PROGRESS
Promoting Green Deal Readiness in the Eastern Partnership Countries

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Financing Instruments for Climate Change Adaptation in Agriculture in Azerbaijan

Stocktaking report for Output IV

Paris, 2026

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Consortium Members:
• European Business Association (EBA) Moldova
• Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (Consortium Lead)
• Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine (IEF)
• Organisation for Economic Co-operation and Development (OECD)
• Regional Environmental Centre for the Caucasus (REC Caucasus)

Consortium Lead Registered office:
Bonn and Eschborn, Germany

Address:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
42 Rustaveli Ave. / 31a Griboedov Str.
0108 Tbilisi, Georgia

E martina.kolb@giz.de
I www.giz.de/en

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Author/Responsible/Editor, etc.:

Isabella Neuweg	OECD Environment Directorate
Krzysztof Michalak	OECD Environment Directorate
Fernando Antúnez García	OECD Environment Directorate

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Background and acknowledgements

This report was prepared within the framework of the project on “Promoting Green Deal Readiness in the Eastern Partnership (PROGRESS)”.

PROGRESS is funded by the International Climate Initiative (IKI) of the German Federal Government and is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, as the lead agency, in partnership with the Organisation for Economic Co-operation and Development (OECD), the Regional Environmental Centre for the Caucasus (REC), the European Business Association (EBA) Moldova and the Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine (IEF).

PROGRESS aims to support the EU Eastern Partnership countries (Armenia, Azerbaijan, Georgia, Moldova, Ukraine) with achieving long-term mitigation, adaptation and sustainable development consistent with the EU Green Deal objectives and 1.5°C pathways of the Paris Agreement. Another project objective is to promote the competitiveness of fruits, nuts and berries from the Eastern Partnership countries on the EU market, with two specific products selected in each country based on a value chain analysis (pomegranate and persimmon in Azerbaijan). PROGRESS lasts during 2023-2028 and has a total budget of EUR 20 million (Euro).

PROGRESS in coordination with the political partner in Azerbaijan selected pomegranate and persimmon as target value chains in Azerbaijan based on selection criteria and following consultations with the project stakeholders, sector experts and specialists. The selection was based on six criteria: economic potential, environmental impact, social inclusion, institutional development, opportunities for the value chain development, and processing potential.

The OECD leads implementation of two out of the Project’s five Outputs:

- Output I on evidence-based national policies and frameworks for climate change adaptation and resilience in agriculture, and
- Output IV on access to and mobilization of green finance in agriculture.

This draft report was developed as part of Output IV on financing mechanisms. The purpose of this draft report is to take stock of Azerbaijan financial mechanisms for climate change adaptation and resilience in agriculture (as of September 2025) to inform future project activities. It focuses on mapping current financial flows, identifying key actors and financial instruments (public, private, domestic, and international), and assessing the enabling environment for climate-related investments in Azerbaijan’s agriculture sector.

Following the **Introduction (Chapter 1)**, **Chapter 2** outlines key economic trends and trade dynamics relevant to Azerbaijan’s agriculture. **Chapter 3** reviews Azerbaijan’s main policy frameworks for climate change adaptation and mitigation in agriculture. **Chapter 4** analyses public financing mechanisms supporting adaptation in agriculture, while **Chapter 5** focuses on private financing instruments and initiatives. **Chapter 6** explores the role of international cooperation in supporting Azerbaijan’s adaptation efforts. **Chapter 7** outlines challenges and opportunities for smallholder farmers to make climate-resilient investments. **Chapter 8** concludes with key takeaways and outlines possible areas for future project focus.

The draft report was prepared based on secondary research and findings from an in-country stocktaking mission to Baku in April 2025.

Isabella Neuweg, OECD Environment Directorate, managed the report preparation under the supervision of Krzysztof Michalak, OECD Environment Directorate. The main author is Isabella Neuweg; Fernando Antunez, OECD Environment Directorate, provided valuable research assistance. Parviz Aliyev, local consultant, provided essential research inputs.

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Abbreviations

ABAD	Facilitated Support to Family Business Agency (Ailə Biznesinə ASAN Dəstək)
ADB	Asian Development Bank
AF	Adaptation Fund
AIFC	Astana International Financial Centre
AKIA	Agrarian Credit and Development Agency
AMFA	Azerbaijan Micro-finance Association
ATAF	Azerbaijan Banks Association
AzAFF	Azerbaijan Agricultural Finance Facility
AZN	Azerbaijani manat
CBAR	Central Bank of Azerbaijan
CPF	Country Partnership Framework
CPI	Climate Policy Initiative
EDF	Entrepreneurship Development Fund
EBRD	European Bank for Reconstruction and Development
EFSE	European Fund for Southeast Europe
EKTIS	Electronic Agricultural Information System (Elektron Kənd Təsərrüfatı İnformasiya Sistemi)
EIB	European Investment Bank
ENI SEIS II East	European Neighbourhood Instrument Shared Environmental Information System II
EU	European Union
EU4Business	European Union initiative supporting small businesses
EUWI+	European Union Water Initiative Plus
FAO	Food and Agriculture Organization of the United Nations
FINTECC	Finance and Technology Transfer Centre for Climate Change
FMO	Netherlands Development Finance Company
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
HAZER	Hazelnut and Agroforestry project (FAO Azerbaijan)
IBA	International Bank of Azerbaijan
IFC	International Finance Corporation
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IOM	International Organization for Migration
IPS	Instant Payments System
LLC	Limited Liability Company
LULUCF	Land Use, Land-Use Change and Forestry
MENR	Ministry of Ecology and Natural Resources of Azerbaijan
MSME	Micro, Small, and Medium-sized Enterprise
NBCO	Non-Bank Credit Organization
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution

NPL	Non-Performing Loan
OECD	Organisation for Economic Co-operation and Development
PROGRESS	Promoting Green Deal Readiness in the Eastern Partnership
RBMP	River Basin Management Plan
RWI	Resilient Water Infrastructure
SAPSSI	State Agency for Public Service and Social Innovations
SECO	Swiss State Secretariat for Economic Affairs
SME	Small and Medium-sized Enterprise
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
USAID	United States Agency for International Development
VAT	Value-Added Tax
WUA	Water User Association

Executive Summary

Purpose and Scope

This stocktaking report, developed under the OECD-led Output IV of PROGRESS, provides a comprehensive mapping of public, private, and international financing instruments supporting climate change adaptation in Azerbaijan's agricultural sector. It aims to inform future policy and investment decisions by identifying key actors, financial flows, and gaps in the enabling environment for climate-resilient agriculture.

Key Findings

1. **Public Financing: Heavy reliance on direct subsidies**

- In 2024, Azerbaijan allocated AZN 1.1 billion (around USD 650 million) to the agricultural sector, with direct subsidies making up almost 40% of this amount.
- Agricultural support is largely focused on direct input subsidies; mainly for fuel, motor oil, and fertilisers. While these schemes are simple to manage and quick to disburse, international experience shows that they are often inefficient, providing limited long-term productivity gains and sometimes encouraging overuse of inputs that harm soil health and the environment.
- Subsidies and concessional credit schemes managed by the public Agrarian Credit and Development Agency (AKIA) have improved access to finance for farmers but focus more on production than long-term climate resilience.
- The lack of comprehensive monitoring frameworks and a more targeted approach to smallholders limits the effectiveness of these public finance schemes.

2. **Private Finance: Limited but innovative financial models emerging**

- Private finance remains limited due to high interest rates, collateral requirements, and low financial literacy. Smallholder farmers, who are most vulnerable to climate risks, continue to rely on self-finance or informal borrowing.
- Non-bank financial institutions such as credit unions and microfinance organizations have made progress in outreach, but their impact is still small compared to commercial banks.
- Innovative financial models such as warehouse receipts and microfinance have potential to increase access to finance but need stronger regulatory support to scale.

3. **International Finance: Essential but fragmented**

- International donors and financial institutions, including the Green Climate Fund, EBRD, and ADB among others, have supported key adaptation projects, especially those focused on irrigation, early warning systems, and sustainable land management.

- While these initiatives have been impactful, they remain fragmented and often lack alignment with national agricultural strategies. The challenge is to scale successful pilots and ensure long-term sustainability.

Systemic Challenges:

- Underfunding relative to sectoral needs: Public allocations remain modest compared to agriculture's contribution to GDP, with subsidies largely focused on output rather than climate resilience.
- Uneven access to finance: Smallholder farmers face barriers to accessing affordable finance, with limited outreach from private financial institutions.
- Limited insurance coverage: The agricultural insurance market remains underdeveloped, with limited coverage and a lack of proactive climate risk mitigation strategies despite high vulnerability to climate risks.
- Fragmented international support: While international financial resources have been critical, coordination with national policies and long-term sustainability remain challenges.

Strategic Recommendations

1. **Rebalance and scale public finance**

- Increase investment in climate-resilient infrastructure such as modern irrigation networks, water-efficient systems, and soil protection measures. Public funds should increasingly target projects that help farmers adapt to climate change rather than only boosting production.
- Adjust subsidy criteria to reward farmers who adopt sustainable and adaptive practices, for example, no-till farming, crop diversification, and on-farm water harvesting.
- Introduce incentive-based water pricing or differentiated charges that encourage farmers to use water-saving technologies, reducing waste and improving efficiency.
- Expand project-based subsidies linked to measurable adaptation outcomes, ensuring public support directly contributes to long-term climate resilience in agriculture.
- Target subsidy rates and outreach programs to smallholders.

2. **Develop risk-management tools**

- Make agricultural insurance more forward-looking and preventive. Instead of only paying farmers after disasters happen, insurance programs should help them prepare and reduce losses before they occur, for example, by using weather forecasts and climate data to plan ahead.
- Expand coverage to climate-related risks such as droughts and floods, which often cause the biggest losses.
- Promote blended models, such as Spain's agricultural insurance model where the state shares risk with private insurers and farmers, with multi-year subsidy commitments for stability.
- Make farmers eligible for subsidized insurance only if they invest in climate-resilient farming practices, for example, by using drought-resistant seeds, efficient irrigation systems, or soil protection measures or offer them specially reduced insurance premiums to encourage wider adoption of these practices.
- Tailor subsidy rates and outreach programs to smallholders.

3. **Mobilize private investment**

- Incentivize green finance instruments, such as warehouse receipts, green bonds, and concessional credit lines targeting climate-smart agriculture.

- Encourage agribusinesses and cooperatives to invest in water-efficient and low-emission technologies through preferential loans and guarantees.

4. **Strengthen coordination and institutional capacity**

- Align donor projects more closely with national strategies, including the National Adaptation Plan.
- Build monitoring systems to track climate finance flows and outcomes in agriculture.
- Invest in farmer training, advisory services, and digital tools to ensure uptake of climate-smart solutions.

5. **Enhance access to credit for smallholders**

- Ensure that financing instruments explicitly target smallholder farmers, women, and youth, who face the greatest barriers to accessing finance.
- Support farmer cooperatives that share resources, cut costs, and help farmers get better prices and stronger positions in the market. Farmer associations and cooperatives can also facilitate joint access to credit for climate-resilient investments.

1 Introduction

Agriculture is one of the sectors most affected by the impacts of climate change. Financing adaptation measures in this sector is an important tool to help farmers adapt their practices and make food systems more resilient to risks from climate change.

The need for adaptation in developing countries is estimated at around AZN 340 to 680 billion per year (approximately USD 200 to 400 billion) but only around AZN 50 billion (approximately USD 30 billion) is currently flowing (CPI, 2025[1]).[1] To close this significant funding gap, it is vital to clearly map and understand the roles of both public and private finance—focusing on how public resources can be allocated more efficiently and effectively, where private investment is already successfully contributing, and identifying future opportunities to scale private sector involvement in financing agricultural adaptation.

This report presents the public and private financing mechanisms available to farmers in the Republic of Azerbaijan (hereafter Azerbaijan). It provides a comprehensive overview of the financial landscape that supports farmers in adopting climate adaptation practices, improving resilience and ensuring financial stability in times of increasingly frequent and severe climate impacts. It also forms the basis for the next phase of the project, which will explore possible adaptations of selected financial instruments in cooperation with relevant government and non-government stakeholders.

[1] All financial figures in this report are presented in Azerbaijani manat (AZN) and US dollars (USD). Conversions to AZN are based on an estimated exchange rate of USD 1 ≈ 1.69/1.70 AZN roughly (xe.currency exchange rate January 2026, monthly average). Conversions are approximate and intended for illustrative purposes only.

2 Key economic trends and trade dynamics

Agriculture's role in the economy

Azerbaijan is a resource-rich country in the South Caucasus, which has experienced a steady transition to a more diversified market-oriented model since gaining independence from the Soviet Union in 1991. After a contraction during the COVID-19 pandemic, Azerbaijan's GDP has experienced stable growth since 2021, supported by high global energy prices (World Bank, n.d.[2]).

While the oil and gas sector remain the main driver of GDP and exports, agriculture continues to play an important socioeconomic role[2] (Economist Intelligence Unit, 2025[3]). Agriculture has accounted for around 5-7% of Azerbaijan's GDP over the past decade and employs more than a third of the working population (36% in 2023). More than one-fifth of these are women. Agricultural land makes up more than half of Azerbaijan's total land area; 70% of cropland is irrigated (The State Statistical Committee of the Republic of Azerbaijan, n.d.[4]). The total cultivated area in Azerbaijan has expanded significantly, increasing from roughly 100 000 hectares in 1995 to 210 000 hectares in 2019. This growth has been supported by favourable agro-climatic conditions and targeted government interventions, such as subsidies, grants, and tax exemptions which remain the main support mechanisms in agriculture (Economist Intelligence Unit, 2025[3]).

Next to wheat and barley as important crops, fruits and vegetables are important export products, worth a total of USD 760 million (approximately AZN 1.3 billion) in 2023; fruit (25.7%) and tomatoes (21.4%) represent a large part of these. Russia and the EU are the main export destinations for these products (OECD, n.d.[5]). Although not formally a candidate for EU membership, Azerbaijan continues to benefit from increased market access and cooperation with the EU. In 2022, the government introduced restrictions on the export of grain products to build up a solid reserve for food security. The country has traditionally relied on wheat imports from Kazakhstan, Ukraine, and Russia.

Azerbaijan benefits from a diverse range of agro-ecological zones and soil types, which enable the cultivation of a wide variety of horticultural crops in both open-field and protected environments (Huseynov H. H., 2021[6]). Between 2010 and 2018, average yields rose from around 15 to almost 22 tonnes per hectare, largely due to the adoption of modern agricultural practices and the intensification of production. Greenhouse horticulture, particularly for tomatoes and cucumbers destined for export markets such as Russia, has been one of the most prominent innovations. In parallel, the uptake of drip irrigation systems combined with mineral fertilisation has increased, especially among commercial farms (Huseynov H. H., 2021[6]).

Azerbaijan's fruit production has shown a steady upward trend over the past four years. Total fruit and berry output rose from around 1 100 thousand tons in 2020 to around 1 300 thousand tons in 2023, with the majority (over 97%) coming from orchards (The State Statistical Committee of the Republic of

[2] Calculations based on World Bank national accounts data, and OECD National Accounts data files.

Azerbaijan, 2025[7]). Among the leading crops, apple production remained high, reaching around 300 thousand tons in 2023 (with slight fluctuations in-between) (Ibid.). Pomegranate and persimmon maintained stable yields, with pomegranate production increasing slightly to 190 thousand tons in 2023. Other important products include hazelnuts, grapes, citrus fruits and mulberry orchards and sericulture (Ibid.).

Agriculture and climate change

Azerbaijan faces increasing challenges from climate change, including higher frequency of droughts, heat waves and water scarcity.

The agricultural sector faces structural and environmental constraints. Land availability is limited, with just 0.56 hectares of agricultural land per capita, which is below the recommended 0.6 hectares for sustaining food self-sufficiency. In addition, water scarcity remains a pressing issue; in many orchards, irrigation is limited to two applications per growing season, whereas six to seven are recommended for optimal yields. Aging irrigation infrastructure, soil erosion and salinization are further challenges. According to national data, 42% of cultivated land is affected by erosion to varying degrees, and around 1 million hectares are impacted by soil salinity. These conditions limit productivity and reduce the economic viability of long-term perennial crop systems (Mammadov and Mammadov, 2022[8]).

Horticulture has been prioritised in regional development programmes and is considered a key area for enhancing non-oil exports and supporting rural livelihoods (Mammadov and Mammadov, 2022[8]). To reduce import dependency, in 2018, the government reopened the Research Institute for Horticulture, which now includes modern greenhouses, laboratories, and experimental plots. In addition, partnerships between the private sector (e.g., HH Group) and Azerbaijan State Agrarian University are supporting training programs and professional development for horticulturists (Huseynov H. H., 2021[6]).

To address these challenges and promote development in horticulture, the sector benefits from a supportive policy environment aimed at economic diversification. For example, there are tax exemptions for all agricultural activities, regardless of turnover; VAT-free imports for equipment, materials, seeds, and livestock intended for non-commercial use; and direct subsidies and preferential credit lines to support farm modernization (Huseynov H. H., 2021[6]). At the same time, these include objectives such as the expansion of certified fruit nurseries, the promotion of the establishment of intensive and super-intensive orchards, and investing in storage and logistics infrastructure to reduce post-harvest losses (Mammadov and Mammadov, 2022[8]).

Organic farming is a current constraint that limits the sector's access to European markets. Moreover, the current domestic breeding capacity is limited, and the seed market (valued at USD 23.4 million, approximately AZN 40 million, in 2018) is dominated by imports from European and Russian companies (Huseynov H. H., 2021[6]).

Financial sector overview and digital banking

Azerbaijan's financial sector is dominated by banks. The banking system held AZN 53 billion in total assets at end-2024 (approximately USD 31.2 billion), more than nine-tenths of the financial-sector stock of assets (Central Bank of Azerbaijan, 2024[9]). As a result, banks account for the overwhelming share of financial-sector assets (over 90%), with the system composed of 22–23 commercial banks operating through several hundred branches across the country (Central Bank of Azerbaijan, 2024[9]; ABC, 2024[10]).

The banking system is concentrated: the state-linked International Bank of Azerbaijan remains a systemically large player, and a small group of large banks together hold a material share of sector assets and deposits. Credit penetration (private sector loans relative to GDP) has been modest compared with many peers, although loan growth recovered strongly in 2023–24 and asset-quality metrics improved (non-

performing loans remained relatively low) (Central Bank of Azerbaijan, 2024[9]). The Central Bank's 2024 Financial Stability Report documents an expanding balance sheet (assets up ~8% in 2024), rising term deposits as a stable funding source and a sector capital adequacy ratio comfortably above regulatory minima (Central Bank of Azerbaijan, 2024[9]).

Non-bank financial institutions remain small by comparison. Non-bank credit institutions (NBCOs) and credit unions have been expanding from a low base (NBCO sector assets rose to roughly AZN 990 million, approximately USD 582 million, at end-2024), while the supervised insurance market is also small relative to banking—recent reporting puts insurance sector premiums and assets in the low-billions of AZN (the market has shown double-digit growth in recent years) (Central Bank of Azerbaijan, 2024[9]).

The Central Bank of the Republic of Azerbaijan (CBAR) has been an active driver of digitalisation in payments and banking. The CBAR's Digital Payments Report (2023) and the Financial Sector Development Strategy 2024–2026 lay out a clear policy push: modernize the national payment system, broaden instant payments, cap interchange tariffs to stimulate merchant acceptance, expand the Government Payment Portal, and raise the share of cashless transactions. As of end of 2023, the Central Bank reports that all banks (including AzerPost) provided Internet-banking services and 20 banks offered mobile banking, while the 24/7 instant payments system (IPS) and card tokenization uptake rose sharply in 2023 (Central Bank of Azerbaijan, 2023[11]). In 2023 roughly 86% of transfers (by number) and nearly 80% of transfer value were conducted through digital channels, and the number of payment cards in circulation exceeded 16.9 million (77% contactless) (Central Bank of Azerbaijan, 2023[11]).

Taken together, these developments show a two-track picture: (i) a traditional banking sector that still dominates intermediation and balance-sheet size, and (ii) a rapidly evolving payments and digital-banking ecosystem (cards, contactless/tokenized wallets, instant payments and a growing mobile-banking footprint) backed by explicit central-bank policy and regulatory action. The CBAR's stated targets for 2024–2026 (for example raising annual cashless transactions per capita and increasing the share of instant payments) and recent regulatory steps (new law on payment services, expanded oversight and interchange caps) are intended to accelerate adoption and deepen the role of digital channels in financial inclusion and efficiency.

For agriculture, and particularly for smallholder farmers, these trends in Azerbaijan's financial sector carry several implications. The continued dominance of banks and relatively shallow penetration of non-bank finance means that access to credit for rural households remains constrained, with lending still concentrated in urban centres and large corporates. At the same time, the rapid expansion of digital payments and mobile banking offers new entry points for improving financial inclusion in rural areas. The Central Bank's promotion of instant payments, card tokenisation and mobile-banking channels could help farmers transact with suppliers and buyers more efficiently, reduce cash-handling costs, and potentially facilitate the development of tailored agri-finance products delivered via mobile platforms. If effectively leveraged, these digital channels could complement government agricultural support schemes and enhance resilience among smallholders who have historically been underserved by the formal banking system.

3 Policy frameworks for adaptation and mitigation in agriculture

Azerbaijan has introduced several policies and plans to strengthen climate change mitigation and adaptation and resilience. They are described below and linked to agriculture where possible. Under PROGRESS, a separate report has been produced that examines Azerbaijan's policy frameworks for agricultural resilience in greater depth; readers are encouraged to consult this complementary report for further analysis.

In 2021, Azerbaijan submitted its updated Nationally Determined Contribution (NDC) under the Paris Agreement, committing to reduce greenhouse gas emissions by 35% below 1990 levels by 2030. The NDC also outlines adaptation priorities in agriculture, including efficient water use, land restoration, and climate-resilient farming practices. The National Strategy on Climate Change and Low-Emission Development (in progress) is expected to offer a clearer roadmap for financing adaptation in key sectors.

Box 1. Definition of adaptation and resilience

Adaptation

In the context of agriculture, adaptation refers to the changes and adjustments made in agricultural practices, technologies, and policies to reduce the negative impacts of climate change and improve long-term sustainability. This includes water conservation, drought-resistant crops, and improved soil management techniques

Resilience

Agricultural resilience involves the capacity of farming systems to recover from climate impacts such as droughts, floods, and extreme temperatures. Resilience is achieved through sustainable farming practices, diversified crops, efficient water use, and climate-smart technologies that allow farmers to withstand and recover from environmental shocks.

Source: Bezner Kerr, R., T. Hasegawa, R. Lasco, I. Bhatt, D. Deryng, A. Farrell, H. Gurney-Smith, H. Ju, S. Lluch-Cota, F. Meza, G. Nelson, H. Neufeldt, and P. Thornton, 2022: Food, Fibre, and Other Ecosystem Products. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability.* Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 713–906, doi:10.1017/9781009325844.007.

OECD (2023), Agricultural Policy Monitoring and Evaluation 2023: Adapting Agriculture to Climate Change, OECD Publishing, Paris, https://doi.org/10.1787/b14de474-en.

Azerbaijan submitted its National Adaptation Plan to the United National Framework Convention on Climate Change (UNFCCC) in November 2024. It identifies agriculture as one of three priority areas for adaptation (alongside water resources and coastal zones). Azerbaijan is in the process of developing its

Initial National Adaptation Plan (NAP) with support from the Green Climate Fund (GCF) and implementation by UNDP. The initial phase (2024–2026) focuses on establishing legal and institutional frameworks and identifying financing sources, while the medium-term phase (2027–2030) will scale up implementation.

A key challenge identified through the NAP process concerns limited national budget allocations and constrained access to international climate finance. To address this, the NAP includes the development of a Finance Strategy for Climate Change Adaptation. Complementary efforts under GCF-supported initiatives are promoting the integration of adaptation and mitigation objectives into economic and investment planning, particularly in the agriculture and LULUCF (land use, land-use change and forestry) sectors, seeking to identify gaps, financial needs and ways to leverage private sector participation. In the agriculture and water sectors, priority measures include the modernization of irrigation systems, promotion of water-efficient technologies, and research into alternative irrigation methods.

4 Public financing mechanisms for agriculture and its adaptation to climate change

Public support to agriculture in Azerbaijan is delivered through a combination of strategic frameworks, budgetary allocations, institutional support, concessional lending, subsidies, insurance schemes and tax incentives. While not all mechanisms are explicitly climate-focused, several contribute directly or indirectly to strengthening climate resilience in the sector. The main ones are outlined below. It should be noted that this is a dynamic field, with many evolving policies and support schemes. The following takes stock of those arrangements in place as of end-2025.[3]

Strategic frameworks and programmes

Agricultural financing is guided by a set of national strategies and long-term programmes. The Strategic Roadmap for the Production and Processing of Agricultural Products (2016–ongoing) established public–private financing partnerships for food security, value chain development, irrigation, machinery, and agricultural insurance (Republic of Azerbaijan, 2016[12]). While not explicitly climate-focused, the Roadmap recognises the need to adapt farming practices to climate change, and promotes the uptake of climate-smart agriculture. The document sets out the development targets for the agricultural sector in the country for three strategic review periods: a short-term strategy until 2020, a long-term review until 2025, and a target stage after 2025.

The Socio-Economic Development Strategy for 2022–2026 expands financial inclusion, including concessional loans to small and medium-sized farms, venture financing for agri-innovation, and improved water resource management. Similarly, the forthcoming State Programme for Agriculture, Fisheries and Aquaculture (2025–2030) prioritises strengthening financial and insurance services, improving access to preferential loans, and developing risk-based agricultural insurance. It also foresees public investment to expand the use of water-saving irrigation systems, modernise water infrastructure, and promote the adoption of climate-smart agricultural practices. One of the measures include reforming the current subsidy system to better align financial incentives with climate adaptation objectives, such as supporting the expansion of intensive orchards or the establishment of field protection strips. National priorities for 2030 also emphasise “clean environment and green growth” as a strategic pillar. Earlier national programmes

[3] Specific and comprehensive contract farming arrangements exist for the cotton sector. While cotton is an important subsector of Azerbaijan’s agriculture, it falls outside the scope of this report and is therefore not covered in the analysis below.

introduced financing mechanisms for sustainable land management and soil restoration, supported through a combination of farmer contributions, bank loans, and donor funding.[4]

The National Water Strategy for 2024–2040 includes the promotion of investments in water conservation technologies, particularly in irrigation, the optimization of water allocation and usage to enhance efficiency, the development of River Basin Management Plans (RBMPs), and the reinforcement of water monitoring systems. Moreover, the plan highlights the need to leverage concessional financing mechanisms (such as long-term credit lines, tax incentives, and public–private partnership schemes) to reduce financial gaps and finance the construction of modern irrigation systems for agricultural fields (Government of the Republic of Azerbaijan, 2024[13]).

At the regional level, the EU4Lankaran Project (2021-2024) helped enhance the competitiveness of the fruit and vegetable sector while integrating climate change considerations into territorial development planning and natural resource management. The project supported the creation of seven producer groups and six investment project proposals, facilitating access to markets and finance (EU NEIGHBOURS east, 2024[14]).

Box 2. The Strategic Roadmap for the Production and Processing of Agricultural Products

The Roadmap provides for the following measures to facilitate farmers' access to financial resources:

- Determining targets for the demand for financial resources in agriculture;
- Considering the possibilities of establishing a credit guarantee fund;
- Developing mechanisms for the application of innovative and unsecured loans in agriculture;
- Expanding the collateral base for loans;
- Increasing the financial literacy of agricultural producers;
- Developing mechanisms for managing risks affecting the agricultural sector;
- Stimulating the allocation of funds of credit institutions to lending to the agricultural sector.

The following measures are envisaged to improve the agricultural insurance mechanism:

- Improving the existing legislation on the insurance system in agriculture;
- Assessing the possibilities of creating an insurance fund in the agricultural sector;
- Preparing the Insurance Incidents Register;
- Creating a mechanism for compensating for material damage caused to agricultural producers due to the application of the quarantine regime;
- Increasing the insurance literacy of agricultural producers.

Source: Republic of Azerbaijan, 2016, The Strategic Roadmap for the production and processing of agricultural products in the Republic of Azerbaijan was approved by Decree No. 1138 of the President of the Republic of Azerbaijan.

[4] Decree of the President of the Republic of Azerbaijan on approval of the "State Program on the effective use of summer-winter pastures, hayfields and prevention of desertification in the Republic of Azerbaijan", Baku, May 22, 2004, No. 222, https://e-qanun.az/framework/5994 The programme provided financing rules for erosion control, restoration of soil fertility, and sustainable land management, funded through a mix of farmer contributions, bank loans, and donor support.

Budgetary allocations and direct subsidies

Public financing for agriculture is underpinned by annual state budget allocations. In 2024, the sector received AZN 1.1 billion (almost USD 650 million; around 3% of total budget expenditures), with almost 40% disbursed as direct subsidies. Crop subsidies represented the largest share, followed by product, livestock, seed, machinery, and cocoon subsidies.

Although absolute allocations to agriculture have grown over time, the sector's share of overall budget spending has declined (direct subsidies to agriculture have experienced a significant growth rate over the past decade), as illustrated in the table below. The Agricultural Orientation Index stood at 0.51 in 2024, suggesting that agriculture remains underfunded relative to its contribution to GDP[5].

Table 1. Budget expenditures and direct subsidies for the agricultural sector

Year	Share of added value created in the agricultural sector in GDP, %	Budget expenditures, million manat	Agricultural expenditures, million manat	Share of agricultural expenditures in the budget, %	Direct subsidies to agriculture, million manat	Agricultural orientation index
2010	5.5	11 765.9	363.4	3.1	111.2	0.56
2011	5.1	15 397.5	435.4	2.8	97.6	0.55
2012	5.1	17 416.5	458.2	2.6	120.2	0.51
2013	5.4	19 143.5	477.5	2.5	118.0	0.46
2014	5.3	18 709.0	494.0	2.6	112.9	0.49
2015	6.2	17 784.5	537.1	3.0	156.3	0.48
2016	5.6	17 751.3	574.1	3.2	183.3	0.57
2017	5.6	17 594.5	484.6	2.8	205.6	0.50
2018	5.2	22 731.6	718.6	3.2	342.8	0.62
2019	5.7	24 425.9	836.3	3.4	379.4	0.60
2020	6.7	26 416.3	862.2	3.3	372.6	0.49
2021	5.7	27 422.4	910.4	3.3	357.9	0.58
2022	4.6	32 064.6	920.1	2.9	441.7	0.62
2023	5.5	36 458.0	947.6	2.6	450.6	0.47
2024	5.7	37 712.7	1 095.8	2.9	452.5	0.51

Source: State Statistical Committee, Ministry of Agriculture (EKTIS)

Institutions and agencies

Several institutions administer agricultural financing instruments. The Ministry of Agriculture manages subsidies, insurance and technical support programmes, and chairs the Agricultural Subsidy Council. The Agrarian Credit and Development Agency (AKIA) provides concessional loans, leasing schemes and public–private partnership support (details described in the next section).

The Ministry of Economy and the Entrepreneurship Development Fund (EDF) finance large-scale projects, with priority given to innovation, green development, and aquaculture. The Agricultural Insurance Fund, established in 2019, implements a public–private insurance system covering crops, livestock and

[5] Food and Agriculture Organization of the United Nations (FAO), *Agricultural Orientation Index for Government Expenditure*. The index measures the ratio of agriculture's share of government expenditure to its share of GDP and is used to monitor progress toward SDG target 2.a..

aquaculture. The Ministry of Finance ensures budgetary allocations to the sector. In addition, the ABAD (Facilitated Support to Family Business) agency run by the State Agency for Public Service and Social Innovations (SAPSSI), supports family farms and microenterprises with business services, certification, and market access.

Box 3. The Agricultural Subsidy Council

In 2019, alongside reforming several subsidy mechansims (see further below), the Agricultural Subsidy Council was established, a collegial decision-making body responsible for the implementation of subsidy policies in the agricultural sector. The Council comprises nine members and is chaired by the Minister of Agriculture of the Republic of Azerbaijan. Its membership includes two representatives from the Ministry of Agriculture, one representative each from the Ministry of Economy, the Ministry of Finance, and the State Statistical Committee, one representative from the National Confederation of Entrepreneurs (Employers) Organizations, one representative from the State Reserves Agency, and one representative from a local farmers' association.

The Agricultural Subsidy Council is responsible for approving:

- The list of areas designated as unified arable land for subsidy eligibility;
- Regional crop lists and the arable coefficients applied to them;
- Crop types subject to mandatory insurance under the Law of the Republic of Azerbaijan “On Agrarian Insurance,” including minimum required planting areas;
- Areas eligible for fallow land subsidies, cultivation timelines, and applicable fallow land coefficients;
- Crop products eligible for production and seed subsidies, including associated coefficients and quotas;
- Land area and quality parameters for crop subsidy eligibility;
- Details on sowing years for perennial plants, planted seeds and seedlings, and the implementation of agrotechnical practices;
- Differentiation of subsidy coefficients based on the application of modern irrigation systems;
- Proposals for improving the overall subsidy mechanism, which are submitted to the Ministry of Agriculture for consideration.

In addition to the base amount, the sowing coefficient is also used to calculate the subsidy amounts. The sowing coefficient is an indicator determined by the Council, taking into account the degree of support for production by regions and crops, unit sowing areas, as well as the volume of sowing area(s).

Credit and loan mechanisms

Access to finance is supported by a range of concessional lending instruments. AKIA provides micro, small, medium, and large loans at preferential rates of 5–7% for terms up to six years, alongside leasing schemes and state-backed guarantees. Discounts of up to 60% are applied to domestically produced equipment, with loan interest fully subsidised by the state. AKIA does not typically issue loans directly to farmers. Instead, it channels state funds through partner commercial banks and credit institutions, which administer

and disburse the loans. AKIA's role is mainly to approve, subsidize, or guarantee these loans, ensuring that they are provided on favourable terms to support agricultural development.

The EDF provides loans at 5–15% interest, with maturities up to ten years and guarantee mechanisms for investment projects, including those in designated priority development areas. Targeted loans are also available for irrigation systems, orchards, and livestock breeding, often backed by state guarantees and interest subsidies.

The terms of using the funds are regulated by the agreement concluded between the authorized credit institutions and AKIA. The maximum amount (limit) of the credit line determined for each authorized credit institution is AZN 5 million (approximately USD 2.9 million). The balance of the total amount of funds attracted by authorized banks from AKIA can be up to 100% of their total capital, and non-bank credit institutions—up to 100% of their authorized capital.

Table 2. Low-interest loans provided by AKIA

Soft loan or leasing amount	Soft loan or leasing type	Terms of concessional loans	Grace period	Interest rate*
Up to AZN 15 000 (approximately USD 8 800)	microloans	Up to 3 years	Up to 12 months	Up to 7%
From AZN 15 001 to 30 000 (approximately USD 8 800–17 600)	small loans	Up to 3 years	Up to 18 months	Up to 7%
From AZN 30 001 to 100 000 (approximately USD 17 600–58 800)	medium loans	Up to 3 years	Up to 18 months	Up to 7%
From AZN 100 001 to 200 000 (approximately USD 58 800–117 600)	large loans	Up to 5 years	Up to 24 months	Up to 7%
Up to AZN 1 000 000 (approximately USD 588 000)	loans and leasing funds for the purchase of agricultural production equipment	Up to 5 years	Up to 24 months	Up to 7%
Up to AZN 200 000 (approximately USD 117 600)	loans in the field of horticulture	Up to 6 years	Up to 36 months	Up to 7%

* Up to 5% on loans to cooperatives

In addition to low-interest loans, AKIA also offers microloans. The maximum loan amount for these loans is AZN 15 000 (approximately USD 8 800), the loan term is up to 3 years, the grace period is up to 12 months, and the interest rate is 12% (AKIA, n.d.[15]).

When preferential loans are provided to business entities for the establishment of new orchards using funds from AKIA, the loan term is set at up to six years, with a grace period of up to 36 months. For the purchase of breeding animals on preferential terms, the loan and leasing period is three years, while for other agricultural production equipment, it is five years. However, the grace period does not apply to loans or leases for agricultural equipment where a discount is already applied. During the grace period, borrowers are required to pay only the interest; no payments are made on the principal.

In accordance with this regulation, AKIA provides funds to authorized credit institutions at an annual interest rate of 2% for unsecured microcredits or other preferential loans, and 2.5% for microcredits secured with collateral (an additional 0.5%). The maximum annual interest rate charged by authorized credit institutions on loans issued using AKIA funds, inclusive of the agency's rate, must not exceed:

- 12% for unsecured microcredits;

- 7% for other preferential loans;
- 5% for all types of loans to agricultural cooperatives.

According to the Regulation on Financing the Sale, Credit, and Leasing of Agricultural Machinery, Technological Equipment, and Irrigation System Sets and Equipment on Preferential Terms, the required down payment by buyers is set at a minimum of 20% of the sales value, as determined through an official evaluation of the equipment (AKİA, n.d.[16])[6]. A discount is applied to the sales value, amounting to 40% of the customs value for imported equipment and 60% of the assessed value for locally produced equipment. This discount is financed from state budget funds allocated to the Agency for this purpose and disbursed through authorized credit institutions. The remaining balance of the assessed sales value is financed by authorized credit institutions through loans or leasing arrangements. Interest on these loans or leases is fully covered by the state budget. The maximum loan or lease amount is set at AZN 1 million (approximately USD 588 000), with a repayment term of up to three years.

Business entities that have undertaken a commitment to food wheat production and have concluded an agreement with the Ministry of Agriculture of the Republic of Azerbaijan are provided with a state guarantee and an interest subsidy from the funds allocated to the Agency for this purpose from the state budget of the Republic of Azerbaijan for loans granted at the expense of credit institutions' own funds for the purchase of modern irrigation systems and that meet the following requirements. In this case, the loan amount for each project should not exceed AZN 3 million (approximately USD 1.77 milion), the initial payment should be made by the buyers of modern irrigation systems in the amount of at least 20% of the sales value determined as a result of the assessment of these systems, the annual interest rate of the loan should not exceed 15%, the loan term should not exceed five years, and the grace period on the loan should correspond to the periods required in the market for the purchase, installation, sowing, harvesting and sale of modern irrigation systems, grain wheat, but should not exceed 12 months. Loans issued in this direction are provided with a state guarantee within the following limits of the total loan amount:

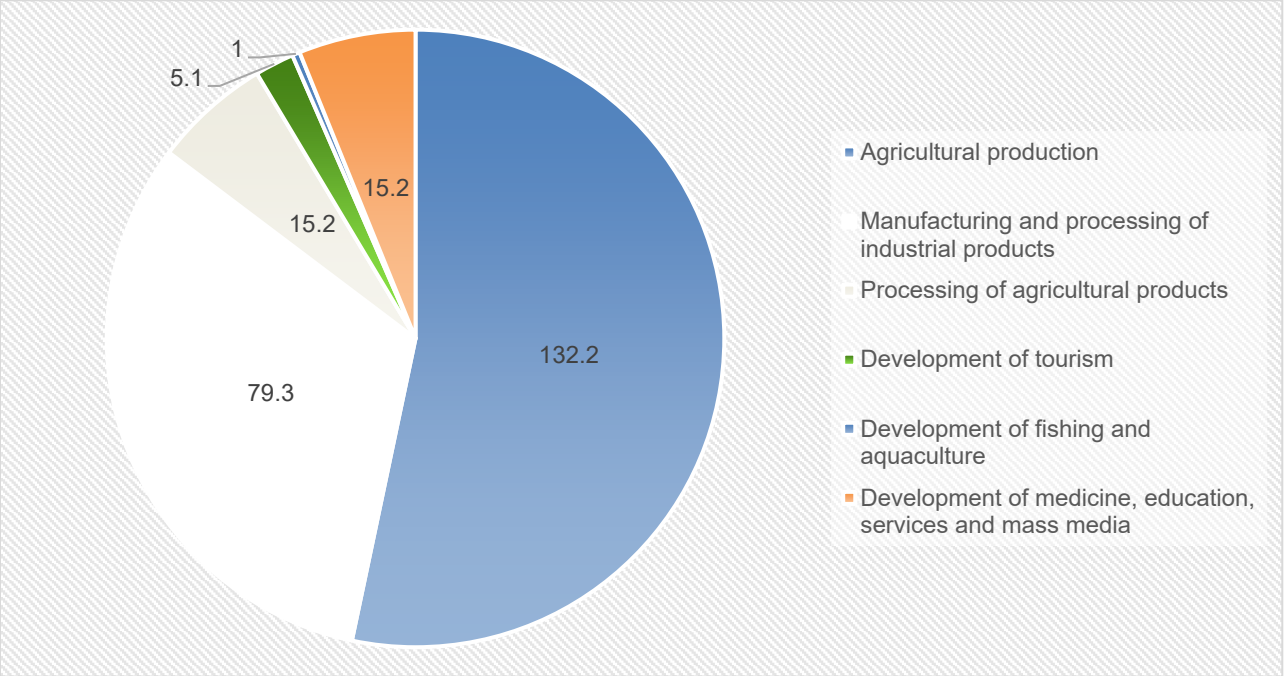
- If the annual interest rate is from 14.01% to 15-30%;
- If the annual interest rate is from 13.01% to 14-40%;
- If the annual interest rate is from 12.01% to 13-50%;
- if the annual interest rate is up to 12-60%.

On loans granted in this direction, business entities pay an annual interest rate of 5%, and the remaining interest rate is paid at the expense of funds allocated to the Agency from the state budget.

Financing the sale, loan, and leasing of agricultural production equipment on preferential terms does not apply to the resale or leasing of such equipment.

[6] see also *Regulation on Financing the Sale, Credit, and Leasing of Agricultural Machinery, Technological Equipment, and Irrigation System Sets and Equipment on Preferential Terms*, available at: https://e-qanun.az/framework/42153

Figure 1. Distribution of loans granted by sectors of the economy (AZN million), 2024



Source: Central Bank of Azerbaijan

Information on loans provided by AKIA is presented in the table below.

Table 3. Agricultural loans provided by AKIA in 2024

	Number of farmers, people	Loan amount, (AZN/USD)
Loans	807	AZN 16 350 309 (USD 9 618 000)
Concessional loans	*1*	*AZN 35 000 (USD 20 600)*
Microloans	*74*	*AZN 831 900 (USD 488 800)*
Loans for the sale of machinery	*732*	*AZN 15 483 409 (USD 9 107 000)*

Source: Ministry of Agriculture (EKTİS)

As can be seen from the table, loans for agricultural machinery have the largest share among the loans provided by AKİA. Implications of public support for leasing are elaborated in the next section.

Table 4. Financing mechanisms provided by the Entrepreneurship Development Fund

	Soft loan	Equipment loan	Guarantee and interest subsidy mechanism
Interest	5%	9%	Up to 15%
Amount	AZN 5 000-10 million (approximately USD 2 900 thousand–5.9 million)	AZN 5 000-3 million (approximately USD 2 900 thousand–1.8 million)	Up to AZN 5 million (approximately USD 2.9 million)
Term	Up to 10 years	Up to 5 years	Up to 7 years
Grace period	Half of the loan term	Up to one year	Up to 3 years

Note: The guarantee and interest subsidy mechanism is designed to support projects implemented in designated priority development areas.

In 2024, the state-funded Entrepreneurship Development Fund under the Ministry of Economy received around 6 000 loan applications through authorized credit institutions. Of these, 5 712 were approved and 119 were rejected, with a total requested amount of approximately AZN 275 million (approximately USD 161 million). During the year, AZN 250 million (approximately USD 147 million) in preferential loans were provided to support nearly 6 000 investment projects valued at almost AZN 500 million (approximately USD 294 million), creating over 4 000 new jobs. Among the recipients, 472 women entrepreneurs received around AZN 19 million AZN (approximately USD 11 million), and 170 young entrepreneurs received AZN 7 million (approximately USD 4.1 million) in soft loans.

Leasing and equipment finance as a partial solution

Leasing of machinery and equipment to farmers has grown in Azerbaijan over time, supported by both private companies and government programmes. Several firms such as Prior Leasing now operate across the country catering to the agricultural sector (ATAF, 2021[17]).

Some leasing products are supported by **government subsidies**, which can cover up to 40% of the interest cost or even offer interest-free or reduced-rate leasing for several years (ATAF, 2021[17]; AKIA, n.d.[18]) (also elaborated in the section above). Notably, between 2018 and 2020, leasing companies affiliated with AKIA extended leasing finance amounting to AZN 111.5 million (approximately USD 66 million) to farmers (ATAF, 2021[17]). These subsidised schemes make it easier for farmers to access modern machinery and climate-smart technologies, such as drip irrigation systems, small greenhouses, and conservation tillage equipment, without needing to provide immovable property as collateral (Ahouissoussi et al., 2014[19]).

Leasing can be an effective way to improve farm productivity and resilience, especially for farmers who cannot qualify for traditional bank loans. However, the success of leasing programmes depends on several factors:

- **Awareness and outreach** – Many small farmers are not familiar with how leasing works or which options exist.
- **After-sales support** – Equipment needs regular servicing, spare parts, and operator training to ensure it is used efficiently.
- **Affordability** – Even with subsidies, monthly payments can be high for small farms with limited income. Farmers with small plots may still find leasing unaffordable unless there are grace periods that match harvest cycles or combined support from grants or concessional loans.

Subsidy schemes

A wide range of subsidies are available to producers. Sowing subsidies compensate for input costs such as soil analysis, irrigation systems and agrotechnical services. Crop subsidies are provided for key products, including wheat, cotton and sugar beet. Additional instruments include fallow land subsidies to restore soil fertility, animal subsidies for improved breeding, and specialised support for beekeeping, cocoon production, orchards, tea plantations, and drip irrigation systems. Since 2007, the state subsidises 50% of the cost of fuel and motor oils used in agricultural production (President of the Republic of Azerbaijan, 2007[20]); this was increased by 25% in 2015 (President of the Republic of Azerbaijan, 2015[21]). Since 2007, a 70% discount applies to the sale price of mineral fertilizers, pesticides, and biohumus produced by Azerbaijani companies, including "Agroleasing" Open Joint Stock Company. While the subsidies for agricultural fuel and motor oils and mineral fertilizers are capped, they constitute direct

subsidies which tend to be price- and income-support measures paid straight to producers rather than routed through market signals or targeted environmental programs.

Reforms since 2019 have sought to improve transparency and efficiency through digital systems (EKTIS) and have gradually integrated climate objectives, for instance by prioritising irrigation investments and climate-resilient crops. The “Rules for Subsidizing Agricultural Production,” approved by the Decree of the President of the Republic of Azerbaijan No. 759 of June 27, 2019, were later updated in 2024. Under these rules, subsidies are provided for the introduction of innovations such as irrigation systems, certified seedlings, and modern technologies.

Currently, approximately 70% of cultivated land in Azerbaijan is irrigated with floods and furrow being the predominant methods. Of the total irrigated area, only 14% is equipped with water-saving irrigation systems, such as drip and pivot irrigation (The State Statistical Committee of the Republic of Azerbaijan, 2025[7]).

For 2025, additional subsidies have been determined for irrigated areas and gardens equipped with modern technologies within the framework of the decisions of the Agricultural Subsidy Council. For example:

- Additional subsidies of AZN 60/ha (approximately USD 35/ha) for areas with complex irrigation systems,
- AZN 1 000/ha (approximately USD 588/ha) for field protection strip crops (at least 1 500 seedlings/ha) in fields,
- AZN 400/ha (approximately USD 235/ha) subsidies are provided for grain legumes cultivated with drip irrigation in designated priority development areas,
- High subsidies are provided to orchards and tea plantations based on soil sample and electrical conductivity (≤2.0-3.0dS/m) to optimize soil-climatic potential – for example, AZN 8 000/ha (approximately USD 4 700/ha) for vineyards, AZN 10 000–11 000/ha (approximately USD 5 900–6 500/ha) for cherry and pear orchards, and AZN 12 000/ha (approximately USD 7 100/ha) for tea plantations
- Subsidies have also been developed for field protection and fallow lands – subsidies have been determined for fallow areas (per hectare)

These subsidies are aimed at reducing water shortages and focused on addressing erosion risks, water conservation, and climate resilience.

Tax and tariff incentives

Fiscal incentives play an important role in supporting the sector. Agricultural producers benefit from long-term exemptions from income, profit, VAT, property, and land taxes, in some cases for up to 13 years. Imports of agricultural machinery and irrigation equipment are also exempt from customs duties.

Further incentives promote agro-processing and renewable energy investments, including partial income tax exemptions, VAT relief, and customs exemptions for renewable energy equipment. These measures can indirectly support climate-resilient agriculture by reducing costs for farmers and agri-businesses investing in sustainable practices.

Disaster risk management and agricultural insurance

Agricultural insurance plays a critical role in reducing the impact of climate-related risks such as storms, hail, and floods, thereby strengthening the sector’s overall resilience. The Law of the Republic of Azerbaijan

on Agrarian Insurance establishes the legal, economic, and institutional framework for insuring risks in the agricultural sector through a joint insurance mechanism (Republic of Azerbaijan, 2019[22]). Under this law, the scope of agrarian insurance includes agricultural crops and their products (including perennial varieties), livestock raised for agricultural purposes, and aquaculture products.

According to the Law on Agricultural Insurance of the Republic of Azerbaijan and the Presidential Decree on Differential Subsidy Rules (2019), sowing subsidies for crops such as barley, wheat, rice, corn, hazelnuts, tea, and lemons –when cultivated on areas exceeding 10 hectares– are only granted if agricultural insurance has been in place for at least three years. Under this scheme, 50% of the insurance premium is subsidised by the state, allowing farmers to access coverage at a reduced risk premium. Insurance products cover a range of risks, including natural disasters, fires, plant diseases and pests, infectious diseases and poisoning, attacks by wild animals, and the spread of particularly harmful pests. Notably, drought is excluded from the list of insurable risks.

However, the Agricultural Insurance Fund receives numerous applications related to drought losses. In response, the Fund is undertaking efforts to address farmers' needs by developing a dedicated insurance mechanism for drought risk. This includes comprehensive assessments of drought risk coverage and preparatory work to integrate it into existing insurance schemes. In parallel, relevant international practices and experiences are being studied and analyzed to inform the design of an effective drought insurance product (BAKU NEWS, 2025[23]).

The list of crops subject to mandatory insurance and the corresponding minimum coverage areas was updated by the Agricultural Subsidy Council in 2025. Insurance requirements for both annual and perennial crops—such as cereals, grapes, tea, and orchards—are now applied based on total cultivated area.

According to the Agricultural Insurance Fund, insurance payouts in the first half of the year totalled AZN 4 435 000 (approximately USD 2.6 million), marking a 55% increase compared to the same period in the previous year. Payments for arable land nearly doubled. The largest payouts were made for wheat and barley (AZN 2.5 million, approximately USD 1.47 million), cotton (AZN 577 000, approximately USD 340 000), corn (AZN 447 000, approximately USD 263 000), sunflower (AZN 196 000, approximately USD 115 000), and tobacco (AZN 174 000, approximately USD 102 000). Orchards also received AZN 170 000 (approximately USD 100 000) in insurance compensation (AIF, 2025[24]).

In 2024, total insurance payments reached AZN 6.42 million (approximately USD 3.78 million) —the highest annual figure since the Fund's establishment in 2019. This represents a 46% increase compared to 2023, when AZN 4.41 million (approximately USD 2.59 million) was disbursed. Of the 2024 total, crop insurance accounted for AZN 5.25 million (approximately USD 3.09 million); much higher than livestock insurance at AZN 1.18 million (approximately USD 694 000). Crop-related payouts rose by AZN 1.7 million (approximately USD 1 million) or approximately 50%, compared to the previous year, while livestock insurance payments increased by AZN 267 000 (approximately USD 157 000), or 29%.

The most frequent incidents triggering crop insurance payments in 2024 were storms, hurricanes, floods, and hail. Compensation was most provided for grape, cherry, apple, almond, and apricot orchards, as well as rice and watermelon fields, in addition to grain, cotton, and corn crops. Livestock insurance claims were primarily related to infectious diseases, poisoning from grass and feed, and bites from snakes and insects.

Since its inception in 2019, the Agricultural Insurance Fund has experienced rapid growth. While only AZN 18 000 (approximately USD 10 600) in premiums were collected in 2020, this figure rose to AZN 14.2 million (approximately USD 8.35 million) by the end of 2024, with payouts totalling AZN 6.4 million (approximately USD 3.76 million) (Agricultural Research Center, 2025[25]). Despite recent expansion of the insurance system and its coverage, the country's existing insurance and compensation mechanisms remain oriented to ex post response rather than preparedness. In addition, analytical capacities including those of the National Hydrometeorological Service under MENR focus on disaster and damage evaluation rather than risk assessment, in addition to its early warning functions (World Bank Group, 2023[26]). The

Agricultural Insurance Fund has put in place further ex post support procedures as well as proactive measures aimed at introducing differentiation by types of crops and geographical location, as explained. However, neither climate change scenarios nor climate-related loss damage projections are considered when determining prioritization (World Bank Group, 2023[26]).

Conclusions

While steps have been taken to integrate climate-resilience into existing financial support schemes, agricultural support in Azerbaijan remains heavily focused on direct subsidies (for agricultural fuel, motor oil and fertiliser). Such direct payments are easy to administer and politically popular, but a growing body of evidence shows they are often inefficient and can produce undesirable economic and environmental side-effects. Economists and international organisations point to several consistent problems with broad direct subsidies. First, they are frequently poorly targeted: a large share of support goes to land, capital, or large farms rather than to low-income or productivity-constrained producers, so the income-support objective is achieved at high fiscal cost (DeBoe, 2020[27]). Second, they can distort production and trade by encouraging the production of supported commodities even when this is not the most efficient use of land or resources, with knock-on effects on global markets and trading partners (The World Bank Group, 2023[28]; OECD & FAO, 2024[29]). Third, many direct subsidies (especially fuel or input subsidies and uncapped price supports) create negative environmental incentives- for example by encouraging over-use of fertilisers, irrigation and pesticides, or by discouraging fallowing and crop rotations that would improve soil health (Matthews and Karousakis, 2022[30]; Lankoski, Nales and Valin, 2024[31]).

Because of these economic and environmental shortcomings, policy guidance from the OECD, World Bank and others increasingly recommends shifting support away from untargeted direct payments toward more efficient instruments: better-targeted income support, payments for clearly-specified environmental outcomes (results-based agri-environmental payments), investments in innovation and extension services, and time-limited adjustment assistance that helps farms restructure without locking in distortive incentives. Recent OECD analysis and the OECD-FAO Agricultural Outlook highlight this reorientation as a central policy trend for improving cost-effectiveness and sustainability in agriculture (OECD & FAO, 2024[29]; OECD, 2024[32]).

5 Private financing mechanisms for adaptation in agriculture in Azerbaijan

Access to finance is one of the biggest challenges for SMEs, including those in the agricultural sector. Azerbaijan ranked low (122 out of 190 countries in 2018) in terms of ease of obtaining credit. The Central Bank of Azerbaijan aims to promote sustainable financing for micro, small, and medium-sized enterprises through its Sustainable Development Roadmap (Central Bank of Azerbaijan, 2023[33]).

The size of the banking sector is relatively small compared to the economy, with loans representing only 20% of GDP, indicating low financial penetration. As explained in the section above on "Financial sector overview and digital banking" (Chapter 2), Azerbaijan's financial sector is heavily bank-centric, with commercial banks holding over 90% of total financial assets. Major banks include International Bank of Azerbaijan (IBA), AccessBank, Bank Respublika, Kapital Bank, Pasha Bank Unibank and Xalq Bank. While the sector remains relatively concentrated, loan growth and asset quality have improved in recent years.

Non-bank financial institutions, including credit unions and insurers, remain small but are gradually expanding from a low base.

Commercial bank financing

Bank Respublika is one of the biggest private banks in Azerbaijan. Between 2023 and 2025, the bank secured multiple major loan agreements with international financial institutions such as the EBRD, IFC, EFSE, FMO, ADB, and EIB Global, totaling over USD 100 million (approximately AZN 170 million), primarily in local currency. These funds support green financing, climate adaptation, and inclusive credit lines targeting women, youth, and agricultural entrepreneurs. For example, in 2024, Bank Respublika signed a four-year local currency loan agreement of USD 25 million (approximately AZN 42.5 million) with the Dutch development bank FMO, targeting MSMEs in the agricultural sector (Bank Respublika, 2024[34]). In 2025, the bank announced the launch of its first-ever "Green Loan" product under the EU4Business-EBRD Credit Line for companies with minimum 250 employees. It offers cashback incentives of up to 15% to entrepreneurs adopting environmentally sustainable practices, including agriculture and horticulture. The maximum loan term is five years, and the loan amount cannot exceed USD 1.81 million (approximately AZN 3.08 million) (Bank Respublika, 2025[35]). Bank Respublika also offers financial products tailored to small and medium-sized farmers, such as farm loans and micro and agribusiness loans (Bank Respublika, n.d.[36]). The loans to micro and agro business are offered with the range of up to AZN 100 000 (approximately USD 59 000) with a maximum term of 48 months and an interest rate starting from 10%. These loans may include a grace period of up to 12 months, depending on the borrower's profile. Farm loans are available up to AZN 20 000 (approximately USD 12 000), with a loan term of up to 12 months. The interest rate starts at 12%, and a grace period of up to 9 months may be offered based on individual circumstances (Bank Respublika, n.d.[37]).

For businesses, and in addition to general business loans, the bank also offers credit supported by AKIA. Loan amounts start at AZN 20 000 (approximately USD 12 000) and can go up to AZN 200 000 (approximately USD 118 000). In some cases, the maximum amount may reach AZN 1 million (approximately USD 588 000) for equipment purchases. These loans have a term of up to 60 months and may include a grace period of up to 24 months (Bank Respublika, n.d.[38]).

Unibank is also among the largest private banks in the country. Through the Entrepreneurship Development Fund (EDF), Unibank offers large-scale, long-term concessional loans to support agricultural development. These loans can reach up to AZN 10 million (approximately USD 5.9 million) with maturities of up to 10 years, including a grace period. The funds can be used to develop greenhouses, intensive orchards, large farms, and to support small businesses, among other options (Unibank, n.d.[39]). Additionally, the agro-loans product offers up to AZN 300 000 (approximately USD 176 000) with a 3% discount and grace period of up to 6 months (Unibank, n.d.[40]). Collateral is mandatory for the latter.

Accessbank disbursed more than AZN 381 million (approximately USD 224 million) in loans to agricultural enterprises in regional areas in 2024 (AccessBank, 2024[41]). It has also issued inaugural thematic bonds totalling USD 5 million (approximately AZN 8.5 million) to support the agricultural sector as it is explained in the following section. Additionally, Accessbank offers green financing with the Global Climate Partnership Fund for investments in energy-efficient infrastructure, renewable energy or sustainable agriculture.

Financial regulation

In 2024, the Central Bank introduced a comprehensive set of “green investment rules” alongside a creditor taxonomy aimed at fostering sustainable economic development in the Republic of Azerbaijan. This taxonomy classifies investments in areas such as smart irrigation systems, climate-resilient seed technologies, and renewable energy projects as officially recognized green categories (Central Bank of the Republic of Azerbaijan, 2024[42]).

The implementation of this framework marks a pivotal step toward the greening and decarbonization of Azerbaijan’s economy. By clearly defining sustainable investment priorities, the taxonomy is designed to attract capital flows into renewable energy, sustainable agriculture, and other strategic sectors essential for building a more resilient, diversified, and low-carbon economic future.

Furthermore, the taxonomy strengthens Azerbaijan’s competitive position on the global stage by aligning national development with international climate and sustainability objectives. A core component of the taxonomy is climate change adaptation, which entails the adoption of measures that enhance the capacity of individuals, communities, and systems to withstand and respond effectively to climate-related risks. By supporting both direct resilience-building and the broader dissemination of adaptive capacities, the taxonomy contributes to long-term environmental and economic stability.

The Central Bank of Azerbaijan has included the development of sustainable finance, including green bonds, within its Sustainable Development Roadmap. For example, in 2024, Unibank issued Azerbaijan’s first green bond[7], valued at AZN 20 million (approximately USD 11.8 million), in accordance with the Green Bond Principles of the International Capital Market Association (AIFC, 2024[43]). Regulatory groundwork and market infrastructure for such instruments are still in early stages, but they represent a potential medium- to long-term financing mechanism also for adaptation.

[7] While Unibank’s 2024 green bond issuance was aligned with the Green Bond Principles of the International Capital Market Association standards and externally verified, it is not formally recognized as a green bond under Azerbaijani law, as no national regulatory framework currently exists to define or certify green bonds.

Micro-finance schemes

Access to finance remains a key constraint for smallholder farmers and agricultural households, particularly those operating at subsistence or semi-commercial scale. In Azerbaijan, agricultural microloans — typically small, short- to medium-term loans used for inputs, livestock, on-farm investments, or seasonal working capital — could play an important role in bridging gaps left by commercial bank lending. While the microfinance sector serves a broad range of micro-entrepreneurs and MSMEs, its geographic reach into rural areas and its tolerance for small loan sizes make it especially relevant for farmers, including those exposed to climate and production risks.

The overall share of microloans in the national commercial loan portfolio was around 10% in 2024 (CBA, 2025[44]). For smallholder farmers, who typically require relatively small loan amounts for seasonal inputs (such as seeds, fertiliser, feed, or veterinary services) or modest capital investments, commercial banks typically do not consider small loans (such as AZN 5 000-10 000, approximately USD 2 940–5 880) to be financially viable due to administrative costs and perceived risk. Nonetheless, nine (out of 26) commercial banks were actively issuing microloans according to latest available data (AMFA, 2021[45]). Banks operating in the microcredit sector tend to apply interest rates ranging from 11-30% (ATAF, 2021[17]). Accessbank is the largest lender to microentrepreneurs (in general, not just agriculture) with a total loan portfolio of AZN 1.1 billion (approximately USD 647 million) in 2023, of which AZN 650 million (approximately USD 382 million) was dedicated to microcredits (AccessBank, 2024[41]). Other active banks in the microloans sector include Bank Respublika, Expressbank,Yelobank, Rabita Bank ASC, Turanbank ASC or Unibank ASC (ATAF, 2021[17]).

As of end of 2023, there were 54 non-bank credit organizations (NBCOs) with total assets of AZN 758 million (approximately USD 446 million), up 47% (AZN 242 million / approximately USD 142 million) from the previous year (Central Bank of Azerbaijan, 2023[46]). The sector is dominated by nine large microfinance NBCOs: CredAgro, FINCA Azerbaijan, FinDev Azerbaijan, Finoko, ParaBOKT, Molbulak, TBC credit, Viator and Agrarcredit; the remaining NBCOS are comparatively small (ATAF, 2021[17]).

NBCOs are particularly relevant for agricultural finance and rural financial inclusion, since 65% of their branches are in rural areas in Azerbaijan (CBA, 2025[10]). Along with 43 credit unions (AMFA, 2021[45]) NBCOs primarily extend loans to MSMEs enterprises, typically in amounts up to AZN 25 000 (approximately USD 14 700). In 2024, NBCOs served about 140 000 borrowers, with a combined net loan portfolio of AZN 302.4 million (approximately USD 177 million). Interest rates for microloans ranged from 18-33% for NBCOs, and up to 49.9% in some cases (e.g., Molbulak), particularly for high-risk SME loans (ATAF, 2021[12]). For smallholder farmers, such rates can significantly constrain uptake and limit the capacity of credit to support climate-resilient investments, underscoring the importance of complementary risk-sharing, concessional finance, or blended instruments.

For example, CredAgro is a microfinance institution that was established under the USAID Azerbaijan Rural Credit Project with the objective of improving financial access to small-scale farmers and entrepreneurs in rural areas. Within five years, CredAgro reported to have disbursed USD 30 million (approximately AZN 51 million) to over 5 000 clients. In 2006 CredAgro became the first non-bank credit institution in Azerbaijan to receive a loan from the EBRD (ACDI/VOCA, n.d.[47]). Its microloans terms depend on the financial product, which range from business to leasing loans. These loans are usually for amounts of up to AZN 100 000 (approximately USD 59 000), with a maximum term of 48 months and an annual interest rate from 20-30%, although some exceed these figures.

As of December 31, 2024, CredAgro reported a total gross carrying amount of AZN 7.40 million (approximately USD 4.35 million) in loans to customers, representing an increase of almost 30% from AZN 5.99 million (approximately USD 3.53 million) in 2023, with loans primarily consisting of consumer credit. The provision for expected credit losses declined to AZN 484 000 (approximately USD 285 000) in 2024

from AZN 650 000 (approximately USD 383 000) in 2023, which may suggest an improvement in the credit quality of the loan portfolio (CredAgro NBCO LLC, 2024[48]).

Aqrarkredit is non-bank credit institution established by the government with the objective of improving financial access to the agrarian sector, with a focus on rural areas and small-scale farmers. Aqrarkredit offers a range of credit programmes as outlined bellow (AqrarKredit, n.d.[49]):

- **Rural Areas Credit Line**: Provides rural communities with access to financial support. It offers business loans and microcredits that can be used for diverse purposes including crop production, livestock farming, agri-processing, etc. Loans amount often go over AZN 1 000 (approximately USD 588) and microcredits up to AZN 10 000 (approximately USD 5 880), with interest rates starting from 15%. Loan terms range from 3 to 60 months, and borrowers may benefit from a grace period of 3 to 18 months based on their business activity. While business loans require collateral such as property or land, microcredits are backed by guarantors.
- **Subsidized Loans via the Entrepreneurship Development Fund (EDF):** These loans aim to stimulate agri-business activities and are structured into three levels: small (AZN 5 000–50 000; approximately USD 2 940–29 400), medium (AZN 50 000–500 000; approximately USD 29 400–294 000), and large (AZN 500 001–10 million; approximately USD 294 000–5.88 million), with repayment periods of up to 10 years. A low interest rate of 5% and generous grace periods make this programme particularly attractive for entrepreneurs aiming to expand or launch new ventures.
- **AKIA-Backed Credit Line:** Funded by the Agrarian Credit and Development Agency (AKIA) under the Ministry of Agriculture this programme offers loans to agri businesses that can range from AZN 15 000 to 200 000 (approximately USD 8 820–117 600) with a fixed interest rate of 7%. Depending on the amount, terms vary from 3 to 5 years, and microloans include a one-year grace period.

In addition to conventional microloans, FINCA Azerbaijan (a microfinance provider) offers several agri-finance products targeted to smallholder farmers. One offers low-interest, collateral-free loans with government support through the Agrarian Agency for Credit and Development. Another product, an agri-insurance loan covers half of farmers' insurance premiums combined with an agricultural microloan to help them expand and climate-proof their farming activities. Applications can be made both online and in-person. The agri-insurance loans target farmers registered in EKTIS, with loans ranging from AZN 500–15 000 (approximately USD 294–8 820) with fixed annual interest of 18% and terms of 6–30 months (FINCA, n.d.[50]). The insurance component benefits from the premium subsidy provided under the state-supported Agrarian Insurance Fund, making coverage more affordable for farmers.

Although some NBCOs face funding challenges and legal constraints (such as the inability to accept deposits), they are generally perceived as more accessible and trustworthy by microentrepreneurs and farmers compared to banks or pawnshops (ATAF, 2021[17]).

Agricultural credit cooperatives

By the end of 2021, there were 43 credit co-operatives (credit unions) operating in Azerbaijan (ATAF, 2021[17]). This number has been steadily reduced from the 109 recorded in 2011 to 40 by the end of 2023 (Central Bank of Azerbaijan, 2023[46]) and 36 by the end of 2024 (Central Bank of Azerbaijan, 2025[51]). The total portfolio of credit unions amounted to AZN 12 million (approximately USD 7 million) in 2024 (Central Bank of Azerbaijan, 2025[51]) which is significantly smaller than those of banks and NBCOs, (Central Bank of Azerbaijan, 2025[51]). They face ongoing challenges related to non-performing loans and limited capital resources (CBA, 2025[44]).

Main barriers to accessing commercial finance for farmers

Farmers in Azerbaijan, especially smallholders who make up nearly 90% of farms and usually manage 1–3 hectares, face challenges accessing climate and agricultural finance. These difficulties stem from banking sector issues, agriculture being seen as high-risk, and limited support and capacity at the farm level (Ahouissoussi et al., 2014[19]; ATAF, 2021[17]).

Rural financing in the region is often expensive and subject to strict collateral requirements (FAO, 2020[52]). Commercial banks avoid small rural loans, preferring larger loans for export or retail, while microloans carry high interest (19–30% per year) and strict collateral requirements, such as property or multiple guarantors (ATAF, 2021[17]; Aliyev, 2019[53]; Central Bank of Azerbaijan, 2025[51]). Loan terms often do not match farming cycles, making repayment challenging for smallholders (FAO, 2018[54]; ATAF, 2021[17]) (FAO, 2018[54]; ATAF, 2021[17]).

Some AKIA SME loans offer lower interest (up to 12%) but require at least 30% of project costs from the borrower and liquid collateral (JAMnews, 2023[55]). Limited profit margins and lengthy approval processes further discourage financial intermediaries (ATAF, 2021[17]; JAMnews, 2023[55]).

Small farm sizes, few cooperatives, and low financial literacy restrict market access and awareness of credit options. Many farmers face repayment burdens beyond their means, sometimes cutting essential spending. According to a survey conducted by Agricultural Finance Facility (as reported in Aliyev, 2019[42]) 40% of farmers self-finance with savings, borrow money from family members (around 20%) and friends (almost 5%).

6 International cooperation to support financing for adaptation in agriculture in Azerbaijan

International donors are actively supporting Azerbaijan in its efforts to address climate change impacts on the agricultural sector through various projects and initiatives.

Key Areas of Support and Achievements

Resilience in agriculture more broadly, including disaster preparedness

The Adaptation Fund (AF), implemented by United Nations Human Settlements Programme (UN-Habitat), the United Nations Environment Programme (UNEP), and the International Organization for Migration (IOM) supports the project *Building Climate Resilience of Vulnerable and Displaced Communities in Azerbaijan*. The project contributes to agricultural resilience mainly through improved water management, which is implemented through investments in rainwater harvesting infrastructure and integrated water management schemes. Approximately USD 6 million (around AZN 10.3 million). Other components aim to scale up and replicate innovative adaptation solutions in the country, including in agriculture (Adaptation Fund, 2024[56]).

Complementing this, UNEP's project on *strengthening Climate Information and Multi-Hazard Early Warning Systems* (2024–2031) provides around USD 35 million (approximately AZN 59.5 million) to enhance national water, weather and climate monitoring and forecasting. These systems directly benefit agriculture by improving preparedness for droughts, floods, and extreme weather events (UNEP, 2024[57]).

Earlier initiatives such as the UNDP GEF-funded project *Integrating Climate Change Risks into Water and Flood Management by Vulnerable Mountain Communities*, which ran 2012-2017, mobilized USD 10 million (approximately AZN 17 million) to support vulnerable farming communities through improved land, soil, and water management practices (UNDP, 2017[58]). In parallel, World Bank analytical work (2012–2013) assessed climate risks to major crops and recommended scaling up climate insurance, credit access, and climate-smart agriculture investments in high-risk regions (Ahouissoussi et al., 2014[19]).

Irrigation and Water Efficiency

The Green Climate Fund's *Scaling Resilient Water Infrastructure* project, implemented by the International Finance Corporation (IFC) aims to increase water supply capacity by up to 850 million liters per day, with Azerbaijan's component focusing specifically on water recycling and reuse to reduce pressure on freshwater resources (GCF, 2024[59]). Complementing infrastructure investments, EU-funded projects (EUWI+ and ENI SEIS II East) have strengthened national water databases and monitoring systems, improving the evidence base for water planning and governance (GCF, 2019[60]).

Readiness support has also focused on improving irrigation practices at the farm level. The FAO *Readiness Project* identified climate-smart irrigation technologies, including drip and sprinkler systems, as priority adaptation measures, while the World Bank Country Partnership Framework (CPF) supports efforts to improve irrigation efficiency and reduce vulnerability to droughts (GCF, 2019[61]; World Bank Group, 2025[62]).

At the institutional level, the FAO *Water Governance* project (2021-2023) supported government reforms to strengthen agricultural water management. Key outputs included recommendations on legislation and government action, water financing and tariff reform aimed at improving stakeholder participation and incentivising efficient water use (FAO, 2024[63]).

Sustainable Land and Ecosystem Management

The FAO's *HAZER* project (2020–2023) promoted sustainable hazelnut cultivation to enhance soil quality and biodiversity (FAO, 2024[64]). Complementary initiatives, including the GEF-UNDP *Sustainable Land and Forest Management* Project and the *EU's ClimaEast* Program, supported pasture management through ecosystem-based adaptation approaches (GCF, 2019[61]). Earlier, the FAO Organic Agriculture project (2015–2017), funded by Turkey, provided training on organic standards, certification, and environmental practices (FAO, 2018[65]).

The UNDP–GEF project *Conservation and Sustainable Use of Globally Important Agricultural Biodiversity* (2016–2021) mobilized USD 25 million (approximately AZN 42.5 million) to promote sustainable land management and climate-resilient farming in the Sheki, Goranboy, and Goychay regions. Activities included supporting gene banks, training over 150 farmers, and forming farmer associations to scale drought-resistant native crops. The project helped lay the groundwork for targeted subsidy schemes and increased government investment in sustainable agriculture (UNDP, 2020[66]).

Climate-Smart Agriculture and Value Chains

FAO's *HAZER* project also promoted sustainable practices to reduce contamination and strengthen value chains for hazelnuts (FAO, 2024[64]). Similarly, initiatives supporting Azerbaijan's NDC in agriculture promote low-emission farming practices, land-use reforms, and the expansion of climate-resilient crops (GCF, 2019[61]).

The Asian Development Bank (ADB)'s partnered with Araz Supermarket LLC to provide over USD 10 million (approximately AZN 17 million) in blended financing to enhance horticulture supply chains, reaching 750 smallholder farmers, particularly women, with training on sustainable pest control, soil management, and post-harvest handling (NuFFooDS Spectrum, 2024[67]).

The European Bank for Reconstruction and Development (EBRD) invested in H&M Agro with a USD 2 million (approximately AZN 3.4 million) senior secured loan to expand its existing hydroponic[8] greenhouses in Salyan (Bitsadze, 2022[68]). The project aims to increase yields while reducing water and fertilize use. The EU provided a grant support of up to USD 138 000 (approximately AZN 234 600) through EBRD's Finance and Technology Transfer Centre for Climate Change (FINTECC), complemented by Turkish support for legal due diligence. H&M Agro is one of the first agricultural producers in Azerbaijan that managed to establish commercial trade relationships with Gulf countries. Diversification of export markets by this producer is expected to have a demonstration effect on local agribusinesses (Bitsadze, 2022[68]).

[8] Hydroponics is a method of growing plants in a water-based nutrient solution instead of soil. It is especially useful in areas with poor soil quality or limited arable land. By delivering nutrients directly and optimizing growing conditions, hydroponics can increase growth rates, yields, and reduce water use. However, it is labour- and capital-intensive, requires technical expertise, and access to clean, affordable water is essential (FAO, 2024[74]).

Agricultural Finance and Risk Management

The UNDP-Habitat project supports climate finance strategies to guide green rural investments (Adaptation Fund, 2024[56]). The *ADB-Araz* project combines climate-smart farming with a USD 10 million (approximately AZN 17 million) loan and USD 500 000 (approximately AZN 850 000) in technical assistance, including financial literacy training (NuFFooDS Spectrum, 2024[67]). In addition, the International Finance Corporation (IFC), in partnership with the Swiss State Secretariat for Economic Affairs (SECO), launched a four-year *Crop and Warehouse Receipts* Project to allow farmers to use crops as collateral, improving access to finance for seeds, fertilizers, and inputs (Respublika AZ, 2025[69]).

Institutional Capacity and Innovation

Strengthening institutional capacity remains a cross-cutting theme. A Green Climate Fund project (USD 2.7 million / approximately AZN 4.6 million, 2020–2024) supports the Government of Azerbaijan in developing its National Adaptation Plan and strengthening climate adaptation in three priority sectors identified by the Ministry of Ecology and Natural Resources (UNDP, n.d.[70])

Projects such as UNEP's *multi-hazard early warning system* (2024–2031) contribute not only to irrigation and climate resilience but also to institutional innovation in data, monitoring, and decision-support systems (UNEP, 2024[33]). At the same time, initiatives such as FAO's readiness work on irrigation technologies and EBRD's support to agribusiness modernization showcase how institutional partnerships and innovation transfer can accelerate climate adaptation across Azerbaijan's agricultural sector.

7 Smallholder farmers and access to climate-resilient finance in Azerbaijan

Smallholder farmers make up almost 90% of all farms in Azerbaijan, usually managing between 1-3 hectares of land (FAO, 2018[65]). These farmers face many difficulties in getting finance for climate-resilient and modern farming. The main reasons are weaknesses in the banking sector, the view that agriculture is a high-risk business, and limited institutional and technical capacity at the farm level (ATAF, 2021[17]; Ahouissoussi et al., 2014[19]). The analysis in this report has identified five main barriers, summarised below.

Access to Bank Loans

Rural credit is often expensive and hard to obtain. Interest rates on agricultural loans can reach 19–30% per year, and banks usually ask for high collateral such as immovable property or two to three guarantors (FAO, 2020[52]; CBA, 2025[44]). Repayment schedules rarely match the timing of planting and harvesting, which makes it difficult for smallholders to repay on time (ATAF, 2021[17]; FAO, 2018[54]). Because of these challenges, many farmers depend on their own savings or borrow informally from family and friends (ATAF, 2021[17]).

Commercial banks often prefer lending to larger agribusinesses at the end of the value chain — such as exporters or food retailers — because they are seen as safer clients with better collateral (Aliyev, 2019[53]). More details are provided in the section “Main barriers to accessing commercial finance for farmers” above.

Public Support Programmes

Government-supported schemes such as the Agrarian Credit and Development Agency (AKIA) and the Azerbaijan Agricultural Finance Facility (AzAFF) provide some loans with lower interest rates: around 12% for one-, three- or five-year terms (EU4Business, n.d.[71]). However, these loans still require farmers to provide at least 30% of project costs and liquid collateral, which many cannot do (JAMnews, 2023[55]; ATAF, 2021[17]).

Administrative procedures can also be slow. It may take a month or more for a loan to be approved, which can be difficult for farmers who need quick financing for planting or harvesting (JAMnews, 2023[55]; ATAF, 2021[17]).

Leasing and Equipment Finance

Leasing programmes, including those supported by the government, are becoming more common. They allow farmers to access machinery and climate-smart equipment without owning large assets for collateral.

Subsidised leasing—sometimes with partial interest support—helps farmers invest in irrigation systems, tractors or small greenhouses (FAO, 2018[54]; Ahouissoussi et al., 2014[19]).

However, the smallest farms may still struggle with regular lease payments, and they also need good maintenance and training services to make full use of the equipment (FAO, 2020[52]; FAO, 2018[54]).

International and Commercial Finance

International financial institutions such as the World Bank, the European Bank for Reconstruction and Development (EBRD), and the EU provide credit lines, guarantees and blended-finance programmes to local banks. These facilities aim to reduce risk and encourage more rural lending (EBRD, 2025[72]; Rosca, 2019[73]).

Still, commercial banks remain cautious and prefer larger clients. Many small farmers are also unaware of these opportunities or lack the business plans and documentation needed to apply (Ahouissoussi et al., 2014[19]; FAO, 2020[52]).

Knowledge and Organisation

Limited financial literacy and the weak presence of farmer cooperatives or unions also make access to finance harder. Without collective organisations, smallholders cannot plan production together, reduce costs, or negotiate better prices. Many farmers simply do not know what credit options exist or how to apply for them (FAO, 2020[52]; FAO, 2018[54]) .

Key Messages for Policymakers

- **Simplify access**: Speed up and simplify loan application procedures for AKIA and other state-supported programmes.
- **Match loans to farming cycles**: Introduce grace periods and repayment schedules that fit harvest times.
- **Support small-scale leasing**: Combine equipment leasing with training and maintenance support.
- **Work through groups**: Strengthen farmer cooperatives so that banks can lend to groups rather than individuals.
- **Use international support**: Align donor and IFI funds with national programmes to reach smallholders directly.
- **Build financial literacy**: Provide simple training and advice services for farmers on how to plan and manage credit.

8 Conclusions and possible areas of future project focus

Public financing remains the dominant source of support for agricultural adaptation in Azerbaijan. In 2024, budget allocations to agriculture reached AZN 1.1 billion (approximately USD 650 million) representing about 2.9% of total state expenditure, with AZN 404.5 million (approximately USD 238 million) paid out as direct subsidies to farmers. Yet agriculture accounted for 5.7% of GDP and employed 36% of the workforce in 2023, meaning the sector continues to receive less funding than its economic and social importance would suggest. Most subsidies are also still oriented towards production—such as crop and sowing subsidies that together made up nearly 70% of all direct subsidies—rather than explicitly incentivising resilience measures like water-efficient irrigation or climate-smart technologies. In 2024, loans for machinery dominated AKIA's agricultural lending portfolio, totalling AZN 15.5 million (approximately USD 9.1 million) out of AZN 16.3 million (approximately USD 9.6 million) in total loans—suggesting limited diversification into other adaptation—relevant investments. This imbalance limits the extent to which public finance can drive long-term adaptation.

Private sector engagement in adaptation finance remains constrained. Credit penetration into agriculture is low, reflecting the sector's dependence on smallholder farms with limited collateral and low savings capacity. While institutions such as the Agrarian Credit and Development Agency (AKIA) provide concessional loans, commercial lending is hampered by high interest rates (typically 7–12% for agricultural loans) and risk perceptions linked to weather volatility. As a result, smallholders still rely heavily on self-finance, subsidies, or informal borrowing to cover costs. Collateral and credit mechanisms tailored to climate-resilient projects remain underdeveloped, and many banks do not yet integrate climate risk assessments into their lending decisions.

Agricultural insurance remains nascent, despite the country's high exposure to climate risks such as droughts, floods, and hailstorms. Insurance payouts in 2024 amounted to AZN 6.4 million (approximately USD 3.76 million), a 46% increase from 2023, but coverage remains narrow in scope. Current products cover storms, pests, and some crop and livestock losses, yet crucial risks like drought are excluded. Participation is also limited: premiums collected in 2020 were as low as AZN 18 000 (approximately USD 10 600) and, although they rose sharply to AZN 14.2 million (approximately USD 8.35 million) by 2024, they still represent only a fraction of total agricultural value. Moreover, the system remains largely reactive, compensating for losses after events occur rather than incentivising proactive risk-management practices. Commercial insurers have yet to design tailored financial instruments such as weather-indexed insurance, and low awareness among farmers of climate risks and insurance options further constrains uptake. Azerbaijan could transition toward a public–private agricultural insurance scheme where the state underwrites part of the systemic risk, insurers manage product design and claims, and farmers contribute through affordable premiums. Drawing on Spain's experience, for example, Azerbaijan could provide multi-year commitments on premium subsidy levels, which would create stability and predictability for insurers and producers alike. At the same time, tailored subsidy rates and outreach programs should specifically target smallholders, who are currently underserved but make up a large share of the sector. Linking

eligibility for subsidized insurance to investments in climate-resilient production (e.g., drought-resistant seed varieties, efficient irrigation systems, or soil conservation measures) would further align risk management with long-term productivity and adaptation objectives.

International donors and international financial institutions have become critical providers of resources for adaptation finance. For example, UNEP's GCF-funded early warning project (USD 35.1 million, approximately AZN 60 million) and the Adaptation Fund's resilience project (USD 10 million, approximately AZN 17 million) target key vulnerabilities in water, land, and agriculture. Similarly, EBRD, ADB, FAO, and the World Bank are financing projects ranging from irrigation to value chain development. These initiatives have introduced innovative financing instruments, demonstration projects, and technical capacity. However, coordination with national subsidy and credit schemes remains fragmented, creating risks of duplication and inefficiency. Long-term sustainability is also uncertain, as many donor-funded projects remain time-bound and dependent on international flows rather than domestic fiscal anchors.

Institutional capacity for managing adaptation finance is improving but remains uneven. The establishment of bodies such as the Agrarian Insurance Fund (2019) and the Agrarian Credit and Development Agency reflects progress toward institutionalising financial support systems. Yet gaps remain: the agricultural orientation index was just 0.51 in 2024, meaning agriculture receives only about half the budget allocation its GDP share would imply. Data collection and monitoring systems are still limited, particularly for climate impacts, risk mapping, and insurance claims. Policy frameworks — including the Strategic Roadmap for Agricultural Products and the draft National Adaptation Plan — signal ambition but need stronger integration with financing mechanisms to ensure that investments systematically support climate-smart agriculture.

Strategic Recommendations

1. **Rebalance and scale public finance**
    - **Increase investment in climate-resilient infrastructure** such as modern irrigation networks, water-efficient systems, and soil protection measures. Public funds should increasingly target projects that help farmers adapt to climate change rather than only boosting production.
    - **Adjust subsidy criteria** to reward farmers who adopt sustainable and adaptive practices, for example, no-till farming, crop diversification, and on-farm water harvesting.
    - **Introduce incentive-based water pricing** or differentiated charges that encourage farmers to use water-saving technologies, reducing waste and improving efficiency.
    - **Expand project-based subsidies** linked to measurable adaptation outcomes, ensuring public support directly contributes to long-term climate resilience in agriculture.
2. **Develop risk-management tools**
    - **Make agricultural insurance more forward-looking and preventive.** Instead of only paying farmers after disasters happen, insurance programs should help them prepare and reduce losses before they occur—for example, by using weather forecasts and climate data to plan ahead.
    - **Expand coverage to climate-related risks** such as droughts and floods, which often cause the biggest losses.
    - **Promote blended models**, such as Spain's agricultural insurance model where the state shares risk with private insurers and farmers, with multi-year subsidy commitments for stability.
    - **Make farmers eligible for subsidized insurance only if they invest in climate-resilient farming practices**—for example, by using drought-resistant seeds, efficient irrigation systems,

or soil protection measures—or offer them specially reduced insurance premiums to encourage wider adoption of these practices.

- **Tailor subsidy rates and outreach programs to smallholders**.

3. **Mobilize private investment**
   - Incentivize green finance instruments, such as warehouse receipts, green bonds, and concessional credit lines targeting climate-smart agriculture.
   - Encourage agribusinesses and cooperatives to invest in water-efficient and low-emission technologies through preferential loans and guarantees.
4. **Strengthen coordination and institutional capacity**
   - Align donor projects more closely with national strategies, including the National Adaptation Plan.
   - Build monitoring systems to track climate finance flows and outcomes in agriculture.
   - Invest in farmer training, advisory services, and digital tools to ensure uptake of climate-smart solutions.
5. **Enhance access to credit for smallholders**
   - Ensure that financing instruments explicitly target smallholder farmers, women, and youth, who face the greatest barriers to accessing finance.
   - Support farmer cooperatives that share resources, cut costs, and help farmers get better prices and stronger positions in the market. Farmer associations and cooperatives can also facilitate joint access to credit for climate-resilient investments.

References

ABC (2024), *Data unveiled on bank branches in Azerbaijan*, https://abc.az/en/news/159167/data-unveiled-on-bank-branches-in-azerbaijan (accessed on 11 September 2025). [10]

AccessBank (2024), *Sustainability report*, https://www.accessbank.az/documents/Presentations/Sustainability%202023%2006.11.24.pdf . [41]

ACDI/VOCA (n.d.), *Azerbaijan Rural Credit Project*, https://www.acdivoca.org/projects/azerbaijan-rural-credit-project/ (accessed on 22 July 2025). [47]

Adaptation Fund (2024), *Proposal for Azerbaijan - Building Climate Resilient Cities and Communities in the Republic of Azerbaijan*, Project and Programme Review Committee, https://www.adaptation-fund.org/project/building-climate-resilient-cities-and-communities-in-the-republic-of-azerbaijan/. [56]

Agricultural Research Center (2025), *Azerbaijan Allocates 6.4 Million Manat for Agricultural Development in 2024*, https://atm.gov.az/az/news/1754/2024-cu-ilde-azerbaycanda-6-4-milyon-manat-aqrar-s. [25]

Ahouissoussi, N. et al. (2014), *Reducing the vulnerability of Azerbaijan's agricultural systems to climate change : impact assessment and adaptation options (English)*, http://documents.worldbank.org/curated/en/840121468003346631. [19]

AIF (2025), *Agricultural Insurance Fund, Record Payments Registered in Azerbaijan's Agricultural Insurance*, https://asf.gov.az/xeberler/azerbaycanda-aqrar-sigorta-odenislerinde-rekord-gosterici-qeyde-alinib. [24]

AIFC (2024), *Azerbaijan Hosts Debut Green Bond Issuance with Support from the AIFC Green Finance Centre*, https://aifc.kz/news/azerbaijan-hosts-debut-green-bond-issuance-with-support-from-the-aifc-green-finance-centre/. [43]

AKIA (n.d.), *Microloans (Mikrokreditlər)*, https://akia.gov.az/az/content/252.html (accessed on 11 July 2025). [15]

AKIA (n.d.), *Report*, https://akia.gov.az/en/content/9-38.html (accessed on 22 July 2025). [18]

AKİA (n.d.), *General Information on Financing the Purchase of Agricultural Machinery and Equipment*, https://akia.gov.az/az/content/251.html (accessed on 10 July 2025). [16]

Aliyev, S. (2019), *PROBLEMS AND OPPORTUNITIES FOR LEVERAGING SME FINANCE THROUGH VALUE CHAINS IN AZERBAIJAN*, https://www.adb.org/publications/problems- [53]

opportunities-leveraging-sme-finance-value-chains-azerbaijan.

AMFA (2021), *WHITE PAPER 2021*. [45]

AqrarKredit (n.d.), *Credit Projects*, https://aqrarkredit.az/en/credit-products/6-loan-products (accessed on 23 July 2025). [49]

ATAF (2021), *Assessment of the microfinance market in Azerbaijan: Limitations and potential for expansion*. [17]

BAKU NEWS (2025), *Azərbaycanda yaxın zamanda quraqlıq sığortası tətbiq olunacaq [Drought insurance to be introduced in Azerbaijan soon]*, https://baku.news/azerbaycanda-yaxin-zamanda-quraqliq-sigortasi-tetbiq-olunacaq. [23]

Bank Respublika (2025), *FOR THE FIRST TIME - "Green Loans" for Entrepreneurs from Bank Respublika*, https://www.bankrespublika.az/en/news/ilk-defe-bank-respublikadan-sahibkarlara-yasil-kredit_4275. [35]

Bank Respublika (2024), *Bank Respublika and FMO signed a major loan agreement to support entrepreneurship.*, https://www.bankrespublika.az/en/news/bank-respublika-ve-niderland-inkisaf-banki-arasinda-novbeti-iri-hecmli-kredit-sazisi-baglandi_3996. [34]

Bank Respublika (n.d.), *Bank Respublika*, https://www.bankrespublika.az/en/ (accessed on 23 July 2025). [36]

Bank Respublika (n.d.), *Farm Loan*, https://www.bankrespublika.az/en/loans-for-individuals/fermer-krediti_1333 (accessed on 10 July 2025). [37]

Bank Respublika (n.d.), *Mobile Banking (Mobil Şöbə)*, https://www.bankrespublika.az/en/pages/mobil-sobe (accessed on 22 July 2025). [38]

Bitsadze, R. (2022), *EBRD supports green expansion of agricultural producer in Azerbaijan*, https://www.ebrd.com/home/news-and-events/news/2022/ebrd-supports-green-expansion-of-agricultural-producer-in-azerbaijan.html# (accessed on 6 January 2026). [68]

CBA (2025), *Strategic Framework for the Microfinance Model*, https://www.cbar.az/page-878/mikromaliyy-modeli-uzr-strateji-crciv. [44]

Central Bank of Azerbaijan (2025), *Strategic Framework for the Microfinance Model*, https://www.cbar.az/press-release-5104/central-bank-publishes-microfinance-model-strategic-framework. [51]

Central Bank of Azerbaijan (2024), *Financial Stability Report*, https://uploads.cbar.az/assets/FSR%20%282024%29%20FINAL_ENG.pdf. [9]

Central Bank of Azerbaijan (2023), *Digital Payments Report*, https://uploads.cbar.az/assets/PS%20annual%20report%20ENG.pdf. [11]

Central Bank of Azerbaijan (2023), *Financial Stability Report*, https://www.cbar.az/page-6/annual-reports. [46]

Central Bank of Azerbaijan (2023), *Sustainable Finance Roadmap 2023-2026*, https://www.sbfnetwork.org/wp-content/uploads/2023/04/70_Azerbaijan_Sustainable_Finance_Roadmap_2023-2026.pdf. [33]

Central Bank of the Republic of Azerbaijan (2024), *Green Taxonomy*, https://doi.org/a. [42]

CPI (2025), *Landscape of Climate Finance for Agrifood Systems 2025*, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2025/. [1]

CredAgro NBCO LLC (2024), *Financial Report 2024 eng*, CredAgro NBCO LLC, https://kredaqro.com/maliyy%C9%99-hesabati-2024-eng/. [48]

DeBoe, G. (2020), *Impacts of agricultural policies on productivity and sustainability performance in agriculture: A literature review*, https://doi.org/10.1787/6bc916e7-en. [27]

EBRD (2025), *59-Azerbaijan Country Strategy 2025-2030*, EBRD, https://www.ebrd.com/content/dam/ebrd_dxp/assets/pdfs/country-strategies/azerbaijan/azerbaijan-country-strategy-2025.pdf. [72]

Economist Intelligence Unit (2025), *One-click report : Azerbaijan*. [3]

EU NEIGHBOURS east (2024), *EU4Lankaran: EU Support to Lankaran-Astara Economic Region of Azerbaijan Project*, EU NEIGHBOURS east, https://euneighbourseast.eu/projects/eu-project-page/?id=1632. [14]

EU4Business (n.d.), *Azerbaijan Agricultural Finance Facility (AzAFF)*, https://old.eu4business.eu/project/azerbaijan-agricultural-finance-facility-azaff#:~:text=The%20overarching%20objective%20of%20the,the%20process%20of%20adjusting%20demand (accessed on 23 January 2026). [71]

FAO (2024), *Growing without soil: Hydroponics fundamentals, pros and cons*, https://www.fao.org/plant-production-protection/news-and-events/news/news-detail/growing-without-soil--hydroponics-fundamentals--pros-and-cons/en. [74]

FAO (2024), *Improved water governance: towards sustainable agriculture development*, https://openknowledge.fao.org/server/api/core/bitstreams/b4ce6000-980a-4a84-997a-b690ec14652f/content. [63]

FAO (2024), *IMPROVING LIVELIHOOD AND FOOD SECURITY IN AZERBAIJAN THROUGH SUSTAINABLE HAZELNUT PRODUCTION*, https://openknowledge.fao.org/items/9dec3c7e-fa3a-4063-ab5c-1c94ff81c92d. [64]

FAO (2020), *Empowering smallholders and family farms in Europe and Central Asia*, https://openknowledge.fao.org/items/e05b48c8-5bf9-4a5b-88a4-1c22581e9122. [52]

FAO (2018), *Organic Agriculture in Azerbaijan: Current status and potentials for future development*, https://openknowledge.fao.org/server/api/core/bitstreams/9900ae12-cf19-49ec-baed-fc3c0d9371da/content. [65]

FAO (2018), *Value chain gap analysis report on Azerbaijan*, https://openknowledge.fao.org/server/api/core/bitstreams/c7f2892f-e9e0-40bd-9ba2-031ebfa81b8f/content. [54]

FINCA (n.d.), *Agri-Insurance Loans*, https://finca.az/en/borrow/agri-insurance-loans/ (accessed on 28 January 2026). [50]

GCF (2024), *FP254: GCF-IFC Scaling Resilient Water Infrastructure(RWI) Facility*, https://www.greenclimate.fund/project/fp254. [59]

GCF (2019), *National Adaptation Plan (NAP) Support Project for adaptation planning and implementation in Azerbaijan*, https://www.greenclimate.fund/document/adaptation-planning-support-azerbaijan-through-undp. [60]

GCF (2019), *Readiness Proposal: NDA Strengthening & Country Programming*, https://www.greenclimate.fund/document/nda-strengthening-and-country-programming-support-azerbaijan-through-fao. [61]

Government of the Republic of Azerbaijan (2024), *Presidential Decree on the Approval of the National Strategy on Efficient Use of Water Resources*, https://president.az/az/articles/view/67069. [13]

Huseynov H. H., J. (2021), "The modern pace of development and perspectives of horticulture in Azerbaijan", *IOP Conference Series: Earth and Environmental Science*, https://iopscience.iop.org/article/10.1088/1755-1315/624/1/012197. [6]

JAMnews (2023), *Inaccessible loans and insurance - why are Azerbaijani farmers deprived of financial support?*, https://jam-news.net/inaccessible-loans-and-insurance-why-are-azerbaijani-farmers-deprived-of-financial-support/#:~:text=Today%20various%20banks%20in%20Azerbaijan,one%2C%20three%20and%20five%20years. [55]

Lankoski, J., E. Nales and H. Valin (2024), *Assessing the impacts of agricultural support policies on the environment: Economic analysis, literature findings and synthesis*, https://dx.doi.org/10.1787/808f110c-en. [31]

Mammadov, I. and I. Mammadov (2022), "Horticulture Sector in Azerbaijan", *Journal of Agricultural Science and Technology*, https://colab.ws/articles/10.47612%2F0134-9759-2022-34-197-210#:~:text=one%20of%20the%20richest%20countries,The%20land. [8]

Matthews, A. and K. Karousakis (2022), *Identifying and assessing subsidies and other incentives harmful to biodiversity: A comparative review of existing national-level assessments and insights for good practice*, https://doi.org/10.1787/3e9118d3-en. [30]

NuFFooDS Spectrum (2024), *ADB, Araz sign $10.5Mn deal to sustain foodsecurity in Azerbaijan*, https://nuffoodsspectrum.asia/2024/11/18/adb-araz-sign-10-5mn-deal-to-sustain-food-security-in-azerbaijan.html#:~:text=The%20Asian%20Development%20%E2%80%A6. [67]

OECD (2024), *OECD advises countries to redirect public subsidies and other support for agriculture to innovation*, https://www.oecd.org/en/about/news/press-releases/2024/11/oecd-advises-countries-to-redirect-public-subsidies-and-other-support-for-agriculture-to-innovation.html. [32]

OECD (n.d.), *Azerbaijan*, https://oec.world/en/profile/country/aze (accessed on 17 July 2025). [5]

OECD & FAO (2024), *OECD-FAO Agricultural Outlook 2024-2033*, https://doi.org/10.1787/4c5d2cfb-en. [29]

President of the Republic of Azerbaijan (2015), *Decree of the President of the Republic of Azerbaijan on additional measures to strengthen state support for the development of crop production*, https://president.az/az/articles/view/14850. [21]

President of the Republic of Azerbaijan (2007), *Decree of the President of the Republic of Azerbaijan on state support for agricultural producers*, https://e-qanun.az/framework/12705. [20]

Republic of Azerbaijan (2019), *Law of the Republic of Azerbaijan on Agricultural Insurance*, https://e-qanun.az/framework/43124 (accessed on 18 September 2025). [22]

Republic of Azerbaijan (2016), *The Strategic Roadmap for the production and processing of agricultural products in the Republic of Azerbaijan was approved by Decree No. 1138 of the President of the Republic of Azerbaijan*. [12]

Respublika AZ (2025), "IFC, SECO launch initiative to boost agricultural finance in Azerbaijan", https://respublika-news.az/en/news/ifc-seco-launch-initiative-to-boost-agricultural-finance-in-azerbaijan. [69]

Rosca, O. (2019), "EBRD and EU support new tool toboost agricultural lending inAzerbaijan", *EBRD news*, https://www.ebrd.com/home/news-and-events/news/2019/ebrd-and-eu-support-new-tool-to-boost-agricultural-lending-in-azerbaijan.html. [73]

The State Statistical Committee of the Republic of Azerbaijan (2025), *Agriculture, forestry and fishing*, https://www.stat.gov.az/source/agriculture/?lang=en (accessed on 6 September 2025). [7]

The State Statistical Committee of the Republic of Azerbaijan (n.d.), *Labour Market*, https://www.stat.gov.az/source/labour/?lang=en (accessed on 6 September 2025). [4]

The World Bank Group (2023), *Unfair advantage: distortive subsidies and their effects on global trade*, https://thedocs.worldbank.org/en/doc/0534eca53121c137d3766a02320d0310-0430012022/related/Unfair-Advantage-Distortive-Subsidies-and-Their-Effects-on-Global-Trade-2023.pdf. [28]

UNDP (2020), *UNDP-GEF Project: Conservation and sustainable use of globally important agrobiodiversity*, https://erc.undp.org/evaluation/documents/detail/18345. [66]

UNDP (2017), *Integrating climate change risks into water and flood management by vulnerable mountainous communities in the Greater Caucasus region of Azerbaijan*. [58]

UNDP (n.d.), *National Adaptation Plan (NAP) support project for adaptation planning and implementation in Azerbaijan*, https://www.adaptation-undp.org/projects/naps-gcf-azerbaijan (accessed on 16 June 2025). [70]

UNEP (2024), *SAP046: Strengthening Climate Information and Multi-Hazard Early Warning Systems for Increased Resilience in Azerbaijan*, https://www.greenclimate.fund/project/sap046. [57]

Unibank (n.d.), *EDF's loans*, https://unibank.az/en/corporatemenus/158/ (accessed on 23 July 2025). [39]

Unibank (n.d.), *The Agro-Loan*, https://unibank.az/en/corporate/loan/215 (accessed on 8 July 2025). [40]

World Bank (n.d.), *GDP (current US$) - Azerbaijan*, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=AZ (accessed on 16 June 2025). [2]

World Bank Group (2025), "World Bank Group to Support a Greener, More Competitive Economy in Azerbaijan", *World Bank Group*, https://www.worldbank.org/en/news/press-release/2025/01/28/world-bank-group-to-support-a-greener-more-competitive-economy-in- [62]

azerbaijan.

World Bank Group (2023), *Country Climate and Development Report: Azerbaijan*, https://documents1.worldbank.org/curated/en/099112723161524095/pdf/P17904806938f5083093a707fa0352e87a5.pdf. [26]