



THE ROLE OF GREEN INSURANCE IN ADVANCING SUSTAINABLE FINANCE IN UZBEKISTAN

<https://doi.org/10.57033/mijournals-2026-3-0121>

Shakhobiddin ISMAILOV

*Master student, International Islamic Academy of Uzbekistan
Tashkent, Uzbekistan.*

Email: shaxobiddin.ismoilov@gmail.com

Received: 15-04-2026

Accepted: 28-04-2026

Published: 06-05-2026



Copyright: © 2026 by the authors.
Submitted for open access publication
under the terms and conditions of the
Creative Commons Attribution (CC
BY) license
([http://creativecommons.org/licenses/
by/4.0/](http://creativecommons.org/licenses/by/4.0/))

Abstract. *This article analyzes the need to develop the green insurance market in Uzbekistan and its significance within the sustainable financing system on the basis of statistical data. The study examines insurance premiums, insurance claims, insurers' investment portfolios, agricultural insurance subsidies, and green financing instruments for 2023-2025. The findings show that the insurance market expanded from 8.1 trillion soums in 2023 to 13.5 trillion soums in 2025, while insurers' investments reached 9.6 trillion soums. At the same time, climate change, water scarcity, drought, and agricultural sector risks are increasing the need for green insurance products. The article proposes that green insurance should be considered not only as an ecological product, but also as a mechanism for financial management of climate risks, protection of green investments, and deepening of sustainable financing.*

Keywords: *Green insurance; insurance market; sustainable financing; climate risks; green bonds; agricultural insurance; ESG; Uzbekistan.*

INTRODUCTION

The transition to a green economy has become one of the important priorities of Uzbekistan's economic policy. The Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2019-2030 defines priority areas aimed at increasing energy efficiency, ensuring environmental safety, using resources rationally, and reducing the impacts of climate change (President of the Republic of Uzbekistan, 2019).

In this process, the insurance sector plays a special role. The transition to a green economy requires not only investment and technologies, but also financial risk

management mechanisms related to these investments. The concept of green insurance is associated with assessing environmental and climate risks, covering them through insurance products, and directing the investment resources of insurance companies toward sustainable projects.

For Uzbekistan, this issue is highly relevant because climate change affects the economy, agriculture, water resources, infrastructure, and household incomes. According to the World Bank, without adaptation measures, by 2050 Uzbekistan's economy could be 10 percent smaller than it would be in a scenario without climate-related damages. This makes insurance an important financial instrument for adapting to climate risks.

METHODOLOGY

The study applies statistical-comparative analysis, dynamic analysis, structural analysis, and proxy assessment methods. The main data were obtained from reports on Uzbekistan's insurance market for 2023, 2024, and 2025 (National Agency for Perspective Projects [NAPP], 2023, 2024, 2025), regulatory documents on the green economy, the World Bank's climate analyses, UNDP materials on agricultural insurance, and open data on green financing instruments (World Bank, 2023).

An important methodological limitation is that official insurance statistics in Uzbekistan do not classify green insurance as a separate insurance class. Therefore, this article assesses the potential of green insurance through the general size of the insurance market, the claims ratio, insurers' investments, agricultural insurance mechanisms, and green financing channels.

Table 1. Proxy indicators used in the study

Direction of analysis	Assessment criterion	Content
Insurance market size	Insurance premiums	Financial capacity of the market and its ability to absorb new products
Level of risk coverage	Insurance claims and claims ratio	The real protection function of insurance
Sustainable financing potential	Insurers' investments	Redirection of insurance resources into the economy
Climate adaptation potential	Agricultural insurance and natural risks	Coverage of drought, water scarcity, crop loss, and natural disaster risks
Link with green finance	Green bonds, sustainability bonds, GEFF	Integration of insurance, banking, and capital markets

Source: Developed by the author based on the methodological approach.

RESULTS

Insurance market size and dynamics

In 2023-2025, Uzbekistan’s insurance market expanded rapidly. Insurance premiums amounted to 8.1 trillion soums in 2023, increased to 9.8 trillion soums in 2024, and reached 13.5 trillion soums in 2025. Over 2023-2025, total premium growth was 67.0 percent, while the approximate average annual growth rate was 29.2 percent.

Table 2. Main indicators of Uzbekistan’s insurance market

Indicator	2023	2024	2025	2025/2023 growth
Insurance premiums, trillion soums	8.06	9.77	13.46	+67.0%
Insurance claims, trillion soums	2.02	2.20	2.99	+47.6%
Insurers’ investments, trillion soums	6.15	6.54	9.55	+55.3%
Number of insurance organizations	38	33	36	-5.3%

Source: Author’s calculations based on ILMA/NAPP insurance market reports

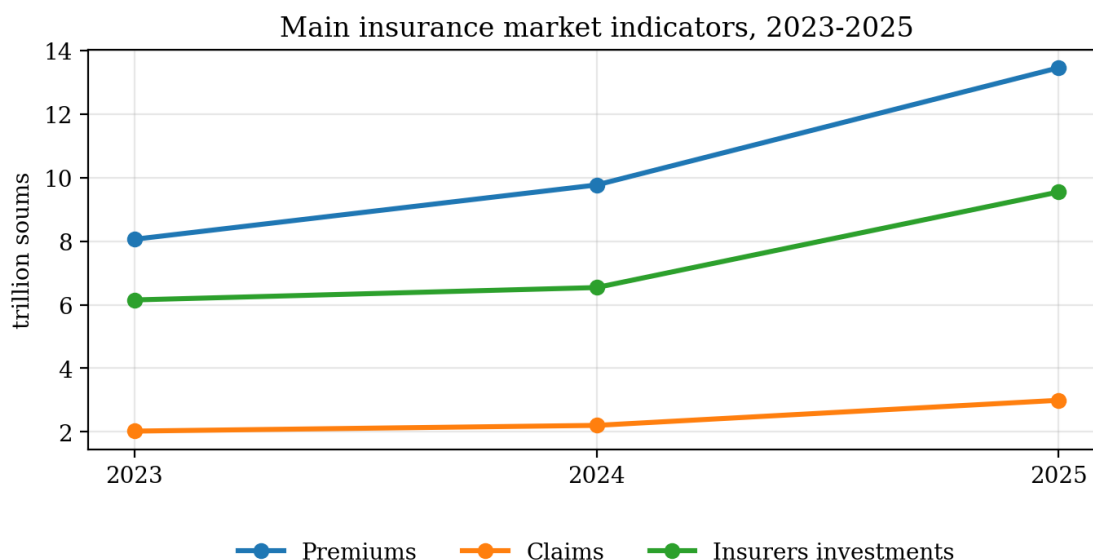


Figure 1. Dynamics of the main insurancemarket indicators, trillion soums

The figure shows that insurance premiums and investments are growing faster than claims. This indicates that insurance companies are developing a financial base for new environmental, agricultural, and climate adaptation products. However, since a large part of the market still relies on traditional insurance products, separate classification and monitoring of green insurance products are necessary (NAPP, 2025).

Insurance claims and the level of risk coverage

Insurance claims amounted to 2.02 trillion soums in 2023, 2.20 trillion soums in 2024, and 2.99 trillion soums in 2025. The claims ratio, defined as the ratio of insurance claims to insurance premiums, was 25.1 percent in 2023, 22.5 percent in 2024, and 22.2 percent in 2025.

Table 3. Analysis of the insurance claims ratio

Year	Premiums, trillion soums	Claims, trillion soums	Claims ratio
2023	8.06	2.02	25.1%
2024	9.77	2.20	22.5%
2025	13.46	2.99	22.2%

Source: Author’s calculations based on ILMA/NAPP reports.

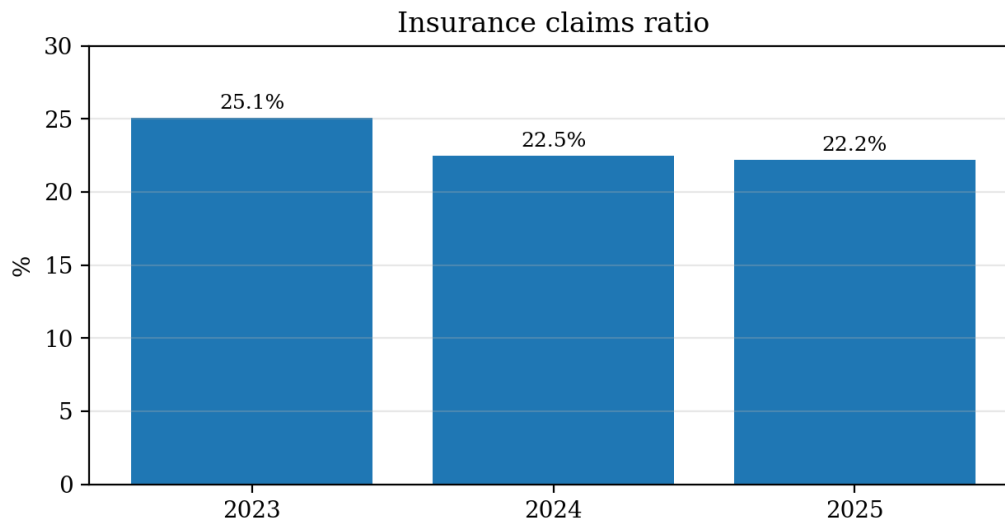


Figure 2. Insurance claims ratio, %

From the perspective of green insurance, a decline in the claims ratio can be interpreted in two ways. On the one hand, it may indicate that insurers are strengthening risk selection and underwriting discipline. On the other hand, if coverage mechanisms for climate risks, drought, crop losses, environmental liability, and natural disasters remain insufficiently developed, the real protection function of insurance may be limited.

Insurers’ investments and sustainable financing

The investment portfolio of insurers reached 9.55 trillion soums in 2025. Compared with 2024, the increase amounted to 46 percent. Deposits dominated the investment structure with a share of 63.2 percent, while securities accounted for 14.6 percent and real estate for 17.4 percent .

Table 4. Structure of insurers' investment portfolio

Investment direction	2024, trillion soums	Share	2025, trillion soums	Share	Growth
Deposits	4.58	70.1%	6.04	63.2%	+31.7%
Securities	1.30	19.9%	1.39	14.6%	+6.9%
Real estate	0.45	6.9%	1.66	17.4%	+266.1%
Loans	0.10	1.5%	0.05	0.5%	-52.1%
Equity participation	0.10	1.5%	0.09	0.9%	-13.2%
Other investments	0.01	0.1%	0.33	3.5%	+3834.1%
Total	6.54	100%	9.55	100%	+46.0%

Source: ILMA/NAPP insurance market report for the fourth quarter of 2025 .

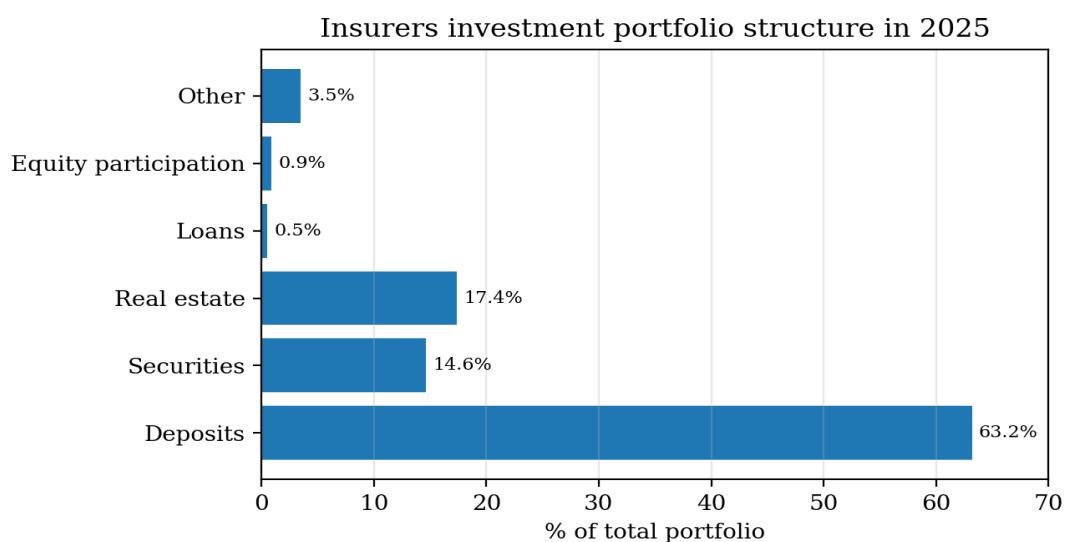


Figure 3. Structure of the insurers' investment portfolio in 2025

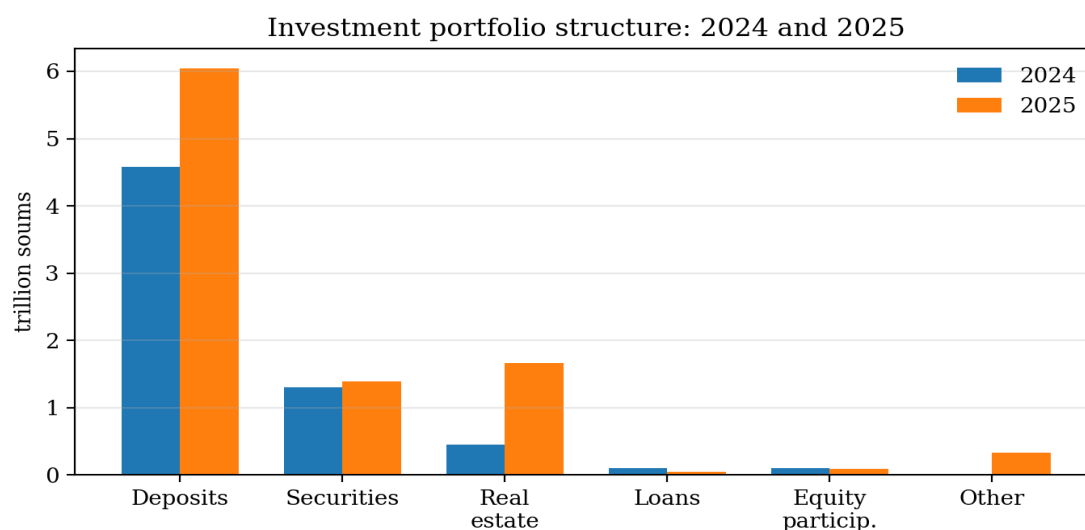


Figure 4. Investment portfolio structure: 2024 and 2025

The high share of deposits in the investment portfolio shows that insurers’ funds are held mainly in relatively safe instruments. From the standpoint of sustainable financing, however, it is important to increase the share of securities, especially green bonds and ESG-compliant financial instruments. This would help transform the insurance sector not only into a risk-coverage mechanism, but also into an institutional investor financing the green economy.

Links with green financing instruments

Green financing instruments are expanding in Uzbekistan. In 2024, Sanoat Qurilish Bank placed a sustainability bond on the international market equivalent to USD 400 million and UZS 2.25 trillion. The issuance was intended to support the expansion of green transformational loans for individuals, small and medium-sized enterprises, state and municipal borrowers, and corporations.

Such instruments create two-sided opportunities for the insurance sector. First, insurers may include green bonds in their investment portfolios. Second, green loans, energy efficiency projects, and renewable energy facilities require insurance protection.

Table 5. Green financing instruments and their link with insurance

Instrument	Content	Link with green insurance
Sustainability bond	Financing green and social projects through banks and the capital market	Investment instrument for insurers and a channel for protecting green projects
Green loans	Financing energy efficiency, renewable energy, and resource-saving technologies	Property, technical, and liability insurance is required to reduce credit risk
Agricultural insurance subsidy	Coverage of up to 50 percent of the insurance premium for crop insurance, but not more than 4 percent of the insured amount	Makes insurance more affordable for farmers and strengthens adaptation to climate risks
ESG investments	Investments based on environmental, social, and governance criteria	Increases the share of green assets in insurers’ portfolio management

Source: Compiled by the author based on Lex.uz and GGGI data.

Agriculture as the most relevant direction for green insurance

In the conditions of Uzbekistan, the most practical direction of green insurance is agricultural insurance. Agriculture is directly affected by climate change, water scarcity, drought, and extreme weather events. In 2024, a procedure was established to

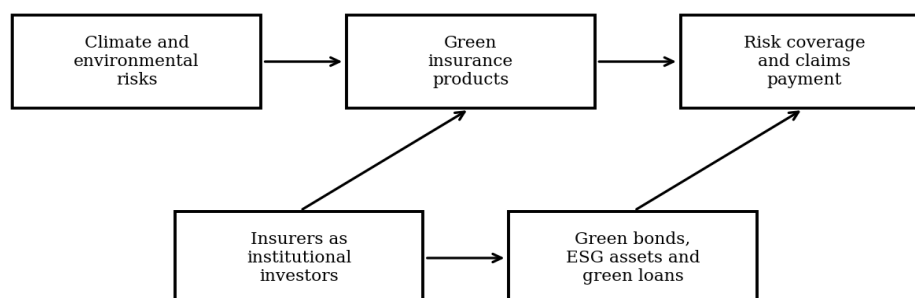
reimburse 50 percent of the insurance premium for crop insurance, but not more than 4 percent of the insured amount.

UNDP’s analysis of the crop insurance system indicates that the agricultural insurance market faces several pressing issues, including a shortage of tailored products, limitations in accounting for regional risks, insufficient reliable databases, and human capacity constraints. Therefore, indexed and parametric products for the agricultural sector are of great importance for developing the green insurance market.

Table 6. Directions for developing green insurance products in Uzbekistan

Product type	Risk covered	Main client	Impact on sustainable financing
Parametric drought insurance	Insufficient precipitation and drought	Farmers and agro-clusters	Reduces agricultural credit risks
Yield index insurance	Decline in crop productivity	Agricultural producers	Increases the stability of farmers’ income
Renewable energy insurance	Damage to solar and wind equipment	Investors and banks	Protects green investments
Environmental liability insurance	Damage to the environment	Industrial enterprises	Strengthens adaptation to ESG requirements
Insurance for energy efficiency projects	Technological failure and non-achievement of expected savings	Enterprises and banks	Reduces risks of green loans
Insurance for water-saving technologies	Equipment breakdown and production interruption	Farmers and water management entities	Encourages efficient use of water resources

Source: Author’s development based on analysis of agricultural insurance and green finance directions.



ble financing is strengthened through protection of green projects and allocation of insurance resources to green assets.

Figure 5. Mechanism of green insurance and sustainable financing

DISCUSSION

The analysis results show that at least three main factors support the development of the green insurance market in Uzbekistan. First, the insurance market is expanding, while premiums and investments are increasing. This strengthens the capacity of insurance companies to introduce new products, including products related to climate, environmental liability, and agricultural risks.

Second, the fact that insurers' investment portfolio reached 9.55 trillion soums in 2025 makes them important participants in the sustainable financing system. However, the dominance of deposits in the portfolio indicates that the participation of insurers in the capital market, particularly in the green bond market, has not yet deepened sufficiently.

Third, the agricultural sector is the most relevant practical field for green insurance. The mechanism for subsidizing part of insurance premiums in agriculture improves farmers' access to insurance. Yet, in order for this mechanism to function effectively, it is necessary to develop meteorological databases, yield statistics, digital maps, regional risk zones, and transparent claims payment systems.

Based on the findings, it is advisable to introduce official statistical classification of green insurance products, test indexed and parametric products, apply ESG criteria in insurers' investment policies, and strengthen integration among banks, insurers, and the capital market.

CONCLUSION

Although the green insurance market in Uzbekistan has not yet fully formed as an independent statistical segment, there is an economic and financial basis for its development. Insurance premiums increased from 8.06 trillion soums to 13.46 trillion soums in 2023-2025, while insurers' investments rose from 6.15 trillion soums to 9.55 trillion soums. This growth strengthens the financial base for introducing green insurance products.

Green insurance in Uzbekistan can perform three key functions: creating financial protection against climate and environmental risks, reducing risks in green investment projects, and involving insurance companies in the sustainable financing system as

institutional investors. In particular, agriculture, water-saving technologies, renewable energy, and environmental liability insurance are likely to remain the most relevant directions in the coming years.

As practical recommendations, the article proposes maintaining separate statistical records for green insurance products; introducing indexed and parametric mechanisms in agricultural insurance; increasing the share of green bonds and ESG assets in insurers' investment portfolios; expanding environmental liability insurance; and strengthening integration among insurance companies, banks, and the capital market.

LITERATURE REVIEW

The literature and regulatory sources reviewed in this study show that green insurance is closely linked with climate adaptation, sustainable finance, and the institutional role of insurers. The national strategy for the transition to a green economy defines the policy framework for energy efficiency, ecological security, and resource efficiency in Uzbekistan (President of the Republic of Uzbekistan, 2019). The World Bank's climate analysis highlights macroeconomic risks associated with climate change and strengthens the argument for financial adaptation instruments.

UNDP's work on agricultural insurance emphasizes the importance of tailored products, reliable data, and institutional capacity in expanding climate risk insurance for the agricultural sector [8]. International principles of sustainable insurance also support the idea that insurers should integrate environmental, social, and governance considerations into risk management, underwriting, and investment decisions. These sources form the theoretical and practical basis for evaluating green insurance as part of Uzbekistan's sustainable financing system.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan No. PQ-4477 of October 4, 2019. On approval of the Strategy for the transition of the Republic of Uzbekistan to a green economy for 2019-2030. <https://lex.uz/docs/-4539502>
2. World Bank. (2023). Uzbekistan Country Climate and Development Report. <https://www.worldbank.org/en/country/uzbekistan/publication/ccdr>
3. Report on the results of the insurance market of the Republic of Uzbekistan for 2023. National Agency for Perspective Projects. <https://napp.uz/>

4. Report on the results of the insurance market of the Republic of Uzbekistan for 2024. National Agency for Perspective Projects. <https://napp.uz/storage/files/shares/opendata/2024/4Q/2024%20%D0%B9%D0%B8%D0%BB%20%D1%8F%D0%BA%D1%83%D0%BD%D0%B8%28%D1%83%D0%B7%29.pdf>
5. Report on the insurance market of the Republic of Uzbekistan for the fourth quarter of 2025. National Agency for Perspective Projects. <https://napp.uz/storage/files/shares/opendata/2025/4Q/>
6. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 373 of July 2, 2024. Procedure for covering insurance premium expenses for crop insurance. <https://lex.uz/docs/-6993258>
7. Global Green Growth Institute. (2024). Uzbekistan's Sanoat Qurilish Bank launches USD 400 million and UZS 2.25 trillion Sustainability Bond on the London Stock Exchange. <https://gggi.org/>
8. UNDP Uzbekistan. (2024). Analysis of the crop insurance system in Uzbekistan. <https://www.undp.org/uz/uzbekistan/publications/ozbekistonda-qishloq-xojaligi-ekinlarini-sugurtalash-tizimining-tahlili>
9. UNEP Finance Initiative. Principles for Sustainable Insurance. <https://www.unepfi.org/insurance/insurance/the-principles/>