Georgian Farmers' Association
საქართველოს ფერმერთა ასოციაცია

Research on the Driving Factors Behind Changes in the Behavior and Attitudes of Dairy and Beekeeping Farmers Toward the Standardization Process

Qualitative Research Grounded in Behavioral Science

BEHAVIOR DRIVERS' STUDY

This document provides an assessment of how, and to what extent, the behavior, perceptions, motivation, and challenges of dairy and beekeeping farmers have changed as a result of their participation in the project *"Capacitated Agricultural Practices and Consumer Awareness (CAPCA)"*, particularly in the case of those farmers who were involved in trainings, demonstration farms, and grant programs.

Behavioral Insights, Strategy and Communication Partners

Research report

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The authors of the text are solely responsible for the content of this publication, which does not necessarily reflect the views of the European Union, the Georgian Farmers' Association, or CSRDG.

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Table of Contents

Introduction

The project *"Enhanced Agricultural Practices and Consumer Awareness,"* launched in 2023, aims to contribute to Georgia's socio-economic advancement through the introduction and institutionalization of safe production practices in agriculture.

To achieve this goal, several specific directions have been identified. These include strengthening the capacities of stakeholders to ensure compliance with DCFTA approximation regulations; equipping farmers, producers, food processors, and Food Business Operators (FBOs) with a better understanding of regulatory requirements on food safety and sanitary-phytosanitary (SPS) principles; and providing them with practical tools to facilitate compliance. This, in turn, increases their ability to better position themselves on the domestic market and to export products to the European Union (EU) market.

On the consumer side, the project seeks to raise awareness of food safety and consumer rights, enabling more informed and conscious decision-making. As a result, the demand for quality products is expected to increase.

Since 2023, a number of initiatives have been implemented within the defined directions, including qualitative research based on behavioral science. The findings of these studies helped the implementing team to design activities in a way that addressed the real problems, needs, and capacities of the target groups, while also fostering sustainable change.

The aim of the present qualitative research, grounded in behavioral science, was to determine the extent to which farmers' behaviors, perceptions, motivations, and challenges have changed as a result of participating in the project, particularly in the cases of those engaged in trainings, demonstration farms, and the grant competition.

Through comparative analysis, we sought to establish the degree to which behavioral change objectives were achieved and to what extent the project succeeded in reducing the barriers that initially stood before both dairy and beekeeping farmers.

Today, there are numerous theories and approaches regarding behavior change; however, they all share a common emphasis on the factors that trigger behavior - those that may either facilitate or hinder change. Studying and analyzing these so-called "provoking" factors helps in designing effective interventions and strategies aimed at achieving behavioral change.

It was precisely with this objective that the qualitative behavioral science research *"Behavioral Drivers of Dairy and Beekeeping Farmers in Georgia Toward the Adoption of Improved Production Standards"* was conducted in 2023 by the Behavioral Insights, Strategy and Communication Partners (BISC Partners), commissioned by the Georgian Farmers' Association. The research aimed, through the lens of behavioral science, to evaluate and identify both the explicit and implicit enablers and barriers influencing:

a) the behavior of dairy farmers, on the one hand regarding the adoption of GeoGAP standards in their farms, and on the other hand their assessment of the risks and opportunities associated with its implementation; and
b) the behavioral drivers of beekeepers, particularly what hindered or motivated them to introduce European standards into their production.

Below is a brief consolidated analysis of in-depth interviews and ethnographic data collected with farmers, which allows for comparison with the findings of the present research. Based on the 2023 research report *'Behavioral Drivers of Dairy and Beekeeping Farmers in Georgia Toward the Adoption of Improved Production Standards'*, the main findings are categorized into four dimensions: **Pains, Gains, Comforts, and Anxieties.**

Pains (Problems)

- **Shortage of labor resources:** Lack of available workforce, especially due to low wages and the negative perception of agricultural work.
- **Financial constraints:** Limited access to affordable credit, high interest rates, and insufficient funds for infrastructure renewal.
- **Difficulties accessing markets:** Barriers to product sales and heavy reliance on intermediaries, which leads to lower prices.
- **Lack of agricultural machinery:** Dependence on outdated or shared equipment hampers productivity.
- **Weak communication with institutions:** Insufficient information about grants, subsidies, and technical assistance.
- **Unregulated market and competition:** Price instability and competition with non-natural (low-quality or counterfeit) products.

Gains (Benefits)

- **Higher prices and market access:** The adoption of GeoGAP is perceived as a pathway to entering large retail chains and selling products at better prices.
- **Improved product quality and trust:** Standards increase consumer confidence and enhance product competitiveness.
- **Security and support:** Farmers associate certification with greater institutional recognition, as well as opportunities for grants and other forms of assistance.
- **Healthy livestock and resource efficiency:** Improved standards ensure better animal health, optimize resource use, and reduce costs.
- **Opportunities for partnership:** Particularly among beekeepers, there is interest in forming cooperatives, which would ensure more stable sales.

Comforts (Habits/Routines)

- **Family tradition:** Farming is perceived as a family inheritance, which creates resistance toward involving external labor and making changes.
- **Self-sufficiency:** Due to distrust of external assistance, farmers prefer to manage processes independently, even if this proves inefficient in the long run.
- **Lenient regulations:** Existing laws allow small farmers to operate without incurring large expenses, unlike the costs required to comply with quality standards.
- **Emotional attachment to farming:** Farmers derive personal satisfaction from working with animals and producing natural products, which gives them a sense of fulfillment despite the difficulties.

Anxieties

- **Standards perceived as unrealistic and unattainable:** Many farmers believe that the requirements of GeoGAP are too demanding and beyond their available resources.

- **Fear of business closure:** Concern that mandatory compliance with quality standards could force them to shut down their activities.
- **Fear of documentation and bureaucracy:** Anxiety about record-keeping, inspections, and the complexity of preparing grant applications.
- **Financial risks:** Worries about the costs associated with implementing and maintaining certification standards.
- **Knowledge deficit:** Uncertainty stemming from a lack of training and information on how to properly meet the requirements.

From these findings, it becomes clear that although farmers recognize the benefits of adopting improved standards, they still face significant structural, financial, and psychological barriers.

Jobs To Be Done – JTBD (Value-Based Goals):

To truly understand what enables or hinders the adoption of desirable behaviors, it is essential to look at these issues from the farmer's perspective. The starting point must be their psychology, character, needs, desires, goals, and ambitions. People do not act without purpose - every behavior is a means to achieving a certain goal, and these goals usually carry strong value-based meaning. Accordingly, the main driving force behind a desirable behavior is the farmer's *"value-based goal" (job-to-be-done)*. This is the reason why a farmer may engage in the process of raising standards, and it is also the benchmark by which they evaluate both the quality of their actions and their level of satisfaction with the results.

This perspective on farmer psychology was taken as our starting point back in 2023, when we set out to explore two key questions: *What were the farmers' value-based goals that motivated them to engage in the process of raising standards?* and *How did existing "barriers" and "enablers" influence the achievement of these goals?*

Functional Value-Based Goals

- *I want to have more income.*
- *I want to save money and manage my farming more efficiently.*
- *I want my farming activities to be stable and less dependent on external factors.*

Emotional Value-Based Goals

- *By adopting standards, I will feel secure and insured.*
- *Working with animals is a fulfilling activity; I love this work and I want my animals to be in good conditions — adopting standards will also positively affect their health.*

Social Value-Based Goals

- *I want to preserve family traditions — my social capital that I value and wish to maintain.*
- *I want to ensure the employment and well-being of my family members — the proper functioning of the farm is directly linked to my family's welfare.*

Research Methodology (Qualitative Impact Assessment)

The aim of this qualitative research was to explore how the CAPCA project influenced farmers' attitudes and behaviors, particularly their readiness to adopt standardized production practices — specifically GeoGAP.

The research was based on the format of interactive, behaviorally informed workshops and employed the principles of behavioral science.

- **Research Structure and Participant Selection Principles**

Four focus group sessions were held across four regions of Georgia — Racha-Lechkhumi and Lower Svaneti, Kakheti, Imereti, and Guria. Each focus group brought together approximately 17 farmers (total N=68).

Each session was designed not only as a learning process but also as an opportunity for live behavioral observation.

The selection criteria ensured diversity among participants and included the following segments:

- Farmers who had participated in CAPCA trainings;
- Farmers involved in demo projects;
- Farmers who received grants;
- Farmers who had only heard about CAPCA but were not direct beneficiaries.

This segmentation aimed to capture differences between farmers already engaged in the project and those participating for the first time — a behaviorally valuable perspective for examining barriers to adoption or mechanisms of acceptance.

Fieldwork was conducted during July–August 2025 in the following target region towns: Ozurgeti, Kutaisi, Telavi, and Ambrolauri.

Integration of Behavioral Science

The workshop structure was deliberately designed to follow a behavior-change pathway—from building trust to personal commitment. The process applied a range of behavioral science approaches and design tools, including the **COM-B** model and the **Pains–Gains–Comforts–Anxieties** framework.

The workshop consisted of the following stages:

1. **Building trust & sharing personal practice** - Participants shared their own farming habits—what they are proud of, and what might not fully meet standards but remains part of their routine. This step surfaced **Comforts** and created a safe, egalitarian environment.
2. **Defining the frame of the desired behavior** - Facilitators introduced the practical essence and advantages of **GeoGAP**. This created a behavioral "anchor," clarifying what the desired behavior means and why it matters.
3. **Mapping behavioral drivers** - Participants split into working groups to identify enablers and barriers related to the desired behavior across four factors:
    - **Pains** — perceived difficulties and frustrations that can motivate change;
    - **Gains** — anticipated benefits from adopting GeoGAP;
    - **Comforts** — entrenched practices and routines that make change feel unnecessary;
    - **Anxieties** — fears and uncertainties associated with standard adoption.

The perspectives identified by the groups were placed on sticky notes, then visually clustered on flipcharts. In this way, a **behavioral map** was created, reflecting farmers' perceived barriers and motivators collectively.

1. Future-Self Visualization

Using the *"Future Me"* technique, participants imagined themselves 2–3 years ahead — as future farmers whose farms are fully standardized and successful.

They described and illustrated this vision: how their production looked, what had changed, who was working with them, and what kind of feedback they received from customers. They also defined success indicators and personal motivations that would lead them toward these goals.

This exercise helped participants perceive standards not as abstract requirements, but as **concrete, value-driven objectives**, and to build a personalized vision of their desired future.

2.Breaking Down Barriers into Small Steps

Groups selected key *Comforts* or *Anxieties* and discussed small, easy-to-implement actions that could address them.

This approach helped reduce the cognitive barrier to change and activated the **"small wins" principle** — a scientifically proven behavior-change strategy showing that small, consistent steps increase the likelihood of achieving change and ensure the sustainability of the process.

3. Commitment to Self

Participants wrote a letter of commitment to their *"Future Me"*, describing 2–3 small actions they would carry out in the coming months to bring themselves closer to their envisioned future.

This written (and optionally public) pledge was designed around a behavioral nudge known as the **commitment bias** — when people state their intentions publicly or in writing, the likelihood of follow-through increases significantly.

4. Forming Social Support

Participants were given the opportunity to exchange phone numbers on-site or to create digital groups (e.g., WhatsApp), which would support ongoing information-sharing and mutual encouragement. This step was grounded in the principle of social influence, leveraging peer networks to sustain motivation and accountability.

Data Collection and Analysis

All verbal and visual outputs (for example, behavioral driver maps, “Future Me” illustrations, and commitment cards) were carefully documented and analyzed using thematic content analysis.

The identified themes were grouped under the four behavioral drivers outlined above. Special attention was given to regional differences, as well as distinctions between farmers who had previously engaged with the project and those who were participating for the first time.

This methodology made it possible to capture both internal cognitive factors (beliefs, habits, fears) and external motivators (incentives, peer examples, policy alignment) that shape farmers’ behavior in relation to adopting food safety and production standards.

Research on the Driving Factors Behind Chnages in the Behavior and Attitudes of Dairy and Beekeeping Farmers Toward the Standardization Process

General Observation

It is noteworthy that among most farmers who participated in the study, there is now a stronger desire to seek out information related to their activities, along with more action and a greater variety of sources. This change is particularly visible among beekeepers. Whereas in the previous research their trusted information sources were mostly limited to relatives and neighbors, today they openly reference a range of both local and international sources.

“My father is a respected beekeeper, and I value his advice. He himself is developing too — he listens to Russian, Moldovan, and American beekeepers. He experiments and tests things, and I adopt into my apiary only what has already been tried and proven.” – Telavi

“Earlier there was more of a conservative approach — old ideas were respected. But now there are many tips on YouTube, and I often watch them.” – Telavi

“I love searching for innovations and I’m not satisfied with existing knowledge — I always want to learn new things.” – Kutaisi

Awareness-raising is particularly visible among farmers who not only attended trainings but also visited demonstration farms and attempted to apply the knowledge gained within their own farms. This practical experience has given them greater confidence, and they now speak more boldly about various approaches, including the process of standardization.

Farmers are also aware of the growing consumer interest in food safety — an awareness that, sooner or later, will place them before the necessity of adopting standardization, something they themselves acknowledge. At the same time, they express a desire for consumers’ knowledge to grow further regarding truly natural products and the effort required by farmers to ensure genuinely safe food products.

“From the village does not automatically mean natural or high-quality.”

Farmers who had been beneficiaries of the CAPCA project in some form drew particular attention from others who had not had direct contact with the project. During the focus group sessions, a representative of the Farmers’ Association joined online to present GeoGAP — including the process of its implementation, its advantages, and its opportunities. Participants had the chance to ask questions and received detailed answers. However, skepticism was still noticeable.

Farmers who had been beneficiaries of the CAPCA project in some form drew particular attention from others who had not had direct contact with the project.

Once a participating farmer began to share their personal experience — explaining how they had introduced GeoGAP into their own farm — the situation changed. At that moment, the process of adopting GeoGAP became more tangible and real for others.

This behavioral shift is best explained through the principle of **“social proof” bias**: people are more likely to believe and adopt a new practice when they see peers like themselves doing it successfully, rather than relying solely on institutional explanations.

This bias means that people (in this case, farmers) are more likely to trust and draw motivation from the actions and experiences of those who are similar to them, whose situation they can easily relate to. While the representative of the Farmers’ Association is credible and competent, their words were still perceived in a more abstract way.

By contrast, when another farmer — **a peer, “someone like them”** — shared their own experience, the information turned into something real, practical, and “possible for someone like me.” This reduced skepticism and increased motivation.

Often, this bias becomes even stronger when combined with the element of **“similarity bias”** — the tendency to give more weight to advice from people who think, work, and live in an environment similar to one’s own.

A difference in attitudes toward change was also observed between smaller farmers and relatively larger ones. Small, including beginner farmers — whether beekeepers or dairy farmers — expressed strong motivation and readiness for development. Yet, within these statements, there was also an audible fear of the unknown future, especially of making mistakes.

Given their already limited resources, making a mistake is associated less with gaining experience and more with irreversible loss. By contrast, larger farmers shared not only their own mistakes but also what they had learned from them. One of the main motivators that helped them persevere, even after mistakes, was **love** — a sincere love for the work they do.

For small and beginner farmers, this often unconscious fear can be explained by the bias of **Loss Aversion** — the tendency to weigh potential losses more heavily than equivalent gains.

According to a classical principle of behavioral economics, losses are experienced as roughly **twice as painful** as the pleasure gained from equivalent wins. For small and beginner farmers, who operate with limited resources, every mistake feels “too costly.” As a result, they tend to be more cautious and face stronger internal barriers when it comes to taking action.

In addition, behavioral science distinguishes between a **Growth Mindset** and a **Fixed Mindset** and their influence on human behavior. Relatively larger farmers tend to demonstrate more of a *growth-oriented mindset*: they see mistakes as a path to gaining experience rather than as outright failure. Their broader resources and accumulated experience help reduce the fear of losses, making experimentation and adaptation easier.

For this reason, when larger farmers share their own mistakes and the lessons learned from them, it can serve as a form of **normative influence** that helps reduce fear among smaller farmers. ***Furthermore, positioning GeoGAP adoption as a safeguard against costly mistakes can motivate small and beginner farmers to take their first steps toward standardization.***

It is noteworthy that in all groups, most farmers engaged with great interest and commitment in the exercise of describing their *"Future Me."*

- *"I've never done this before — it feels like I never have the time for it... but yes, I agree, it's necessary."* — Ozurgeti
- *"Everything is in my head. If I write it down, will anything change? Fine, I'll write it — maybe I can turn it into reality."* — Kutaisi
- *"I've never thought about what kind of farm I might have in 3–4 years. I live for today, working hard. I'm just an ordinary peasant — can I really achieve success? Well, at least for this short time, I'll allow myself to believe it."*— Telavi
- *"There's a saying: 'Tomorrow will take care of itself.' And now you ask us to imagine ourselves 3 years from now? Still, you're right — a goal is important, you need to know where you're heading. Okay, I'll think about it."* — Ambrolauri

This practical exercise was carried out after farmers had already heard the presentation on GeoGAP and listened to the experience of a local farmer. The guiding questions also touched upon the issue of adopting GeoGAP, but were framed humorously, so that participants would not feel obliged to give "the right answer." Instead, they were encouraged to define their own wishes and formulate visions that were closer to their real-life circumstances.

Speaking aloud about one's *"Future Me"* was voluntary, but it is noteworthy that all participants who did share their visions mentioned elements of standardization — and, if not complete, then at least partial adoption of GeoGAP.

At first, many farmers perceived the *"Future Me"* exercise as something unusual or even a "pastime for those with too much free time." However, once they engaged in the process, two important behavioral features emerged.

The first was the **self-affirmation effect**: when people are given the space and time to articulate their own values and goals, their openness to change increases. This was clearly visible in farmers' statements such as *"Fine, I'll write it down, maybe I can make it real"* and *"For this short time, I'll believe it"*. The exercise thus became not just an act of imagination, but a tool for strengthening self-belief.

The second was the **implementation intention effect**: when people specify a future behavior — even partly in jest or symbolically — the likelihood that they will actually perform that behavior

increases. The fact that every vision shared aloud contained an element of standardization (whether full or partial adoption of GeoGAP) indicates that the process intentionally embedded the desired behavior into farmers' future planning.

It is also important to note that the exercise followed both an official presentation and the sharing of a local farmer's personal experience. This **social proof** further reduced skepticism and increased readiness to imagine themselves on the same path. Meanwhile, the use of humor in framing the questions lowered psychological resistance and opened the way for more genuine and reality-based goal setting.

"Commitment to the Future Self" was another practical exercise that offered valuable behavioral observations. After describing their *"Future Me,"* farmers were asked to identify 1–5 small actions or steps they would take in the coming months to move at least a little closer to their envisioned future self.

This took the form of a commitment sheet, where they had to write down their name, specify the actions, sign it, and date it. In behavioral science this is known as the commitment bias: when a person states their intention publicly or in writing, the likelihood that they will actually follow through increases significantly.

Interestingly, several farmers refused to make such a promise to themselves:

- *"I can't write it down, why should I lie to myself? Give myself a promise that I don't know if I can keep?"* – Kutaisi
- *"What if I can't do it? Then how would I face myself?"* – Kutaisi

This observation once again demonstrates the strong influence of the commitment effect. It may seem like "nothing serious" — just making a promise to oneself. Yet the commitment sheet stayed with them, just like their vision of the *"Future Me"*, serving as a reminder of what they wanted to achieve.

This episode clearly illustrates how the **commitment effect (commitment bias)** operates not only when a promise is made, but also when a person avoids making a promise. The reason for refusal strongly reflects **loss aversion** — farmers were more afraid that failing to keep their promise would damage their self-esteem and trust in themselves than they were motivated by the potential benefits of starting the desired behavior.

It is also noteworthy that participants appreciated learning that the **commitment sheet** and the *"Future Me"* vision would remain with them. This created a **cue-based reminder effect** — a physical object that periodically reminds a person of their goal, thereby increasing the likelihood of maintaining the behavior over time.

It is important to emphasize that these observations once again confirm the significance of approaches such as **making commitments** and practically integrating other behavioral science tools. To reduce the effect of **loss aversion** when making a promise to oneself, it is possible to introduce an additional stimulus — for example, awarding oneself a pre-defined symbolic reward for completing each small action. Such a mechanism increases motivation to follow through and reduces the fear of failure.

In addition, it is advisable to encourage farmers to adopt a **"try and learn" approach**, which frames mistakes not as failures but as valuable experiences. This perspective lowers the fear of taking the first step and increases the likelihood that farmers will implement new behaviors in practice, even on a small scale.

Key Findings

During the **Behavioral Drivers Mapping** session, farmers reflected on the desired behavior — improving production processes and adopting standardization — and discussed both the **enablers** and **barriers** connected to it.

As a result, the following **key findings** were identified and categorized according to the behavioral change framework:

- **Pains** — perceived difficulties and frustrations that can become motivations for behavioral change;
- **Gains** — expected benefits of adopting GeoGAP standards;
- **Comforts** — established practices and routines that make the need for change less visible;
- **Anxieties** — fears and uncertainties associated with the adoption of standards.

Existing Problems and Challenges - PAINS

(Problems representing weaknesses in the current situation or behavior that create a sense that change is necessary.)

A number of problems (PAINS) identified during the 2023 research remain relevant today. In particular, the **shortage of able-bodied labor** is still persistent, if not increasing. According to participants, this is largely driven by the country's socio-economic situation. Despite the government's announcements of economic growth and positive statistical indicators, farmers note that they do not feel this progress in their daily lives.

Financial constraints also remain a critical challenge. Especially beginner farmers emphasize difficulties in securing start-up capital. Grant financing is available only if a farmer already has some tangible progress or achievements:

- *"When I'm starting, that's exactly when I need support. No one just has that kind of money lying around. That's when you should help, because those who already achieved something have more opportunities anyway."* – Ambrolauri
- *"Grants are not for beginners – the process is unfair. Why should someone who already has everything set up get a grant?"* – Kutaisi

The **lack of accessible credit and high interest rates on loans** was unanimously mentioned by both beginner and experienced farmers as one of the most significant problems:

- *"What am I supposed to do with the state program? Loans take 36% for themselves, and then you have to struggle to pay it back. In the end, you're forced to ask yourself, what's the point?"* – Kutaisi

- *"If you give me 100,000, you want me to bring back 150,000 in one year. When you sell cows, do you sell the calves too? They need time to grow, don't they?"* – Kutaisi
- *"If sufficient finances were available, I would definitely implement [the standards]."* – Kutaisi

Limited access to modern technologies and innovative approaches continues to hinder productivity growth. In the 2023 study, reliance on outdated or second-hand equipment was already identified as a factor limiting productivity. This time, focus group participants emphasized the urgent need for infrastructure and farm machinery renewal, which is also linked to large financial costs, and access to such resources remains restricted.

- *"In our business operations, we see the lack of access to modern equipment as a problem."* – Ambrolauri

The lack of qualified personnel is also not new, but in the last 2–3 years it has become an even more pressing issue due to the spread of new diseases, particularly in beekeeping — for example, *Tropilaelaps*.

- *"In dairy farming there is a shortage of veterinarians; in beekeeping, it's not a shortage — there simply are none."*– Ozurgeti

The shortage of qualified personnel and professional knowledge not only prevents the timely detection of diseases, but also obstructs effective and proper treatment.

- *"I just want an experienced professional who can advise me on what to do, what medication to use, so I don't always have to be experimenting and worrying."* – Ambrolauri

Knowledge deficits and insufficient professionalism complicate the effective management of farms. Against this backdrop, especially in Western Georgia, where ***Tropilaelaps*** disease is more widespread, farmers rely heavily on each other, exchanging advice and techniques for managing the issue. Special attention was given to those experienced farmers who had already tried multiple methods.

- *"From what I've asked, read, and heard, I think this approach is more correct. Right now, I have the queen bee confined."* – Ambrolauri

The absence of control over pesticides was highlighted in focus groups across all regions as one of the most significant challenges. This problem has two dimensions: on the one hand, farmers spoke about the risk of potentially counterfeit products; on the other hand, they referred to the uncontrolled use of these chemicals by other private farms.

- *"Most people buy these preparations from so-called 'vet-pharmacies.' Even the seller doesn't really know what they're selling. Then they spray it, and who knows if they did it correctly or at the right time? If the bees come into contact with those plants, they're already contaminated."* – Ozurgeti
- *"The lack of control over pesticides increases the risk of low-quality or harmful products being used, which directly damages farms."* – Telavi

- *"The uncontrolled use of chemicals in private farms worsens environmental conditions."* – Ambrolauri

Product Marketing and Sales - Despite acknowledging that consumer awareness and demand for safe and high-quality products has increased somewhat, farmers still consider this insufficient.

- *"The promotion of healthy products is limited; there's a lack of 'PR.'"* – Ozurgeti

Farmers attribute this problem to insufficient consumer knowledge, noting that consumer attitudes often do not encourage prioritizing local products. In addition, the domestic market's vulnerability to imports was also identified as a barrier to product sales.

Another problem identified in connection with marketing and sales was the **absence of planned farming**. According to participants, the lack of long-term strategies and production planning in the agricultural sector leads to inefficient use of resources and income fluctuations.

Although there is an existing agricultural insurance service partially subsidized by the government, several groups still mentioned the **lack of accessible insurance** as a problem. Farmers noted that in agriculture — a sector highly vulnerable to climate and biological risks — the services necessary to mitigate these risks are either unavailable or inaccessible:

- *"This leaves us in a vulnerable position."*

Uncontrolled growth of wolves and bears poses a serious threat to both livestock and bees. Existing regulations do not work in favor of the farmer and instead add to the damage:

- *"A friend of mine had his hives destroyed by a bear. He had everything recorded on video, and do you know what response he got? They told him he had trespassed into the bear's territory."* – Ambrolauri

Violations of **hygiene standards** and poor **farm management practices** were also noted as problems, as they negatively affect both product quality and the farmer's reputation. Participants emphasized the importance of giving more farmers — especially smallholders — access to opportunities for developing their skills in standardization and management.

Finally, **natural and climatic conditions** were repeatedly mentioned among the most significant barriers: harsh climate, reallocation of pastures into the forest fund, challenges in land cultivation, and insufficient road infrastructure all significantly hinder the functioning and development of farms, for both dairy and beekeeping farmers.

GAINS – Anticipated benefits of Change

[Realization of aspirations, potential rewards and improvements resulting from change. What value can adopting the desired behavior bring?]

Compared to the gains identified in the 2023 study, the perception of benefits has become even more **tangible and concrete**. Farmers now speak more about the *real advantages* they have experienced as a result of the CAPCA project, including obtaining **GeoGAP certification**.

Compared to the Gains factors identified in the 2023 research, it should be emphasized that the **perception of benefits has become even more concrete**. Farmers now discuss the *real advantages* that became available to them as a result of the CAPCA project's implementation, including **GeoGAP certification**.

- *"Now I follow modern methods. I started with the traditional ways of my ancestors, but practice showed me how to fight diseases, so I switched to other methods."* – Telavi
- *"My goal is to have a certified shop, where I'll know the honey and milk are of high quality, and when I deliver my products, they will know mine is also certified."* – Ozurgeti

The most frequently mentioned benefits are related to **traceability** and **expanded sales opportunities**.

- *"We are oriented toward innovation; we packaged honey in coffee bags and delivered it to supermarkets."* – Telavi
- *"If modern equipment is introduced into existing farms, labor productivity and product quality will increase, which in turn will bring financial benefits to the farmer."* – Ambrolauri

The **platform**[1] created within the CAPCA project for grant-recipient farmers, which ensures the traceability of their products, is perceived as an opportunity to increase their **visibility** and attract more customers.

- *"For as long as I can remember, I have spent my whole life in beekeeping. I started independently 15 years ago and became actively involved only a year ago — I left my job and decided to dedicate my life to bees."* – Telavi

Direct implementation of **GeoGAP**, according to farmers, provides the possibility to improve the **quality of products**, including opportunities to produce **organic products**.

- *"I work tirelessly, and I am proud that my farm is managed by standards. I work for satisfaction — it's not just about money."* – Ozurgeti
- *"Modern treatments and beekeeping have become more accessible — medicines and contemporary approaches seem more practical to me."* – Telavi

[1] Grant-recipient farmers are **registered** so that their products become **traceable**. This helps consumers feel confident that they are consuming **GeoGAP-certified products**.
Through a **QR code**, consumers will be able to access detailed information about the farmer, including their production history, location, and other relevant details.

- *"Hard work and the pride that my farm is managed according to standards. I work for enjoyment it's not only about money." – Ozurgeti*
- *"Modern treatment and beekeeping have become more accessible — medicines, modern approaches seem more practical to me." – Telavi*

As the scale of **GeoGAP adoption increases** — the more their neighbors take steps toward production standardization — the more protected their farms will become, and the easier it will be to maintain the safety and quality of products. Accordingly, they emphasized the **importance of continuing initiatives like CAPCA**.

Farmers also noted that **being a CAPCA project beneficiary and implementing GeoGAP increases their chances of receiving other grants** in the agricultural sector, including those for purchasing modern equipment.

Finally, the **successful adoption of GeoGAP** opens the possibility of expanding sales markets, including exports abroad, especially in beekeeping, where, in the case of several certified beekeepers joining together, **pursuing Global GAP certification** could even become a realistic goal.

COMFORTS – Existing Routines

[Existing routines are the "well-worn paths" we follow. They are tried and perceived as safe, which makes changing them difficult.]

As in 2023, attachment to family traditions was again evident:

"My father and grandfather did it this way" – farmers often justify their farming methods by appealing to ancestral practices, even though these may not be effective under modern conditions.

Blind adherence to tradition – instead of adopting innovations, many continue to prefer practices that have been followed for years without critical reflection.

Similar to the 2023 finding of *"self-reliance"*, distrust toward external advice and assistance also emerged in 2025:

Reluctance to accept others' views – farmers are less open to listening to or sharing perspectives with other farmers or experts.

- *"I keep attending trainings to learn something new. But I haven't received anything really useful or practical to improve my situation."* – Kutaisi

Dependence on friends' advice – in making decisions, they rely more on the experiences and recommendations of close acquaintances than on official or technical guidance.

In both studies, emotional attachment to farming was evident, which makes adopting changes more difficult. However, important differences compared to the 2023 findings also emerged. First, it should be noted that the *Comforts* identified in 2023 were more rooted in **emotional and identity-based factors**, whereas in 2025 they are described more as **practical and behavioral**

barriers. This suggests that presenting change as a process of small, simple steps may be more effective in overcoming them.

More clearly observed in 2025 was a lack of **internal organization and planning**, something not highlighted separately in 2023:

Laziness toward safety norms and new practices – some farmers feel reluctant both to implement safety standards and to adopt new technologies.

Lack of discipline – a shortage of systematic and planned approaches in farm management makes the adoption of change more difficult.

Absence of record-keeping practices – many farmers do not keep regular records, which not only complicates analysis of results and proper planning but is also perceived as requiring "extra" effort that feels unnecessary to them.

In 2025, the influence of **stereotypes and mechanical practices** also became evident:

Perception of switching to new practices as difficult – Farmers struggle to change long-established methods of work, as the introduction of new approaches is often perceived as a complex and exhausting process.

Hive marking – For identifying beehives, farmers often rely only on mechanical marks (rather than numbering systems), which can act as a barrier to adopting more technologically efficient methods.

Old stereotypes – Behaviors and choices are still shaped by entrenched, long-standing beliefs, which hinder openness to new approaches.

One farmer expressed this vividly:

- *"The idea that you can't extract honey with a metal spoon is a myth. They invented this just because, on the roadside, when selling honey to tourists, they wanted to use wooden spoons. But the honey extractor is made of metal, and that's fine. So why would a spoon be different? Now they say they've just discovered this, but before it supposedly didn't react?!" — Telavi*

ANXIETIES – Uncertainty Related to Change

[Conscious and real anxieties, or unconscious ones driven only by internal predispositions, that are connected to change.]

As in 2023, financial risks and fears of bureaucracy/control are still strongly present. However, while in 2023 the perception of *standards being too complex* appeared as the central fear, in 2025 this concern has shifted and broadened towards **state control** and **uncertainty about consumer response**:

- **Fear of state control** – Anxiety that the registration required for standardization will increase supervision and bureaucratic burden.

- **Uncertainty about consumer attitudes** – Concern about whether consumers truly value certified farmers and whether certification provides a real competitive advantage.
- **Fear of financial loss** – Concern that the introduction of standards may not generate sufficient financial return and could even lead to losses.

Risks stemming from the environment and natural conditions were present in both years, but in 2025 this theme became more pronounced:

- **Risk of new diseases and pests** – Emerging pests that threaten production (e.g., in beekeeping) may become a top priority, making GeoGAP seem less relevant in comparison.
- **Environmental pollution** – Fear that implementing standards will be meaningless if the problem of environmental pollution is not addressed.
- **Natural and biological threats** – Deteriorating climatic conditions and damages caused by predatory animals, which directly harm production.

Unlike the first study, in 2025 a **political-economic instability factor** appeared, which was not mentioned at all in 2023:

- **Turbulent environment undermining long-term development** – Political and economic instability creates a sense of uncertainty among farmers, discouraging them from thinking about long-term investments or expansion plans.

In 2025, farmers openly spoke about a **deficit of trust** – "Are they deceiving us?" – and about losing hope in state support, which indicates a broader rise in general mistrust against the backdrop of ongoing events.

- **Deficit of trust** – Fear of being deceived or receiving incorrect information.
- **Risk of losing international support and being left solely dependent on the state** – Given the current political crisis, there is fear that international partners, including the European Union, might suspend agricultural assistance. This existing mistrust intensifies anxieties that the state will not or cannot provide adequate help in addressing the problems that lie ahead.

A **new factor** also emerged in 2025 – **age and health limitations**:

- **Health and age-related constraints** – The perception that physical ability and age could become barriers to fully implementing the standards.

The specific fear identified in 2023 – that "standards are unattainable" – in 2025 has transformed into more **complex anxieties**: fear of regulations, doubts about financial outcomes, and environmental challenges.

Jobs to be Done - JTBD (Value-Based Goals)

As noted in the introduction of this report, in order to understand the factors that either enable or hinder desired behaviors, it is essential to consider issues from the farmer's perspective. The

starting point must be their psychology/character, needs, desires, goals, and ambitions. People do not act without purpose — each behavior is a means of achieving their own goals, and these goals usually carry value-based significance. Accordingly, in this study we define the farmer's **"value-based goal" (jobs-to-be-done)** as the primary driver of desired behavior.

The research identified the key value-based goals that form the basis for why a farmer might think about — or be motivated to — improve their practices.

Functional Goals

- I want to implement GeoGAP and other standards if product quality and safety can be ensured.
- I want to use product traceability and certification to expand sales opportunities, including entering export markets.
- I want access to modern equipment and innovative approaches — through targeted grants or cooperative investment — to increase productivity.
- I want access to external markets and direct communication platforms with consumers.
- I want to reduce production risks and ensure the sustainability of agricultural activity by managing climate and ecological risks.
- I want simplified compliance — easy "checklists" and minimal record-keeping standards.

Emotional Goals

- I want to feel safe and calm in an unstable political and economic environment — "I am not losing, I am moving forward" despite turbulence.
- I want to experience professional pride in producing high-quality, certified products — "I produce with standards," as a source of personal dignity (my cattle/bees have better conditions).
- I want to believe in my own capacity — by reducing fear of new things through "small wins" and examples from farmers like me.

Social Goals

- I want to gain society's trust — through certified production and traceability: "It is clear who I am and what I do."
- I want to unite with farmers like me for collective benefit, including simplifying product marketing.
- I want social recognition — through the visibility of (European) standardization, such as signs or labels.

The comparative analysis of value-based goals identified in 2023 and 2025 is presented below in the form of a table.

Category	2023 JTBD	2025 JTBD	What Changed / Progressive Development
Functional Goals	• I want to have more income. • I want to save money and manage my work more efficiently. • I want stability and less dependence on external factors.	• I want to implement GeoGAP and other standards if product quality and safety are ensured. • I want to use traceability and certification to expand sales, including export. • I want access to modern equipment and innovative approaches (grants/cooperative investment) to increase productivity. • I want access to external markets and direct communication platforms with consumers. • I want to reduce production risks and ensure agricultural sustainability through climate/ecological risk management. • I want simple compliance – simple checklists, minimum record-keeping standards.	Farmers' goals moved from general aspirations (income, stability) to specific steps and tools — certification, technology, market access, climate risk response. An export-oriented vision and operational approaches have emerged.
Emotional Goals	• By introducing standards, I will feel safe and protected. • Working with animals is a fulfilling activity, and I want them to be in good conditions.	• I want to feel safe and calm in an unstable environment ("I don't lose, I move forward") despite political-economic turbulence. • I want to feel professional pride in producing high-quality, certified products — "I produce by the standard" — as a source of personal dignity (my livestock/bees are in better conditions). • I want to strengthen my self-confidence through "small wins" and the examples of fellow farmers.	Emotional values have become more diverse — the focus on safety remains, but professional self-esteem, overcoming fears, and personal growth have been added. The emotional dimension is linked not only to love for farming but also to the process of personal development.
Social Goals	• Preserving family traditions (social capital). • Employment and wellbeing of family members.	• Gaining public trust through certified production and traceability — "it is clear who I am and what I do." • Joining with fellow farmers for shared benefits, including simplifying sales. • Gaining public recognition through the visibility of (European) standardization — signs/labels.	Social goals have expanded beyond the family circle to the broader public and international arena — the focus is now on trust, collaboration, and global standards.

General Conclusion

The transformation from 2023 → 2025 is characterized by:

1. **Shifting from general aspirations to concrete steps (e.g., *income growth → certification, technologies, market access*).**
2. **Deepening of emotional values - professional pride, overcoming fears, motivation through small wins.**
3. **Expansion of social engagement - moving from the family framework to the broader public and international arena.**

Recommendations

Drawing on the results of this research, below are **behavioral science–based recommendations** that can make a substantial contribution to encouraging standardization processes and driving behavioral transformation among farmers. Each recommendation builds on behavioral mechanisms identified during the study and is rooted in specific insights revealed by the research.

Recommendation #1 – Farmer-to-Farmer (Peer-to-Peer): Farmer Ambassador Program

Use organized involvement of successful, opinion-leading farmers to achieve change.

As the research demonstrated, **the most effective way to overcome skepticism about standardization** among farmers is through the experience of those who have already engaged in implementing GeoGAP. Regardless of official presentations or expert talks, the real *"aha moments"* occurred when participants heard stories from farmers like themselves and saw a real person embodying success.

This finding clearly shows that **the effect of social proof** is a powerful driver of behavior change. Therefore, organizing visible demonstrations of success could be a strong initiative.

Identifying farmer-ambassadors is relatively straightforward since the Farmers' Association already maintains a database of individuals who have successfully implemented GeoGAP and built commercially profitable farms. Their experience is valuable in several directions:

- **Farm structure insights** — demonstrating that success requires organized, scalable farm structures, not just small-scale operations.
- **Real benefits of GeoGAP** — highlighting practical gains and outcomes.
- **Myth-busting** — showing that what looks complex in instructions or sounds abstract from experts has been concretely applied, for example in disease control methods.

Depending on resources, the program may include **in-person farm visits, organized meetings, video materials, and case studies of successful practices.** Beyond presentations, ambassadors could also engage in **mentorship** with farmers who are still in the decision-making phase (e.g., a "free trial" of GeoGAP implementation).

This approach would help farmers see **tangible, practical benefits** of standardization, reduce abstract skepticism, and create a social environment where the new behavior is perceived as **possible, desirable, and worthwhile** (rather than unattainable or too costly to invest time and money in).

Recommendation #2 – GeoGAP Free Trial Path

Overcoming Loss Aversion in the Standardization Process

The research made it clear that one of the main barriers to adopting new standards is loss aversion — both financial and emotional — which often prevents farmers from testing something new. The fact that several participants refused to even make a written promise to themselves ("I can't write it, I don't want to lie to myself") highlights that the lack of readiness for change is largely tied to perceived psychological risk.

In this context, it is advisable to introduce a "Free Trial Path" within the GeoGAP process. This would give small farmers the opportunity to engage in the standard's requirements in a non-committal, low-risk way and test its feasibility in practice.

Such a trial could be structured as a one-month (or even shorter, e.g., two-week) non-mandatory program, incorporating:

- Minimal requirements that are achievable within the timeframe.
- Simple, visual tools (e.g., checklists) to guide farmers.
- Accompanied mentorship from an experienced farmer.
- Step-by-step feedback loops to track progress.

This approach creates a psychologically safe environment, where change is not perceived as a risk, but rather as an experiment — a "try and see" opportunity.

Recommendation #3 – Reliable Sources of Information: "Trusted Voices"

Systematizing and Ensuring Access to Reliable Information

The research revealed that farmers are increasingly using the **internet, including YouTube**, to seek information. The main challenge is distinguishing **reliable from unreliable information**, since the internet is full of irrelevant and often misleading content, and farmers find it difficult to navigate this. A second major challenge is the **language barrier**: Georgian-language resources are limited, while Russian-language materials are often filled with spam or even disinformation.

Our recommendation is to build on this growing interest by creating a dedicated **space where reliable, verified information is easily accessible.** The best platform for this would be the **media resources already managed by the Farmers' Association** (website, Facebook group, and YouTube channel).

- **The YouTube channel should become the main tool**, promoted through the Association's Facebook page. A critical mechanism will be optimizing the channel for search engines (SEO) so that materials appear at the top of search results for relevant keywords.
- The channel should host not only videos produced by the Association but also **other Georgian content** (e.g., episodes from the public broadcaster's program *Farmer*) and selected foreign materials.

- To overcome language barriers, it is possible to use YouTube's recently launched **automatic Georgian dubbing technology (autodubbing).**

To ensure visibility, each time new videos are uploaded, it is advisable to send **short SMS notifications** to phone numbers in the Farmers' Association's database, boosting views and improving targeted dissemination.

In parallel, a **"Trusted Voices Directory"** should be developed, available in both print and digital form. This would include **recommended veterinarians, agronomists, communication channels, and contact links to peer farmers.**Such a structure will help strengthen trust in information and provide a solid foundation for farmers to make **knowledge-based decisions.**

Recommendation #4 – Workshop Cycle "Future Me"

Institutionalizing Behaviorally Informed Workshops

We recommend the routine implementation of workshops modeled on the methodology piloted by **BISC Partners**, as described in detail in this study. As the results showed, the combined method of **coaching and behavioral science** (the "Future Me" technique, problem mapping, and defining action steps) not only reduces skepticism toward standardization but also strengthens farmers' motivation and self-confidence.

Based on this experience, it is advisable for the Farmers' Association to introduce a **regular cycle of behavioral science–based workshops** across target regions.

This format simultaneously achieves multiple goals:

1. **Strengthens farmers' capacities and self-belief.**
2. **Supports recruitment of new members** to the Association by engaging them directly during the sessions.
3. **Expands the number of farmers interested in adopting GeoGAP** — participants can be enrolled on the spot into either a trial phase or the full certification program.
4. **Promotes awareness of the "Trusted Voices" platform.**
5. **Provides a systematic feedback mechanism**, ensuring continuous learning and adaptation.

Our strong advice is to **adhere strictly to the methodology** and not skip any of its components, since the integrity of the approach is what ensures its effectiveness.

Recommendation #5 – Information Campaigns "Farmer to Farmer" and "Consumer to Farmer"

What the research tells us – key considerations for designing an information campaign

The study once again clearly showed how influential another farmer's words, actions, attitudes, and successes are for farmers. Therefore, to encourage the desired behavior — **taking steps toward standardization** — the messenger for target farmers should again be **other farmers themselves**.

Based on the findings, below are examples of messages that can be voiced *by farmers, for farmers*:

- **"GeoGAP gives us access to markets."** – New opportunities for selling certified products.
- **"Produce with standards: Georgian and high-quality."** – Pride in meeting European standards with Georgian products.
- **"Producing by the standard is my pride."** – High-quality production is a symbol of professionalism and family strength.
- **"It's clear who I am and what I do."** – Certified production builds public trust.
- **"Small steps toward big victories."** – Success stories of farmers like me show that I can also achieve this.
- **"European standards, Georgian work."** – Your product has greater recognition when marked with European certification.
- **"Direct connection with the consumer."** – Don't you want this too? GeoGAP's platform lets more people discover your product and its origins.
- **"Safe and high-quality products are always in demand."** – GeoGAP gives you confidence that even in political or economic turbulence, your business is protected.

To overcome farmers' fears and hesitations regarding the adoption of GeoGAP, it is essential to clearly demonstrate the **benefits of this behavior**. As repeatedly confirmed by research, the primary perceived benefit for farmers is **sales and increased consumer demand**. Therefore, alongside "Farmer-to-Farmer" messages, it is equally important to employ **Consumer-to-Farmer messages**, where the target audience remains the farmers themselves.

Farmers are already aware of the growing consumer demand for safe and high-quality products. If this message is further reinforced by hearing it "from consumers themselves," it increases farmers' motivation and confidence that with standardization, demand for certified products will indeed rise.

Below are sample **Consumer-to-Farmer messages**, grounded in the study's findings:

- **"I know where it comes from."** – Certified products are traceable; you can be sure of their origin and quality.
- **"I feel protected, because ..."** – Milk and honey produced under GeoGAP certification are controlled, making them virtually safe for health.
- **"Less chemicals, more nature."** – Products grown under standards are healthier and protect my wellbeing.

- **“I’m at peace when I know what I eat.”** – Certified and traceable products make my everyday life calmer and safer.
- **“Georgian and high-quality.”** – I’m proud that Georgian products meet European standards.
- **“I choose the farmer who is responsible.”** – By buying certified products, I support an honest, conscientious farmer.
- **“I help Georgian villages.”** – Choosing certified products is direct support for the local economy and rural employment.
- **“I choose the European standard.”** – Every step toward certified production is, for me, a step toward Europe.

Visual communication formats can further amplify these messages:

- **Supermarket labels/shelf signs:** e.g., “It’s clear who I am and what I do – this product comes from a certified farmer.”
- **Posters and social media visuals** with family/children imagery: *“I feel calm when I know what I eat.”*
- **Short video or story in a farmer’s voice:** *“I produce with standards, you choose Georgian and high-quality.”*