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СЕЛЬСКОХОЗЯЙСТВЕННОЕ СТРАХОВАНИЕ В РЕСПУБЛИКЕ АРМЕНИЯ: ДОБРОВОЛЬНЫЙ ВЫБОР ИЛИ ЖИЗНЕННАЯ НЕОБХОДИМОСТЬ?

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Аннотация: Сельскохозяйственное страхование — это специализированный инструмент управления рисками, предназначенный для защиты от финансовых потерь, возникающих в результате повреждения или утраты урожая и животных. Эта форма страхования важна для стабилизации доходов в сельском хозяйстве и стимулирования инвестиций в сельскохозяйственное производство, особенно для фермеров с низким уровнем дохода. В последнее время в Республике Армения резко возросло количество убытков, связанных с изменениями погоды. В последние месяцы как заморозки, так и град сделали более актуальным в сельскохозяйственном секторе Республики Армения вопрос страхования урожая, и, что наиболее важно, как его застраховать. Недавние примеры показали, что страхование позволило фермерам обеспечить непрерывность производства, несмотря на понесенные убытки.

Ключевые слова: сельскохозяйственное страхование, сельскохозяйственные риски, страховые полисы, убытки.

AGRICULTURAL INSURANCE IN THE REPUBLIC OF ARMENIA: A VOLUNTARY CHOICE OR A VITAL NECESSITY?

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Abstract. Agricultural insurance is a specialized risk management tool designed to protect against financial losses resulting from damage to or loss of crops and animals. This form of coverage is important for stabilizing agricultural incomes and encouraging greater investment in agricultural productivity, particularly for low-income farmers. Recently, the number of losses due to weather changes has increased dramatically in the Republic of Armenia. In recent months, both frost and hail have made it more relevant in the agricultural sector of the Republic of Armenia to insure or not to insure the crop, and most importantly, how to insure it. Recent cases have shown that insurance has enabled farmers to ensure the continuity of production despite the losses incurred.

Keywords: Agricultural insurance, agricultural risks, insurance policies, losses

Introduction. New quality agricultural productivity plays an important role in high-quality agricultural transformation. As the main tool for risk management in the sector,

agricultural insurance and its transfer mechanisms are becoming increasingly important. The lack of agricultural insurance in the Republic of Armenia caused a collapse situation, especially in those areas where hail caused great damage to agriculture. The main goal of the article is to identify the importance of the pilot agricultural insurance of the Republic of Armenia, its main mechanisms. As a result of the analysis, it is necessary to identify the advantages of the current model, which is used in the field of agricultural insurance, to identify the main reasons that hinder farmers' involvement in the agricultural insurance program.

Literature review. Agricultural insurance, through risk distribution and income stabilization, can mitigate the consequences of natural disasters and market instability, reduce the expected losses associated with the introduction of technologies and investments, and thus support new quality productivity. The literature shows that insurance optimizes factor allocation, stabilizes production expectations, and promotes technological progress.

In agriculture, alleviating factor constraints, increasing production efficiency, and accelerating agricultural and rural modernization depend on the development of new quality productivity.

Insurance can increase efficiency by promoting firm entry, improving labor allocation, and promoting technological innovation, but limited coverage or misallocation of resources can reduce these benefits.

As a key risk management tool, insurance can guide producers toward green practices such as water-saving irrigation, risk transfer incentives, and farmers' risk attitudes are likely to play a key role in this process.

The global crop insurance market size was valued at USD 48.01 billion in 2025 and is projected to grow from USD 50.14 billion in 2026 to USD 76.98 billion by 2034, registering a CAGR of 5.50% during the forecast period. North America dominated the global market, accounting for 41.60% in 2025.

Climate change and increasing weather variability are increasing the demand for comprehensive crop protection in North America, Europe, and the Asia-Pacific region, where farmers face high risks of hail, drought, floods, and temperature extremes.

Technological advancements such as remote sensing, satellite imagery, and artificial intelligence-based risk assessment are expected to improve insurance accuracy and claims management. In addition, the use of innovative technologies is revolutionizing insurance accuracy and reducing settlement times in regions such as India, Brazil, and Australia.

In 2024, China's agricultural sector accounted for about 6.8 percent of the country's total gross domestic product (GDP), estimated at about 134.91 trillion yuan (about 18.6 trillion US dollars) at current prices.

Despite its relatively small share in GDP, agriculture remains a crucial part of China's economic and social fabric, especially in terms of food security, rural employment, and poverty reduction. China's national food security agenda is deeply linked to rural stability and agricultural productivity. Agricultural insurance in China operates under a state-supported, market-driven model, with the government subsidizing and regulating the sector and private insurance companies providing its operational implementation. The system covers a wide range of protection, from crop yields and incomes to livestock, natural disasters, and price fluctuations.

Several key government agencies are involved in this ecosystem. The Ministry of Finance provides central subsidies, the Ministry of Agriculture defines risk zones and coordinates pilot programs, and the National Financial Regulatory Authority oversees the activities of insurers, approves products, and sets pricing and reserve standards.

Regional and local governments co-finance premium subsidies, select insurers through a competitive process, organize farmer registration, conduct awareness campaigns, and monitor data reporting, ensuring the effectiveness of the system at the community level.

Research methodology. When conducting the research, we used the system analysis method, through which the role of agricultural insurance in ensuring economic stability was assessed. Official statistical sources, data published by the National Agricultural Statistics Service, and official information provided by the Ministry of Economy were used to collect data.

Analysis and results. In the agricultural sector, especially the climatic consequences in recent months have been quite negative in the Republic of Armenia. Regions where risk mitigation mechanisms were lacking suffered more losses. Farmers who participated in insurance received compensations stipulated by the contract, both in the case of early spring frosts and hail. Agricultural insurance in the Republic of Armenia has already yielded significant results. Since we do not yet have reinsurance companies, state support is once again becoming even more important.

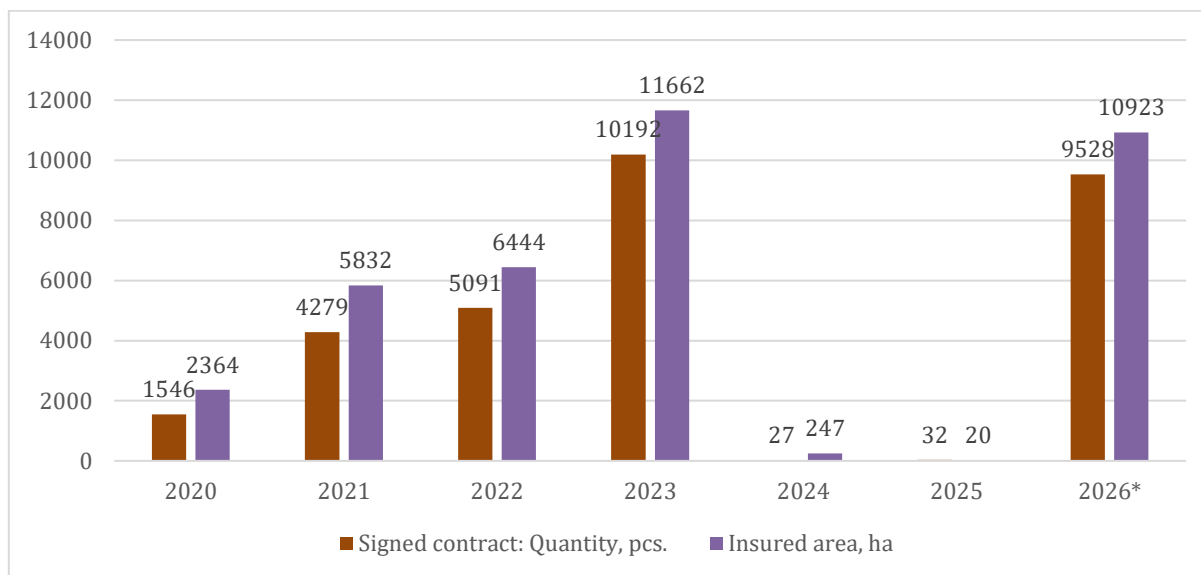


Fig. 1. The number of contracts signed during the implementation of the pilot agricultural insurance of RA (items) and the insured areas (ha) 2020-2026*

The pilot program in the agricultural sector of the Republic of Armenia encountered numerous obstacles, starting from the very beginning of the program's implementation. At the initial stage, 1,546 contracts were signed and 2,364 ha of land were insured, which signaled the beginning of the program's testing. In the following years, active growth and incomparably high interest among farmers are observed. In particular, in 2023, the indicators already amounted to 10,192 contracts (a 559% increase compared to 2020) and 11,662 ha.

This indicates an increase in confidence among farmers in the program, improvement of insurance mechanisms and expansion of state support. In 2024-2025, a sharp decline was recorded: in 2024, only 27 contracts (247 ha) were signed, and in 2025, 32 contracts (20 ha). This significant decrease was due to the inconsistent steps taken by reinsurers to exit the market, as well as the weakening of state control, which was manifested in the exclusion of the products with the largest weight in the program, apricots and grapes. The restoration steps of the agricultural insurance pilot program have already begun since 2025. In 2025, the state was forced to subsidize 70-80% of payments, and in 2026, subsidies were reduced (for apricots - 40%, for other crops - 60%), with 200 million drams allocated for this purpose.

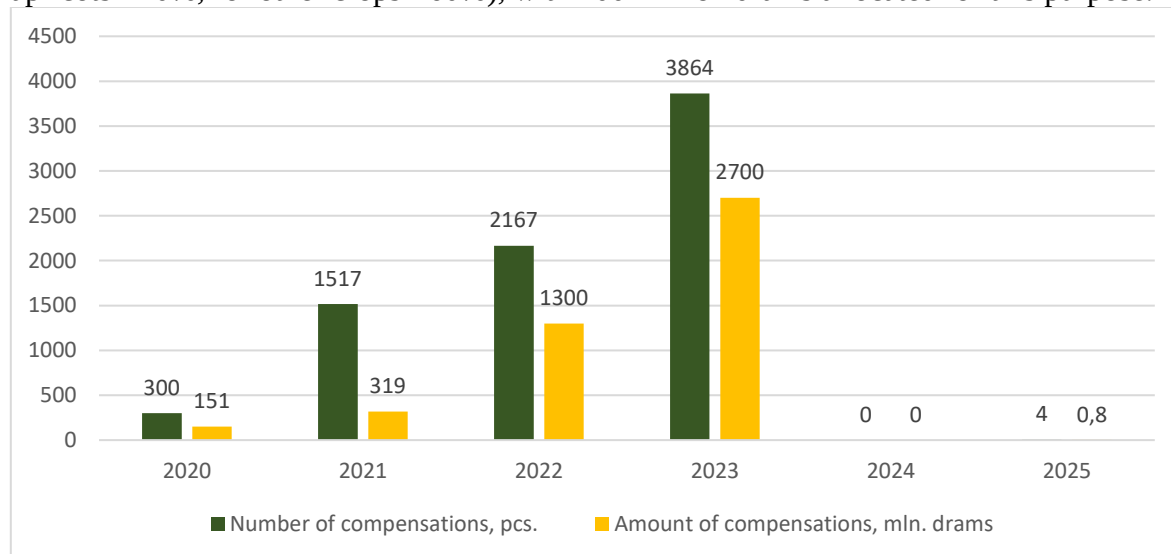


Fig. 2. Number of compensations (units) and compensation amounts (million drams) during the implementation of the pilot agricultural insurance of the Republic of Armenia in 2020-2025.¹

In 2020-2023, a sharp increase in the number and amount of compensations was recorded. In 2020, 300 compensations (151 million drams) were recorded, and in 2023, already 3,864 compensations (2,700 million drams), which means a 12.8-fold increase in quantity and 17.9-fold in monetary terms. This growth is directly due to the increase in the number of contracts signed and insured areas during the same period, as well as in 2021-2023. adverse weather conditions, which led to large-scale losses. It is noteworthy that in 2023 the amount of compensation (2.7 billion drams) significantly exceeded the insurance premiums paid by farmers, revealing the high level of unprofitability of the insurance system.

No compensations were registered in 2024 (0), and in 2025 only 4 compensations (0.8 million drams). This decline does not mean the absence of losses, but reflects the unstable state of the insurance system, the main reasons for which, as already mentioned, were the exclusion of reinsurers and basic products from the program, as a result of which

¹ In response to the Ministry of Economy's letters of June 20, 2025 No. 09.7.12/14044-2025 and June 25, 2026 No. 09.7.12/16118-2026 and the official published indicators of the National Statistics Agency <https://aina.am/>

new contracts were not concluded. In fact, the indicators for 2024-2025 show that without state support and reliable reinsurance structures, agricultural insurance becomes economically unfeasible. The 2026 activity, the already signed 9528 contract, is only possible thanks to a 70-80% state subsidy, but without reinsurance, long-term sustainability remains questionable.

Table 1 - Amount of gross insurance premiums for agricultural insurance in the Republic of Armenia in 2020-2025, million drams

Date	Volume, tons	An absolute plus $\Delta y_{i/i-t}$		Growth rate $T_{P_{i/1}}$, %		Growth rate $T_{пы_{i/1}}$, %		1% growth rate $A \% $
		base	chain	base	chain	base	chain	base
2020	130.4	0.0		100.0		0.0		
2021	474.6	344.2	344.2	364.0	364.0	264.0	264.0	1.3
2022	866.3	735.9	391.7	664.3	0.0	564.3	0.0	4.7
2023	1877.9	1747.5	1011.6	1440.1	216.8	1340.1	116.8	8.7
2024	22.0	-108.4	-1855.9	16.9	1.2	-83.1	-98.8	18.8
2025	1.867	-128.5	-20.1	1.4	8.5	-98.6	-91.5	0.2

In 2020-2023, gross insurance premiums recorded an exceptional growth, reaching 1,877.9 million drams from 130.4 million drams, which means a 14.4-fold increase, with the largest increase recorded in 2023, by 1,011.6 million drams (116.8%), which was due to a sharp increase in insured territories and contracts, but in 2024 there was a decline with a chain decrease of 98.8% (reaching 22.0 million drams), and in 2025 the situation worsened even more, with insurance premiums amounting to only 1,867 million drams. These sharp fluctuations indicate that the effectiveness of the insurance system is largely determined by reinsurance reliability and state support.

Conclusion. The pilot program of agricultural insurance of the Republic of Armenia, although formally voluntary, is essentially becoming a vital necessity in the conditions of high level of risks in the agricultural sector. The indicators for 2020-2023 indicate a growing interest in the program, but in 2023, the compensations of 2.7 billion drams against the collected payments of 1.8 billion drams revealed the fundamental problem of the system - financial imbalance, as a result of which the reinsurance company left the market.

The sharp decline recorded in 2024-2025 (27 contracts in 2024, 32 contracts in 2025) shows that without state support and reinsurance structures, the program loses its viability. In 2025, the state was forced to subsidize 70-80% of payments, which proves that insurance

is inaccessible to the majority of farmers in market conditions, but without it they remain unprotected from natural disasters.

Pilot insurance schemes in the agricultural sector of the Republic of Armenia need to be reformed. It is recommended to:

- introduce new damage assessment criteria and a qualification system for experts in the field,
- create statistical infrastructures for a more accurate assessment of risks,
- involve new reinsurers/reinsurers,
- exchange experience with leading developed countries in the sector,
- introduce innovative risk reduction methods, including the installation of anti-hail stations, the use of protective nets, sensor monitoring systems for soil and air humidity, as well as expand the network of local weather stations to increase the accuracy of climate forecasts.

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