, and the ecosystem;

b) the frequency and severity of natural disasters;

c) the spread of pests and fungal diseases.

Under stable climatic conditions and with the implementation of proper farming technologies, it is possible to maintain soil fertility, preserve ecosystem sustainability, and manage and control pests and diseases. However, it is not always possible to prevent insurance risks and the losses they cause. It is precisely in such situations that agricultural insurance becomes particularly important for maintaining the economic stability of agriculture. Agricultural production is seasonal, and agricultural risks are mainly divided into two categories:

a) crop production and its related risks;

b) livestock farming and its related risks.

For each of these subsectors and production conditions, it is essential to consider the specific risks associated with them. In addition to the specific risks directly related to agriculture, agricultural insurance products should also take into account risks associated with accidents or criminal acts committed by third parties. Agricultural insurance ensures that fluctuations in global market prices do not cause devastating damage to the national economy and the agricultural sector. Agricultural insurance products may cover one or several risks, the entire farm, or only a specific part of it. To maintain the financial sustainability of the sector, it is most important to insure risks associated with systemic natural disasters (hail, drought, mudflows, floods) and epidemic diseases. Risk is a characteristic of uncertainty about the future of an object. Without risk, there is no insurance. How can risks in agricultural production be reduced? It is necessary to understand the nature, level, and characteristics of the risks faced by agricultural producers. The following agricultural risks exist:

- Production risks;
- Price and marketing risks;
- Institutional risks;
- Financial risks;
- Professional risks;

- Personal risks;
- Systemic risks.

Production: For example, grain prices typically fluctuate significantly during the harvest period and decline after the harvest, when the first information about the total harvest becomes available. Over the years, price fluctuations are primarily linked to production volumes in individual years, as well as supply and demand in both domestic and foreign markets. Under unfavorable weather conditions and low yields, product prices may increase or decrease significantly.

Prices: Price volatility is a serious source of risk in agriculture. Price changes from year to year may display a relatively similar pattern, which is explained by the seasonal nature of agricultural production.

Institutional: These risks may arise due to changes in economic policy, agricultural legislation, or state agricultural policy. Managing institutional risk requires a stable legislative framework regulating land relations, which has significantly influenced the investment attractiveness of agricultural production over the past decade.

Financial: These risks are related to enterprise formation, capital accumulation, and financing methods. In this case, the risk is caused by changes in borrowing interest rates, the size of equity capital, and insufficient liquidity.

Professional: This type of risk is particularly common in crop production and is assessed by the degree of variability in the yields of individual crops. The level of production risk is often measured using the statistical indicator known as the coefficient of variation.

Personal: This is especially important in peasant and family farms. It refers to situations such as illness or disability, which may seriously affect the economic activities of the farm.

Systemic: These risks have a major impact on the economy and cause significant losses for both farmers and the state. Examples include periods of drought or epidemics among livestock and poultry. This systemic component may result in substantial losses within agricultural insurers' portfolios.

Among European countries, crop insurance is the most widely demanded insurance product. Similarly, in Georgia, agricultural insurance products mainly consist of crop insurance. Compared with European countries, the share of insurance subsidies in Georgia is relatively high. Under the State Agricultural Insurance Program, the government subsidizes 70% of the insurance premium, which exceeds the subsidy level in many European countries, while the insured farmer pays the remaining 30% of the premium. At different stages of the program's development, the subsidy rate varied between 50% and 90%; however, the current mechanism provides a 70% state co-financing rate.

The introduction and development of agricultural insurance in Georgia cover a relatively short period. On the initiative of the Government of Georgia, the State Agricultural Insurance Program was launched through the creation of a pilot agricultural insurance program, which came into effect in September 2014 and involved government financing of a significant portion of the insurance premium. Georgia's efforts to introduce international practices have spanned only ten years. For such a complex type of insurance as agricultural insurance, this is a relatively short period. Developed countries around the world possess extensive experience in this field. Numerous mechanisms have been tested to ensure the effective functioning of agricultural insurance systems. Research has shown, based on international experience, that government support is critically important for agricultural insurance. In leading countries where agricultural insurance systems operate successfully, co-financing programs are in place and the government actively participates in the process. As a result of implementing the agricultural insurance program, the sector has clearly become more popular among the population. The introduction of the State Agricultural Insurance Program in Georgia has undoubtedly moved the country's agricultural sector to a new stage of development. However, many stages of development still lie ahead to establish a fully functioning system. Compared to other countries, agricultural insurance is a relatively new product for Georgia, and it will take time for the population to understand, analyze, and fully recognize its advantages, importance, and necessity. The development of the insurance market for the agricultural sector is extremely important, as it will promote agricultural production, increase competitiveness, reduce production risks, and help preserve farmer’s income. Based on statistical data, we can assess the pace and results of agricultural insurance development. As of 2025, the situation is as follows:

In 2014, the agricultural insurance program was still in its initial stages of development. By 2025:

- The state budget increased by 50% (from 10 million to 15 million GEL);

• The maximum insurable area was doubled (from 10 to 20 ha, and from 50 to 100 ha for grains);

• Co-financing for villages along the dividing line was increased to 75%;

Procedures for damage assessment and compensation were simplified.

Chart N1

Information on agricultural insurance implemented in 2025

Insurance company	Insurance policies issued since the beginning of the reporting year	Insurance premium collected since the beginning of the reporting year
Insurance company "Aldagi"	29075	18,012,558
TBC insurance	2253	3,475,149
Insurance company "Alpha"	166	292,957
New vision insurance	90	86,744
International insurance company "Irao"	3	240
Total	31,587	21,867,648

Chart N2

Difference between 2014 and 2025 agricultural-insurance statistics

Year	Quantity of insurance policies	Total insurance premium (Lari)	Insured area
2014	21,056	12,586,739	18,723 ha
2025	31,587	21,867,648	24 000 ha

In addition, the program's cumulative results indicate its growth: Since 2014, more than 194,000 insurance policies have been issued, 72,703 beneficiaries have used the program, and the amount of damages compensated has exceeded 92 million GEL. If we look at the premiums collected from agri-insurance policies issued in 2025, we can see that the total number of policies has been increasing over the years and continues to grow. According to these statistics, we can calculate that the total premiums collected in 2025 exceed those of 2014 by approximately 9 million, which equates to a growth of about 73%. Statistics show that the interest of farmers and people working in agribusiness in agro-insurance is gradually increasing, However, compared to other developed countries, agricultural insurance in Georgia is far from perfect. We can compare the agricultural insurance model in Georgia with those in developed countries to clearly highlight the differences between them:

Chart N3

Agricultural Insurance Model in Georgia

Characteristics	Georgia (emerging market)	Developed countries (USA, EU)
Market maturity and history	New platform (the state program has been in effect since 2014).	Centuries of experience and an established insurance culture.
Government subsidies	High share, the state covers 50% to 70% of the premium (2026 budget: 17 million Ge Lari).	High and stable, subsidies are often over 60% and are linked to protecting farmers' income.
Scope of insured risks	Limited: It mainly covers hail, floods, storms, and spring frost.	Comprehensive (MPCI): Covers drought, diseases, pests, and yield/price declines (Revenue Insurance).
Technological level	It is mainly based on an on-site physical assessment of damages by experts.	High-tech: Satellite monitoring, AI, drones, and parametric (index-based) models.
Farmer involvement	Low: Only a small percentage of farmers insure their crops (due to low trust and awareness).	High: The majority of farmers (often over 80%) are enrolled in insurance schemes.

Based on the information, which is given in the table, we can say that the agro-insurance model in Georgia lags behind that of developed countries. The main reasons for this are

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challenges such as: Limited choice of risks: The program managed by the Georgian Ministry of Environment and Agriculture does not cover critical risks such as drought or plant diseases. According to the local farmers' association, the current program does not fully meet the farmers' needs and requires an expansion of its list of covered risks. Loss Assessment System: Unlike the automated satellite systems used in developed markets, the loss assessment process in Georgia is often a point of dispute between insurance companies and farmers, leading to a lack of transparency. Despite the challenges, the sector is growing, with both the number of insured beneficiaries and the area of insured land increasing in recent years. Market-leading companies are actively working to provide farmers with stability guarantees and increase access to insurance. Therefore, with the right interventions and the help of innovative technologies, it is possible to capture a much larger share of Georgia's agricultural market and offer a better product to the agricultural population, so that this sector can develop for the benefit of both insurance companies and individual Georgian farmers and Georgian agribusiness.

Conclusion

Agriculture plays one of the most significant roles in Georgia's economy. Its development will lead to economic sustainability and an improved quality of life for the population. In order to promote the country's agrarian development, the state must use all available levers, one of which will certainly be agrarian insurance, through which it will be possible to relatively easily solve all of these problems, which farming faces in agricultural activities.

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