Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

DEVELOPING AN INCLUSIVE INSURANCE SYSTEM IN UZBEKISTAN UNDER CLIMATE DISASTER CONDITIONS: THEORETICAL FOUNDATIONS AND INTERNATIONAL EXPERIENCE

Ravshanova Mokhinur Urolovna
PhD Candidate at the Banking and Finance Academy

Abstract
Intensifying global climate change is driving a marked rise in the frequency of natural disasters and the scale of related economic losses. Low-income households remain the most vulnerable, constrained by limited financial resilience and restricted access to risk-sharing mechanisms. Although insurance is widely recognized as a core instrument for post-disaster recovery, markets in many developing economies still lack sufficient inclusiveness. This paper adapts the conceptual framework of Ceres's Climate-Related Disaster Insurance to the context of Uzbekistan's non-life insurance market, climate-risk profile, and regulatory conditions. Empirical evidence shows that despite rapid market expansion, insurance penetration remained only 0.8% of GDP in 2023–2024. Given escalating climate-related risks, the introduction of parametric, micro, and meso-insurance models, alongside regulatory measures that enhance transparency and equity, represent the most promising pathways for building an inclusive insurance system. The article concludes with policy recommendations for designing an inclusive insurance framework tailored to Uzbekistan's institutional and economic environment.

Keywords: Inclusive insurance, parametric insurance, microinsurance, climate risk, Uzbekistan insurance market, natural disasters, financial protection, regulation, insurance penetration.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

Introduction

Over the past decade, global climate change has sharply increased the frequency and intensity of natural disasters worldwide. According to international economic assessments, the average annual economic loss from natural disasters during 2020–2023 ranged between USD 250–300 billion. Such shocks disproportionately affect population groups with limited financial resources, as they often reside in high-risk areas and possess minimal access to insurance services.

Uzbekistan, too, has experienced similar trends:

– more than 600 major floods, mudflows, and windstorms were recorded between 2018 and 2024;[1]

– over 40% of the country's territory is classified as high climate-risk zones;

– nearly 65% of households lack any financial protection mechanism against natural disasters.[2]

Meanwhile, the insurance market has demonstrated significant growth: total premiums exceeded UZS 9.8 trillion in 2024 and increased by 46% during the first half of 2025. However, this market expansion has not translated into proportional social coverage. Per-capita insurance spending remains only UZS 219,000—15 to 20 times lower than in advanced economies.[3]

Under these conditions, the development of an inclusive insurance system emerges as a crucial component of Uzbekistan's socioeconomic resilience and climate-adaptation strategy.

Literature Review

The concept of inclusive insurance initially emerged in studies of microinsurance programs aimed at protecting low-income households in developing economies (Churchill, 2006). Over time, this concept expanded into a broader framework addressing underserved or excluded groups within insurance markets (Banthia et al., 2012).[4]

[1] Compiled using data from the Uzbekistan Hydrometeorological Service (Uzhydromet)
[2] Compiled using data from the Uzbekistan Hydrometeorological Service (Uzhydromet)
[3] https://cbu.uz/upload/medialibrary/ee6/7palxd1wlydf65xdrfn4mqzuu57b6qfv/FSR_2023
[4] Churchill, C. (2006). Protecting the Poor: A Microinsurance Compendium. ILO Publications.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

The Ceres report (Kousky & French, 2023) outlines five core principles of inclusive insurance policy: affordability, accessibility, transparency, people-centered design, and fairness. The authors highlight that in the United States, low-income communities those most in need of disaster insurance are often among the least insured. Studies conducted by WFP, GFDRR, and UNU-EHS further demonstrate that:

– parametric insurance is one of the most effective tools for protecting vulnerable households;

– in the absence of government subsidies, insurance uptake among low-income groups can be up to 20% lower;

– households with insurance recover 2–4 times faster after disasters compared to uninsured households.[5]

Research and analysis

The inclusiveness of Uzbekistan's insurance market remains limited despite steady sectoral growth. Insurance penetration is low, and coverage is concentrated primarily in urban areas and among higher-income groups. Low-income households, rural communities, and small businesses face barriers such as low financial literacy, limited awareness of insurance products, and insufficient access to affordable risk-transfer mechanisms. While regulatory reforms and market expansion have improved competitiveness, the development of microinsurance, parametric products, and broader distribution channels is still in early stages. Overall, the market's inclusiveness remains constrained, highlighting the need for targeted policies to enhance accessibility, affordability, and consumer trust.

[5] Kousky, C., & French, K. (2023). Climate-Related Disaster Insurance: A Roadmap for Inclusive Coverage in the United States. Ceres Report.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

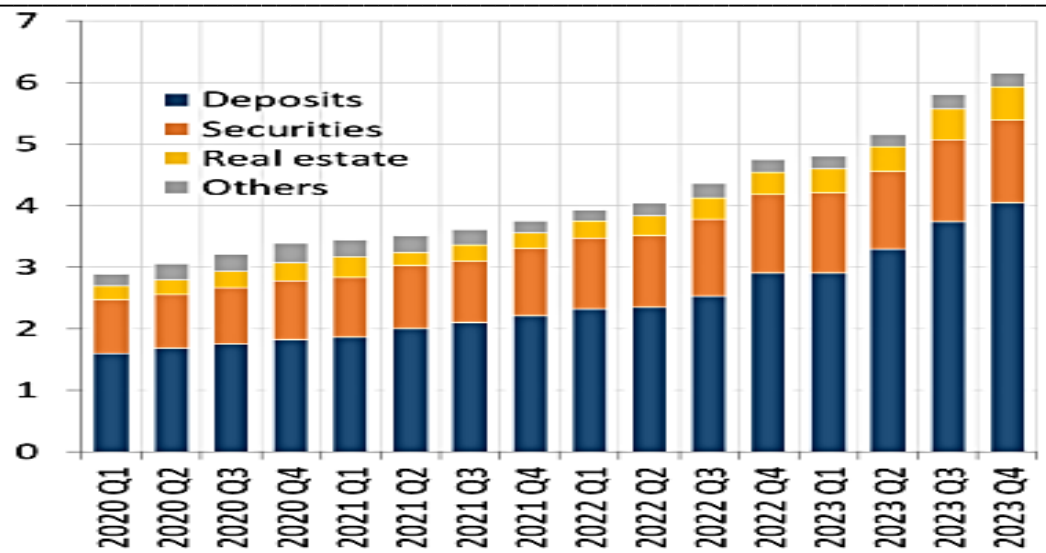


Figure 1. Investments of Insurance Companies, trillion UZS[6]

The growth of the investment portfolios of insurance companies in Uzbekistan has been driven primarily by low-risk financial instruments, particularly bank deposits. In 2023, deposits accounted for 66 percent of the total investment portfolio of insurance companies, while securities represented 22 percent of investments. The annual growth rates of these asset classes amounted to 39 percent and 5 percent, respectively. In addition, investments in real estate expanded by 50 percent, constituting 9 percent of the total portfolio.

The relatively high growth rate of deposit-based investments indicates that insurance companies continue to allocate their funds toward lower-risk and highly liquid instruments, viewing them as a stable long-term source of income and prioritizing capital preservation in an increasingly uncertain economic and climate environment.

[6] National authorities, National Agency for Prospective Projects, Statistics Agency and CBU staff calculations.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

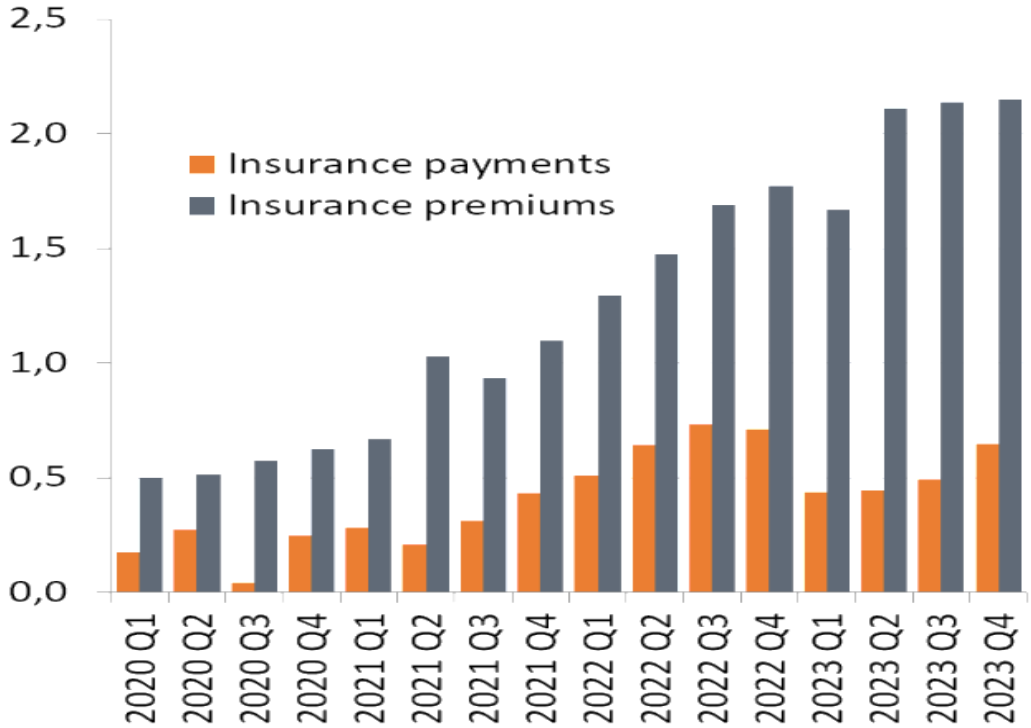


Figure 2. Quarterly Insurance Payments and Premiums, trillion UZS[7]

Gross written premiums (GWP) also demonstrated substantial expansion. In 2023, total insurance premiums increased by 29 percent, reaching 8.1 trillion UZS. However, due to a contraction in voluntary life insurance premiums, the annual growth of total premiums slowed by 38 percentage points compared to 2022. The non-life segment continued to dominate the market structure: voluntary non-life insurance generated 7.1 trillion UZS, forming the bulk of total premiums. Furthermore, 1.9 trillion UZS of collected premiums were allocated to reinsurance, indicating deepening integration with international and domestic reinsurance markets.

[7] National authorities, National Agency for Prospective Projects, Statistics Agency and CBU staff calculations.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

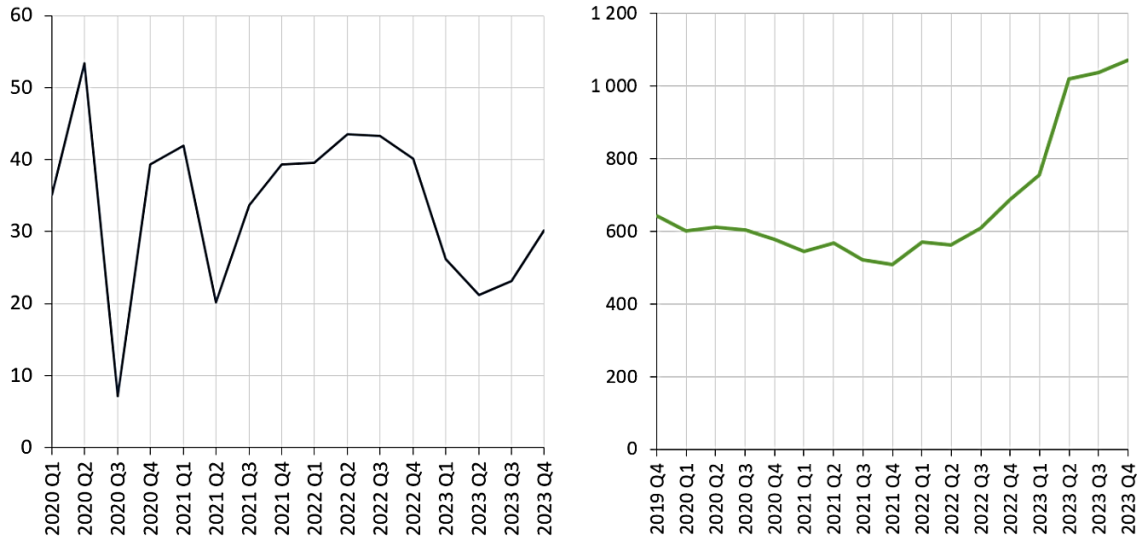


Figure 3. Insurance Payments to Insurance Premiums Ratio[8], % and Insurance Premiums Concentration, HHI[9]

Insurance claims exhibited a downward trend. As a result of a sharp decline in claims within voluntary life insurance, total claims fell by 22 percent in 2023 and amounted to 2 trillion UZS. Most claims (66 percent) originated from voluntary non-life insurance products. The combination of rising premiums and decreasing claims significantly improved the operational efficiency of insurance companies, strengthening the sector's financial resilience.

Market concentration in the insurance sector also continued to rise. Although the sharp increase observed in the first half of 2023 decelerated toward the end of the year, the Herfindahl–Hirschman Index (HHI) reached 1,072, corresponding to a medium level of market concentration. This figure suggests that a substantial share of market premiums is captured by several large insurers. However, given the relatively small share of the insurance sector within the national financial system, the likelihood of systemic risks emerging from this concentration remains low.

[8] National Agency for Prospective Projects and CBU staff calculations.
[9] The HHI categorizes industries into low concentration (HHI below 1000), medium concentration (HHI between 1000 and 1800), and high concentration (HHI above 1800).

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

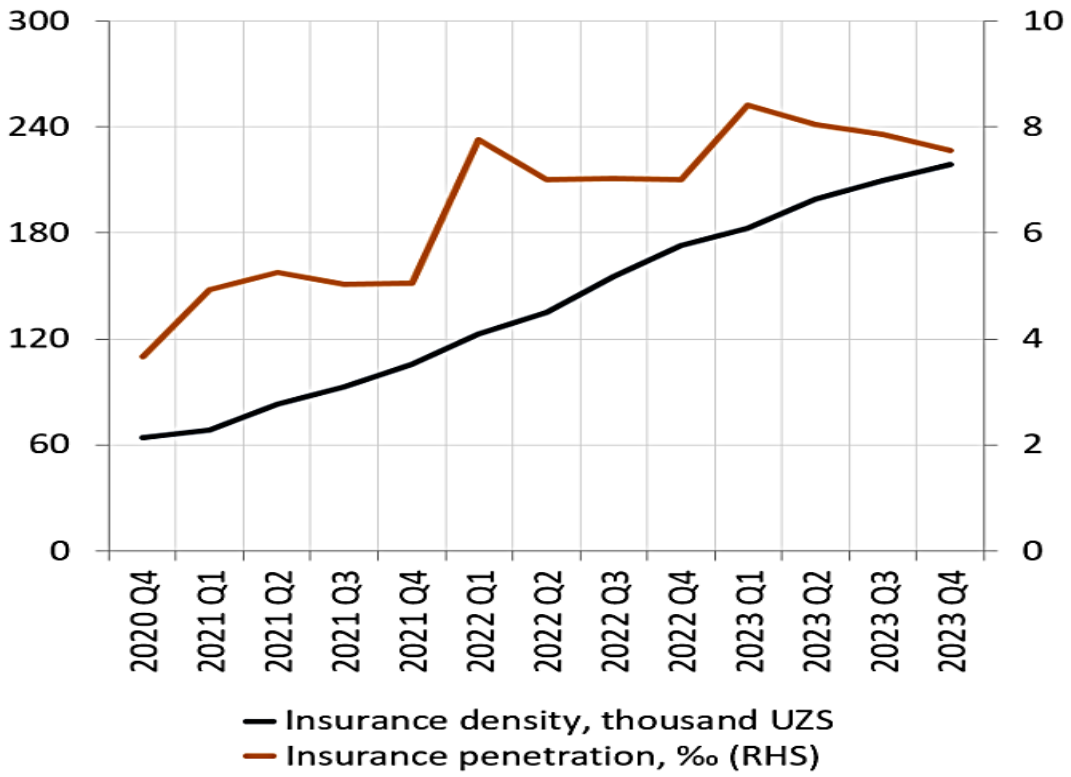


Figure 4. Insurance Penetration and Density in Uzbekistan[10]

Insurance penetration and density indicators revealed positive growth dynamics. Insurance density increased by 27 percent in 2023, with per-capita premiums amounting to 219,000 UZS. Insurance penetration measured as the ratio of GWP to nominal GDP also rose, reaching 7.6 per mille (0.76%) by year-end. Despite this improvement, Uzbekistan's penetration rate remains comparatively low relative to countries with similar economic development levels, highlighting the need for further expansion of inclusive insurance services.

These statistical developments demonstrate that although the insurance sector is expanding rapidly in financial terms, its social coverage and inclusiveness

[10] National authorities, National Agency for Prospective Projects, Statistics Agency and CBU staff calculations. Note: Per mille (‰) represents one-thousandth of a number or one-tenth of a percent. Insurance density is calculated by dividing annual total insurance premiums by the population. Insurance penetration is calculated by dividing the total insurance premiums by the nominal GDP. The values of insurance premiums and the nominal GDP in the corresponding periods are used for this purpose.

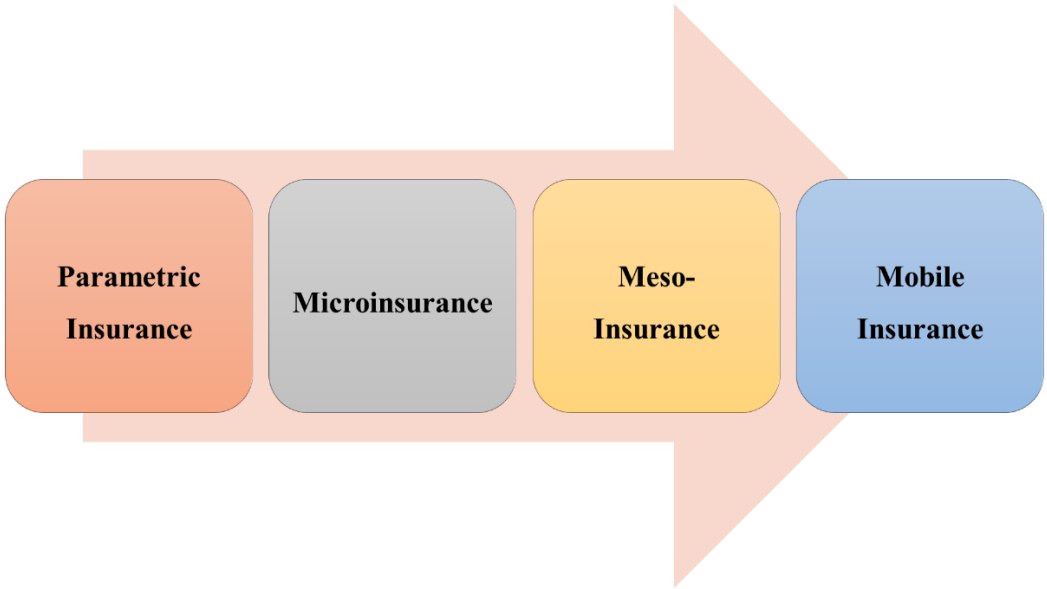
Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

remain insufficient, reinforcing the urgency of developing an inclusive insurance framework tailored to Uzbekistan's evolving climate and socio-economic risks. Inclusive insurance refers to financial-protection mechanisms designed for populations traditionally excluded from insurance markets due to low income, limited literacy, or geographic constraints.

Key barriers to inclusive insurance in Uzbekistan include:

– relatively high premium levels;
– limited availability of disaster-risk insurance products;
– insufficient data transparency;
– low insurance literacy among the population;
– lack of research into the needs of vulnerable groups.

International best practices indicate that effective inclusive insurance requires strong cooperation among government institutions, insurers, and community organizations.



Picture 1. Modern Inclusive Insurance Models and Their Applicability to Uzbekistan

Parametric Insurance. Compensation is triggered by measurable hazard indicators (wind speed, water level). Parametric products for floods and droughts would be highly effective in Uzbekistan.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

Microinsurance. Low-premium, rapid-payout insurance tailored to low-income households. The Puerto Rico experience suggests premiums should not exceed 2% of annual household income.

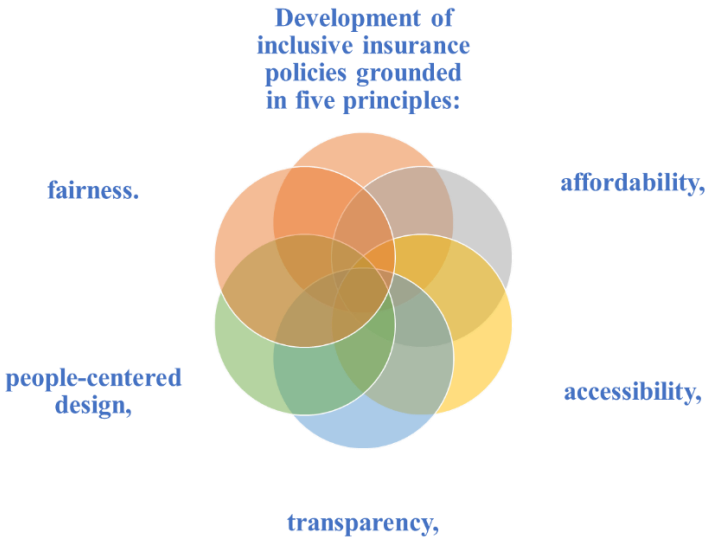
Meso-Insurance. Insurance is purchased by communities, cooperatives, mahallas, or NGO is not individual households. This model aligns closely with Uzbekistan's strong mahalla institution.

Mobile Insurance. An optimal solution for populations without access to banking services.

Proposed Policy Framework for Inclusive Insurance in Uzbekistan

Based on the analysis, the following strategic directions are recommended:

1. Introduction of parametric flood and drought insurance.
2. Establishment of a subsidized microinsurance market.
3. Development of a "Community-Based Insurance Investment Law."
4. Creation of an open insurance-data platform.
5. Implementation of regulatory methodologies to detect indirect discrimination in tariffs.



Picture 2. Five principles of development of inclusive insurance policies

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 08, November, 2025
Website: usajournals.org

Conclusion

Although Uzbekistan's insurance market is one of the fastest-growing in the region, its inclusiveness remains limited. With climate risks intensifying, expanding the social coverage of insurance has become a strategic necessity, not merely an economic option. The lack of financial protection among low-income communities slows post-disaster recovery, increases poverty risks, and places additional burdens on the state budget.

Introducing parametric, micro, and meso-insurance models alongside reforms that improve data transparency and prevent unfair pricing practices can significantly enhance the inclusiveness and resilience of Uzbekistan's insurance system. Inclusive insurance strengthens social equity, improves climate-risk protection, and accelerates economic recovery following natural disasters.

References.

1. Kousky, C., & French, K. (2023). Climate-Related Disaster Insurance: A Roadmap for Inclusive Coverage in the United States. Ceres Report.
2. Churchill, C. (2006). Protecting the Poor: A Microinsurance Compendium. ILO Publications.
3. Banthia, A., Johnson, S., & McCord, M. (2012). Microinsurance That Works. MicroInsurance Centre.
4. GFDRR (2021). Financial Protection Against Natural Disasters. World Bank.
5. Pardaev, Sh. (2020). Theoretical Foundations of Insurance Market Development. TDIU Press.
6. Environmental Defense Fund (2022). Climate Adaptation and Insurance.
7. Wharton Risk Center (2023). Innovations in Parametric and Inclusive Insurance Models.
8. Ceres Accelerator for Sustainable Capital Markets (2023). Insurance and Climate Risk.
9. www.cbu.uz Financial Stability Department of the Central Bank of Uzbekistan