

PROGRESS

Promoting Green Deal Readiness in
the Eastern Partnership Countries

On behalf of:



of the Federal Republic of Germany

Assessing the Capacity Needs of Farmers and Agribusiness Enterprises to Access Financing for Sustainable Agricultural Investments in the European Union Eastern Partnership Countries

Georgia Report

January 2026



Published within the framework of the regional project PROGRESS – Promoting Green Deal Readiness in the Eastern Partnership Countries

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The project 'Promoting Green Deal Readiness in the Eastern Partnership Countries' (PROGRESS) is implemented on behalf of the International Climate Initiative (IKI) of the Federal Government of Germany. Within the Federal Government, the IKI is anchored in the Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN). Selected project is also the responsibility of the Federal Foreign Office (AA). PROGRESS 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).

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The Authors would like to express their gratitude for valuable contributions and excellent cooperation to Sopio Tsomikuridze and Nino Janelidze of GIZ Georgia, Krzysztof Michalak, Senior Programme Manager, OECD and Nelly Petkova, OECD.

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ABBREVIATIONS

BMUV – German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

CNA – Capacity Needs Assessment

DSIK – German Sparkassenstiftung for International Cooperation

EaP countries – Eastern Partnership countries

EBA – European Business Association

EBRD – European Bank for Reconstruction and Development

EU – European Union

EUR – Euro

FGD – Focus Group Discussions

GEFF – Green Economy Financing Facility

GEL – Georgian Lari

GIZ – German Agency for International Cooperation

IEF – Institute for Economics and Forecasting

IKI – International Climate Initiative

JSC – Joint Stock Company

KII – Key Informant Interview

LTD – Limited Liability Company

OECD – Organisation for Economic Cooperation and Development

OJSC – Open Joint Stock Company

PCGF – Partial Credit Guarantee Fund

PROGRESS – Promoting Green Deal Readiness in the Eastern Partnership Countries

RECC – Regional Environmental Centre for Caucasus

UCO – Universal Credit Organization

INTRODUCTION TO CAPACITY NEEDS ASSESSMENT

This study, Assessing Capacity Needs of Farmers and Agribusiness Enterprises, was conducted within the framework of the project “Promoting Green Deal Readiness in Eastern Partnership Countries” (PROGRESS). The goal of the capacity needs assessment (CNA) is to examine the challenges and opportunities farmers and agribusiness owners face in Armenia, Azerbaijan, Georgia, and Ukraine in terms of accessing finance for sustainable agricultural development, with a particular focus on climate-resilient investment.

PROGRESS is a regional initiative covering the five EU Eastern Partnership (EaP) countries - Armenia, Azerbaijan, Georgia, Moldova, and Ukraine. The project supports these countries in achieving long-term mitigation, adaptation, and sustainable development consistent with the EU Green Deal objectives and the 1.5°C pathways of the Paris Agreement. A particular emphasis is placed on horticulture, alongside the efforts to enhance the competitiveness and trade opportunities of the fruits, nuts and berries sectors from the EaP region locally and in EU markets.

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In line with its overarching purpose, this capacity needs assessment pursues three key objectives which are 1) assessment of the financial knowledge and literacy levels amongst small farmers and agribusinesses; 2) identification of the gaps preventing above mentioned target group from accessing finance for climate-resilient investments; 3) provision of a basis for designing targeted capacity-building initiatives tailored to these groups.

By addressing these objectives, the assessment seeks to contribute to stronger, more sustainable agricultural systems in the Eastern Partnership countries and to ensure that farmers and agribusiness entrepreneurs are better equipped to access finance, adapt to climate risks, and seize new market opportunities.

EXECUTIVE SUMMARY

The main goal of the assignment is to assess the capacity needs of farmers and agribusiness owners in EU Eastern Partnership countries (Armenia, Azerbaijan, Georgia, and Ukraine) in terms of access to finances for sustainable agricultural development. In accordance with the goal, the following objectives were outlined for the study:

- Assess the financial knowledge and literacy levels of small farmers and agribusinesses
- Identify gaps preventing them from accessing finance for climate-resilient investments
- Provide a basis for developing targeted capacity building for these target groups.

The target group of the study includes small and medium-sized farm and agribusiness enterprise owners, men and women, as well as representatives of financial institutions in each target country.

Across the four countries, the study involved 17 focus group discussions (FGDs) with 104 farmers and agribusiness owners, of whom 50 were women (48%). The FGDs were conducted online and included participants from more than 30 regions, ensuring a geographically diverse sample. Armenia contributed 4 FGDs with 27 participants, Azerbaijan - 4 with 30 participants, Georgia - 5 with 26 participants, and Ukraine 4 as well with 21 participants.

Moreover, 10 key informant interviews (KIIs) were carried out with financial institutions, which included major banks, microfinance institutions, and agricultural credit unions actively engaged in agricultural finance; in particular: 2 KIIs in Armenia with Farm Credit Armenia UCO (Universal Credit Organization) and ACBA Bank OJSC; 2 in Azerbaijan with Azerbaijan Micro-Finance Association (AMFA) and Unibank, 2 in Georgia with JSC TBC Bank and JSC Microbank Crystal, and 4 in Ukraine with JSC Creditwest Bank Ukraine, JSC Oschadbank, the Business Development Fund (BDF), and The Partial Credit Guarantee Fund in Agriculture (PCGF).

Participants represented a wide range of agricultural sectors, most prominently horticulture, vegetables, fruits, berries, nuts, beekeeping, animal husbandry, grain production, and small-scale processing. Across countries the majority were micro- and small-scale farmers employing between 1 and 10 workers, with annual turnover most commonly ranging from €1,500 to €10,000. A significant share of participants operated informally, while others were registered as individual entrepreneurs, LLCs, or cooperatives. Association membership varied by country but remained modest overall, with Ukraine showing the highest engagement.

The sample captured both female and male farmers, new entrants and experienced operators, as well as smallholders and medium-sized agribusinesses, providing a comprehensive picture of financial literacy levels, climate-awareness, and access-to-finance challenges across the region.

Despite differences in country contexts and the varying scope of issues explored in each assessment, farmers and agri-entrepreneurs across all four countries report broadly similar types of constraints that limit their ability to access finance, adopt climate-resilient practices, and expand their agricultural

activities; however, given the qualitative nature of the study, the severity of these challenges cannot be directly compared between countries.

Budgeting and record-keeping among smallholder farmers remain major cross-country gaps, as they tend to rely on informal and compliance-driven bookkeeping practices used mainly for preparing loan applications or grant proposals. As a result, their creditworthiness is often weak, creating significant barriers to access formal finance. In contrast, medium and more established farms typically employ professional accountants, use specialized accounting programs, maintain structured reporting systems, and rely on these insights to guide their farming activities.

Although awareness of state and donor programs is generally high, particularly in Georgia and Ukraine, farmers often rely on family members, acquaintances, or paid consultants to prepare grant proposals. Individuals with prior experience in such programs tend to achieve higher success rates, whereas those applying for the first time frequently lack the information and skills required to submit competitive applications.

In all four countries, farmers express satisfaction with subsidized state loan programs, which significantly reduce interest rates and make borrowing more accessible. Without these subsidies, interest rates become prohibitively high for many farmers, especially smallholders. Farmers also emphasize that bank lending practices are highly risk-averse, with procedures that do not sufficiently account for the long investment cycles typical of horticulture, beekeeping, and other agricultural sectors. As a result, newly established and small-scale farmers face the greatest obstacles in obtaining credit, while medium and larger farms with long-standing banking relationships experience fewer difficulties.

Gender-related barriers are recognized to varying degrees across the four countries, with notably lower acknowledgment in Azerbaijan. A common pattern nevertheless emerges while women often benefit from donor and state-funded grant programs targeting female entrepreneurship, they remain relatively disadvantaged in accessing bank loans. This disadvantage is shaped by cultural stereotypes, gender roles, lower levels of property ownership, and difficulties demonstrating financial stability. Some banks in the region offer specialized programs for women farmers and entrepreneurs, which helps to narrow the gender gap, although these initiatives vary in availability and effectiveness across countries.

Climate change is perceived across all four countries as an increasingly severe and unpredictable threat. Farmers report experiencing more frequent frost, drought, extreme heat, irregular rainfall, and emerging diseases and pests, all of which reduce yields and increase expenditures. The effects are described as worsening year by year, and farmers often feel unprepared and under-resourced to respond. While some medium-sized farms have adopted irrigation systems, renewable energy solutions, or other adaptive technologies, smallholders remain limited by high costs, low awareness, and lack of technical expertise. Awareness of climate-related financial products and subsidies is consistently low across all countries. In Ukraine, climate impacts are further exacerbated by wartime destruction, water scarcity following major infrastructure damage.

Financial institutions across the region are at varying stages of integrating climate-related considerations into their lending portfolios. Ukrainian banks, often supported by international donors, are the most

advanced in offering financing for irrigation, renewable energy, and energy-efficient machinery, reflecting both increased demand and stronger donor engagement. In Georgia, Armenia, and Azerbaijan, dedicated climate finance products are less developed, although banks occasionally integrate environmental assessments into subsidized loan programs.

Across all four countries, farmers express a strong interest in capacity-building initiatives, particularly those that are practical, hands-on, and tailored to their specific sector and region. Participants consistently emphasized the importance of learning through demonstration farms, peer exchange, and applied workshops rather than theoretical training. They also highlight the need for support with bookkeeping, budgeting, project proposal preparation, and understanding climate-smart technologies.

The recommendations developed across the four countries focus on improving farmers' financial literacy, strengthening practical training on climate-smart technologies, and expanding access to finances for women and smallholders. On the financial sector side, recommendations emphasize the need for more flexible collateral requirements, loan products that reflect long agricultural investment cycles, gender-responsive financing, and dedicated instruments for climate adaptation. While many recommendations are shared across all countries due to common structural challenges, several are tailored to specific contexts and aim to create a more resilient, inclusive, and climate-responsive agricultural finance ecosystem.

1. ASSESSMENT METHODOLOGY, CRITERIA, AND PROCESS IN GEORGIA

The study applied qualitative research methods to gather in-depth insights on access to finance for sustainable agriculture in Georgia.

Data collection and analysis

Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were conducted. In total, 5 FGDs were held with 26 farmers and agribusiness entrepreneurs, exploring gaps and needs in sustainable agricultural development and assessing participants' openness to potential interventions. FGDs were organized online via Zoom and WhatsApp to accommodate participants' availability and included farmers and agribusiness entrepreneurs from various sectors, regions, ages, and gender with women making up 54% of participants.

2 KIIs were conducted with representatives of local financial organizations (TBC Bank and Crystal, a recently licensed microbank), focusing on lending challenges, clients' financial literacy, and awareness of climate-related financing options.

Ethical considerations

Data collection followed high ethical standards to protect participants' rights and safety. Informed verbal consent was obtained before each FGD and KII, with clear explanations of the study's purpose, voluntary participation, the right to withdraw, and confidentiality. Data were securely stored, and findings are reported in aggregate form to prevent identification of individuals.

2. DEMOGRAPHIC CHARACTERISTICS OF FOCUS GROUP PARTICIPANTS¹

The total number of focus group participants amounted to 26 people, representing diverse demographic groups and different sub-sectors across Georgia's agricultural sector.

In terms of gender representation, focus groups stroke good balance of male and female farmers and agri-entrepreneurs with representation of 14 female (54%) and male (46%) participants (see Figure 1).

¹ Percentages presented in this chapter may not total exactly 100% due to rounding.

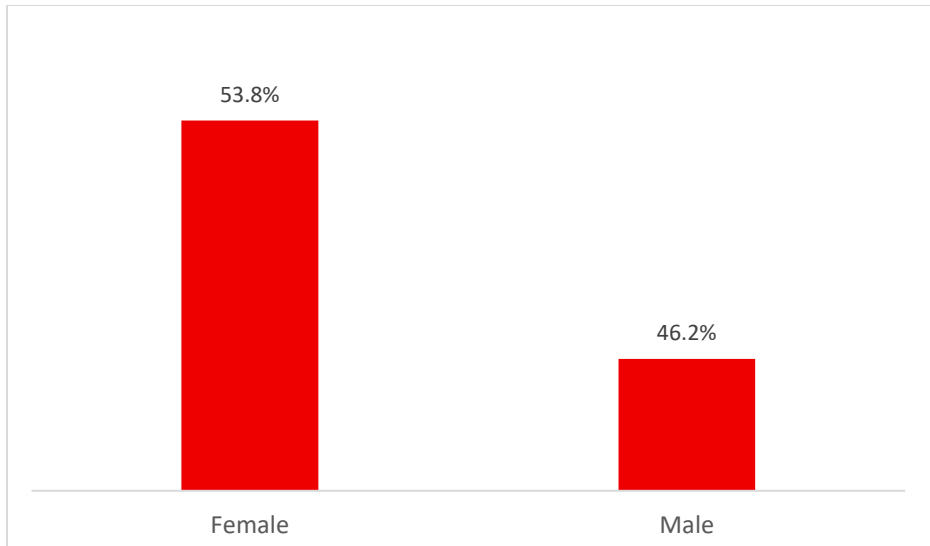


Figure 1: Gender distribution among FGD participants

The majority of participants were between 35 and 54 years old (65%), followed by 27% aged 25–34. The smaller share (15%) were over 55 years old (see Figure 2).

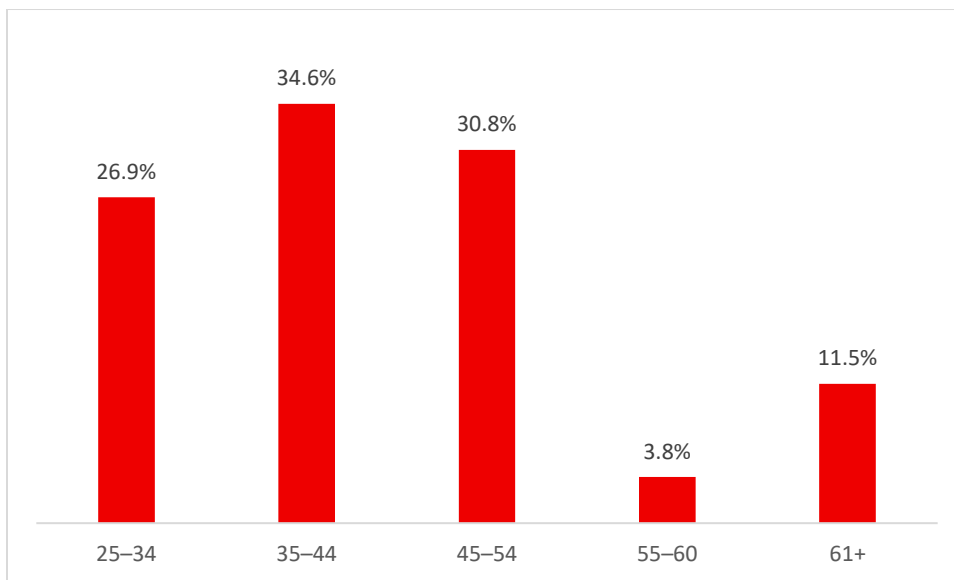


Figure 2: Distribution of age groups among participants

FGD Participants represented 6 regions of Georgia and capital city, with the highest concentration from Racha-Lechkhumi (46%), followed by Mtskheta-Mtianeti and Shida Kartli (15% each) (see Figure 3).

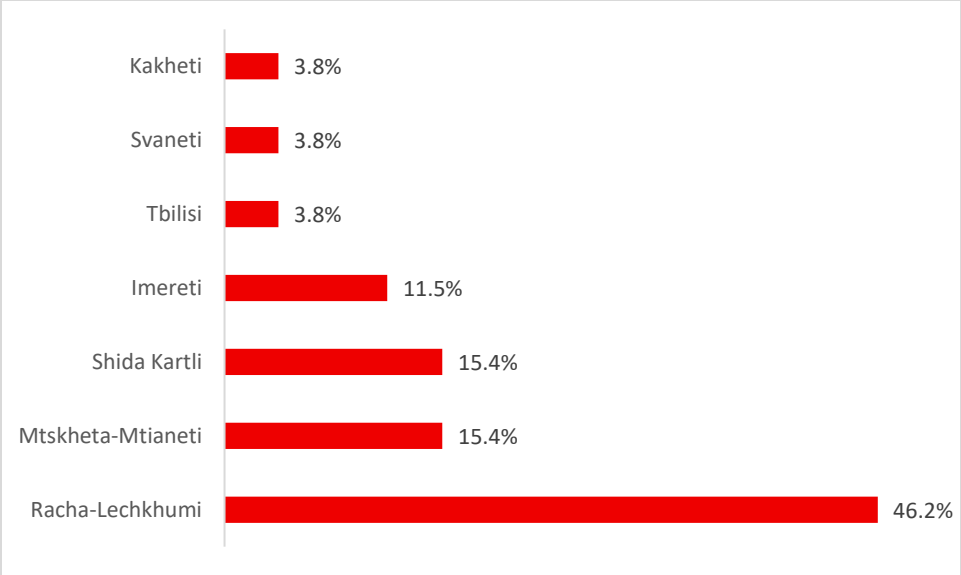


Figure 3: Regional distribution among FGD participants

FGD participants represented a diverse range of sectors, with the largest share belonging to horticulture-related activities - such as fruit, strawberry and tea production along with beekeeping, which accounted for 34.6% of all participants (see Figure 4).

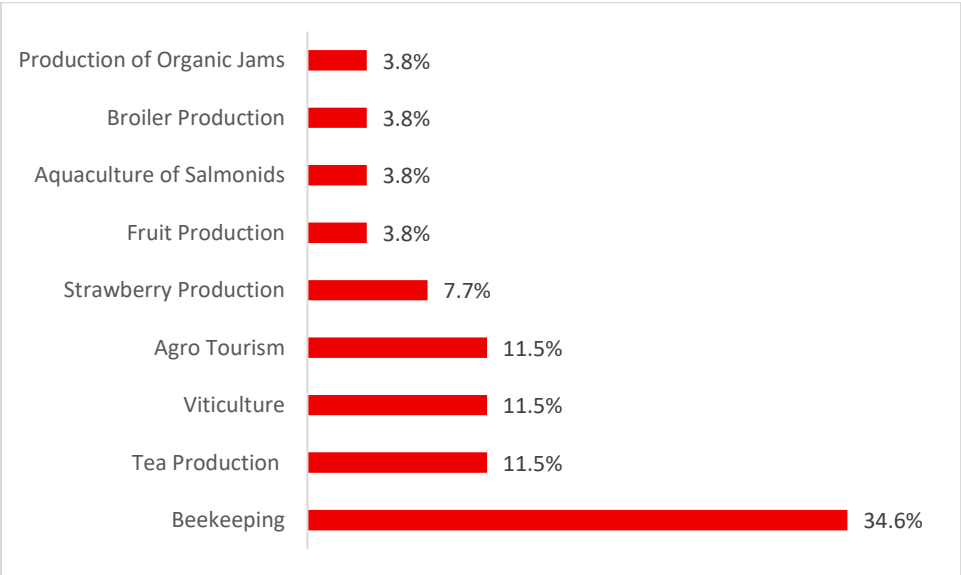


Figure 4: Sectoral distribution among FGD participants

Participants operated under varied legal statuses: 27% as limited liability companies (LTDs), 19% as individual entrepreneurs, and 12% as micro-entrepreneurs, while 4% represented cooperatives (see

Figure 5). Notably, 39% did not specify their registration status, suggesting that the largest share of participants was operating in the sector informally.

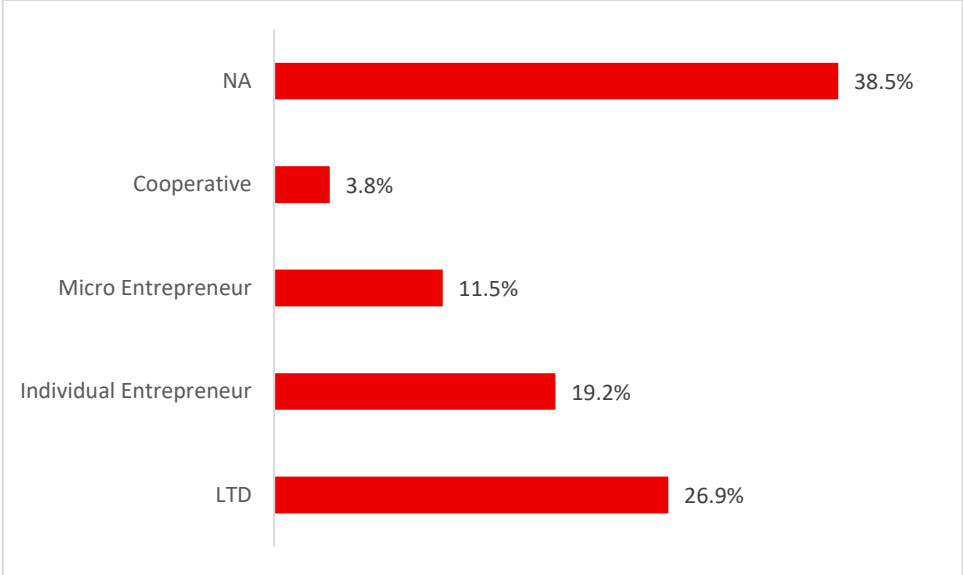


Figure 5: Distribution of FGD participants by legal status

Most of the participants (65%) outlined that they were operating on employing 2–5 people and another 19% employing 5–10. 15% of the participants indicated that they were single-person operations (see Figure 6).

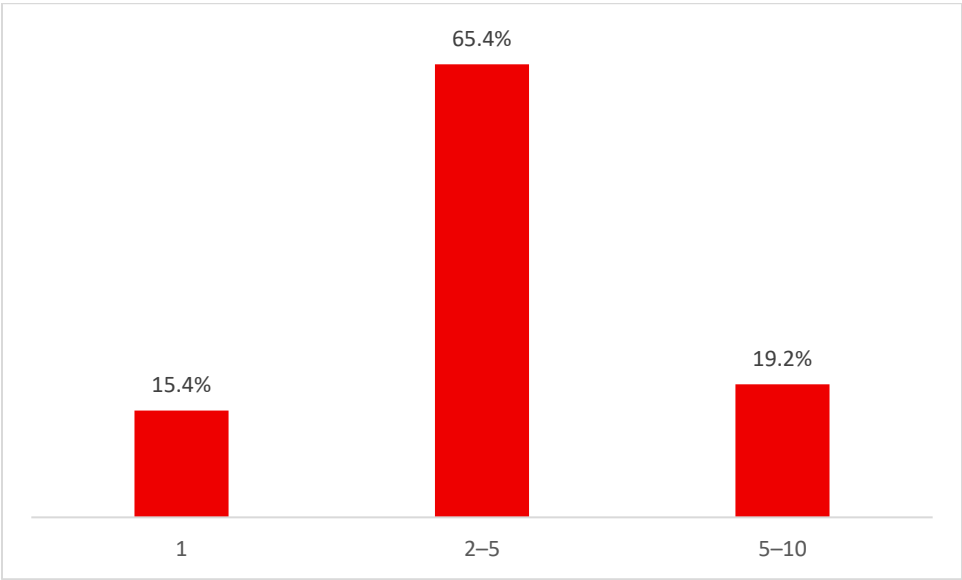


Figure 6: Distribution of the number of employees within farms and enterprises among FGD participants

Reported annual turnovers varied widely among participants though most (around 39%) fell within the 1,500–10,000 EUR range, and 27% reported ≤1,500 EUR. About 15% earned 10,001–35,000 EUR, and only

a few reported higher income levels ($\geq 35,000$ EUR, 12%). Interestingly, 7.7% didn't wish to share the information regarding their annual turnover (See figure 7).

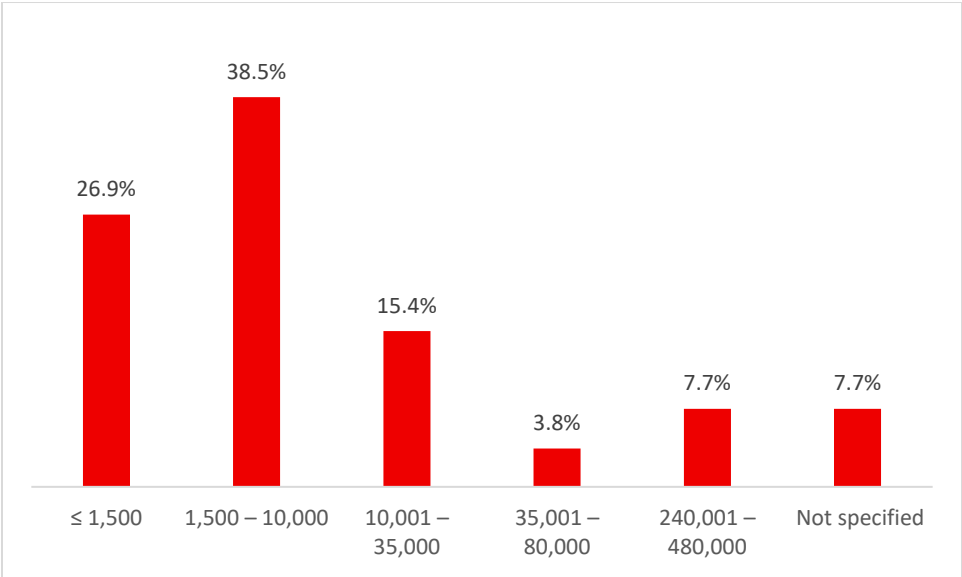


Figure 7: Distribution of annual turnover within farms and enterprises among FGD participants

Just over one-third (35%) of FGD participants reported being members of associations or clusters while the majority (62%) had no membership, suggesting limited formal networking or institutional engagement.

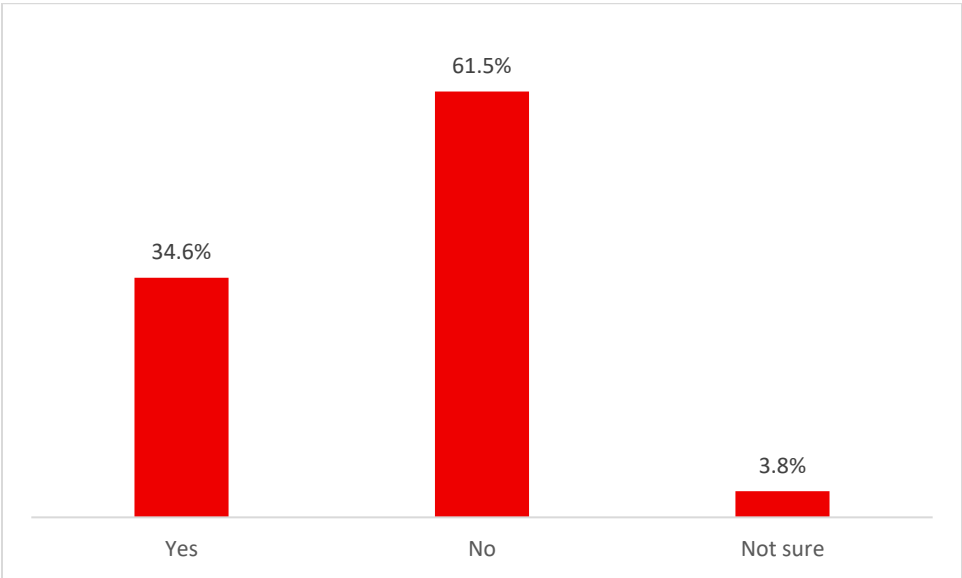


Figure 8: Distribution of association/cluster membership among FGD participants

3. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

3.1. FINDINGS

3.1.1. Financial Literacy

It was observed that farmers and entrepreneurs demonstrate varying practices in relation to bookkeeping and budgeting. Medium size farm owners generally outsource financial management to professional accountants or firms, while smallholder farmers tend to manage these processes independently.

Among smallholder farmers who are not registered as legal entities and therefore lack formal financial obligations to the state, record-keeping was largely absent. In most cases, financial records were only maintained when required for grant applications or bank loan submissions. It was also noted in KIIs that while small farm owners face documentation hurdles, banks mitigate this challenge through their local credit officers, who support farmers to prepare documentation.

“At first, we started keeping track of how much fertilizers and vitamins cost us, but then there was just so much work to do. Basically, we had to spend all day in the field and didn’t have time for all the counting and calculations, so we stopped. Now I just know what income we got and what we spent, but I don’t count it anymore.” (Strawberry Production, Female)

“I have a small farm, so there isn’t that much to count. But mostly, I keep records for projects, when there’s a requirement or need for it. That way, I know how much it costs to produce a kilogram of honey.” (Beekeeping, Male)

Findings indicate that, even when farmers and entrepreneurs engage in financial management, their practices are typically limited to paying taxes and balancing accounts in order to comply with Georgian tax regulations. Very few go beyond this to calculate profit margins or to analyze potential strategies for enterprise development, suggesting that financial practices are largely compliance-oriented rather than growth-oriented.

3.1.2. Access to Finance

Awareness of state and donor-funded programs supporting farming and entrepreneurial activities was generally high among focus group participants, with only a few noting that they had not yet identified a program suited to their profile. Interestingly, relatively lower awareness was found mainly among informal and family-run farms.

With regard to grant management, a minority of participants reported handling the application process independently and without difficulty. However, the majority indicated that they had relied on assistance from family members, friends, or other individuals with more experience in preparing proposals.

Participants also emphasized that banks and microfinance organizations generally fail to meet their needs, largely due to highly risk-averse lending practices. Farmers indicated that financial institutions tend to

withhold credit from those who are just getting started. The same issue was observed among agri-entrepreneurs seeking to rapidly expand their operations and requesting larger loan amounts. This challenge affects both smallholder and medium-sized farmers in securing loans that are appropriate for the scale of their activities. At the same time, FGD participants indicated that they did not encounter particular difficulties with the procedural aspects of obtaining loans, as bank representatives were generally supportive and assisted applicants in completing the required documentation.

“The issue that I have with banks is that they don’t look into individual cases. If they studied better what experience my business has and what perspectives are possible, then maybe they could ease these requirements a little. Unfortunately, everything is assessed based on the standard rules set by the National Bank, and with that approach production can’t really develop.” (Tea Production, Female)

Interestingly, entrepreneurs in the beekeeping sector reported particular challenges in accessing bank loans, as beehives are not recognized by financial institutions as eligible assets. Consequently, beekeepers are required to pledge alternative forms of collateral, which limits their ability to secure financing and constrains opportunities for sectoral development.

“I used to have credit lines, not very large -around 100K and 50K [GEL] -and after the repayment period I didn’t need them anymore. But now I might need a larger amount, and it’s getting harder in terms of collateral. Beekeeping assets are rarely accepted. They insist it has to be real estate, personal property. That’s a big problem with our financial institutions -even if the state acts as a guarantor, they still demand real estate as collateral.” (Beekeeping, Male)

For a smaller group of FGD participants, bank loans were not regarded as a viable financing option, primarily due to perceived high interest rates, which would further reduce the already low profit margins of their businesses. This constraint was reported to be particularly pronounced among smallholder farmers and self-employed women, who face greater difficulties both in demonstrating creditworthiness at the outset and in sustaining loan repayments over time.

In the interviews, bank representatives noted that from their side creditworthiness is being examined through revenue-based assessments per National Bank of Georgia regulations and requirements. Creditworthiness is also checked through the Credit Bureau register to prevent over-indebtedness. Both interviewed banks simplify processes: no business plans are required, with credit officers evaluating activity viability on-site. After this initial evaluation, the risk teams also review and validate the loans per banks’ internal protocols. Insurance is not mandatory for taking loans.

Farmers and entrepreneurs who had previously accessed bank loans, or who currently hold outstanding loans, generally reported positive experiences, noting that credit had facilitated the development and expansion of their businesses. They did not highlight major challenges in managing repayment obligations. However, these experiences were predominantly linked to loans subsidized through state programs or used as co-financing alongside donor-funded grants, suggesting that positive outcomes may be less attainable in the absence of external financial support mechanisms.

“Starting from the construction of the farm building, we did everything with the help of the bank, and even now I’m using installment payments for feed. It’s an agri-loan -I pay 3.5%, and the rest is covered by the state.” (Broiler production, Female)

FGDs revealed that gender dynamics influence differences in how women and men farmers access financial resources. It was noted by participants that in grant programs women were often perceived as having an advantage. In some cases, male farmers reported presenting their spouse as the lead applicant in order to increase the likelihood of receiving funding. At the same time, several female farmers emphasized that, based on their personal experience, they did not receive any additional support or advantage in the grant application process, except in cases where programs were explicitly designed for women.

“All the grant applications I’ve filled out are in my wife’s name, and all the projects we’ve won are also in her name. Of course, women have advantages in every project. In the eligibility criteria, it always shows up -just like being from a high mountain area or living along the ABL, being a woman is also listed.” (Fruit production, Male)

In relation to access to bank loans, participants noted that programs or portfolios advertised as targeting female entrepreneurs were perceived largely as promotional rather than substantive. They reported that such products did not provide any real advantages for women, as loans were offered under the same interest rates and collateral requirements as those applied to men. A few participants noted that women often struggle to obtain bank loans because they lack property in their names and do not have formal employment or stable income.

[..] “In terms of banks, I actually think it’s the opposite - women are less likely to get loans. With women, the issue is that property usually isn’t in their name, so they can’t use it as collateral to get a loan. On top of that, women in villages are less employed, and they don’t have registered salaries.” (Homemade Jams’ production, Female)

“Bank of Georgia had an offer for loans for women entrepreneurs, but the requirements were absolutely the same - they asked for the same collateral and guarantors, and so on. There was no difference or privilege that we could see. It was exactly the same as when I’ve taken any other personal loan - it had to be justified in the same way, how it would be repaid. In the end, it comes down to us ourselves having to show financial stability in order to get the loan, and in that sense, there was no difference at all between women and men.” (Viticulture, Female)

In terms of better supporting women farmers and entrepreneurs, FGD participants suggested that programs should prioritize and even be designed specifically for women, particularly those without jobs and engaged mainly in household duties. Additionally, they emphasized the need for practical trainings in project writing, budgeting, and entrepreneurship, combined with face-to-face support, site visits, and exposure to successful women farmers and entrepreneurs.

3.1.3. Challenges in Financing Climate-Resilient Investments

Climate change emerged as a highly relevant issue for the overwhelming majority of FGD participants. Farmers consistently reported experiencing difficulties in recent years, with the current season perceived as particularly affected by climate-related risks. Although participants acknowledged having faced similar challenges in previous years, the scale and severity of recent impacts were described as unexpected.

The effects of climate change were primarily reported in two dimensions: 1) a reduction in crop yields and overall agricultural output; and 2) an increase in production-related expenditures, particularly those associated with crop maintenance and harvesting. Together, these dynamics indicate both declining productivity and rising costs, creating a dual burden for farmers.

“There were problems in previous years too, but I don’t remember the situation ever being this bad. Even the apple trees and their leaves shriveled. In my village, there’s no irrigation water, but that was never really a problem before. There were always small droughts, but never to this extent - this is clearly caused by climate change.” (Fruit production, Male)

“From my observation, it seems like the seasons have shifted, and if the rainy season happens to coincide with the blooming of a certain variety, pollination doesn’t occur, and the harvest ends up being smaller. Another challenge is the late frost -this year it destroyed the buds that had already come out. Vineyard owners like us were less affected, but fruit growers in Shida Kartli lost their entire harvest.” (Viticulture, male)

Although the effects of climate change are overwhelmingly negative, in rare instances, participants mentioned some positive scenarios. For example, they are now able to grow fruit trees in high mountainous areas where this was previously impossible. They expressed enthusiasm about taking advantage of this opportunity and using it in the future.

The majority of farmers acknowledged the severity of climate-related challenges but expressed a sense of powerlessness in addressing them. Many reported uncertainties about whether any effective measures exist, while others emphasized that limited financial resources prevent them from taking action. Looking ahead, farmers widely anticipated that similar problems will persist in the future. However, they lacked clarity on what specific measures should be undertaken to mitigate these risks, reflecting both informational and resource-related gaps in adaptation capacity.

“I talked to experts at Elkana² and they advised me to set up an irrigation system, to build a big tank of 50–100 tons to collect water and then use it in the summer. But at this stage, it’s very expensive for me. The terrain is also difficult, and that makes it costly. (Fruit Production, Male)

“[I have] Nothing in terms of strategy! This isn’t something that can even be solved in theory. Even if I put all my finances into it, I’m still completely dependent on nature -you can’t bring bees into a greenhouse. It all depends on nature.” (Beekeeping, Male, Imereti)

² Elkana – Organic Farming and Rural Tourism Network in Georgia.

A smaller number of FGD participants reported being better equipped to address climate-related challenges, noting that they had access to the necessary knowledge and tools. Interestingly, these cases were largely associated with farmers and agri-entrepreneurs who either possessed an educational background in agriculture or maintained regular access to professional agronomists. This pattern suggests that formal training and professional expertise play a critical role in enhancing farmers' adaptive capacity. In addition, farmers also highlighted the importance of learning about adapting innovative technologies in agriculture to increase production, noting that access to such knowledge would help them better respond to climate-related challenges.

Farmers who are members of associations or unions, or who have a larger network of fellow farmers through grant programs, have access to more information regarding climate resilience strategies and technologies. However, smallholder farmers or novices are mostly dependent on their own research and information provided by local agri-shops.

Both farmers and agri-entrepreneurs recognized the need to adopt practices that are less harmful to ecosystems and to reduce the excessive use of pesticides and chemicals. However, they reported lacking adequate information on how to make their practices less invasive, particularly in the face of emerging plant diseases. To address these challenges, participants underlined the need for adopting and enforcing quality control for pesticides used in agriculture, as unreliable or ineffective products often lead to crop losses and environmental damage.

“For me, it’s important to have information about effective treatments. When this disease appeared and we started spraying, none of the strawberry pesticides sold in the shops worked against it. We sprayed with so many different products, but we couldn’t get rid of the thrips -though I think in the process we might have destroyed the fruit instead.” (Strawberry production, Female)

On the other hand, smallholder farmers who manage their operations informally as family-run activities are generally less inclined to adopt environmentally sustainable practices if these do not lead to direct benefits such as reduced production costs or improved product quality. Farmers who own larger plots of land or are registered as enterprises, however, tend to show greater interest in bio or other environmentally innovative approaches to agriculture.

The vast majority of FGD participants emphasized that capacity building on climate change is both timely and highly relevant for farmers and entrepreneurs engaged in agriculture across the country. However, discussions consistently highlighted that such efforts must meet specific criteria to be effective:

- Training should strike the right balance between theory and practice, with greater emphasis on practical application, including the use of demonstration farms.
- Content should be tailored to the needs of participants from different sectors and regions, recognizing that conditions and climate vary significantly across the country.
- Training groups should be differentiated by participants' levels of expertise, with curricula adjusted to their prior knowledge.
- Trainings and workshops should be scheduled outside regular working hours to accommodate farmers with full-time jobs.

FGD participants emphasized that information on climate change adaptation and sustainable farming should be directed not only to farmers but also to agronomists, given their deeper technical expertise and ability to provide long-term support to farmers. At the same time, farmers and agri-entrepreneurs unanimously reported limited access to qualified agronomists. According to farmers such specialists are in short supply, and their services remain prohibitively expensive, accessible mainly to larger-scale farmers.

“I’ve gone through many trainings and along the way I also studied viticulture, but the main problem is the lack of agronomists. These small meetings don’t produce agronomists, and if someone funds the proper training of such specialists, that will really bring results.” (Viticulture, Female)

Farmers also emphasized that beyond technical knowledge, they require stronger support with product realization within the country and outside its borders, as access to markets remains a major barrier to the economic viability of climate-resilient practices.

Except for very few cases, participants aren’t aware of any programs or subsidies designed to tackle climate change issues in the country. The only type of program in this area that is commonly known is agricultural insurance. However, the utilization of these programs was very low among horticultural farmers because they were not tailored to the needs of farmers in different regions of the country. Notably, beekeepers from various regions expressed concern that no insurance programs are available for their sector at all.

“I’ve never had [agricultural] insurance and probably never will, because vineyard insurance only covers hail. But hail is a problem in Kakheti, while here in Racha what really affects us is the late frost. Whenever insurance agents call me, I always tell them to include frost, but they say it’s not up to them and that they’ll pass it on to the manager. And then the next year it’s the same offer again -they never take it into account, and it just keeps going like that.” (Viticulture, Female)

“In beekeeping, there’s no insurance program at all [...]. There are diseases like ‘American foulbrood,’ where the direct recommendation is to destroy the hive so it doesn’t spread elsewhere, and antibiotics aren’t allowed. But since there’s no insurance, people don’t burn the hives and they keep using antibiotics. In other countries - abroad they have different practices in this regard.” (Beekeeping, Male)

Additional KII insights highlighted persistent weaknesses in agricultural insurance: drought risks remain largely uninsured, and land registration issues further complicate access. Crystal’s partnerships with TBC Insurance, Aldagi Insurance, and New Vision Insurance provide agro-insurance products, but their effectiveness was described as limited.

Interestingly, it was revealed from KIIs that neither interviewed banks offer dedicated climate adaptation/mitigation products, but environmental integration occurs: TBC assesses risks in subsidized loans; Crystal's green line (targeting 50 million GEL by 2026) finances energy-efficient/renewable activities via EBRD/GEFF, with KPIs for green economy support. Demand for adaptation investments is nascent, driven by partnerships with donors rather than client pull. It was also noted in KIIs that awareness-raising with regard to environmental protection and climate change risks is also limited but the banks use their

social media channels to consistently build awareness. It was emphasized that practical demonstrations of long-term gains will be crucial to increase the interests of farmers and agribusinesses in climate-smart activities. Hence, TBC maintains partnerships with the agro-consulting companies or successful agribusinesses providing advice and counseling to customers or interested farmers on a large variety of issues.

Both banks indicated that rejections of loan applications on climate risk grounds are rare if not nonexistent. However, Crystal avoids financing activities with major environmental or health risks, such as oil or tobacco production, and anticipates the introduction of more rigorous environmental protocols in the future.

Respondents interviewed during KII also noted that for sustainable investments, challenges encompass high investment volumes, information shortages, and the need to obtain government subsidies. Crystal confirmed ineffective agricultural insurance dynamics. Underserved groups like women encounter awareness and attitudinal barriers, though tailored outreach (e.g., Crystal's community leaders' program) helps.

3.1.4. Opportunities and Associated Needs

Demand side (Farmers and agri-entrepreneurs)

- Farmers highlighted a strong interest in accessing low-interest loans and reduced collateral requirements, as well as in banks adopting a more individual approach that assesses the potential and opportunities of farmers and entrepreneurs beyond fixed guidelines. These loans are needed both to expand their activities and to finance adaptation to new technologies and strategies in response to climate change.
- Women farmers and entrepreneurs require additional support in accessing such loans, as they are less likely to possess financial assets that could be used as collateral and often face greater challenges in proving their creditworthiness.
- When applying for loans, farmers are often required to present financial statements and budgets to demonstrate income and creditworthiness; however, due to limited budgeting and financial planning skills, many struggle in this area.
- Farmers also expressed a need for agricultural insurance tailored to the specific needs of each region and sub-sector, to provide greater financial stability and protection against increasing climate risks. Beekeepers, in particular, currently lack access to any such insurance.

Supply Side (Financial institutions³)

- Financial institutions offer low-interest loans through state-subsidized programs, yet these conditions remain inaccessible to a large share of farmers, especially those who are new to the sector or do not meet program requirements.

³ The supply-side analysis reflects insights from the banks with which KIIs were conducted and does not represent a comprehensive assessment of the entire financial market in Georgia.

- Banks currently do not offer dedicated climate adaptation or mitigation financial products, though some environmental considerations are integrated into existing services.
- Bank officers often assist individual farmers in preparing the necessary financial documentation and loan applications, helping to reduce the administrative burden on clients.
- Special loan programs for women are available to enhance accessibility, often developed in partnership with donor-funded initiatives.
- Agricultural insurance, also subsidized by government programs, follows standardized requirements and offers policies across different sectors, reflecting the small market size and narrow profit margins within the country.

3.2. CONCLUSIONS

The assessment in Georgia revealed interconnected financial, institutional, and environmental challenges that constrain farmers' access to finance and resilience to climate risks. While awareness of programs is relatively high, financial management remains informal and compliance-driven, limiting smallholders' and women's ability to plan and invest. Access to credit is hindered by strict collateral rules, high interest rates, and gender disparities in property ownership. At the same time, climate change impacts are intensifying, while adaptive capacity remains low due to limited technical knowledge, weak advisory systems, and inadequate insurance coverage.

- Most smallholder farmers who are not registered as legal entities, manage finances informally and mainly for tax or loan purposes. Registered farmers show stronger financial discipline and better access to formal finance.
- Financial management is compliance-focused rather than growth-oriented, with limited attention to profitability or business planning.
- Awareness of state and donor-funded programs is high, but most applicants rely on informal help, and grant management skills remain limited.
- Gender dynamics in access to finance differ across grant programs and bank loans—while men sometimes apply in their wives' names to benefit from perceived advantages in grant schemes, women report few real benefits unless programs are specifically designed for them; in contrast, women reportedly face greater challenges in accessing bank loans due to lack of collateral, property ownership, and formal income.
- Banks and MFIs are risk-averse, often withholding loans from small or early-stage farmers, with strict collateral rules that particularly disadvantage women lacking property or formal income.
- High interest rates and low profit margins discourage borrowing among smallholders and self-employed women, while those who access subsidized or co-financed loans report positive experiences, highlighting the importance of external financial support mechanisms.
- Beekeepers face unique financing barriers, as beehives are not accepted as collateral, limiting access to credit and sector growth.
- Climate change is seen as a major and worsening challenge, causing yield losses, higher costs, and greater uncertainty across agricultural sectors, while farmers feel ill-equipped to respond due to limited knowledge, financial resources, and access to expert advice.

- Medium-sized and registered farms are more inclined to adopt environmentally innovative practices, while smallholder family-run farms focus mainly on immediate economic benefits.
- Agricultural insurance programs are not sufficiently tailored to regional and sectoral realities, with low uptake and coverage gaps.
- Banks reported that dedicated climate adaptation or green investment products are currently not offered, as demand for such financing remains low from farmers' side.
- There is a strong demand for practical, hands-on training on financial literacy, climate adaptation, and sustainable farming methods.
- The shortage of qualified, affordable agronomists remains a major constraint to improving productivity and resilience.
- Women farmers and entrepreneurs continue to face additional barriers due to limited access to resources, skills, and networks compared to men.

3.3. RECOMMENDATIONS

Building on the key findings and conclusions, the following recommendations aim to address Georgia's most pressing capacity and institutional gaps in agricultural finance and climate resilience. They emphasize practical measures to strengthen financial literacy, improve access to inclusive and gender-sensitive credit, enhance farmers' technical knowledge, and develop tailored instruments for climate adaptation and insurance. The recommendations are structured in two parts: those targeting the demand side, focusing on farmers and capacity-strengthening actors, and those addressing the supply side, which includes financial institutions providing agricultural finance. The proposed actions are designed to ensure that both farmers and financial institutions are better equipped to promote sustainable, climate-smart agricultural development across all regions.

Recommendations for supporting farmers' needs

- Invest in lifelong learning and retraining programs for agronomists to expand farmers' access to qualified professionals, with a particular focus on strengthening their skills in climate change adaptation strategies and tools.
- Tailor and expand agricultural insurance schemes to address the specific needs of farmers across different regions and production sectors, including currently excluded sectors such as beekeeping.
- Develop and disseminate clear, sector-specific guidelines and protocols for farmers on managing plant diseases and pests, with particular attention to new and emerging threats.
- Collaborate with relevant state ministries to establish and enforce quality control standards for pesticides.
- Introduce additional support programs for farmers and agri-entrepreneurs, with particular emphasis on women, to compensate for the decline in donor-funded activities.
- Strengthen financial literacy programs for smallholder farmers and unregistered entrepreneurs, focusing on bookkeeping and budgeting.

- Introduce incentives for sustainable practices, such as subsidies or tax benefits, particularly for smallholder and family-run farmers adopting climate-smart and environmentally sustainable technologies.
- Design capacity-building activities in a practical and applied manner, such as through one-on-one coaching or demonstration/model gardens.
- Plan and deliver capacity-building programs tailored to the specific needs of each region and sector, ensuring they are scheduled on weekends or during periods outside the main harvest season.

Recommendations to strengthen capacity of financial institutions

- Collaborate with banks and microfinancing institutions to promote gender-sensitive programs aimed at increasing women’s access to finances.
- Revise collateral requirements to better reflect agricultural realities (recognizing beehives, equipment, or long-term production contracts as assets).
- Collaborate with banks and microfinance organizations to adopt case-by-case risk assessments for agricultural enterprises, moving away from rigid application of general lending rules.

Implementing these recommendations will require coordinated efforts among government institutions, financial organizations, and development partners. Strengthening partnerships and ensuring continuous capacity-building support will be essential to create a more resilient, inclusive, and sustainable agricultural finance ecosystem in Georgia.

4. COMPARATIVE ANALYSIS

4.1. INTRODUCTION

This comparative analysis examines the evolution of capacity needs among farmers and agribusinesses in Georgia drawing on three key assessments conducted in 2021, 2022, and 2025 by German Sparkassenstiftung for International Cooperation (DSIK). Namely:

- Studies of Micro and Small Business Needs, 2021 and 2022
- Assessing the Capacity Needs of Farmers and Agribusiness Enterprises to Access Financing for Sustainable Agricultural Investments, 2025.

While both studies examine barriers to accessing finance and strengthening agribusiness capacity, their focus and depth differ considerably. The 2022 assessment centers on general micro and small business (MSE) financial literacy, management capacity, and access to basic financing instruments, whereas the 2025 assessment broadens the scope to include climate-resilient investments, sustainable agricultural finance, and gender-inclusive approaches.

Taken together, the two studies reflect the sector’s progression from foundational capacity and financial literacy challenges toward more advanced needs linked to climate adaptation, sustainability, and green finance integration.

4.2. KEY COMPARATIVE FINDINGS

4.2.1. Financial Literacy, Record Keeping, and Management

According to 2021 and 2022 studies, most micro and small agricultural enterprises exhibited low levels of financial literacy. Entrepreneurs - both formal and informal - had limited understanding of banking products, loan mechanisms, and accounting principles. Most relied on informal cash transactions and personal judgment.

Record-keeping was largely nonexistent or rudimentary, with participants keeping notes in personal notebooks or relying on memory. Only a small proportion of registered businesses maintained accounting journals, typically for tax purposes rather than business analysis. Personal and business finances were often intertwined. Overall, financial management practices were informal and reactive, with little emphasis on strategic planning or business growth.

By 2025, the situation showed modest improvement, particularly among formally registered MSMEs. Entrepreneurs demonstrated greater awareness of financial systems, and digital banking and electronic payments became more common. However, record-keeping practices remained largely - undertaken primarily to satisfy regulatory or loan documentation requirements. Few businesses used accounting for decision-making, profitability analysis, or growth planning. Overall, financial literacy evolved from a near-absent skill to basic operational competency, yet practical application and analytical use of financial data remain limited.

Key Insight: Incremental yet steady progress in awareness but persistent weakness in applied financial management and business planning.

4.2.2. Access to Finance

The 2021 and 2022 studies revealed personal and family savings to dominate as the main source of business financing, accounting for over 80% of startup and operational capital. Access to external credit was rare, and awareness of state or donor support programs was minimal. Entrepreneurs' reluctance to seek formal credit was shaped by low trust in banks, limited understanding of financial procedures, and the absence of tailored financial products for small-scale farmers. Informal business owners often viewed registration as unnecessary, further excluding them from formal credit systems.

By 2025, awareness of financial programs and credit opportunities had improved considerably, reflecting stronger outreach by the government, donors, and financial institutions. However, the nature of barriers shifted from informational to structural. Collateral requirements, high interest rates, and complex loan conditions remained the primary constraints, especially for smallholders and women farmers with limited asset ownership. While relationships with banks improved the overall accessibility of credit remained restricted.

Key Insight: Shift in MSME constraints from gaps in awareness and information to more entrenched institutional and structural barriers.

4.2.3. Business and Entrepreneurial Knowledge

The 2021 study found that business and entrepreneurial skills were largely experience-based and informal among MSMEs. Most farmers operated without formal business plans or marketing strategies, relying on inherited knowledge. Planning horizons were short typically accounting for one agricultural season. Only a few MSMEs had the capacity to forecast costs, revenues, or investment needs. Entrepreneurial thinking was limited to production, with little focus on market analysis, competitiveness, or diversification.

According to the 2025 study, business literacy has shown measurable improvement, particularly among MSMEs pursuing loans or grants. An increasing number of enterprises have begun developing simplified business and investment plans to meet financing requirements, reflecting a gradual move toward more structured planning. However, these plans often remain externally motivated, designed primarily to fulfill donor or lender criteria rather than to inform internal strategies or guide decision-making.

Marketing practices have also shown modest advancement. While word-of-mouth promotion continues to dominate, digital marketing and e-commerce platforms are attracting growing interest. Especially so among younger entrepreneurs and those engaged in donor-supported programs. Overall, the findings indicate steady progress from informal, family-based management toward more organized yet still foundational business planning practices.

Key Insight: MSME business knowledge is advancing; however, planning processes remain predominantly compliance-oriented rather than strategically driven.

4.2.4. Climate Awareness, Risk Management, and Insurance

In 2022, climate change was identified only as a risk factor, linked to crop losses and natural disasters. Preventive or adaptive measures were rare, and agro insurance uptake was extremely low owing to high costs and unreliable compensation. Risk management practices were traditional and reactive, focusing on coping with immediate threats such as weather events, pests, and crop disease. Farmers commonly relied on personal experience, neighbor advice, or basic local agronomic input to respond to crises.

By 2025, the narrative around risk management had evolved significantly. The assessment explicitly linked risk mitigation to climate resilience and financial planning, reflecting global trends in agricultural investment. Farmers increasingly recognized climate change as a long-term threat and expressed interest in technologies and financing models that enhance resilience. Insurance remains underutilized, but awareness of climate-smart practices and risk-informed decision-making improved.

Key Insight: Transition from reactive adaptation to a growing understanding of resilience-based planning. Implementation remains limited by cost and institutional access. Farmers are aware but ill-equipped to respond.

4.2.5. Gender Dynamics and Financial Inclusion

The 2021 and 2022 studies did not explicitly address gender dynamics. Women were included among participants but were not analyzed as a distinct group.

The 2025 study integrated gender as a cross-cutting theme, identifying clear disparities in financial access and participation. Women farmers were found to face systemic constraints, including lack of collateral, smaller landholdings, and fewer formalized businesses. Nonetheless, donor programs and banks have begun piloting gender-responsive initiatives, albeit with limited reach. The analysis acknowledges that while gender inclusion is now visible in policy and program design, practical implementation remains shallow.

Key Insight: Gender inclusion has moved from absent to explicit, with growing awareness but persistent structural disadvantages.

4.2.6. Institutional and Ecosystem Support

By 2021-2022, banks and support programs were poorly connected to small farmers. Tailored financial instruments were rare, and trust in financial institutions was low.

By 2025, the situation shows gradual improvement: financial institutions now engage with donor-led green initiatives (e.g., EBRD, GEFF). Some banks integrate environmental risk assessments into subsidized loans and provide advisory partnerships. However, these remain pilot efforts, and demand for green finance is still nascent.

Key Insight: Engagement between banks and small farmers is improving through emerging green finance initiatives, but uptake remains limited.

4.2.7. Training Needs and Learning Approaches

By 2022, motivation to participate in training was low, as most entrepreneurs perceived such programs as overly theoretical and disconnected from their practical needs. Only a small proportion (32%) showed interest, and just 10% were ready to participate. Training priorities at the time centered on financial management, access to funding, marketing, and basic climate change awareness.

By 2025, demand for training increased substantially, with participants seeking practical, experience-based learning tailored to their specific sector and regional context. Farmers emphasized the value of demonstration farms, field visits, and coaching-based formats, expressing strong interest in financial literacy, climate adaptation, and sustainable agricultural practices.

Key Insight: Training interest has shifted from passive awareness to active demand for practical, sector-specific, and experience-driven learning.

5. SUMMARY TABLE – TREND DEVELOPMENT ACROSS STUDIES

Dimension	2021-2022	2025	Change
Financial Literacy	Basic, minimal bookkeeping	Compliance-focused, modest improvement	Slight progress
Access to Finance	Awareness gap	Structural and collateral barriers	Shift in constraint type
Climate Awareness	Low, reactive	High, recognizing impact	Considerable progress
Gender Sensitivity	Absent	Integrated	Moderate progress
Training Motivation	Low	High, practical	Positive change
Risk Preparedness	Very weak	Improved awareness, low action	Moderate progress
Institutional Support	Weak ecosystem	Emerging green finance	Incremental growth