



Food and Agriculture Organization  
of the United Nations

**Regional TCP  
on Empowering Smallholders  
and Family Farms  
(TCP/RER/3601)**

# **Smallholders and family farms in Georgia**



**Country study report**

**2019**



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# Abbreviations and acronyms

<b>ACDA</b>	Agricultural Cooperatives Development Agency
<b>ACH</b>	Accion Contra el Hambre
<b>ADB</b>	Asian Development Bank
<b>APMA</b>	Agricultural Projects Management Agency
<b>CIS</b>	Commonwealth of Independent States
<b>CNFA</b>	Cultivating New Frontiers in Agriculture
<b>CPF</b>	Country Programming Framework
<b>DCFTA</b>	Deep and Comprehensive Free Trade Agreement
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EIB</b>	European Investment Bank
<b>ENPARD</b>	European Neighbourhood Programme for Agriculture and Rural Development
<b>EPI</b>	Economic Prosperity Initiative project
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FDI</b>	Foreign Direct Investment
<b>Geostat</b>	National Statistics Office of Georgia
<b>GDP</b>	Gross Domestic Product
<b>GEL</b>	Georgian Lari
<b>GVA</b>	Gross Value Added
<b>LAG</b>	Local Action Group
<b>MCC</b>	Millennium Challenge Corporation
<b>NBG</b>	National Bank of Georgia
<b>NEO</b>	New Economic Opportunities project
<b>NGO</b>	Non-Governmental Organization
<b>NPC</b>	National Project Coordinator
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>REAP</b>	Restoring Efficiency to Agriculture Production project
<b>SAVE</b>	Support Added-Value Enterprises
<b>SDG</b>	Sustainable Development Goals
<b>SSF</b>	Single Strategic Framework
<b>SPS</b>	Sanitary and Phyto-sanitary Standards
<b>TLU</b>	Tropical Livestock Units
<b>UNDP</b>	United Nations Development Programme
<b>USAID</b>	The United States Agency for International Development
<b>USD</b>	United States Dollar
<b>VET</b>	Vocational Education and Training
<b>VGGT</b>	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security



# Executive summary





# Objectives of the country study report

The main objective of the FAO's Regional Technical Cooperation Programme on Empowerment of Smallholders and Family Farms is to create an inclusive knowledge platform on the needs, challenges and constraints for smallholders and family farms, as well as policies and their preconditions for targeting these needs. This country study is an important output of the project. The report aims to analyse the development trend and current state of smallholders and family farms in the country and to study the current political priorities and policies affecting smallholders and family farms. Ultimately, based on the conclusions made, the aim of the report is to provide recommendations, mainly at the policy level, on how to further support the development of commercial family farms and at the same time ensure, in general, inclusive growth, improved rural livelihoods, and reduction of rural poverty. The aims of the study can be addressed by the following four main research questions:

**Research question #1:** What are the trends and the current role and weight of smallholders and family farms in economic, social and environmental development in the covered countries?

**Research question #2:** What are the main needs, constraints and challenges for the realization of the economic, social and environmental development potential of smallholders and family farms?

**Research question #3:** Which current administrative procedures, institutional settings and policy interventions are implemented to support and/or prevent the development of smallholders and family farms?

**Research question #4:** Which future administrative procedures, institutional settings and policy interventions can be developed and recommended to strengthen the role of smallholders and family farms in economic, social and environmental development and in the process of transformational change?

## Methodology

The project was implemented in several phases. First, a national inception workshop was organized in April 2017 with representatives of farmers, the business sector, academia, the Government, non-governmental organizations and the international community. Needs, constraints and challenges for smallholders and family farms were discussed at length; this helped set the priorities and directions for research. Extensive desk research followed to collect the necessary statistical data from Geostat and other sources, including reports produced by international projects. Twenty-one interviews were conducted in Tbilisi and the regions to fill the existing gaps in data and learn about the positions of the respondents on various topics concerning smallholders and family farms. The field research also included a trip to Kazbegi municipality to closely understand the issues facing smallholders and family farms in a high mountainous municipality at the Russian Federation border. In addition, the study

includes six case studies to demonstrate the results of development or specific interventions in various subsectors.

## Conclusions

The report elaborates the development trend and current state of smallholders and family farms in Georgia. This includes analysing the weight and role of smallholders and family farms and documenting various aspects that are important for them, such as agricultural land market and secure property rights, value chain organization, access to finance, access to services, education, environmental and climate change considerations and other aspects of rural economy.

The 2014 Agricultural Census shows that almost 99 percent of the agricultural holdings with agricultural land own less than 5 ha in Georgia. The average size of male-headed family farms is 1.3 ha, and the average size of female-headed family farms is 0.77 ha. Key agricultural subsectors, such as hazelnuts and grape, are mostly produced by family farms. By 2016, 43 percent of the country's labour force was employed in the agricultural sector, with most of them (97 percent) being self-employed. Regarding the structure of family farms, around 70 percent of farm managers are men, and 60 percent of women who are self-employed work as unpaid family workers. Finally, the agricultural sector contributed to 9 percent of the country's economy in 2016 but to 15 percent of greenhouse emissions. These numbers show how important is the role of stallholders and family farms, and they also highlight that it is not only an economic issue but also a social one. Hence, policies should take this factor into account.

Policy-wise, Georgia's agricultural sector saw important shifts in recent years that are supposed to help smallholders and family farms. The Strategy of Agricultural Development in Georgia 2015–2020 and the Rural Development Strategy 2017–2020 were adopted in the past three years. This gives Georgian agriculture more predictability and less volatility, which always had been a major issue in Georgia as priorities of the policymakers often changed. However, recent amendments to the Constitution of Georgia concern an essential issue for Georgian agriculture and lead to a different reality than there had been even a few months earlier. The new constitution has been adopted by the parliament, and enforcement began after the presidential elections in October 2018. Section 4 of Article 19 bans the selling of agricultural land to foreign citizens. Some representatives of investor groups have raised concerns that such restrictions might have direct impacts on a number of issues for Georgia's smallholders and family farms.

This study also shows that smallholders and family farms face a constantly changing, complex set of needs, constraints and challenges for the realization of their economic, social and environmental development potential. In terms of needs, agricultural information, mechanization and involvement in agenda-setting are highlighted in the report. Challenges include the Deep and Comprehensive Free Trade Agreement (DCFTA) and the new rules for actors in agricultural sector, agricultural insurance, agricultural information, access to reliable agricultural statistics, access to finances, and pests and diseases. Constraints include land fragmentation, a weak agricultural land market, cash-flow



issues, geographic constraints and gender-related constraints. All these challenges, and particularly access to and enjoyment of land ownership, are worse for women, considering existing gender-based inequalities. People living in remote areas, persons with disabilities, internally displaced persons and ethno-linguistic minorities are also in a more vulnerable position.

## Recommendations

The report provides 17 recommendations, which are divided into three broad categories. The first set of recommendations addresses structural and institutional gaps in the agricultural sector. These issues are the foundation for the further development of the sector. Perhaps the most important from these is clarifying the status of agricultural land, which is comprised of three parts: completing the land registration process, clarifying the conditions of the ban on land sale to foreign citizens, and improving women's land title rights, as currently women are clearly in a disadvantaged situation in rural Georgia. Other recommendations include promoting and expanding the agricultural insurance system; accelerating the introduction of extension services; improving agricultural statistics, especially on the municipal level; accelerating the development of the farm registry; and integrating new technologies in agriculture.

The second set of recommendations aims to empower smallholders and family farms so that they are better able to navigate the changing social, economic, political and environmental conditions. A specific recommendation is to provide special attention to socially vulnerable groups, such as women, persons with disabilities and ethnic minorities, and to expand social assistance coverage to the settlements that are not currently sufficiently covered, such as settlements with internally displaced persons (IDPs). Other recommendations include diversifying the skill-sets of farmers, including trainings on managerial skills and basic analytic tools so that they can make informed decision on what cultures to plant and how to manage an agricultural business. The report also recommends that vocational education and training (VET) centres provide more tailored programs suitable for smallholders, based on their time availability and needs. As the DCFTA regulations and directive are taking shape in Georgia, it is also important to provide to the farmers all necessary knowledge. Activities related to climate change are also necessary to ensure long-term sustainability and resilience of smallholders and family farms. Finally, it is important to involve the local farmers in designing and implementing activities in their region. FAO's community development pilot projects, supported by the Austrian Development Agency (ADA), and community development pilot projects supported by the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD) are already providing good examples in several municipalities.

The third set of recommendations is about economic promotion initiatives that would provide economic opportunities for smallholders and family farms. Investment facilitation is one of the key recommendations. The report recommends introducing service and marketing cooperatives, which can be built on the already existing successful producers' cooperatives program. With the right knowledge and direction, service and marketing cooperatives would be an effective tool to link agricultural supply and demand. Smallholders and family farms also need support in accessing

international and domestic markets. There are specific activities that can be implemented in this regard, which the report elaborates in the recommendations. Two other economic promotion interventions that the report recommends are developing agritourism and supporting more formal employment in the agricultural sector. Both of these initiatives would increase cash flow and allow smallholders to reinvest in agricultural activities.

# მოკლე შინაარსი





# ქვეყანაში არსებული ვითარების კვლევის მიზნები

მცირე და საოჯახო მეურნეობების განვითარებაზე ორიენტირებული FAO-ს რეგიონული ტექნიკური თანამშრომლობის პროექტის ძირითადი მიზანია შეიქმნას ინკლუზიური ცოდნის პლატფორმა, მცირე და საოჯახო მეურნეობების საჭიროებების, მათ წინაშე არსებული გამოწვევების და შეზღუდვების, ასევე პოლიტიკის ფორმირებისა და ამისათვის საჭირო წინაპირობების შესახებ, რაც საბოლოოდ აღნიშნული საჭიროებების დაკმაყოფილებისაკენ არის მიმართული. ანგარიში ასახავს მცირე და საოჯახო მეურნეობების განვითარების ტენდენციას ქვეყანაში და მიმდინარე პოლიტიკისა და პოლიტიკურ პრიორიტეტებს რომლებიც გავლენას ახდენენ მცირე და საოჯახო მეურნეობებზე. ანგარიშის მიზანია, საბოლოოდ დასკვნებზე დაყრდნობით წარმოადგინოს რეკომენდაციები ძირითადად პოლიტიკის დონეზე, იმის შესახებ თუ როგორ უნდა გაგრძელდეს კომერციული ფერმერული მეურნეობების მხარდაჭერა მომავალში და იმავდროულად უზრუნველყოფილი იქნას, ზოგადად, ინკლუზიური ზრდა, საარსებო წყაროების გაუმჯობესება და სოფლად სიღარიბის შემცირება. კვლევის მიზნების მიღწევა შესაძლებელია ოთხი მთავარი კითხვის მეშვეობით:

კვლევის კითხვა #1: როგორია მიმდინარე ტენდენციები და მცირე და საოჯახო მეურნეობების როლი და მნიშვნელობა მოცული ქვეყნების ეკონომიკურ, სოციალურ და გარემოს დაცვის განვითარებაში?

კვლევის კითხვა #2: რა ძირითადი საჭიროებები, შეზღუდვები და გამოწვევები დგას მცირე და საოჯახო მეურნეობების ეკონომიკური, სოციალური და გარემოსდაცვითი პოტენციალის რეალიზების წინაშე?

კვლევის კითხვა #3: რომელი მიმდინარე ადმინისტრაციული პროცედურები, ინსტიტუციური პარამეტრები და პოლიტიკური ინტერვენციები უწყობს/უშლის ხელს მცირე და საოჯახო მეურნეობების განვითარებას?

კვლევის კითხვა #4: რომელი სამომავლო ადმინისტრაციული პროცედურები, ინსტიტუციური პარამეტრები და პოლიტიკური ინტერვენციები შეიძლება შემუშავდეს და რეკომენდებულია მცირე და საოჯახო მეურნეობების როლის გაძლიერებისათვის ეკონომიკურ, სოციალურ და გარემოს დაცვის განვითარებაში, ტრანსფორმაციული ცვლილების პროცესში?

## მეთოდოლოგია

პროექტი რამდენიმე ფაზად განხორციელდა. პირველი, საწყისი სამუშაო შეხვედრა გაიმართა 2017 წლის აპრილში. მას ესწრებოდნენ ფერმერები, ბიზნესის, სამეცნიერო წრეების, მთავრობის, არასამთავრობო ორგანიზაციების და საერთაშორისო საზოგადოების წარმომადგენლები. მოხდა მცირე და საოჯახო მეურნეობების საჭიროებების, მათ წინაშე არსებული შეზღუდვების და გამოწვევების დეტალურად განხილვა, რამაც ხელი შეუწყო კვლევის პრიორიტეტებისა და მიმართულებების განსაზღვრას. ჩატარდა მნიშვნელოვანი სამაგიდო სამუშაოები სტატისტიკური მონაცემების შესაგროვებლად, საქსტატისა და სხვა წყაროებისაგან, მათ შორის საერთაშორისო პროექტების მიერ მომზადებული ანგარიშებიდან. ჩატარდა 21 ინტერვიუ თბილისსა და რეგიონებში, მონაცემებში არსებული ხარვეზების შევსების და მცირე და საოჯახო მეურნეობებთან დაკავშირებით რესპონდენტების პოზიციის გარკვევის მიზნით. საველე კვლევა ასევე მოიცავდა ვიზიტს ყაზბეგის მუნიციპალიტეტში, რუსეთის ფედერაციის საზღვრის მიმდებარე მაღალმთიან მუნიციპალიტეტში მცირე და საოჯახო მეურნეობების მდგომარეობის უკეთ გაცნობის მიზნით. ამასთან, კვლევის ფარგლებში ჩატარდა ექვსი ქეისის განხილვა, სხვადასხვა ქვესექტორებში განვითარების ან კონკრეტული ინტერვენციის შედეგების დემონსტრირების მიზნით.

## დასკვნები

ანგარიშში წარმოდგენილია მცირე და საოჯახო მეურნეობების განვითარების ტენდენციები და არსებული მდგომარეობა საქართველოში. ეს მოიცავს მცირე და საოჯახო მეურნეობების მნიშვნელობისა და როლის ანალიზს, და მათთვის მნიშვნელოვანი სხვადასხვა საკითხის შესწავლას, როგორცაა, მაგალითად, სასოფლო სამეურნეო მიწის ბაზარი და საკუთრების უფლების უზრუნველყოფა, ღირებულებათა ჯაჭვის ორგანიზება, ფინანსებზე ხელმისაწვდომობა, მომსახურებებზე ხელმისაწვდომობა, განათლება, გარემოს დაცვისა და კლიმატის ცვლილების საკითხების გათვალისწინება და სოფლის ეკონომიკის სხვა საკითხები.

2014 წლის სასოფლო სამეურნეო აღწერამ აჩვენა, რომ საქართველოში სასოფლო სამეურნეო მეურნეობების თითქმის 99 პროცენტს 5 ჰექტარზე ნაკლები მიწა გააჩნია. 1.3 ჰექტარია იმ მეურნეობების საშუალო ზომა, სადაც ოჯახის უფროსი მამაკაცია, ხოლო ქალი ოჯახის უფროსის შემთხვევაში მეურნეობების საშუალო ზომა 0.77 ჰექტარია. ძირითად სასოფლო სამეურნეო ქვესექტორებს, როგორცაა თხილი და ყურძენი, მეტწილად საოჯახო მეურნეობები აწარმოებენ. 2016 წლისთვის, ქვეყნის სამუშაო ძალის 43 პროცენტი სოფლის მეურნეობის სექტორში იყო დასაქმებული და მათი უმრავლესობა (97 პროცენტი) თვით- დასაქმებული იყო. რაც შეეხება მეურნეობების სტრუქტურას, მმართველების დაახლოებით 70 პროცენტი მამაკაცები არიან, ხოლო ქალების 60 პროცენტი, რომლებიც თვითდასაქმებულები არიან, ეწევიან აუნაზღაურებელ შრომას როგორც ოჯახში

მომუშავეები. და ბოლოს, სოფლის მეურნეობის წვლილი ქვეყნის ეკონომიკაში 2016 წელს 9 პროცენტს შეადგენდა, მაგრამ სათბურის გაზების ემისიის 15 პროცენტს. ეს რიცხვები აჩვენებენ, რამდენად მნიშვნელოვანია მცირე და საოჯახო მეურნეობების როლი, და ასევე ხაზს უსვამენ, რომ ეს მარტო ეკონომიკური კი არა, სოციალური საკითხიცაა. ამდენად, ეს ფაქტორები პოლიტიკის ფორმირებისას გათვალისწინებული უნდა იქნას.

პოლიტიკის დაგეგმვის კუთხით, ბოლო წლებში საქართველოს სოფლის მეურნეობის სექტორში მნიშვნელოვანი ცვლილებები განხორციელდა, რამაც ხელი შეუწყო მცირე და საოჯახო მეურნეობების განვითარებას. გასული სამი წლის განმავლობაში მიღებულია 2015 – 2020 წლების საქართველოს სოფლის მეურნეობის განვითარების სტრატეგია და 2017 – 2020 წლების სოფლის განვითარების სტრატეგია. ეს დოკუმენტების უფრო მეტად პროგნოზირებადსა და ნაკლებად არასტაბილურს ხდის საქართველოს სოფლის მეურნეობას, რაც ყოველთვის მნიშვნელოვანი საკითხი იყო საქართველოში, რაკი პოლიტიკის მესვეურთა პრიორიტეტები ხშირად იცვლებოდა. თუმცა, საქართველოს კონსტიტუციაში ბოლო დროს შესული ცვლილებები ეხება სოფლის მეურნეობის მნიშვნელოვან საკითხს და რამდენიმე თვის წინანდელი ვითარებისაგან განსხვავებული რეალობისკენ მივყავართ. პარლამენტმა მიიღო ახალი კონსტიტუცია და ის ძალაში შევიდა 2018 წლის ოქტომბრის საპრეზიდენტო არჩევნების შემდეგ. 19-ე მუხლის 4-ე პუნქტი კრძალავს სასოფლო სამეურნეო დანიშნულების მიწების მიყიდვას უცხოელი მოქალაქეებისთვის. ინვესტორთა ჯგუფების ზოგიერთმა წარმომადგენელმა გამოთქვა შეშფოთება, რომ ამგვარმა შეზღუდვებმა შესაძლოა პირდაპირი გავლენა მოახდინოს საქართველოს მცირე და საოჯახო მეურნეობებისათვის მნიშვნელოვან საკითხებზე.

წინამდებარე კვლევა აჩვენებს, რომ მცირე და საოჯახო მეურნეობები, მათი ეკონომიკური, სოციალური და გარემოს დაცვის განვითარების პოტენციალის რეალიზაციისას აწყდებიან საჭიროებების, შეზღუდვებისა და გამოწვევების მუდმივად ცვალებად სტრუქტურას. საჭიროებებთან დაკავშირებით ანგარიშში ხაზგასმულია ინფორმაცია სოფლის მეურნეობის შესახებ, მექანიზაცია და დღის წესრიგის განსაზღვრაში მონაწილეობა. გამოწვევები მოიცავს ღრმა და ყოვლისმომცველ სავაჭრო ხელშეკრულებას (DCFTA) და ახალ წესებს სოფლის მეურნეობაში ჩართული პირებისათვის. შეზღუდვები ეხება მიწის ფრაგმენტაციას, სუსტ სასოფლო სამეურნეო ბაზარს, ფულადი ნაკადების მოძრაობას, ასევე გეოგრაფიულ და გენდერულ საკითხებს. ყველა ეს გამოწვევა და განსაკუთრებით საკუთრების უფლების ხელმისაწვდომობა და მისი სარგებლობა, უფრო მძიმედ არის გამოხატული ქალების შემთხვევაში, არსებული გენდერული უთანასწორობის გათვალისწინებით. ცენტრიდან მოშორებულ ადგილებში მცხოვრები ადამიანები, შშმ პირები, დევნილები და ეთნო-ლინგვისტური უმცირესობები ასევე უფრო მოწყვლად მდგომარეობაში არიან.

## რეკომენდაციები

ანგარიშში წარმოდგენილია 17 რეკომენდაცია, რომლებიც დაჯგუფებულია სამ მსხვილ კატეგორიაში. რეკომენდაციების პირველი ჯგუფი ეხება სოფლის მეურნეობის სექტორის

სტრუქტურულ და ინსტიტუციურ ხარვეზებს. ეს საკითხები სექტორის სამომ ვლო განვითარების საფუძველს წარმოადგენს. ალბათ, მათ შორის ყველაზე მნიშვნელოვანი არის სასოფლო სამეურნეო მიწის სტატუსის დაზუსტების საკითხი, რომელიც, თავის მხრივ, სამი ნაწილისგან შედგება: მიწის რეგისტრაციის პროცესის დასრულება, უცხოეთის მოქალაქეებისთვის მიწის მიყიდვის აკრძალვის პირობების დაზუსტება და მიწაზე ქალთა საკუთრების უფლებების მდგომარეობის გაუმჯობესება, რადგან საქართველოში ამ ეტაპზე ქალები სოფლად ნამდვილად არასახარბილო მდგომარეობაში არიან. სხვა რეკომენდაციები ეხება სასოფლო სამეურნეო სადაზღვევო სისტემის განვითარებას და გაფართოვებას; ექსტენციის მომსახურებების შემოღების დაჩქარებას; სოფლის მეურნეობის სტატისტიკის გაუმჯობესებას, განსაკუთრებით მუნიციპალურ დონეზე; ფერმერული მეურნეობების რეესტრის შემუშავების დაჩქარებას; და სოფლის მეურნეობაში ახალი ტექნოლოგიების ინტეგრირებას.

რეკომენდაციების მეორე ჯგუფი მიზნად ისახავს მცირე ფერმერების და ფერმერული მეურნეობების გაძლიერებას, რათა მათ შეძლონ უკეთ ორიენტაცია სოციალური, ეკონომიკური, პოლიტიკური და ბუნებრივი გარემოს ცვლილებების პირობებში. კონკრეტული რეკომენდაცია ითვალისწინებს განსაკუთრებულ ყურადღებას სოციალურად დაუცველი ადამიანების მიმართ, როგორცაა: ქალები, შეზღუდული შესაძლებლობების მქონე პირები და ეთნიკური უმცირესობები, და სოციალური დახმარების გაფართოვებას ისეთ დასახლებებზე რომლებიც ამ ეტაპზე სათანადოდ არ არიან მოცულნი, როგორცაა, მაგალითად, დევნილთა დასახლებები. სხვა რეკომენდაციები ეხება ფერმერების უნარების დივერსიფიკაციას, მათ შორის ტრენინგებს მართვის უნარებსა და საბაზისო ანალიტიკურ მექანიზმებში, რათა მათ შეძლონ ინფორმირებული გადაწყვეტილებების მიღება კულტურების დარგვასა და სასოფლო სამეურნეო ბიზნესის მართვასთან დაკავშირებით. ანგარიშში ასევე წარმოდგენილია რეკომენდაცია, რომ პროფესიული განათლების და ტრენინგის ცენტრებმა უზრუნველყონ მცირე ფერმერებისთვის მორგებული პროგრამები, მათ დროისა და საჭიროებების შესაბამისად. რაკი ღრმა და ყოვლისმომცველი სავაჭრო ხელშეკრულების რეგულაციები და დირექტივები საქართველოში ვრცელდება, მნიშვნელოვანია ფერმერებმა მიიღონ შესაბამისი ცოდნა. კლიმატის ცვლილებებთან დაკავშირებული აქტივობები ასევე საჭიროა მცირე და საოჯახო მეურნეობების გრძელვადიანი მდგრადობის და მედეგობის უზრუნველსაყოფად. და ბოლოს, მნიშვნელოვანია ადგილობრივი ფერმერების ჩართვა მათ რეგიონში სხვადასხვა ღონისძიებების დაგეგმვის და განხორციელების პროცესში. FAO-ს მიერ ავსტრიის განვითარების სააგენტოსა (ADA) და სოფლის და სოფლის მეურნეობის განვითარების ევროპის სამეზობლო პროგრამის (ENPARD) მხარდაჭერით განხორციელებული სათემო განვითარების პილოტური პროექტები უკვე წარმოადგენენ კარგ მაგალითებს სხვადასხვა მუნიციპალიტეტებში.

რეკომენდაციების მესამე ჯგუფი ეხება იმ ინიციატივების მხარდაჭერას, რომლებიც ეკონომიკურ შესაძლებლობებს შექმნიან მცირე და საოჯახო მეურნეობებისთვის. ინვესტიციების ხელშეწყობა ერთ-ერთი ძირითადი რეკომენდაციაა. ანგარიშში რეკომენდებულია მომსახურების და მარკეტინგის კოოპერატივების შემოღება, რომლებიც შესაძლოა დაეშენოს უკვე არსებულ მწარმოებელთა კოოპერატივების პროგრამას. სწორი მიმართულებისა და სათანადო ცოდნის შემთხვევაში, მომსახურების და მარკეტინგის კოოპერატივები ეფექტური მექანიზმი იქნება სასოფლო სამეურნეო მოთხოვნისა და მიწოდების დასაკავშირებლად. მცირე და საოჯახო მეურნეობები ასევე საჭიროებენ მხარდაჭერას საერთაშორისო და ადგილობრივი ბაზრების შეფასებაში. არსებობს კონკრეტული აქტივობები რომლებიც ამ მიმართულებით შეიძლება განხორციელდეს, რაც



მითითებულია ანგარიშის რეკომენდაციების ნაწილში. ანგარიშში ასევე რეკომენდებულია ორი სხვა ეკონომიკური ხელშეწყობის ინტერვენცია: აგრო-ტურიზმის განვითარება და სოფლის მეურნეობის სექტორში უფრო ფორმალური დასაქმების ხელშეწყობა. ორივე ინიციატივა გაზრდის ფულად ნაკადებს და მცირე ფერმერებს სოფლის მეურნეობის სექტორში ხელახალი ინვესტიციების განხორციელების საშუალებას მისცემს.



# 1. Introduction to smallholders and family farms and their role in Europe and Central Asia





## 1.1 Background for the Regional Initiative supporting smallholders and family farms, along with the rationale for the project and the four central research questions

Europe and Central Asia is largely a region of smallholders and family farms. FAO has in the region 18 programme countries, of which the large majority have farms structures dominated by smallholders and family farms. These countries have either farm structures fully dominated by smallholders or dualistic farm structures with a large number of small farms and a small number of large corporate farms. In most of the countries, but not all, the current farm structures are the outcome of land reforms implemented from the beginning of the transition from planned economy towards market economy that began after 1990. Smallholders and family farms in the FAO programme countries are usually at the same time suffering from a wide range of needs and constraints. These smallholders and family farms are often not economically viable, and people living in rural areas remain the most poor and vulnerable part of the population. Despite this, they potentially represent a key resource to achieving sustainable economic, social and environmental development. Smallholders and family farms can achieve higher levels of income, production and productivity through sustainable utilization of resources and intensification of production, better organization, adequate public services and better integration into the agrifood value chains. Getting family farming right in this respect is a key component to enhancing food security, ensuring equitable and decent livelihoods for all rural women and men, achieving sustainable rural development and diversification in rural areas, and reducing rural poverty.

Supporting smallholders and family farms is one of the four priorities for FAO in Europe and Central Asia, confirmed by the FAO Regional Conference in 2016. FAO launched in the region from 2014 the Regional Initiative on Empowering Smallholders and Family Farms for Improved Rural Livelihood and Poverty Reduction. The Regional Initiative builds on the legacy of the International Year of Family Farming in 2014. In addition, the United Nations General Assembly, in December 2017, officially declared 2019–2028 the Decade of Family Farming, and thus the Regional Initiative will continue to provide the framework for FAO support to family farms in Europe and Central Asia.

The FAO REU Regional Initiative has two main components:

1. *support policy development and innovative practices for increased sustainable agricultural production;*  
*and*
2. *support the improvement of rural livelihoods and enhanced access to natural resources.*

Through the first component, support is provided to the development of competitive and commercial smallholders and family farms. There is a need to increase the capacities of women and men farmers in terms of sustainable agricultural production using pilot projects, farmer field schools and strengthened extension services. In this context, FAO supports policy development and practices in line with the

Sustainable Food and Agriculture principle (FAO, 2014a), such as efficient use and management of natural resources as well as adaptation and resilience to climate change. More specifically, FAO intends to focus on the promotion of good agricultural practices in the region, such as integrated pest management, organic agricultural techniques, conservation of plant genetic resources and proactive drought risk management. In addition, work will be done on modern irrigation systems, sustainable forest management and fish production, including fish seed improvement, and will focus on supporting smallholders.

Another main challenge of the Regional Initiative is to ensure inclusive growth through improved rural livelihoods. This is supported through the second component of the Initiative. There is a need, both at policy and community level, to ensure that disadvantaged and vulnerable groups also benefit from economic growth and to accelerate gender equality and rural women's economic empowerment. In this context, FAO supports, under the programmatic approach of the Regional Initiative, multi-sectoral rural development policies, integrated community development, improved access to value chains, and the implementation of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) (FAO, 2012), including addressing structural problems with land fragmentation and small farm sizes through land consolidation instruments, statistics, decent rural employment and social protection.

As part of the preparation of the work plan for the Regional Initiative for 2018/19, the Initiative has been re-focused to ensure strong and increased contribution to the implementation of the 2030 Agenda and to achieving the Sustainable Development Goals (SDGs). The Regional Initiative will contribute to SDG 2 on "zero hunger," in particular SDG target 2.3 on doubling the agricultural productivity and income of small-scale food producers. Furthermore, the RI contributes to SDG 1 on ending poverty (target 1.4 on ensuring equal rights to land and other natural resources and target SDG 1.b on pro-poor and gender-sensitive development strategies), to SDG 4 on ensuring inclusive and equitable quality education (especially target 4.3), to SDG 5 on promoting gender equality (target 5.A to undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, and target 5.B to enhance the use of enabling technology to promote the empowerment of women). The RI also contributes to SDG 8 on the promotion of sustainable and inclusive economic growth (target 8.2 on achieving higher levels of economic productivity through diversification and target 8.3 to promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation and that encourage the formalization and growth of micro-, small- and medium-sized enterprises) and also to SDG 10 on reducing inequality within and among countries (target 10.2 to empower and promote the social, economic and political inclusion of all and target 10.4 to adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality).

## 1.2 Background and objectives of the present country study

The background for conducting country studies on the challenges, needs and constraints of smallholders and family farms in the seven countries has been a wish to further strengthen the Regional Initiative and develop the Initiative towards a stronger programmatic approach at both regional and country levels. In order to provide support to smallholders and family farms, there has been a need to develop a better understanding and knowledge platform of the main challenges, needs and constraints of smallholders and family farms in the specific country context. Even though many of the challenges are the same throughout the region, there are still significant variations among the countries, which it is important to be aware of and understand when designing support to smallholders and family farms in the specific country.

FAO has during 2017–18 conducted country studies on the needs and constraints of smallholders and family farms in seven countries of the region as part of a regional project (TCP/RER/3601). The countries included are the countries that have been the focus countries of the Regional Initiative during 2014–17: Albania, Armenia, Georgia, Kyrgyzstan, Republic of Moldova, North Macedonia and Tajikistan.

It has been the objective of the country studies first to analyse the development trend and current state of smallholders and family farms in the specific country, second to study the current political priorities and policies affecting smallholders and family farms and finally, based on the conclusions made, to provide recommendations, mainly at the policy level, on how to further support the development of commercial family farms and at the same time ensure, in general, inclusive growth, improved rural livelihoods for women and men and the reduction of rural poverty. It is hoped that this country study will not only be relevant for FAO but also for the Government of Georgia, donors and other international organizations when formulating policy and preparing programmes. Furthermore, it is the intention that the recommendations from the study will feed directly into the formulation of the Country Programming Framework (CPF), which is the multi-annual cooperation agreement between FAO and the country.

Furthermore, the seven country studies contribute to raising awareness on the needs and constraints of smallholders and family farms and promote the support to smallholders and family farms provided by FAO under the programmatic umbrella of the Regional Initiative among both government institutions, civil society organizations and other stakeholders at country level, as well as among donors and international organizations. In this way, it is the hope that the studies will lead to establishment of enhanced partnerships and the mobilization of resources to further scale up support to smallholders and family farms.

It is, as mentioned, a global observation that smallholders and family farms face needs, constraints and challenges, limiting their development and reducing their potential, and that current policies only to a limited extent provide an appropriate support to their development.

Based on this global observation, it is the objective of the country studies to verify the observations through answers to the following research questions:

1. *What are the trends in and the current role and weight of smallholders and family farms in economic, social and environmental development in the covered countries?*
2. *What are the main needs, constraints and challenges for the realization of the economic, social and environmental development potential of smallholders and family farms?*
3. *Which current administrative procedures, institutional settings and policy interventions are implemented that support or prevent the development of smallholders and family farms?*
4. *Which future administrative procedures, institutional settings and policy interventions can be developed and recommended to strengthen the role of smallholders and family farms in economic, social and environmental development and in the transformational change process?*

The research questions are answered following a common overall methodology presented in the section below.



## 2. Methodology and approach





## 2.1 The overall methodological principles of the Regional TCP on smallholders and family farms

The methodology summarized in Section 2.1 is common for all seven country studies, while the approach specific to Georgia is presented in Section 2.2.

The research methodology combines the use of desk research, interviews with key stakeholders and the use of case studies.

### **DESK RESEARCH:**

The desk research covers an assessment of available policy documents, research papers, reports, studies and others from public authorities, academia and international donors and organizations. Furthermore, the desk research covers official statistics from public sources supplemented with poverty and living conditions surveys and data/statistics from academia, donor organizations and other contributors. The desk research contributes to answering all main research questions.

### **INTERVIEWS:**

Interviews were accomplished with the aim of contributing data and information to answer the four research questions. They contribute by filling in data gaps identified during the desk research. Interviews were conducted with selected resource persons representing key stakeholders.

The interviews target different stakeholders and were streamlined to the individual interviewee or groups of interviewees, depending on the findings from the desk research phase.

An interview template was prepared and used by the national experts/consultants when interviewing national stakeholders and resource persons. The template includes the themes covered by the project.

Two rounds of interviews were accomplished. First, the national expert/consultant completed the primary round of interviews of national stakeholders and resource persons. The interview template was targeted to the expertise of the person being interviewed. Second, the national expert/consultant made additional interviews during the final stage of writing the report to address the gaps that emerged during the analysis of the primary and secondary data.

The interviews were individual or group interviews, depending on the topic and the situation. The national expert/consultant planned, carried out and reported the interviews.

## **CASE STUDIES:**

Case studies are used to illustrate or demonstrate various topics. One example is case studies of policy interventions to demonstrate the results and impacts of these interventions, such as an investment support scheme or a training of farmers accomplished by advisory services. Based on the documentation and information gathered from these interventions, recommendations are formulated for existing or new policies. These good policy examples are useful not only for the country in question but also for other countries facing similar challenges.

The case studies also include studies of needs, challenges and constraints identified through stakeholder interviews and where the case studies exemplify or illustrate the topics. The case studies are prepared at family/village/municipality level, depending on the selected topic and in order to ensure diversity.

Furthermore, case studies also include examples of administrative procedures and/or institutional settings that prevent or support the development of smallholders and family farms. These cases are also identified through stakeholder interviews.

## **WORKSHOPS:**

Two workshops were organized in each country.

One introductory workshop, accomplished right at the beginning of the working process, had the objective to clarify and define:

- a) the definition of smallholders and family farms;
- b) the current situation and the state of play of smallholders and family farms;
- c) the problem analysis regarding needs, constraints and challenges for smallholders and family farms;
- d) the policy analysis, identifying and targeting administrative procedures, institutional settings and policy solutions to the identified needs, constraints and challenges; and
- e) the comparative advantage of FAO vis-à-vis the donor community in providing solutions to the identified needs, constraints and challenges.

The second workshop was a validation workshop in which the preliminary findings, conclusions and recommendations were presented to the stakeholders who participated in the first country workshop and to new stakeholders identified through the working process. The objective was to validate the analysis and to establish a common understanding about the conclusions and recommendations. The workshop took place at the end of the process but before finalization of the study, so that requests for adjustments from the workshop could be taken aboard.

A synthesis report is prepared based on the seven country reports, and a regional validation workshop was organized in Budapest in March 2018 for the discussion and validation of the synthesis report and with the objective to further enhance the support to smallholders and family farms in Europe and Central Asia through the Regional Initiative.

## 2.2 Approach: description of the specific approach taken in Georgia

As outlined in the project implementation guidelines, the initial phase of this country study started with the inception workshop on 26 April 2017, which was attended by 33 participants (half of whom were men and half women), including farmers and representatives of farmer associations, government agencies, agricultural cooperatives, educational and research institutions, various international projects, and FAO. The participants were told of the details of the project and asked to elaborate constraints, challenges and policies that are relevant for smallholders and family farms in Georgia. The summary of the notes served as the initial basis for the national consultant to detect interviewed stakeholders and identify case studies.

The second stage of the research focused on desk research. Important data came from Geostat, particularly its Agricultural Census 2014, as well as other specific reports. The data was complemented by a number of reports produced by FAO, the United Nations Development Programme (UNDP), Oxfam, the United States Agency for International Development (USAID), and other organizations. These reports usually covered various aspects of agriculture but are not necessarily always focused on smallholders and family farms. The comparison and triangulation of data were used to ensure a comprehensive analysis.

The next stage included interviews to address the gaps revealed during the desk research and to learn about the specific positions of the respondents on the key research questions of the report. In total, 40 interviews were conducted in Tbilisi and the border region of Kazbegi. Interviewees included farmers and representatives of the Government, associations and the business sector; 20 were women and 20 men. Most of the respondents were also inception workshop participants. During the field work, the national expert went to Kazbegi municipality for several reasons. First, it is a high mountainous area, and it was important to see how this factor affects smallholders and family farms. Second, Kazbegi borders the Russian Federation, and it was important to see how this affects the needs, challenges and constraints of the local population. Third, in Kazbegi the national consultant also could closely explore the work of the local action group (LAG) and talk to some of the local farmers and project implementers. This served as one of the case studies in the report.

The report provides seven case studies to illustrate particular development or interventions that have taken place and resulted in significant change. The topics were selected to cover a wide range of issues. The wine and hazelnut subsectors were selected because they represent the two largest agricultural export goods for Georgia. The milk sector was selected to demonstrate important changes in the value chain structure. Beekeeping was selected to demonstrate how the new Agricultural Cooperatives Development Agency (ACDA) is adapting to the changing market needs and providing support to smallholders and family farms. A maize farm operated by South African investors was selected to demonstrate that such initiatives can allow local farmers to have access to new technologies and services. The *traktor.ge* (now rebranded as *kalo.ge*) platform was selected to demonstrate technological solutions for small farmers. Finally, the Kazbegi Local Action Group was selected to show how piloting participatory approaches operates in Georgia.



# 3. Development trend and current state of smallholders and family farms in Georgia







## 3.1 Definitional issues

There is no official definition of a farmer in Georgia. To address this issue, a note was made in the country's agricultural strategy 2015–2020 that a special working group would be created in order to define the procedures of grants and registering the status of a farmer (Ministry of Agriculture of Georgia, 2015). The group was created in 2015. However, consensus was not reached. The main challenge is the fact that less than 30 percent of the country's agricultural land is formally registered in the Land Register (National Agency for Public Registry, 2018). The rest is mostly being used by the farmers who have title documents issued during the land reform process in the early 1990s that were never formally included in the Land Register or who have no documents at all. The situation is even more complex in the case of women, given that even when land is registered, it is usually not registered in the name of all owners, but just in the name of the so-called “head of the household,” who usually is a man. Registration documents issued during the land reform process often do not coincide with the actual boundaries of the individual land plots. However, the Government has started land registration reform that is supposed to significantly facilitate the process. Currently, with financial support from the World Bank, a pilot project on systematic registration is being implemented in 12 settlements of the country to register all land holdings. By the end of 2018, the plan was to extend the project to the rest of the country, however, there have been delays with the implementation of this plan.

The national statistics office, Geostat, also doesn't have a definition of a smallholder. However, it uses a concept of **agricultural holding**, which is further subdivided into two types of holdings: family holding and agricultural enterprise. A family holding is defined as an agricultural holding operated by a household, including holdings operated by several households without any formal agreement among them (Geostat, 2017a). A household is considered to be an agricultural household when one of the members of the household is a holder (regardless of which source is the largest source of income of a household or if no income is derived from agricultural production) (Geostat, 2014). This is consistent with the FAO approach, which recognizes family farming as means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production that is managed and operated by a family and predominantly reliant on family labour, including both women's and men's (FAO, 2014b).

According to the results of 2014 General Population and Agricultural Censuses, the total number of households in Georgia was 1 109 000, and the number of agricultural holdings was 640 000, of which 31 percent were headed by women and 69 percent by men. Agricultural holdings account for 99.6 percent of all farms and 58 percent of all households in Georgia.

Although the government working group has failed to come up with a definition of a farmer's status, currently the Ministry of Environmental Protection and Agriculture of Georgia is identifying and registering all farmers nationwide. The registry includes information about land (size, location, category), owners, leasers and current land use. With the support of FAO and the Austrian Development Cooperation, the Ministry of Environmental Protection and Agriculture of Georgia has implemented a farm registry project. Within the framework of the FAO project, the first pilot activities were conducted in 2015 in Ambrolauri, where 242 family farm holdings were registered in one week. Requirements of hardware and software, human resources and data acquisition were developed. Data were collected and registered using Abaco Systems software. The outcomes helped the project team develop an action plan for the project's full-scale implementation. The action plan for the nationwide implementation of the farm registry system has been prepared and approved by a ministerial decree. The action plan

included activities to reach 100 000 registered farmers by the end of 2018 (one of the conditions of ENPARD), however, there have been significant delays. The Samegrelo-Zemo Svaneti region remains the target region for the launch of a farm registry system in Georgia. This selection was made due to the availability of ortho-photos and the agricultural importance of the region as the main producer of hazelnuts, one of the country's main agricultural export products.

Looking at the government programmes at different times, it is clear that there has never been a unified approach towards smallholders. For example, a government initiative in 2004 exempted from the land tax all landowners owning less than 5 ha (Tax Code of Georgia, 2004). The main idea of the initiative was to provide incentive to the small farmers to register their lands, and the regulation applies only to those lands that were distributed through the land reform process or purchased before the enactment of the initiative in 2004. Another example is from spring 2013, when the Government of Georgia launched a policy to subsidize agriculture through the Small Farmer Assistance Program. The programme targeted farmers with land up to 5 ha. The programme included different components: subsidies for farmers with up to 0.25 ha, for farmers with between 0.25 ha and 1.25 ha, and for farmers with between 1.25 ha and 5 ha. The 2013 law on agricultural cooperatives became a basis for creating the Agricultural Cooperatives Development Agency, an entity responsible for facilitating the formation of agricultural cooperatives and providing support. Thus, in effect, Georgia has a definition of an agricultural cooperative but not of a farmer.

The Agricultural Extension Strategy of Georgia 2018–2019 classifies the beneficiaries of the strategy by three types of farms:

1. small farms (with up to 1.25 ha of agricultural land) that produce agricultural products for their own consumption;
2. medium farms (with between 1.25 ha and 5 ha of agricultural land) that sell agricultural products through formal or non-formal markets; and
3. large farms (with more than 5 ha of agricultural land) that use hired labour and sell products through formal market channels.

Since there is no official definition, all non-enterprise farms are considered as small farms, since the number of large farmers not registered as enterprises is negligible. Even if one uses the classification of farms by land size given above, current official statistics provide very limited data for each type of farm.

## 3.2 Structural analysis and a qualitative description of the sector

### 3.2.1 Development of the role/importance of smallholders and family farms in the economy

This subsection is divided into four areas:

1. The contribution of smallholders and family farms in the economy.
2. Key agriculture development trends by subsectors. Naturally, the same subsectors are important for understanding smallholders and family farms. This area covers animal husbandry and plant growing, the two most important agricultural subsectors.
3. International trade trends, as this is immensely important for a structural analysis of smallholders and family farms.
4. Analysis of farms according to size and geographical distribution, to go into a deeper and more nuanced analysis.

#### CONTRIBUTION OF SMALLHOLDERS AND FAMILY FARMS IN AGRICULTURE

There are no official statistics showing the contribution of smallholders to total agricultural output and the gross domestic product (GDP). The share of the agricultural sector in Georgia's GDP is usually between 8 and 10 percent. However, by 2016, 43 percent of the country's total workforce was engaged in agriculture, of whom 97 percent were self-employed. Among them, 60 percent of self-employed women are non-paid workers. The total number of self-employed persons in agriculture is 842 000 (Geostat, 2018a).

Table 1. Gross value added of the agriculture, forestry, hunting and fishery sectors

Indicator	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GVA (at current prices, millions GEL)	1 544	1 563	1 551	1 457	1 510	1 855	1 933	2 195	2 328	2 507	2 629
GVA (at current prices, millions USD)	869	936	1 041	872	847	1 100	1 171	1 320	1 318	1 104	1 111
Agriculture's share of total GVA (%)	12.8	10.7	9.4	9.4	8.4	8.8	8.6	9.4	9.3	9.1	9

SOURCE: GEOSTAT

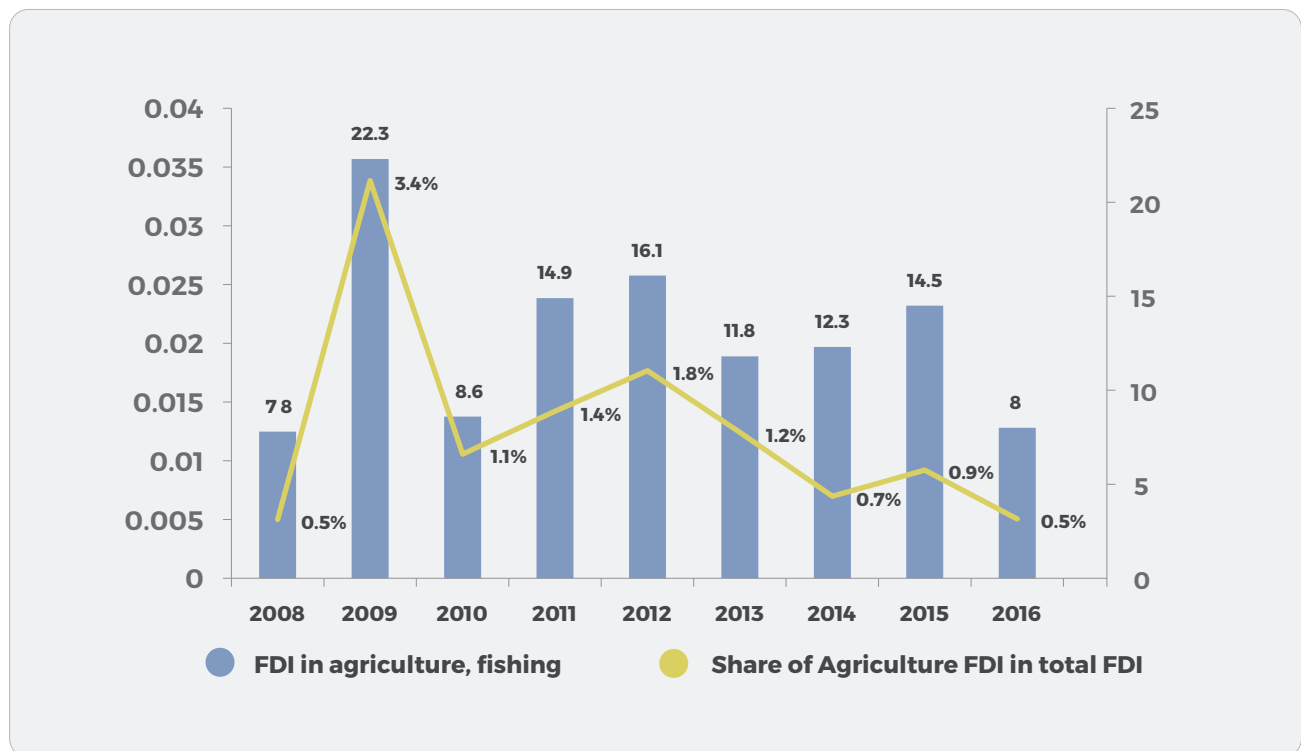
Table 1 suggests that since 2008, agriculture's share of the economy has stayed roughly the same, implying that agriculture has grown at the same rate as the overall economy. The agricultural sector in Georgia is characterized by high seasonality patterns. The high season starts in late spring and lasts until the beginning of September. This is because this period coincides with the seasons for milk, vegetables and most fruits, including grapes, and since storage facilities are almost non-existent in the country. As new technologies and know-how are being adopted in Georgia, with increasing government support and available finances, it is expected that the season will not be so short.

Based on the calculations of gross value added (GVA) and the number of employees in the sector, the labour productivity level in the agriculture sector (GVA/number of employees in the sector) in 2016 was GEL 3 037 (USD 1 283), which is one of the lowest in the region. The reason is clear: While 43 percent of the workforce were involved in agriculture, the sector’s share in the economy was only 9.3 percent (based on the 2014 census data). The reason for such a small contribution of agriculture to the GDP is the small size of Georgian holdings, fragmentation of holdings, lack of investments, lack of machinery and more.

According to business statistics data, the average monthly earnings of employees in agriculture, hunting and forestry was GEL 613 (USD 250) for men and GEL 455 (USD 193) for women in 2016. This is 59 percent of the average monthly earnings of men for all sectors of the economy and 67 percent of the average for women, which were GEL 1044 (USD 442) and GEL 680 (USD 288), respectively (Geostat, 2017b). This refers to employment in the business sector and does not cover family holdings. Earnings in agriculture, together with the education sector, are the lowest all among sectors of the economy. This data is shown in Section 3.5.

The agricultural sector in Georgia suffers from extremely low levels of investment, which suggests that although the Government has clearly recognized the social importance of people involved in agriculture, the private sector sees little economic opportunity in the sector.

Figure 1. Foreign direct investment (FDI) in agriculture (millions USD) and its share in total FDI (%), 2007–2016



SOURCE: GEOSTAT, FOREIGN DIRECT INVESTMENTS

[HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=PAGE&P\\_ID=2231&LANG=ENG](http://geostat.ge/index.php?action=page&p_id=2231&lang=eng)

Foreign direct investment (FDI) in the agricultural sector in Georgia is usually below USD 20 million per year. It is only a small fraction (usually around 1 to 2 percent) of the total FDI inflow.

## KEY AGRICULTURE DEVELOPMENT TRENDS BY SUBSECTOR

The total agricultural output of Georgia was almost GEL 4 billion for 2016 (USD 1.7 billion). The comparison between gross value added created in agriculture and the total agricultural output is shown Table 2.

Table 2. The share of agricultural gross value added of the total agricultural output

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Agricultural GVA (at current prices, millions GEL)	1 544	1 563	1 551	1 457	1 510	1 855	1 933	2 195	2 328	2 507	2 629
Agricultural output (at current prices, millions GEL)	2 134	2 251	2 203	2 072	2 242	2 674	2 807	3 210	3 387	3 667	3 942
Share of agricultural GVA in total agricultural output (%)	72.3	69.4	70.4	70.3	67.3	69.3	68.9	68.3	68.7	68.3	66.7

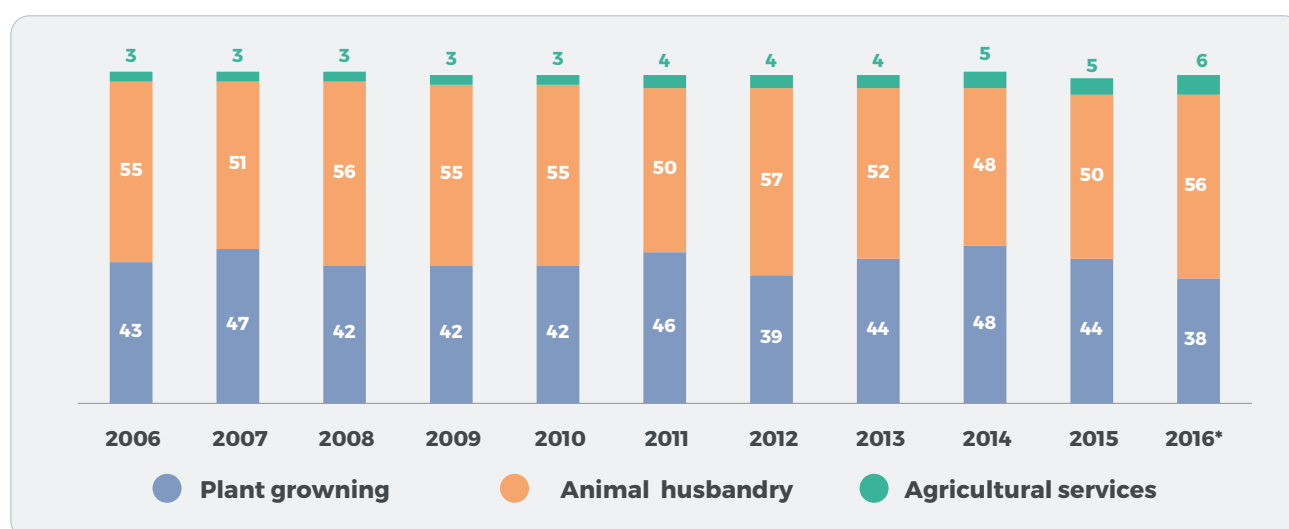
SOURCE: GEOSTAT

The highest share of agricultural GVA in agricultural output shows that the agricultural sector is efficient, with the lowest possible costs of production. The data presented in Table 2 show that this tendency has not changed during recent years.

Across all subsectors of agriculture, Georgia has a long-standing problem of low productivity due to the high level of fragmentation of land plots, the lack of technological know-how, and limited access to machinery and agricultural information.

Looking at the shares of each subsector of agriculture in the total agricultural output, by 2016 the share of animal husbandry was 56 percent and the share of plant growing 38 percent. Historical data since 2006 shows that this structure has been almost the same during past ten years.

Figure 2. Shares of plant growing, animal husbandry and agricultural services in agricultural output



SOURCE: GEOSTAT (2017) AGRICULTURE IN GEORGIA. ANNUAL REPORTS. 2006-2016

[HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=WNEWS\\_ARCHIVE1&QY=1&QY1=7&LANG=ENG](http://geostat.ge/index.php?action=wnews_archive1&qy=1&qy1=7&lang=eng)

The share of family holdings in the total output of agriculture, forestry and fishery was 90 percent in 2015 and decreased to 87 percent in 2016. Table 3 shows the share of family holdings in total output of agriculture, forestry and fishery and its subsectors in 2016.

Table 3. Share of family holdings in output of agriculture, forestry and fishery, %

	2015	2016
Output of agriculture, forestry and fishery, total	90	87.5
Including:		
Growing of cereals and other crops	93.7	94.4
Growing of fruit, nuts, beverage and spice crops	97.2	93.1
Growing of vegetables, horticultural specialities and nursery products	96.2	96.9
Farming of animals	84.2	80.8
Agricultural service activities	92.8	91.3
Forestry and logging	92.9	91.2
Fishing and fish farming	93	91.4

SOURCE: GEOSTAT

As shown in Figure 2, animal husbandry has almost always been more than half of total output, while agricultural services have been negligible. This has been changing in recent years, with the share of agricultural services steadily climbing. Table 4, from the annual publication of Geostat titled “Agriculture of Georgia, 2016,” shows a more detailed picture of the trends in animal husbandry.

Table 4. Animal production in agricultural holdings (thousands of tonnes)

Category	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Meat</b>											
Beef	33	31	25	29	27	21	16	20	23	24	22
Pork	31	21	11	8	13	12	12	15	17	19	16
Sheep and goat	8	8	8	4	5	4	3	3	4	5	5
Poultry	11	12	13	12	12	12	12	10	15	18	24
Total	83	73	57	54	56	49	42	48	59	66	66
<b>Milk</b>											
Milk (millions of litres)	606.1	624.8	645.8	551.4	587.7	582.1	589.5	604.7	588.8	566.3	540.1
Out of which sheep and goat milk (millions of litres)	7.3	7.9	6.7	6.6	6.7	6.4	6.9	8.8	9.9	9.8	9.9

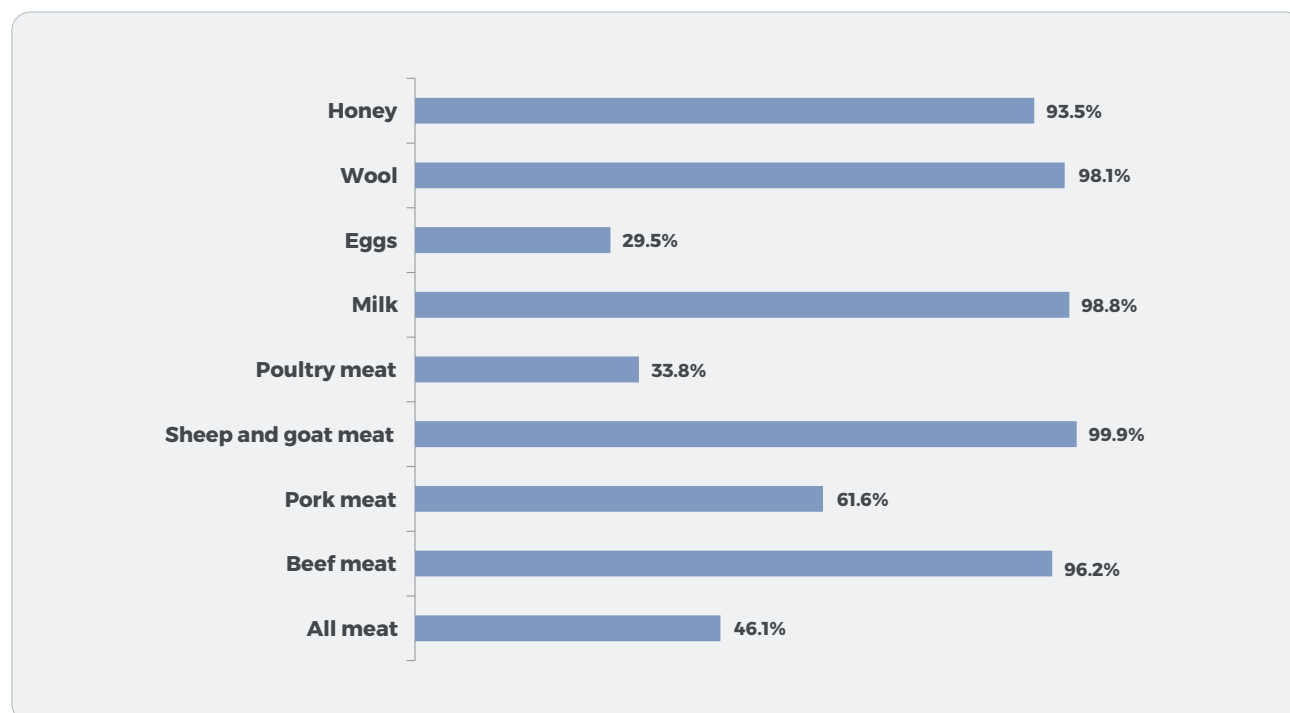
SOURCE: GEOSTAT

Starting in 2007, African swine fever has caused high mortality rates in pigs. This is the reason why pork production drastically dropped in that year. Food balance sheets show permanent increases in poultry meat production. Poultry production does not require much investment; thanks to its low cost of production, this subsector of animal husbandry has developed in recent years.

Official statistics are not able to distribute animal husbandry data by holding size; it is only possible

to distinguish between family holdings and enterprises. If one looks at the shares of family holdings in animal production, it is clear that family holdings produce more than 95 percent of beef meat, sheep and goat meat, milk and wool. These data show the significant role of family holdings in animal production.

Figure 3. Share of family holdings in animal production, 2016, %



SOURCE: GEOSTAT

While beef and pork production are volatile in the country, with significant decreases in the past ten years, the production of poultry meat follows the pattern of growth of poultry numbers, having increased by more than 50 percent since 2006. In all, 59 percent of male-headed agricultural holdings and 53 percent of female-headed agricultural holdings have poultry (Geostat, 2017d). Most agricultural families have one or two cows of mixed breed and low productivity but that are adapted to the mountainous terrain. The numbers of sheep and goats have increased in recent years due to high demand from the neighbouring countries; 47 percent of male-headed agricultural holdings and 35 percent of female-headed agricultural holdings have cattle and buffaloes (Geostat, 2017d). Azerbaijan, the Islamic Republic of Iran, Saudi Arabia and the United Arab Emirates have imported large quantities of live sheep from Georgia, making it profitable for local sheep-herders to invest in sheep breeding.

Table 5. Number and structure of livestock farms according to livestock category and size class, 2014

Description	Number of farms	Structure (%)
<b>Cattle farms</b>	<b>271 118</b>	
Farms with 1–4 head of cattle	215 496	79.48
Farms with 5–9 head of cattle	41 693	15.38
Farms with 10 or more head of cattle	13 929	5.14
<b>Sheep farms</b>	<b>19 962</b>	
Farms with 1–4 head of sheep	7 152	35.83
Farms with 5–19 head of sheep	7 969	39.92
Farms with 20–99 head of sheep	2 797	14.01
Farms with 100 or more head of sheep	2 044	10.24
<b>Goat farms</b>	<b>6 868</b>	
Farms with 1–4 head of goats	4 474	65.14
Farms with 5–19 head of goats	1 851	26.95
Farms with 20–49 head of goats	509	7.41
Farms with 100 or more head of goats	34	0.50

SOURCE: GEOSTAT, (CENSUS DATA)

Table 5 highlights that the structure of cattle ownership is very different from sheep ownership. While almost 80 percent of cattle owners own only up to four head of cattle, 64 percent of sheep owners own at least five head of sheep. More precisely, the average number of bovine animals across Georgia is 3.7 per household farm, while the average number of sheep or goats per household is 40.6 (Geostat, 2014).

Most of the livestock is owned by family holdings in Georgia. Official data on livestock numbers in holdings of all categories prove the important role of family holdings in the livestock sector. Table 6 shows that the share of enterprises in livestock numbers is relatively high only in the case of poultry.

Table 6. Share of family holdings in total livestock herd by livestock category, %

	2014	2015	2016
Bovine animals	99.7	99.8	99.2
Pigs	90.1	90.2	91
Sheep and goats	97.6	89.6	96.3
Poultry	68.6	54.2	50.8
Beehives	99.8	99.2	98.4

SOURCE: GEOSTAT

The share of family holdings has almost the same tendency in plant growing. The sown area by crop categories is shown in Table 7, which shows that the sown area for winter, but especially spring crops, has significantly decreased in the last decade. The main reason for this is migration of the rural population to urban areas. Often, such people find temporary jobs in towns but retain their small land plots in villages. Selling the land plots would not bring them significant income due to low prices for land. It



would also require going through the formal registration process. Many also keep land as an alternative source of income if they lose their temporary job in town. It has to be noted that the sampling frame of the 2016 survey has been updated and based on the 2014 agricultural census. Consequently, in order to ensure the comparability of data from 2014–2017, reconciliation of the data has been made for the years of 2014 and 2015. Therefore, the data of 2014–2017 are not comparable to the data of 2006–2013.

Table 7. Sown areas of winter and spring crops, (thousands of ha)

Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Sown area, total</b>	<b>330.2</b>	<b>297.2</b>	<b>329.3</b>	<b>289.7</b>	<b>256.7</b>	<b>262.4</b>	<b>259.6</b>	<b>310.7</b>	<b>274.9</b>	<b>263.7</b>	<b>240.0</b>
<b>Of which:</b>											
<b>Winter crops</b> (wheat, barley)	76.6	55.0	58.6	60.5	58.8	50.8	54.1	52.5	58.4	56.2	60.5
Spring crops	253.6	242.2	270.7	229.2	197.9	211.6	205.5	258.2	216.5	207.5	179.5
<b>Of which:</b>											
Grain and leguminous crops (wheat, barley, rye, oats, maize, pulses)	150.8	151.0	176.9	156.3	132.6	140.6	132.8	183.8	154.6	142.7	119.5
Of which maize	129.1	125.5	146.2	130.1	108.6	121.2	114.8	150.4	129.1	114.1	95.5
Potato, vegetables and melons	56.4	58.9	54.8	44.3	48.3	45.3	52.6	48.6	41.2	43.8	38.9
Other crops	46.4	32.3	39.0	28.6	17.0	25.7	20.1	25.8	20.8	21.0	21.1

SOURCE: GEOSTAT

It is important to note that almost 94 percent of sown areas belong to family holdings (Geostat, 2017a).

Table 8. Share of family holdings sown area, %

In sown area of grain and leguminous crops	93.4
In sown area of potato and vegetables	99.2
In sown area of other crops	86.9
<b>In total sown area</b>	<b>93.7</b>

SOURCE: GEOSTAT

Geostat conducts a quarterly survey on sowing structure by size of holdings. The survey separates agricultural holdings into those with less than 5 ha of land and those with more than 5 ha of land.

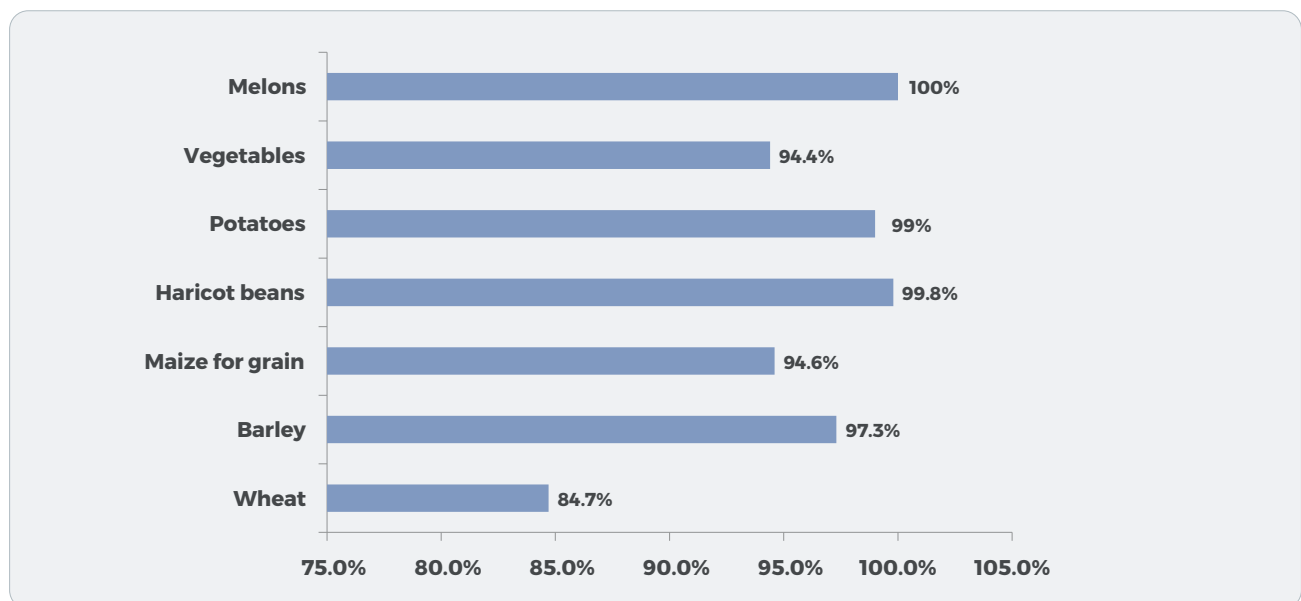
Table 9. Distribution of sown areas of annual crops by size of holdings (family holdings and enterprises), %, 2016

	<=5 ha	>5 ha
Wheat	23.6	76.4
Maize	84.2	15.8
Haricot beans	89.8	10.2
Potatoes	84.8	15.2
Vegetables	84.6	15.4

SOURCE: GEOSTAT

According to production statistics of annual crops, the vast majority of the main annual crops are produced by family holdings. For instance, 100 percent of melons and almost 100 percent of haricot beans and potatoes are produced by family holdings.

Figure 4. Share of family holdings in total production of annual crops, 2016, %



SOURCE: GEOSTAT

Referring to permanent crops, Table 10 shows that almost 80 percent of farms with permanent crops have less than 0.5 ha devoted to permanent crops. Women have an average of 0.28 ha under permanent crops (of 0.48 ha of total arable land), and men have an average of 0.36 ha under permanent crops (of 0.66 ha of total arable land) (Geostat, 2017d).

Table 10. Number of farms by area under permanent crops, 2014

Area under permanent crops	Number of farms	Share (%)
0–0.1 ha	68 489	25.18
0.1–0.19 ha	62 824	23.09
0.2–0.49 ha	83 646	30.75
0.5–0.99 ha	39 528	14.53
1–1.99 ha	13 458	4.95
2–2.99 ha	2 385	0.88
3–4.99 ha	980	0.36
>5 ha	736	0.27
<b>Total</b>	<b>272 046</b>	<b>100</b>

SOURCE: GEOSTAT, CENSUS DATA

Table 11 shows that the production of vegetables overall has decreased since 2006, but the production of potatoes and especially melons has increased. While the sown area is generally decreasing, especially for vegetables, the yield per hectare for all three cultures has significantly increased. It has to be noted that the sampling frame of the 2016 survey has been updated and based on the 2014 agricultural census. Consequently, in order to ensure the comparability of data from 2014–2017, reconciliation of the data has been made for the years of 2014 and 2015. Therefore, the data from 2014–2017 are not comparable to the data from 2006–2013.

Table 11. Sown area, production and yield per hectare of vegetables, potatoes and melons, 2006–2016

Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Vegetables sown area (thousands of ha)	30	32	27	24	24	22	24	21	19	18	15
Vegetables production (thousands of tonnes)	180	190	165	170	176	186	199	205	154	152	142
Yield per hectare for vegetables (tonnes)	6	6	6	7	7	9	8	10	8	8	9
Potatoes sown area (thousands of ha)	24	22	24	18	21	20	26	26	18	22	20
Potatoes production (thousands of tonnes)	169	229	193	217	229	274	252	297	215	187	249
Yield per hectare for potatoes (tonnes)	7	11	8	12	11	13	10	11	12	8	12
Melons sown area (thousands of ha)	3	5	4	3	3	3	3	3	4	3	3
Melons production (thousands of tonnes)	38	74	53	44	41	43	37	66	86	73	73
Yield per hectare for melons (tonnes)	12	14	15	17	15	13	11	25	23	22	21

SOURCE: GEOSTAT

As with other crops, the total area for fruits has significantly decreased in the past three years, while the yield per hectare has increased (Table 12).

Table 12. Fruits production and yield per hectare, 2006–2016

Permanent crops	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total area (thousands of ha)	85	103	156	177	175	171	162	271	66	66	61
Total production (thousands of tonnes)	153	228	158	181	124	187	158	218	210	144	186
Yield per hectare (tonnes)	1.8	2.2	1.0	1.0	0.7	1.1	1.0	0.8	3.2	2.2	3.0

SOURCE: GEOSTAT

As for production of permanent crops, the share of family holdings in the production of fruit and grapes is high (Table 13). It is close to 100 percent for fruit.

Table 13. The share of fruit and grapes in family holdings, %

	2014	2015	2016
Fruit	99.4	98.8	98.2
Grapes	94.7	95.3	85.8

SOURCE: GEOSTAT

The Geostat quarterly survey on agricultural holdings categorizes the production of main crops by holding size, separating holdings into those with 5 ha of agricultural land or less and those with more than 5 ha of agricultural land (Table 14).

Table 14. Distribution of production of main crops by size of holdings (family holdings and enterprises), %, 2016

	5 ha or less	More than 5 ha
Wheat	21.1	78.9
Maize	72.1	27.9
Haricot beans	89.6	10.4
Potatoes	83.4	16.6
Vegetables	72	28
Fruit	88.7	11.3
Grapes	72.1	27.9

SOURCE: GEOSTAT

Analyzing the development trends of subsectors of agriculture, it can be concluded that smallholders and family holdings play a crucial role in animal husbandry as well as in plant growing and, overall, in the formation of agricultural output. More specifically, these analyses show that the share of family holdings in the total output of agriculture, forestry and fishery in 2016 was 87 percent, including 80.8 percent in animal farming, 94.4 percent in the growing of cereals and other crops, 93.1 percent in the growing of fruit and nuts and in the production of beverage and spice crops, and 96.9 percent in the growing of vegetables, horticultural specialities and nursery products. The official statistics of Georgia

show that holdings with less than 5 ha land use large proportions of their sown areas for annual crops; such holdings that grow haricot beans use 89.8 percent of their sown areas for that crop, and those percentages are 84.8 percent for potatoes, 84.6 percent for vegetables and 84.2 percent for maize (Table 9). Besides, according to official data, almost 80 percent of farms with permanent crops have less than 0.5 ha devoted to permanent crops (Table 10). As for the production of main crops, 89.6 percent of haricot beans, 88.7 percent of fruit, 83.4 percent of potatoes, 72.1 percent of maize and grapes as and 72 percent of vegetables are produced by farms with less than 5 ha land (Table 14).

## **INTERNATIONAL TRADE TRENDS**

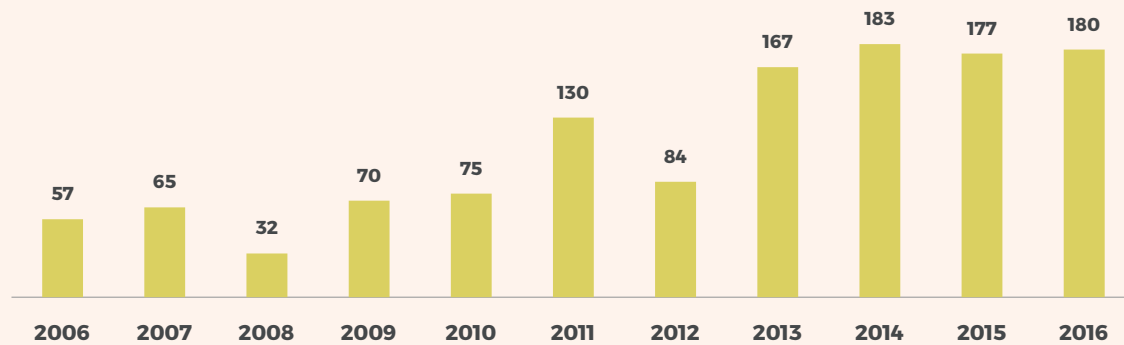
The two most important agriculture subsectors for Georgia, at least in terms of exports, are hazelnut production in Samegrelo, in western Georgia, and wine production in Kakheti, in eastern Georgia. These two subsectors are by far the largest agricultural export commodities and are almost exclusively produced by family holdings. The report presents a short case study of the hazelnut production and how the introduction of a large company has facilitated development of the field. The wine sector is discussed at more length to help explain the dynamics of the sector in recent years.

### **Box 1. The case of hazelnut production in Georgia**

While western Georgia has traditionally been a strong hazelnut growing region, hazelnut production has been relatively low because of several factors. First, the largest demand had been coming from Turkish wholesalers. Turkey produces from 70 to 80 percent of the world's hazelnuts, so they only bought Georgian hazelnuts when there was a supply shortage in Turkey. Thus, the demand was unorganized. Georgian hazelnut producers had a relatively insignificant role in the value chain. The second reason for low productivity of hazelnuts in Georgia was that there were no large hazelnut producers or groups who would provide support for small farmers. A third, related factor was that while hazelnuts production was fragmented and most of the production came from small farms, there was little investment in modern technologies and know-how.

The task of the Government was to facilitate the introduction of a large hazelnut company to Georgia. There were two main objectives: 1) help local farmers gain access to markets; and 2) introduce know-how and expand hazelnut production. One of Europe's largest chocolate producers, Ferrero, entered Georgia in 2008, primarily for two reasons. First, the Government of Georgia offered very good conditions for large investors willing to invest in Georgia, including removing most taxes and licences, simplifying business registration and requirement procedures, and, above all, publicly committing to support foreign businesses. This was also reflected in Georgia's rapid rise in the World Bank's "ease of doing business" rankings, to the top 20 and later to the top 10 in the world. The second reason for Ferrero's entry into Georgia was that, aside from Turkey, Georgia is one of the world's largest hazelnut producers. Ferrero purchased areas for growing hazelnuts, but most of its supplies come from the small farmers in Samegrelo in western Georgia. Thus, it was in the interest of the company to help local farmers master new technology. Several larger hazelnut producers also emerged as a result, such as the cooperative "Darcheli hazelnuts" and "Nutexport." One of the key actors is the association of hazelnut producers, established in 2013, which has more than 500 active members and promotes their interests.

Exports of hazelnuts from Georgia, 2006–2016, millions USD



Source: Geostat trade data

Hazelnuts have become the largest agricultural export commodity for Georgia, and the market has been stable since 2013. However, the subsector is not safe from pest outbreaks, and small farmers are especially in a vulnerable position.

As income levels have risen, consumption levels have also increased, and agricultural trade has doubled in the past ten years in terms of both exports and imports.

Table 15. Value of external trade of food and beverages, 2006–2016, millions USD

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All exports	936	1 232	1 495	1 134	1 677	2 186	2 377	2 910	2 861	2 205	2 113
Food and beverages	234	297	248	316	349	436	510	774	824	605	683
Share of food and beverages in total exports (%)	25	24	17	28	21	20	21	27	29	27	32
All imports	3 675	5 212	6 302	4 476	5 236	7 072	8 056	8 023	8 602	7 300	7 295
Food and beverages	585	792	880	734	880	1 092	1 169	1 191	1 187	998	956
Share of food and beverages in total imports (%)	16	15	14	16	17	15	15	15	14	14	13

SOURCE: GEOSTAT (2017) TRADE DATA

Table 15 shows that Georgia has decreased its negative agricultural trade balance in recent years, as the share of exports of food and beverages in total exports has increased from 25 percent in 2006 to 32 percent in 2016, while the share of imports of food and beverages in total imports has decreased from 16 percent in 2006 to 13 percent in 2016. Comparing 2016 to 2006, exports of food and beverages have increased by USD 449 million, and imports have increased by USD 371 million. Note that mineral waters are also included in “food and beverages” classification.

Table 16. Exports of the top ten commodities from the food and beverages category, 2006–2016, millions USD

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Exports</b>	<b>936</b>	<b>1 232</b>	<b>1 495</b>	<b>1 134</b>	<b>1 677</b>	<b>2 186</b>	<b>2 377</b>	<b>2 910</b>	<b>2 861</b>	<b>2 205</b>	<b>2 113</b>
Hazelnuts and other nuts	57	65	32	70	75	130	84	167	183	177	180
Wine of fresh grapes	41	29	37	32	41	54	65	128	180	96	114
Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages	30	57	59	54	56	68	80	100	95	65	92
Waters, natural or artificial mineral and aerated waters, not containing added sugar	24	25	31	25	37	48	59	107	137	82	80
Live bovine animals	0	0	1	17	19	28	39	48	30	20	37
Flours, meals and pellets, unfit for human consumption; greaves	0	0	0	1	3	2	1	13	16	11	15
Citrus fruit, fresh or dried	3	5	4	16	12	5	8	20	15	13	12
Waters, mineral and aerated waters, containing added sugar	23	29	8	11	15	15	21	17	29	19	12
Live sheep and goats	0	0	0	17	13	15	18	16	21	20	11
Fruit, nuts and other edible parts of plants, otherwise prepared or preserved	4	2	2	0	1	2	2	3	7	10	10

SOURCE: GEOSTAT

Table 15 and Table 16 show several remarkable trends that merit further explanation. Exports of food and beverages were 41 percent of imports in 2006 but were 74 percent in 2016 – still a trade deficit but a considerable improvement over the ten years. This has several explanations. First, starting from 2013, the exports of wine have significantly increased. This is due to the fact that the Russian market became once again accessible for Georgian wine exporters after the ban in 2006. Second, the Russian market was also opened for fruits and vegetables. However, the share of vegetables is negligible. Dependence on the Russian Federation poses an important threat for Georgian farmers, as the Russian Federation has demonstrated that it often uses import bans on various agricultural products as a tool for political pressure, as was the case with milk from Belarus, for example. The third reason for the increase of exports in the food and beverages category is the rise in sheep exports. Georgian exporters managed to find lucrative markets in the Near East as, after the Ramadan period, there is a high demand for live sheep. There had been problems related to the stock of sheep in Georgia and to the presence of various diseases, but most of the obstacles have been resolved through massive government-funded vaccination efforts, and the total number of sheep has significantly increased in the country. In recent years, the share of European Union member countries in Georgian export destinations has been increasing. Georgia has been part of the Deep and Comprehensive Free Trade Area since September 2014. The share of European Union countries<sup>1</sup> in Georgian total exports in 2013 was 20.9 percent; in 2014, the share was 21.8 percent, in 2015 29.3 percent, and in 2016 27.1 percent. Moreover, the share of

<sup>1</sup> To all EU-28 countries

agricultural products of the total exports to the EU increased from 6.8 percent in 2014 to 9.3 percent in 2016. At the same time, the share of the Commonwealth of Independent States (CIS) decreased from 55.7 percent in 2013 to 34.9 percent in 2016.

Table 17. Evolution of international trade of main agrifood products categories, thousands of tonnes

<b>Meat</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Import	32.10	53.30	62.10	61.90	61.90	71.30	77.50	75.30	78.80	71.90	84
Export	0.90	1.20	0.80	0.20	0.70	1.20	0.80	0.70	1.10	0.50	13
Trade Deficit	31.20	52.10	61.30	61.70	61.20	70.10	76.70	74.60	77.70	71.40	71
<b>Vegetables</b>											
Import	52.00	64.00	58.00	59.00	67.00	76.00	63.00	79.00	90.00	87.00	90
Export	3.00	2.00	5.00	5.00	14.00	7.00	8.00	11.00	10.00	7.00	11.00
Trade Deficit	49.00	62.00	53.00	54.00	53.00	69.00	55.00	68.00	80.00	80.00	79.00
<b>Milk</b>											
Import	136.00	77.00	51.00	50.00	48.00	43.00	53.00	64.00	71.00	92.00	124
Export	2.00	1.00	2.00	1.00	6.00	2.00	3.00	4.00	8.00	4.00	3.00
Trade Deficit	134.00	76.00	49.00	49.00	42.00	41.00	50.00	60.00	63.00	88.00	121.00

SOURCE: GEOSTAT

Trade figures (Table 17) suggest that the import of meat, vegetables and milk is significantly increasing every year, while exports lag far behind. Hence, there is an increasing trade deficit in all three subsectors.

## ANALYSIS OF FARMS ACCORDING TO SIZE AND GEOGRAPHICAL DISTRIBUTION

According to the 2014 Agricultural Census results, as of 1 October 2014 there were 642 209 holdings in the country. The total number of non-enterprise farms (family holdings) was almost 640 000, accounting for 99.6 percent of all farms in Georgia, with 30.9 percent of farms headed by women. Among the regions, the largest numbers of holdings were observed in Imereti (19.6 percent of the total), Kakheti (15.1 percent) and Samegrelo-Zemo Svaneti (13.3 percent). Out of all holdings, 574 100 holdings were operating agricultural land, while the remaining 68 100 holdings were not. These 68 100 holdings live in rural areas but do not operate agricultural land. Examples can include households that have summer houses or people who permanently live in rural areas but are employed in non-agricultural sectors.

Table 18. Total number of holdings and structure by holding type

<b>Type</b>	<b>Number of agricultural holdings</b>
Family holdings (households)	639 963
Agricultural enterprises	2 246
Total	642 209

SOURCE: GEOSTAT AGRICULTURAL CENSUS 2014



According to the census results, the average area of agricultural land per holding in Georgia was 1.4 ha (1.2 ha for households and 49.2 ha for legal entities). The census results showed that the major share of holdings operate on small land parcels. In particular, more than three-fourths of holdings (77.1 percent) operate agricultural land smaller than 1 ha, and their total area constitutes 21.5 percent of all of the operated agricultural land.

**Table 19. Geographical distribution of smallholders with less than 1 ha of land and their percentage distribution among all farms in the respective region**

	<b>All holdings</b>	<b>Holdings with less than 1 ha land</b>	<b>% holdings with less than 1 ha land</b>
Tbilisi	13 554	13 277	98%
Autonomous Republic of Adjara	43 873	40 568	92.5%
Guria	33 498	26 354	78.7%
Imereti	111 169	99 835	89.8%
Kakheti	88 849	53 096	59.8%
Mtskheta-Mtianeti	29 928	24 957	83.4%
Racha-Lechkhumi and Kvemo Svaneti	13 511	12 808	94.8%
Samegrelo-Zemo Svaneti	76 437	58 477	76.5%
Samtkhe-Javakheti	34 473	17 664	51.2%
Kvemo Kartli	67 480	54 443	80.7%
Shida Kartli	61 305	41 061	67%
Georgia	574 077	442 540	77.1%

SOURCE: SOURCE: GEOSTAT AGRICULTURAL CENSUS 2014

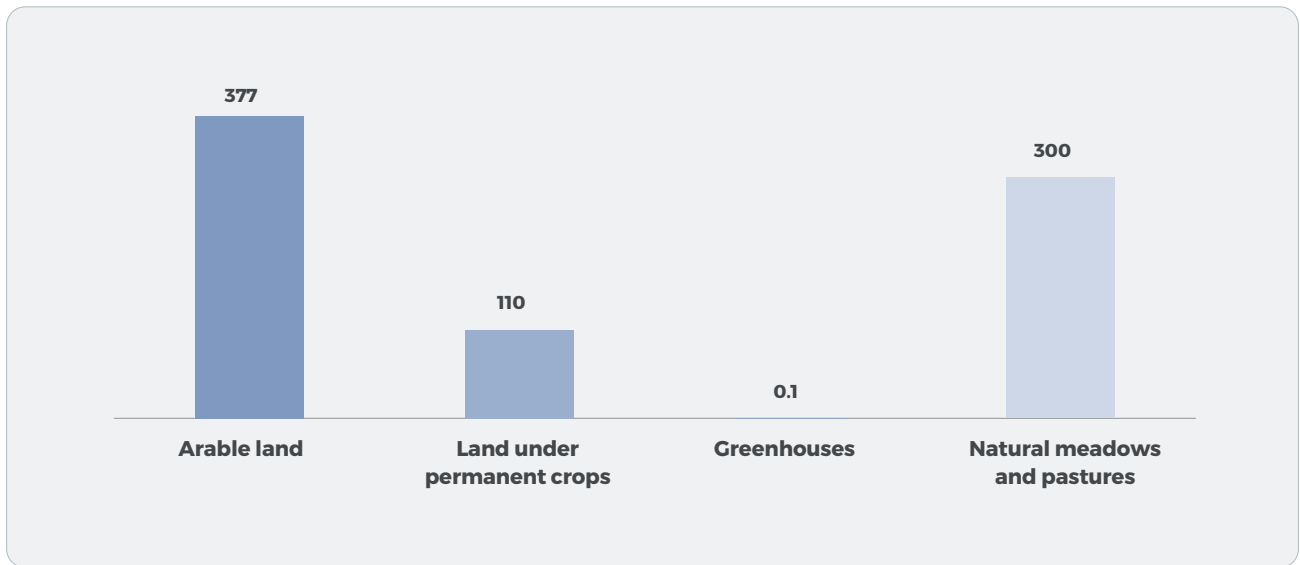
There is a total of 787 700 ha of agricultural land in the country, owned by 574 077 holdings. The total area of arable land is slightly more than for natural meadows and pastures. The share of areas with greenhouses, on the other hand, is almost negligible. The structure and the average area of agricultural land operated by holdings are shown in Table 20. The data also include state land, which is often in the form of natural meadows and pastures.

**Table 20. Structure and average area of agricultural land operated by holdings (as of 1 October 2014)**

	<b>Holdings of all categories</b>	<b>Households</b>	<b>Legal entities</b>
Number of holdings with agricultural land (thousands)	574.1	571.9	2.2
Agricultural land (thousands of ha)	787.7	681.1	106.6
Arable land (thousands of ha)	377.4	322.7	54.8
Land under permanent crop (thousands of ha)	109.6	92.6	17.0
Meadows and pastures (thousands of ha)	300	265.2	34.8
Greenhouses (thousands of ha)	0.7	0.6	0.1
Average area of agricultural land (ha)	1.4	1.2	49.2

SOURCE: GEOSTAT

Figure 5. Agricultural land operated by agricultural holdings, according to type of land use, thousands of ha

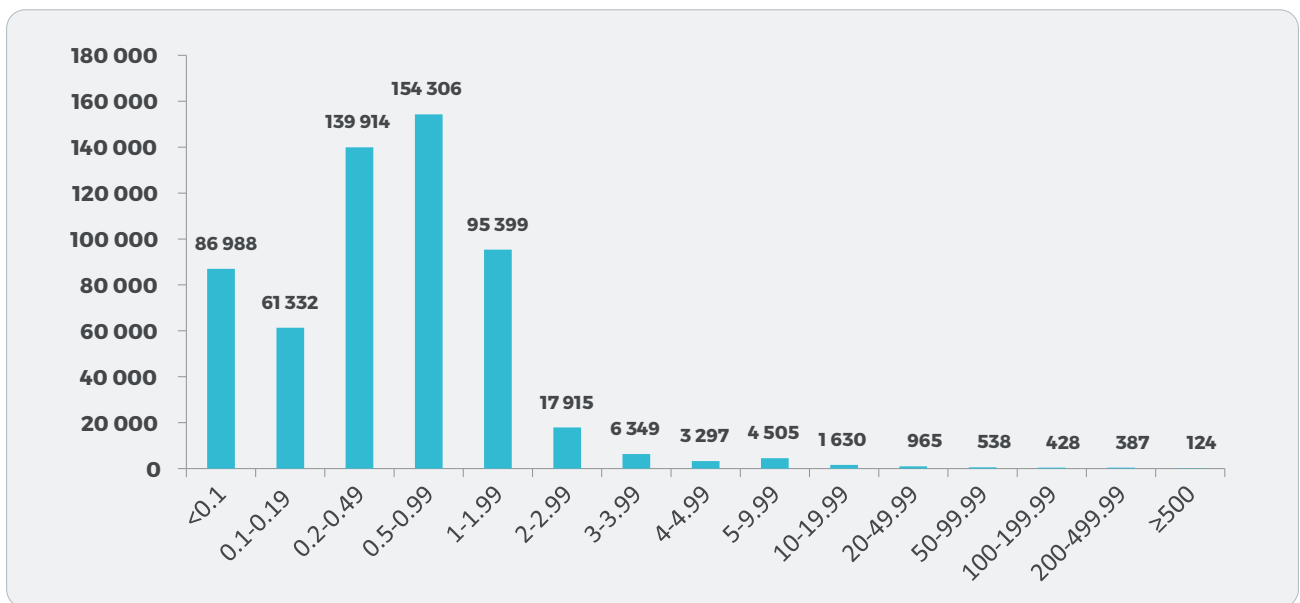


NOTE: THE DATA ALSO INCLUDE STATE LAND, WHICH IS OFTEN IN THE FORM OF NATURAL MEADOWS AND PASTURES.

SOURCE: GEOSTAT

The distribution of agricultural holdings by agricultural land areas is shown in Figure 6. Male-headed farms operate an average of 1.30 ha, and female-headed households operate an average of 0.77 ha.

Figure 6. Number of agricultural holdings by size of agricultural land, 2014



SOURCE: GEOSTAT

According to data shown in Figure 6, 50 percent of agricultural holdings in Georgia operate land smaller than 0.5 ha. The 2014 Agricultural Census data also show that the average number of operated parcels in Georgia is 2.14, while the average area of operated parcels is 0.61 ha (Geostat, 2014). Table 21 shows that 99 percent of the holdings with agricultural land operate less than 5 ha.

Table 21. Number of agricultural holdings, by size of land, 2014

	Number of holdings	Share (%)
Less than 0.5 ha	288 234	50
From 0.5 ha to 1 ha	154 306	27
From 1 ha to 2 ha	95 399	17
From 2 ha to 3 ha	17 915	3
From 3 ha to 5 ha	9 646	2
More than 5 ha	8 577	1
<b>Total</b>	<b>574 077</b>	<b>100</b>

SOURCE: AGRICULTURAL CENSUS DATA 2014

Using FAO's relative approach (FAO, 2017a) to define smallholders in Georgia by the bottom 40 percent of the distribution of land size, smallholders in Georgia fall between 0.2 ha and 0.5 ha of land.

The total area of each holding group, ranked by size of land area, is shown in Figure 7.

Figure 7. Total agricultural land area by each group of holding, by size of land, ha



SOURCE: GEOSTAT

Table 22 and Table 23 provide regional data on the average area of operated land and holdings with irrigable and irrigated area, by region.

Table 22. Average area of operated land by region, ha, 2014

No.	Region	2014
1	Tbilisi	0.14
2	Adjara	0.49
3	Guria	0.88
4	Imereti	0.61
5	Kakheti	3.39
6	Mtskheta-Mtianeti	0.7
7	Racha-Lechkhumi and Kvemo Svaneti	0.46
8	Samegrelo-Zemo Svaneti	0.9
9	Samtskhe-Javakheti	2.17
10	Kvemo Kartli	1.73
11	Shida Kartli	1.01
<b>12</b>	<b>Georgia</b>	<b>1.4</b>

SOURCE: GEOSTAT (2016), AGRICULTURAL CENSUS DATA 2014

Kakheti is one of the most agricultural regions of Georgia. Mostly known for its grapes and wine-making tradition, it contains the vast Alazani Valley, which is used for agricultural purposes. Regions of Samegrelo, Imereti and Autonomous Republic of Adjara, on the other hand, have dense populations, and the availability of land is more limited.

Table 23. Holdings with irrigable and irrigated areas, 2014

Region	Holdings with agricultural land	Holdings with irrigable land area	Holdings with irrigated land area	% irrigated
Tbilisi	13 554	182	2 474	18
Adjara	43 873	1 072	14 257	32
Guria	33 498	298	15 202	45
Imereti	111 169	3 133	32 075	29
Kakheti	88 849	12 322	30 177	34
Mtskheta-Mtianeti	29 928	2 749	10 085	34
Racha-Lechkhumi and Kvemo Svaneti	13 511	33	3 107	23
Samegrelo-Zemo Svaneti	76 437	504	25 386	33
Samtskhe-Javakheti	34 473	7 655	16 015	46
Kvemo Kartli	67 480	16 993	28 907	43
Shida Kartli	61 305	15 057	30 395	50
<b>Total</b>	<b>574 077</b>	<b>59 998</b>	<b>208 080</b>	<b>36</b>

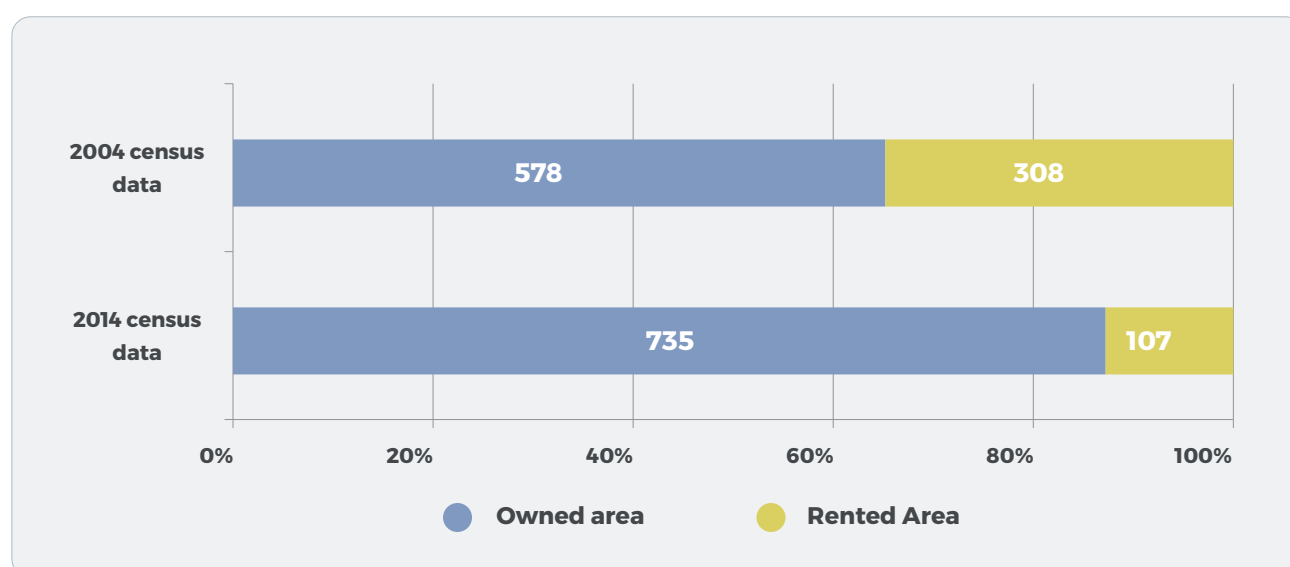
SOURCE: GEOSTAT (2016), AGRICULTURAL CENSUS DATA 2014

### 3.2.2 Agricultural land market and property rights

According to Article 3, paragraph I of the Law on Agricultural Land Ownership dated 22 March 1996, agricultural land represents land parcels registered in the public registry that are suitable for agricultural production, including arable land, perennial plants, meadows and pastures with or without fixed buildings.

In 1992, the new Government of Georgia decided to implement land reform by distributing the state-owned agricultural land to households for inheritable lifetime use. The actual transfer of landownership became possible after the adoption of the Law on Agricultural Land Ownership in 1996 (Hartvigsen, 2013). In mountainous areas, up to 5 ha of land was distributed to households, while in low-lands up to 1.25 ha was given per household (0.75 ha for rural households who had not been engaged in large-scale farming during the Soviet Union and 0.25 ha to households in urban areas. In total, about 60 percent of arable land was distributed to households, with the intention that the remaining state-owned land would be leased or sold to larger farms (Hartvigsen, 2013). The land was distributed in the form of several small land plots. Over time, these land plots were further sub-divided by the households, leading to excessive fragmentation of land and “thus making efficient agriculture impossible” (FAO, 2015). The Saakashvili government tried to address this issue, and in 2005–2011 allowed the leaseholders to buy larger agricultural land plots from the state reserve. Of the total of around 850 000 ha of operated agricultural land, the share of rented area has decreased from 35 percent in 2004 (Geostat, 2004) to 13 percent in 2014 (Geostat, 2014).

Figure 8. Land operated by holdings according to land tenure, thousands of ha, 2004 and 2014



SOURCE: GEOSTAT, 2004 AND 2014 AGRICULTURAL CENSUS DATA

Figure 8 shows that the share of owned area vs. rented land significantly increased from 2004 to 2014. Both private and state rents are included in the rented areas, although the share of private rented area is essentially negligible. In the owned areas, Geostat notes that both registered and unregistered land plots are included. According to Article 203 of the Georgian Tax Code, land is only considered properly registered if it is registered in the public registry, with proper cadastral mapping coordinates. Individuals are not considered as legal owners in the absence of land registration and are not allowed

to sell their land, even if they hold older government documents showing title to the property. So far, only an estimated 20 percent to 30 percent of agricultural land is officially registered. Such a low rate of formal registration is the biggest obstacle for the land market, as it leads to informal transactions, hampering any development.

The 1.25 ha of agricultural land that was distributed to households in the form of several small land parcels between 1992 and 1998 became even further fragmented as various members of households claimed their shares. Initially, the allocated land plots were considered as common property owned by the household members. However, as the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) notes, the initial arrangements created problems for land registration and land market development:

*for the simplicity of the process registration was done in the name of a family head. This was done in order to avoid overloading the owner's box of the tenure certificate but it created a lot of misunderstanding and disputes among family members at a later stage. The problem appeared during land transactions, sale or transfer of the parcel, as during the real estate sales process, notaries or other appropriate institutions did not request from the household head the approvals from the other household members, as should have been done under this 'joint ownership' property regime (FAO, 2015).*

The issue still remains largely unaddressed, and it is one of the causes for women's limited access to and control over landownership. In fact, even if women legally own land, because it is rarely registered in their name, they need to go to court to be able to register the land plot in their name and use it as they see fit.

This lack of land registration limits men's and mostly women's access to government subsidies, credit and grant schemes because of lack of collateral. More importantly, limited access to the ownership and registration of land (or any other property) also diminishes women's status in and outside the family. It has been demonstrated that women who own property are less likely to suffer from domestic abuse, as they have a way out (FAO, 2018b).

According to Article 203 of the Georgian Tax Code, land is only considered properly registered if it is registered in the public registry, with proper cadastral mapping coordinates. Individuals are not considered as legal owners in the absence of land registration and are not allowed to sell their land, even if they hold older government documents showing title to the property. The title documents were distributed by the Government when the land was distributed. This document is a basis for registering formal ownership. So far, only an estimated 20 percent to 30 percent of agricultural land is officially registered. The exact share of registered land plots is impossible to establish at this point. The total agricultural area is estimated by Geostat, while the registration process is done through NAPR and is often accompanied by corrections in area of land parcels. Moreover, the status of state and private land often changes as part of the registration process. According to the description of the land registration reform, the NAPR website provides an estimate of 25 percent (as of August 2016). Such a low rate of formal registration is the biggest obstacle for the land market, as it leads to informal transactions, hampering any development.

Even though land was distributed equally to women and men during the land reform, it is expected that the share of women owning land will decrease after each generation (FAO, 2018b), because of the existing "son preference" regarding the inheritance of land (Bendeliani *et al.*, 2014). This bias toward

sons is linked with patrilocal marriages, under which brides are expected to move to live at the home or the community of the grooms' families (FAO, 2018b). Sons are expected to manage the family farm and to take care, economically, of their parents in their old age. Therefore, women are expected to renounce any inheritance right on the land of their family and to have no rights over the land that their husbands owned before marriage (FAO, 2018b). This leaves women in a vulnerable position, with high levels of economic dependency.

One of the widely discussed topics in Georgia is the issue of foreign ownership of agricultural lands. Article 4 of the Law on Agricultural Land Ownership, initially adopted in 1996, stipulates that the right of agricultural landownership is given only to Georgian citizens, households composed of Georgian citizens, and legal entities registered in Georgia. As for foreign citizens or legal entities registered overseas, the ownership right for agricultural land is restricted; foreign citizens or legal entities are required to transfer the ownership right for agricultural land to local citizens, households or locally registered legal entities within six months of acquiring this right. Violation of the law will result in expropriation of agricultural land in favour of the state through court decision and relevant compensation. However, the Constitutional Court of Georgia ruled this restriction as unconstitutional in 2012 (Constitutional Court of Georgia, 2012). The recently adopted new Constitution of Georgia, adopted in 2017, however, once again places a ban on selling lands to foreign citizens. However, the corresponding amendments to the laws still need to be defined.

Business associations, as well as the Investors Council (an independent consulting body at the office of the Prime Minister) have repeatedly raised concerns that the restriction of the sale of land to foreigners is likely to negatively affect the prospects of foreign direct investment in the agricultural sector and the already weak agricultural land market in Georgia (Kvintradzem 2017). The argument usually put forward is that after the restrictions, farmers in Georgia would have fewer opportunities to learn the modern practices and know-how that agricultural investors might bring (as was the case with Ferrero and the Hartzenberg Bros). There would also be less access to the wider market (for example, small hazelnut producers are now able to sell hazelnuts to Ferrero in western Georgia). The restrictions also might draw the prices down, as demand for good agricultural land would decrease. Finally, the restriction will further impede the process of the consolidation of land plots, which would lead to more efficient agricultural economy. Currently, the share of foreign-owned agricultural land plots is quite small and cannot cause significant problems for the development of local agriculture. According to the "Transparency International – Georgia" report, foreign citizens own roughly 18 500 ha of agricultural land in Georgia, which is about 0.7 percent of the total area of agricultural land (Transparency International, 2015). If anything, Georgian agriculture is in strong need of more investments and agricultural land market development.

Improving the agricultural land market is stated as one of the priority tasks in the Agricultural Development Strategy 2015–2020. The first key strategic direction of the strategy is competitiveness enhancement of rural entrepreneurs. One of the measures to achieve this, according to the strategy, is through "developing efficient functioning agricultural land market and introduction of modern approaches of land use." In order to accomplish this objective, the Government plans to promote rational management of available land assets, to survey and register all agricultural land, introduce GIS and streamline the regulatory framework. In August 2016, Georgia started the process of land registration reform, which facilitates sporadic land registration (NAPR, 2018). The land measurement works are completely reimbursed by the Government, and the list of required documentation is simplified. In parallel, with support from the World Bank's Irrigation and Land Market Development Project, the government has selected 12 settlements where it is piloting systematic land registration mechanisms.

One of the key directions of the project is land market development: “The [land market development] component will finance the pilot phase of a land registration program in order to redefine and test the policies and procedures for registration of agricultural land that will allow the majority of existing land ownership rights to be registered (regularization). The pilot will inform the design of a national land registration program” (World Bank, 2016). All land parcels within the selected settlements are being measured and processed. Currently, works have been completed or are near completion in 11 out of the 12 selected settlements. This covers roughly 30 000 land parcels. At the end of the project, area-specific recommendations will be provided to inform the national land registration reform, and the strategy on land registration will be presented.

Another problematic issue for the land market and property rights is the lack of clarity in relation to the communal lands. During the initial phase of land distribution, some of the land was retained under state property, with the intention to privatize to larger agricultural businesses (Hartvigsen, 2013). However, to date, this has not yet happened to a large extent and has even led to conflicts among the local communities who had been using such land and potential investors. According to a 2015 FAO case study on Georgia regarding the Voluntary Guidelines on the Responsible Governance of Tenure, while the law on Agricultural Land Ownership recognizes communal land ownership, “it does not clearly define the community, which constraints recognition of group rights on land. This especially refers to villagers’ rights on pastures that are not surveyed and registered in the National Agency for Public Registry (NAPR). Due to the lack of a full inventory and registration of agricultural land in state and communal ownership, there were cases when government privatized several common pastures in use by the local communities, causing significant public dissatisfaction in rural population” (FAO, 2015). This often creates a problem when large infrastructural projects are constructed, such as road sections or transmission lines, for example. International Financial Institutions like the World Bank, the Asian Development Bank, the European Bank for Reconstruction and Development and the European Investment Bank, have requirements and standards to protect the rights of the communities who use the communal lands, but the national law often regulates this issue differently.

## **3.3 Value chain organization, standards and access to markets**

### **3.3.1 Key actors in Georgian value chains**

#### **FARMERS AND COOPERATIVES**

Georgian agriculture is characterized by subsistence farming. Families holding agricultural land usually have roughly 1 ha of land, fragmented into smaller parcels. This makes the renting of machinery difficult and expensive, as the farmers need to team up with neighbouring land plot owners. In general, one family owns one or two cows. Milk is being consumed at home, mostly for making cheese. However, in



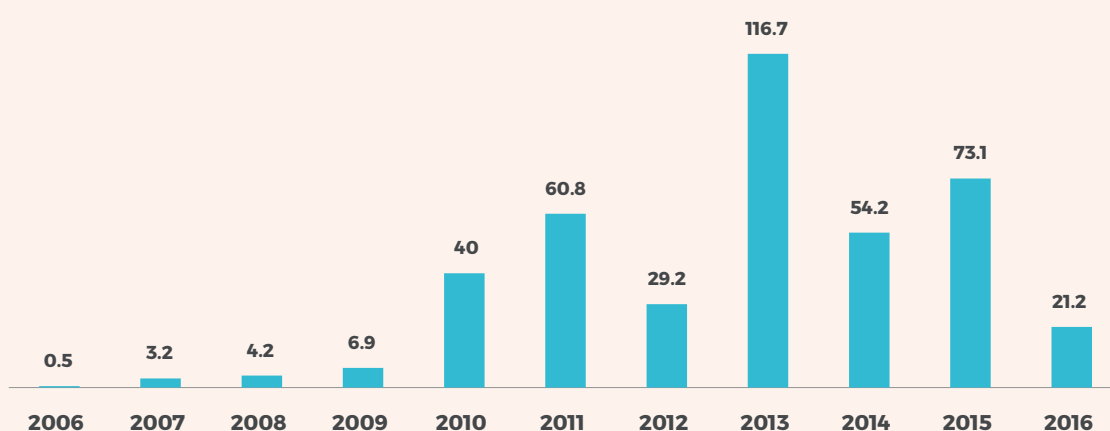
the last six to eight years, more and more milk collection centres have been established in the regions where the rural population is relatively dense and, consequently, there is more milk to collect. These regions are also generally close to the large markets, such as Tbilisi, or big milk factories.

In general, small-scale farmers rarely have direct access to large buyers such as supermarkets and rely on middle-persons to collect their produce. The reason for this is that farming patterns are fragmented and volatile in Georgia, and thus there is much room for middle-persons to constantly identify the suppliers and ensure that the quality of products corresponds to the needs.

## Box 2. Development of beekeeping in Georgia

Beekeeping is a small but quickly growing sector in Georgia. It is almost exclusively run by family farms, and hired labour in the sector is rare. Another characteristic of beekeeping in Georgia is that operating businesses are very small, and they are often not even registered with the tax authority. Out of more than 87 000 registered and active businesses in Georgia, based on Geostat's 2017 Database of Active and Registered Businesses (Geostat, 2017b), only 25 are classified as businesses.

Exports of natural honey, thousands USD, 2006–2016



Source: Geostat

This graph of the exports of natural honey shows that exports have significantly increased lately compared to 2009 and earlier periods. However, the sector experiences great volatility. While the Deep and Comprehensive Free Trade Area may provide opportunities for Georgian beekeepers to have access to the European markets, new standards and requirements might actually create hurdles for them. The data from 2016 indicates that in addition to the usual volatile nature of the sector, honey experts seem to have faced problems to satisfy the European Union standards. These new standards will be especially problematic to small-scale farmers who have limited access to information and resources. The beekeepers' knowledge is either outdated or incorrect. Women-headed households and vulnerable households are particularly at risk.

In 2015, the Agricultural Cooperatives Development Agency (ACDA) started the cooperatives support programme, which grants up to 100 beehives and additional equipment, for 30 percent of its value, to agricultural cooperatives. Women-only cooperatives and cooperatives with shareholders representing vulnerable group members receive this equipment for 20 percent of its value (Agricultural Cooperatives Development Agency, 2017). In addition, one honey sample per cooperative can be delivered for a laboratory examination. They also receive consultancy on technical regulations regarding honey. Only cooperatives with the official status of “agricultural cooperative” are eligible to participate. Cooperatives without such status but that are involved in agriculture can apply for and receive the status from ACDA for free upon meeting all eligibility requirements, including having at least five members, having a statute, and being registered at the National Agency for Public Registry.

As a result, between 2015 and 2016, the state support programme granted 13 936 beehives to 164 agricultural cooperatives, 28 honey extractors to 28 agricultural cooperatives, and 27 agricultural cooperatives received 61 400 1-litre honey storage tanks. In 2014, there were 191 000 beehives in Georgia. In 2015, there were 197 000, and in 2016 there were 205 000. Seven percent of Georgia's beehives were supported from this programme. In the first phase of the 2017 programme, 98 agricultural cooperatives received 7 588 hives. In the second phase, 51 cooperatives were to receive 3 609 hives, and 19 will were to receive 19 honey extractors. Also, 41 800 1-litre storage tanks were to be granted, collectively (Agricultural Cooperatives Development Agency, 2017).

The establishment of the ACDA and its beekeeping support programme has given incentive to beekeepers to form cooperatives or to move from an individual business model to a cooperative model and become registered by the state. This allows the Government to identify the actors in the sector and provide tailored interventions. More importantly, this model opens up access to new opportunities for beekeepers, such as the laboratory, trainings, and grants. To increase the impact of the programme, ACDA can follow a model that is often used by development assistance organizations, incentivizing beneficiaries to share their equipment and know-how with non-beneficiary neighbours. ACDA also can increase cooperation with vocational education centres and can help with developing educational modules tailored towards small-scale farmers.

While for milk, small-scale farmers often turn to milk collection centres, the model is slightly different for other sectors. Often, people who produce potatoes, tomatoes, peaches, apples and other agriculture produce that does spoil easily sell them along the highways. On the East–West highway or the road connecting Gurjaani to Telavi, one can find many street vendors, usually selling their own or neighbours' agricultural produce. Of course, this only works for farmers who live in the proximity of highways. Farmers who want to sell agricultural products that are remotely located from the highways usually have more limited options. In some cases, like with grape producers, if there is a factory in the vicinity, the farmers wait for a factory to announce that it is buying grapes. As soon as the farmers find out, they quickly hire a truck, ask the neighbours to provide help, and collect the harvested grapes on very short notice.

Since 2014, the Government has been actively facilitating the creation of agricultural cooperatives. With at least five members (three if it is a high, mountainous area), cooperatives have more access to resources and state support in sectors that are prioritized by the Government: hazelnuts, honey, milk and wine. Currently, there are 2 106 agricultural cooperatives across Georgia, of which 100 (4.7 percent) are headed by women (FAO, 2018b).

## WHOLESALERS

For agricultural products, when there is no factory in the vicinity, farmers have to rely on wholesalers. Farmers usually take their products to a municipal market early in the morning and sell their products to wholesalers, who usually have good places at the market to make selling easier. For larger quantities, wholesalers go to rural areas and collect agricultural products of their choice; thus, farmers can sell their products directly from the farm gate. Such arrangements happen during the season without having any contact information, since wholesalers simply know where and when to look for the products of their choice.

## PROCESSORS

There are only a few large agricultural processors in Georgia. In the Kakheti region, there are quite a few wine factories that directly buy grapes from farmers. In Kvemo Kartli and Shida Kartli, there are few fruit and vegetable processing companies. Samegrelo has a large walnut company that buys and processes walnuts for chocolate. However, the share of the processors in agricultural output is quite low. Most agricultural products are either sold directly to consumers or exported.

Some households and cooperatives are also involved in small-scale processing. Usually these would include producing dried fruit, fruit sweets (churckhela), jams, honey, cheese and alcohol (wine and vodka). Most of the household's activities are unregistered, and the products are usually sold within a local village or to acquaintances in Tbilisi. Agricultural cooperatives are registered, but their overall weight in agriculture is yet quite small.

## RETAILERS

**Supermarkets.** The main supermarket chains are located in Tbilisi. There are several international brands that have relatively recently entered the market, such as Carrefour, for example. The share of supermarkets is constantly rising. They prefer to deal with large and stable suppliers, but with the growing demand, they are facing serious challenges. Cooperation with small-scale farmers is happening, but often unsystematically, as such farmers cannot ensure a reliable supply of agricultural products.

**Green markets.** While the number of supermarkets is increasing, the role of green markets is noticeably decreasing in Georgia. There are still a few in Tbilisi and at least one in every large centre, but fewer and fewer people buy products there. This poses a challenge for smallholders, as they now have fewer opportunities to sell their produce.

**Groceries.** The number of groceries has quickly increased in recent years. Often, they will have fruits and vegetables as well, placed on the outside. Groceries can be found in every neighbourhood, especially in urban areas.

**Hospitality sector.** This is an important part of the value chain, as the sector represents the higher end of consumers for agricultural farmers and producers. Hotels and restaurants often have a hard time finding fresh produce locally. In Kazbegi municipality, for example, which is located in the high mountainous region bordering the Russian Federation, a higher end Rooms hotel has to get most of

the products it needs from Tbilisi or elsewhere, as there are only a few reliable local suppliers who can deliver quality agricultural products. Rural tourism and agritourism are almost non-existent, as most small holders are not familiar with such concepts, and the few educational institutions and programmes – such as the “Aisi” vocational education and training centre in Kachreti – have only recently started to work in the sector.

**Consumers.** The final point of the value chain is the consumers. Recent years have seen significant changes in consumer behaviour. As average incomes rise and urbanization increases, the demand for agricultural products also grows, leading to higher trade volumes. In recent years, there has also been a growing number of niche consumers who require organic/natural products, but suppliers still need to catch up on this front.

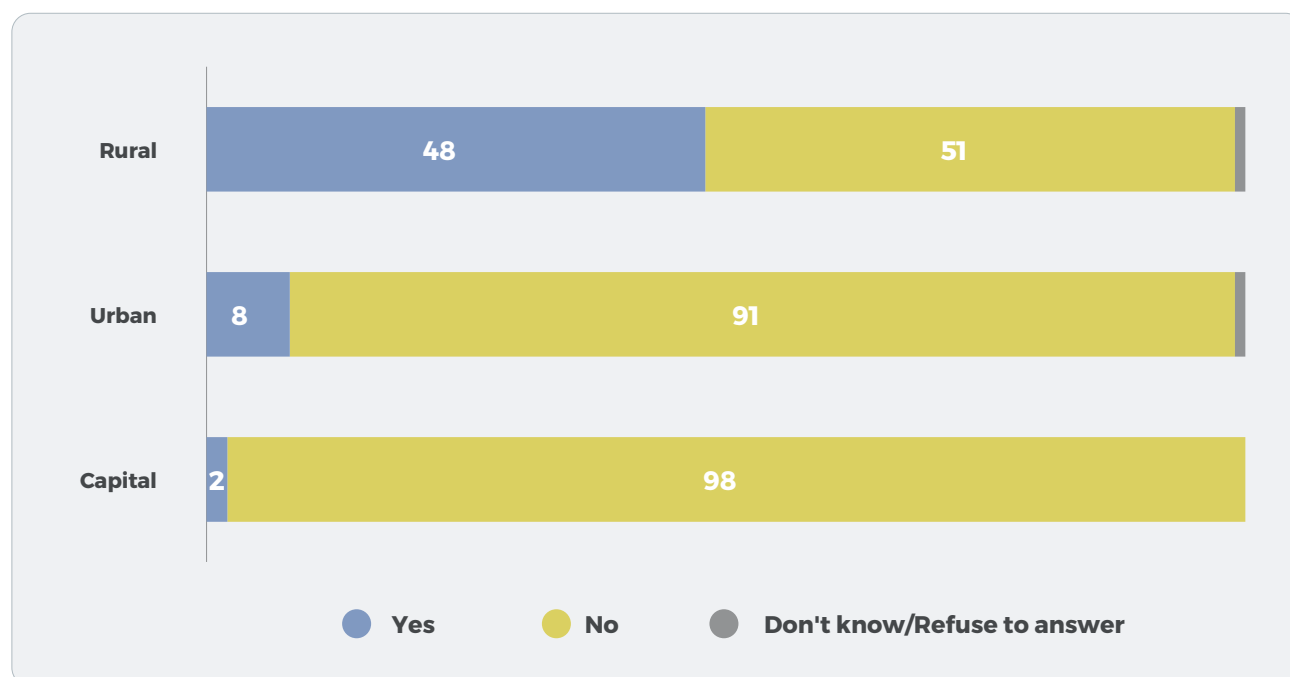
#### **GOVERNMENT’S FOCUS ON VALUE CHAIN AND ITS IMPORTANCE FOR SMALL-SCALE FARMERS**

The Strategy for Agricultural Development 2015–2020 highlights the importance of strengthening value chains in Georgia. Strategic Direction 3.4 on the regional and sectorial development value chain lists several measures that the Ministry of Environment and Agriculture plans to implement:

- defining and supporting rural development and investment strategies for each region;
- developing, implementing and monitoring sectorial agricultural programs;
- supporting the further development of geographic indication schemes and appellations of origin;
- supporting the development of seed and planting material production;
- supporting the seed/planting material certification process;
- developing a breeding system;
- strengthening post-harvest services, facilities and operations (handling, storage, grading/ sizing, packing, processing and marketing);
- improving access to improved supply services; and
- improving access to agricultural machinery (Ministry of Agriculture of Georgia, 2015).

Smallholders and family farms play a key role in agricultural value chains in Georgia. For almost half of the rural population, agricultural products have commercial significance, as they are a source of monetary income, according to the Caucasus Barometer survey conducted by the Caucasus Research Resource Centers (CRRC).

Figure 9. Sale of agricultural products as a source of household income, by settlement type, % (responses to a household survey question about whether the sale of agricultural products is a source of income)



SOURCE: CAUCASUS BAROMETER 2015 GEORGIA DATASET, RETRIEVED FROM [HTTP://CAUCASUSBAROMETER.ORG/EN/CB2015GE/INCSOUAG-BY-SETTYPE/](http://caucasusbarometer.org/en/cb2015ge/incsouag-by-settype/)

## ACCESS TO INTERNAL AND EXTERNAL MARKETS

Most of the products produced by local farmers find their way to the two largest markets in Georgia: Tbilisi, which is home to 1.1 million inhabitants (representing roughly 30 percent of the country's total population), and Adjara, during the summer season, when local and international tourists visit Batumi and other destinations at the sea. This market feature determines how different value chains are generally structured.

An untapped source of internal market for smallholders and family farms are government procurement tenders. The annual GEL 118-million (USD 56-million) market is predominantly import oriented. As the Oxfam/PMCG report has showed, the reason farmers in Georgia have not been able to become suppliers for state institutions like the army, prisons and schools is that they cannot provide enough quantities and are generally inexperienced in dealing with paperwork for tenders (PMCG, 2017). One of the recommendations from Oxfam/PMCG has been to split the procurement by regions, which would make the contract requirements smaller and provide more opportunities for local farmers. In parallel, an active information campaign would be necessary to explain to local farmers how the procurement system works and how they can successfully bid. The system should ensure the transparency of tender procedures and design so that no specific or even individual suppliers are prioritized.

Another key challenge for internal market access for small-scale farmers in Georgia has usually been roads. However, recent years have seen massive investments in the road infrastructure, which has significantly improved access to markets. For example, the mountainous region of Samtskhe-Javakheti has traditionally been famous for its suitable conditions for potato-growing and cheese-making. However, from there it would usually take up to six or seven hours to reach Tbilisi via poor-quality

roads. This increased costs for local farmers. The Millennium Challenge Corporation provided more than USD 200 million in assistance to rehabilitate more than 200 km of road networks in the Samtskhe-Javakheti region, thus decreasing the travel time from Akhalkalaki to Tbilisi from almost six hours to down to two-and-a-half hours (Ministry of Infrastructure and Regional Development of Georgia, 2010). This provides opportunities for large milk companies to open small milk collection centres in the region and have access to fresh milk produced by small farmers. Because fresh milk can spoil in just a few hours, this new business model became possible only after the new road was completed in 2009.

Generally, men are associated with wholesale and women with retail. This is explained in part by women's limited access to transportation (FAO, 2018b). Female farmers usually do not have their own vehicles, and only sporadically can they afford to hire a car. Therefore, more women than men sell products in local (and sometimes less profitable) markets, while men are the majority in larger and more distant markets (FAO, 2018b).

Both women and men participate equally in selling their products, although they sell the products that each of them prepare. In particular, men usually sell meat, and women usually sell milk, berries, greens, vegetables and fruits (FAO, 2018b).

### Box 3. Convergence of government, private and donor support. The case of milk collection centres

The development of milk collection centres served as a pillar for the milk sector in Georgia. The region of Samtskhe-Javakheti became particularly exemplary in terms of an effective system for running milk collection centres. However, only about ten years ago it was impossible or, at best, fruitless for small farmers to establish milk collection centres; most milk was consumed at home or converted into cheese. Several factors contributed to the radical shift of this situation.

First was the construction of the new road to Samtskhe-Javakheti, funded by the Millennium Challenge Corporation in 2009, as well as the addition of new sections to the East-West Highway, with support from a number of international donors, including the World Bank, the European Investment Bank and the Asian Development Bank. These changes allowed for faster and less risky transportation of milk, incentivizing milk companies to find solutions for tapping into the traditionally strong milk region of Samtskhe-Javakheti. With the support of BP – and then other organizations, such as Mercy Corps and CARE International – a number of milk collection centres were set up. Drivers with special refrigerators would make the rounds to collect milk from farm gates in several villages. Even those farmers who had just a few litres to sell were able to do so.

Second, in April 2015, technical regulations for milk and dairy products were approved. These regulations set conditions for placing milk and dairy products on the market. According to the regulation, it is not permitted to have direct or indirect reference on the label that a product is a milk or dairy product when it is not.

Third, the work of non-governmental organizations helped to change the attitudes of small-scale farmers who had not realized that even selling small amounts of milk can be more beneficial than turning milk into cheese.

As a result, the list of businesses classified as milk producers almost doubled, from 56 in 2011 to 101 in 2017. Each milk collection centre serves up to 200 small-scale farmers, for whom it is a source of cash. This arrangement provides opportunities for these farmers to reinvest in agriculture and to be able to sell milk or other agricultural products.

The experience with the milk collection centres shows that sometimes multiple interventions must be implemented at the same time in order to intervene successfully. The Government has a crucial role in facilitating and coordinating activities of different stakeholders and proposing corresponding/matching activities to ensure the achievement of set goals. When major changes need to happen – most importantly, how small farmers are used to conduct their everyday activities – the Government, businesses and non-governmental organizations need to be on board.

With the DCFTA, access to foreign markets, in principle, became more realistic for Georgian farmers. It introduced zero tariff barriers on most goods, but it also brought requirements on harmonization of a whole set of Georgia's legislation with EU standards in areas such as phytosanitary protections, labour regulations and competition policy. This makes the lives of smallholders and family farms even harder in the short and medium term. Following such standards will require substantial investments from the producers' side. However, the Government of Georgia is trying to extend the transitional period to make it easier for small-scale farmers. Of the European Union's 43 directives that the government of Georgia was supposed to match with its regulations by 2014, most of them were postponed until 2020 (Oxfam, 2017).

Certain types of agricultural products, such as meat, will be hard for Georgia to export to the EU because of the sanitary and phytosanitary standards. Dairy production is another sector where standards are important both for domestic and foreign markets. Thus, the Government is trying to invest in activities that facilitate bringing dairies into compliance with the regulatory framework. The ACDA, for example, provides technical and financial support for cooperatives that specialize in beekeeping, hazelnut growing and dairy production (Agricultural Cooperatives Development Agency, 2017). However, the initiatives are too recent to show strong evidence of success.

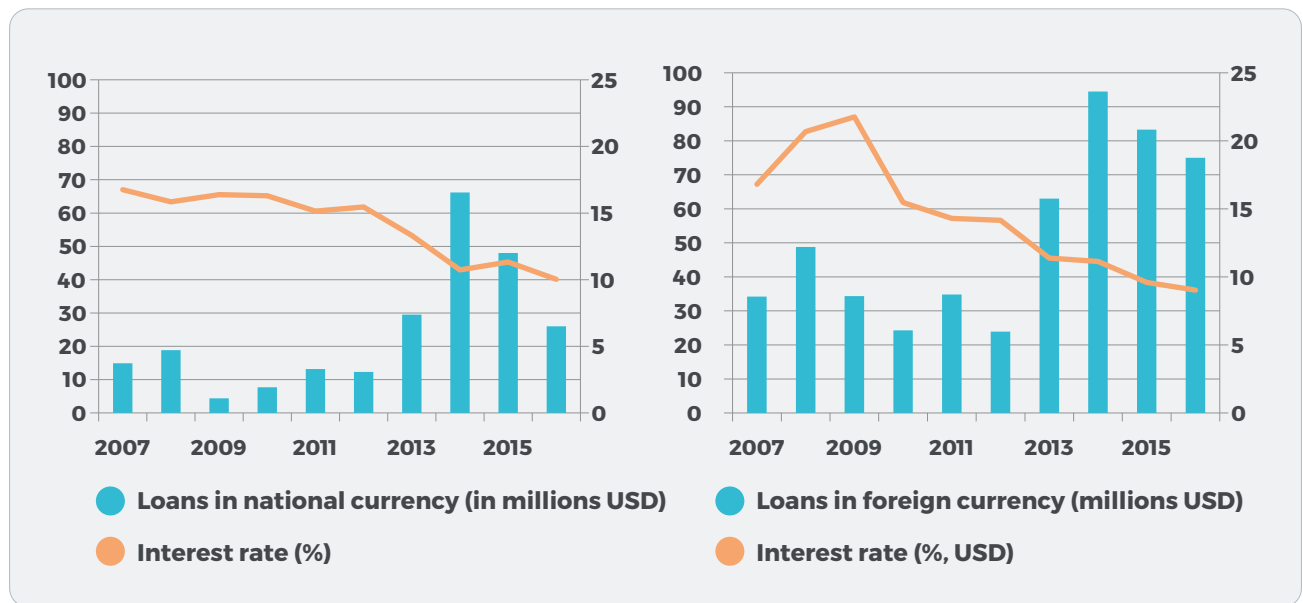
In addition, after the new government came into power in 2012, Georgian farmers also returned to the Russian market. This market is especially important for wine producers and vegetable and citrus farmers.

### **3.3.2 Access to finance**

#### **AGRICULTURAL LOANS AND GRANTS**

It is widely accepted that access to finance has been one of the key problems for small-scale farmers (Welton, 2013). Until 2014, the total portfolio of agricultural loans were small, and interest rates were high, often reaching 20 percent annually.

Figure 10. Volume of loans to the agricultural sector, in national and foreign currencies and interest rates, 2010–2017



SOURCE: NATIONAL BANK OF GEORGIA STATISTICAL DATA [HTTPS://WWW.NBG.GOV.GE/INDEX.PHP?M=304&LNG=ENG](https://www.nbg.gov.ge/index.php?m=304&lng=eng)

The graphs show that the volume agricultural credits was massively increased in 2014. This is due to a Government programme, initiated in March 2013, called the Preferential Agro-Credit Program (sometimes referred as “Cheap Agro-Credit Program.”). Of the existing 19 banks, 15 are involved in this program (Rural and Agricultural Policy and Development Institute, 2017), and it initially included three main components:

- Interest-free commodity loans for small-scale farmers, allowing them to buy production supplies during the production cycle. After the harvest period, the farmer pays the bank the money without accrued interest.
- Preferential agro-credit for medium- and large-scale farmers.
- Preferential agro-credit for agricultural enterprises.

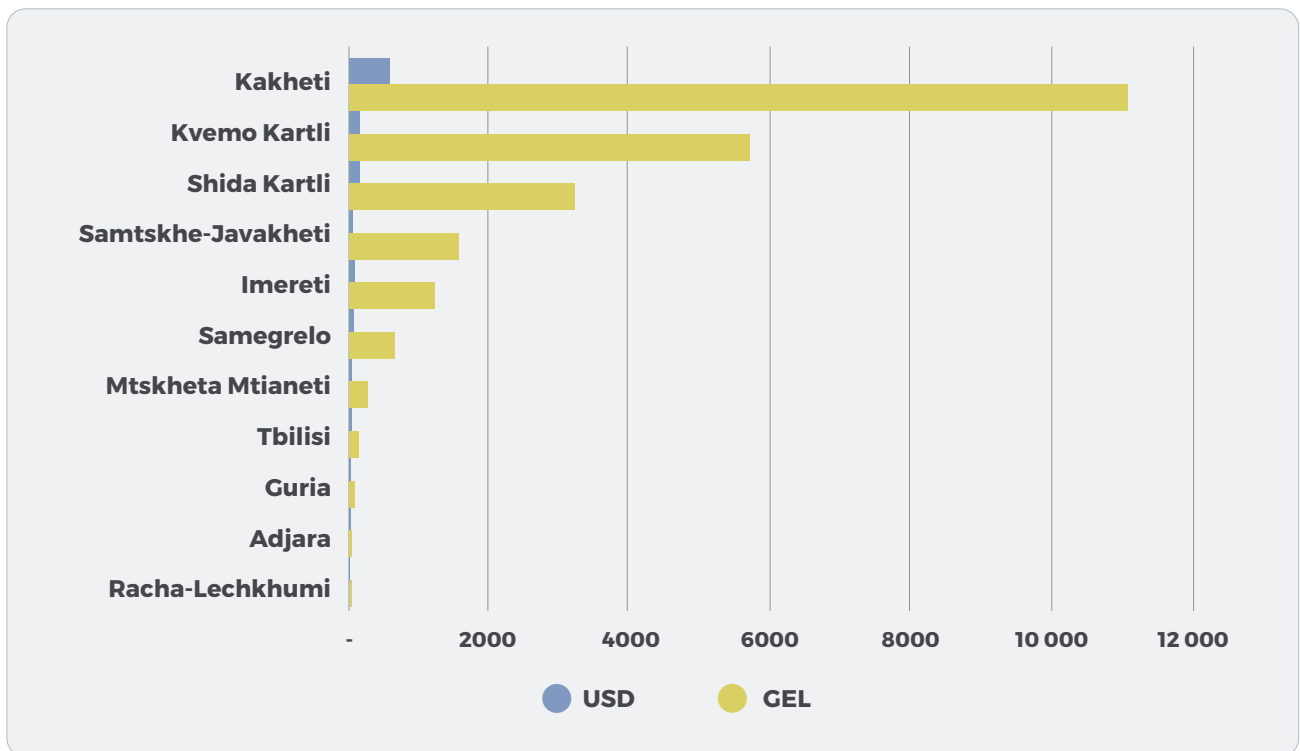
The programme underwent several important changes, and new components were added at later stages. But most important for small-scale farmers was that the lower limit of the loan amount was raised from GEL 5 000 (USD 2 040) to GEL 20 000 (USD 8 163). The idea was to promote newly established agricultural cooperatives rather than individual small-scale farmers.

As of 31 December 2015, almost 22 000 beneficiaries were funded, with the total amount being GEL 686 million (USD 302 million) in national currency and USD 154 million in foreign currency. For comparison, the total amount of agricultural credits as of 31 December 2012 was only GEL 60 million (USD 36 million) (Rural and Agricultural Policy and Development Institute, 2017).

Only 7 percent of the beneficiaries of the preferential agro-credit programme were women (FAO, 2018b). When comparing this figure with the proportion of female-headed agricultural holdings in Georgia (30.9 percent), it can be deduced that women have limited access to credit compared with men. One of the reasons behind this is that even though women may legally own land, they are less likely to have it registered in their name (FAO, 2018b).



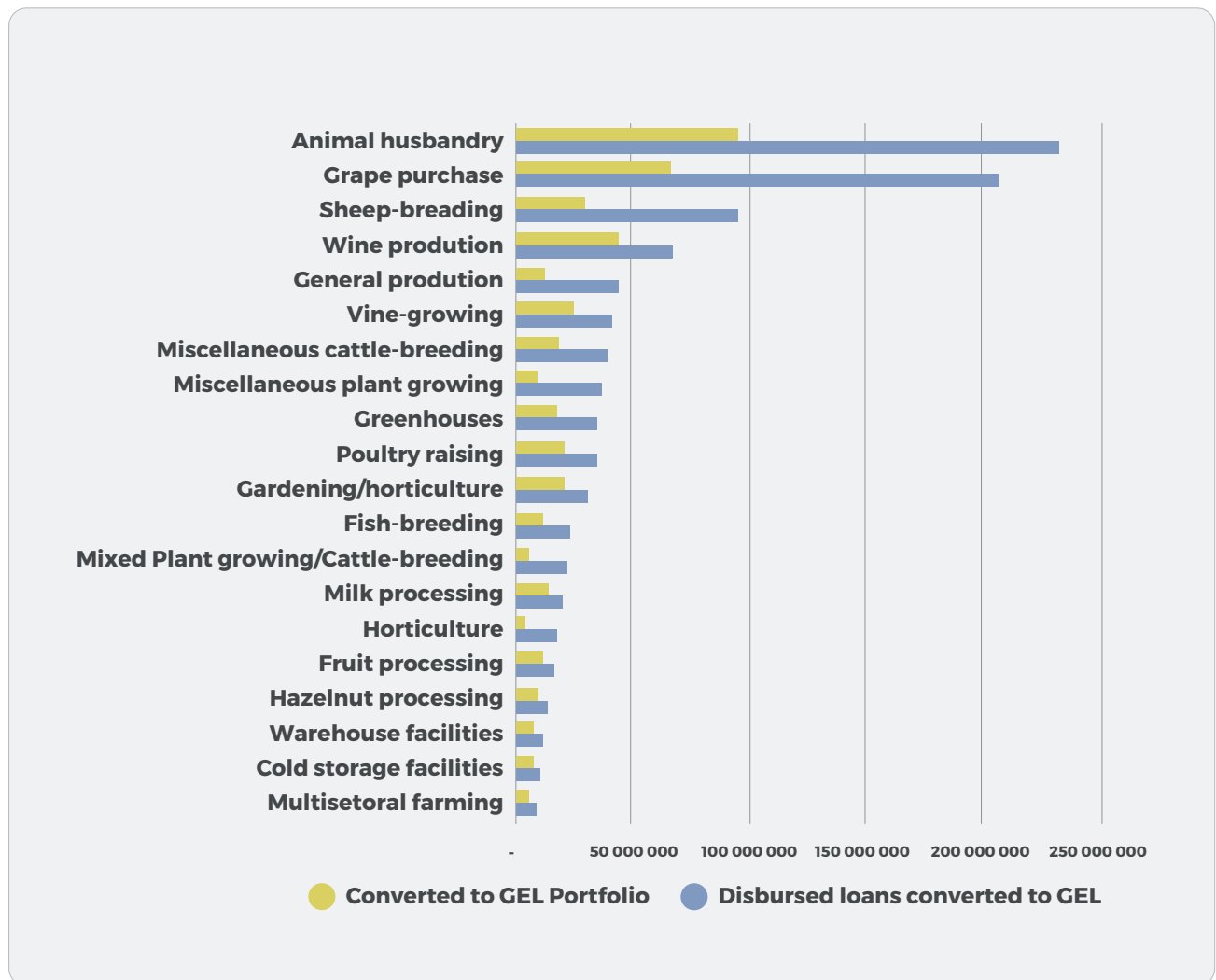
Figure 11. Number of loans by region



SOURCE: FROM RURAL AND AGRICULTURAL POLICY AND DEVELOPMENT INSTITUTE (2017). EVALUATION OF PREFERENTIAL AGRO CREDIT PROGRAM, REPORT COMMISSIONED BY OXFAM'S FOOD SECURITY NETWORK PROJECT [HTTP://FOODSECURITYSC.COM/PUBLICATION/EVALUATION-OF-PREFERENTIAL-AGRO-CREDIT-SYSTEM-IN-GEORGIA/](http://foodsecuritysc.com/publication/evaluation-of-preferential-agro-credit-system-in-georgia/)

Kakheti is leading among the regions in the total number of loans (Figure 11) because a specific component of grapes was added to the program. Figure 12 shows a breakdown of the issued amounts by sector.

Figure 12. The most financed industries from the Preferential Agro-Credit programme



SOURCE: RURAL AND AGRICULTURAL POLICY AND DEVELOPMENT INSTITUTE (2017). EVALUATION OF PREFERENTIAL AGRO CREDIT PROGRAM, REPORT COMMISSIONED BY OXFAM'S FOOD SECURITY NETWORK PROJECT [HTTP://FOODSECURITYSC.COM/PUBLICATION/EVALUATION-OF-PREFERENTIAL-AGRO-CREDIT-SYSTEM-IN-GEORGIA/](http://foodsecuritysc.com/publication/evaluation-of-preferential-agro-credit-system-in-georgia/)

Animal husbandry is the largest agricultural sector in Georgia, so it is not surprising that it tops the list of the sectors funded by the agro-credit programme (Figure 12). Grapes were added later to the priorities, and this also makes sense, as the opening of the Russian market has increased opportunities for grape producers.

A significant portion of the programme funds were directed to smallholder farms; 47 percent of loans for fixed assets and 72 percent of loans for working capital went to smallholders. But the total number of smallholder farmer beneficiaries was 13 849 for 2013–2014, which is less than 2 percent of the total number of smallholders in the country (Rural and Agricultural Policy and Development Institute, 2017).

Small-scale farmers in Georgia also benefit from various donor programmes implemented in the country. The two key donors usually are the European Union and the United States Agency for International Development (USAID). The total budget of the European Union's European Neighbourhood Programme for Agriculture and Rural Development (ENPARD) programme for 2013–2020 is up to

EUR 180 million (USD 207 million), but most of it goes to the central budget. The programme has a component that uses a European LEADER approach in pilot municipalities to facilitate the creation and functioning of Local Action Groups (LAGs), similar to the entities that exist in the European Union under the Common Agricultural Policy (CAP). These LAGs discuss development priorities for their own municipality and then make decisions on distributing grants, which often include agricultural activities such as, for example, greenhouses for salad leaves. The three pilot projects that had been selected for piloting the LEADER approach are being implemented by CARE International, Mercy Corps and People in Need in Lagodekhi, Borjomi and Kazbegi municipalities (The European Union for Georgia, 2017a). USAID has traditionally been implementing agriculture support programmes in Georgia. Currently, Cultivating New Frontiers in Agriculture (CNFA) is running the USAID-funded Restoring Efficiency to Agriculture Production (REAP) programme with a total budget of USD 19.5 million, aiming to provide 120 matching grants and impacting at least 150 000 individuals (United States Agency for International Development, 2015).

## **INSURANCE**

Agricultural insurance is very poorly developed in Georgia and was completely absent just five years ago. In 2012, before the election, the Kakheti region was devastated by hail that left many grape producers without income. The opposition coalition, Georgian Dream, promised during the election campaign that if they won the elections, farmers would be compensated. This eventually happened; affected farmers received GEL 150 million (USD 91 million) from the Government and GEL 150 million (USD 91 million) from a private fund. Such ad-hoc interventions from the Government are not uncommon in Georgia, but the Government is now trying to move away from such practices and establish a better system of insurance instead.

In September 2014, the Agricultural Projects Management Agency (APMA) introduced the Agro Insurance Program, which allowed farmers to purchase insurance against hail, excess rainfall, storms, and, only for citrus, autumn frost. The Government initially paid 94 percent of all insurance that was sold. Roughly 21 000 insurance policies were sold for 19 000 ha of land; 26.2 percent of those policies were sold to women (Larsen, 2016).

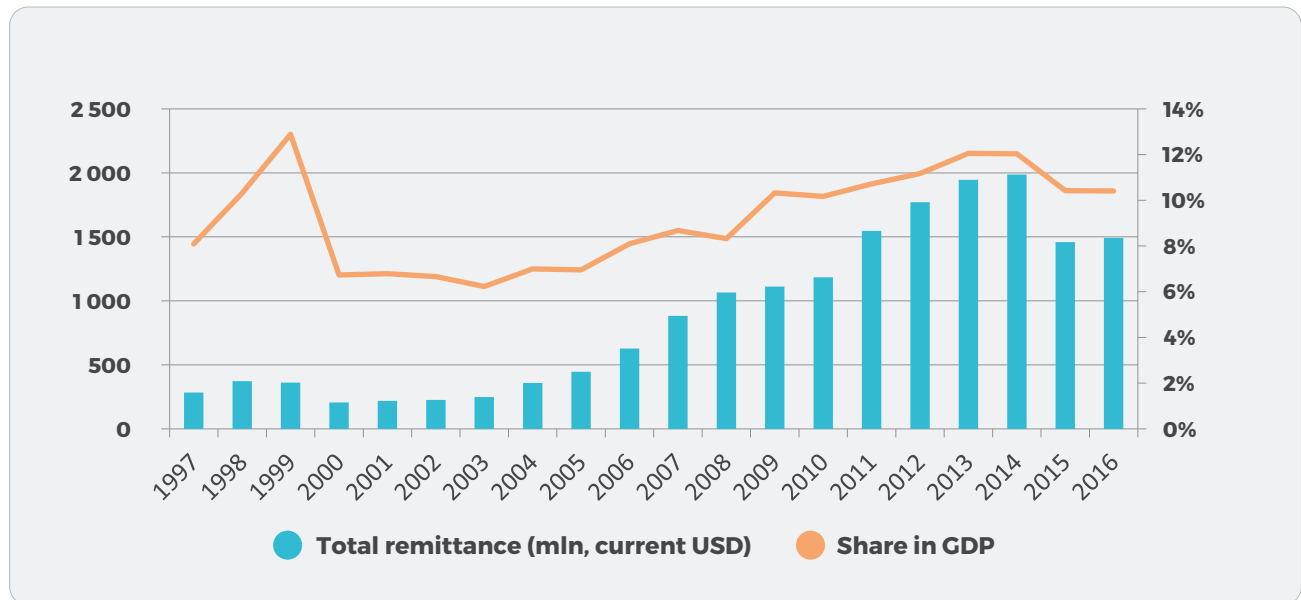
As the government subsidy covering insurance costs for farmers decreased from 94 percent to 70 percent (and 50 percent in the case of grapes), insurance policies became less attractive for farmers. Only roughly 3 000 ha was insured in 2015. The future of agricultural insurance in Georgia is not yet completely clear.

## **MIGRATION AND REMITTANCES**

There are two main ways in which migration affects the agricultural sector: 1) positive effects of remittances and return migration; 2) negative effects of the loss of labour. In the case of Georgia, remittances are an important part of the economy, ranging between 7 percent and 12 percent of country's gross domestic product for the past 20 years, as can be seen in Figure 13. The National Bank of Georgia reports lower levels of remittances than the World Bank. For example, the National Bank of Georgia reported remittance inflows equal to USD 1.440 billion in 2014 and USD 1.080 billion in 2015, compared to the World Bank's figure of USD 2 billion in 2014 and USD 1.459 billion in 2015 (World Bank, 2017). The differences can be explained by definitions and data sources. The National Bank of

Georgia obtains remittance data directly from the figures reported by the commercial banks and other financial institutions engaged in money transfer operations, whereas the World Bank estimates are based on the International Monetary Fund's balance of payments data, reported by the countries. In order to be able to make cross-country references, we have opted to use the World Bank data.

Figure 13. Total remittances, millions USD, and share of remittances in GDP, %



SOURCE: WORLD BANK (2017), WORLD DEVELOPMENT INDICATORS, [HTTP://DATA.WORLDBANK.ORG/DATA-CATALOG/WORLD-DEVELOPMENT-INDICATORS](http://data.worldbank.org/data-catalog/world-development-indicators).

In 2017, Georgia received USD 1.4 billion in remittances in total, with 80 percent of those remittances coming from six countries: the Russian Federation (33 percent), Italy (10 percent), the United States of America (10 percent), Greece (10 percent), Israel (9 percent) and Turkey (8 percent) (National Bank of Georgia, 2018). Before migrating, 66 percent of the citizens lived in urban areas, and only 34 percent lived in rural areas (Geostat, 2014). At the same time, between the 2002 and 2014 general population censuses, the rural population has decreased by 23.7 percent, while urban population has decreased by 7.1 percent. This also indicates that migration from rural to urban areas is high. The share of urban population has increased from 52.3 percent in 2002 in 57.2 percent in 2014.

The Organization for Economic Co-operation and Development (OECD) did a survey in Georgia to study the positive and negative effects of migration. The results suggest that households with a member who has emigrated do not usually replace that person for labour work at home. Those who receive remittances, however, can afford hiring external assistance (Caucasus Research Resources Centers Georgia, 2017). According to the OECD survey: “Remittances allow households to spend more on agricultural assets than those not receiving remittances. But the real difference comes from return migration, which seems to be prompting a diversification of migrant household activity: households with return migrants are more likely to invest in agricultural assets and to have non-agricultural businesses” (Caucasus Research Resources Centers Georgia, 2017).

In general terms, remittances improve the living conditions of those staying in Georgia and reduce poverty and food insecurity (Geostat, 2017d). A large share of remittances in Georgia is spent on meeting basic needs, and a significant part also is used on healthcare and education. However, the share of remittances saved or invested in agriculture or other business activities is low (Geostat, 2017d).

### 3.3.3 Access to services

Agricultural services are very scarce in Georgia. Small-scale farmers have repeatedly pointed out the absence of qualified veterinarians and agronomists in their villages as one of the key problems (Geowel, 2016).

Table 24. Agricultural service providers, by region

Region	Service providers in animal husbandry	Service providers in plant growing	Total number of service providers	Population of the region (thousands)
Tbilisi	4	18	22	1 159
Kakheti	9	6	15	315
Kvemo Kartli	10	4	14	432
Imereti	7	4	11	507
Samegrelo-Zemo Svaneti	2	8	10	321
Shida Kartli	8	1	9	259
Guria	5	3	8	111
Mtskheta-Mtianeti	6	-	6	94
Adjara	3	1	4	346
Rach-Rechkhumi and Kvemo Svaneti	-	-	-	30
Total	54	45	99	3 729

SOURCE: GEOSTAT REGISTRY OF REGISTERED AND ACTIVE BUSINESSES, APRIL 2017.

The above table doesn't include veterinary services, but most services provided in animal husbandry are actually slaughterhouses.

## Box 4. South African farmers in Georgia: a case of proactive outreach

One of the longstanding problems for smallholders and family farms in Georgia is limited access to various types of agricultural services. Limited access is not only due to a lack of cash but also that some of the services are simply almost non-existent. For example, storage facilities are not available in most regions, forcing producers to sell their produce during the high season, when the price is low.

While the Government cannot provide all necessary services, active interventions can lead to addressing the problems. Realizing the low productivity and lack of technological know-how of the agricultural sector, the Government of Georgia started a campaign in 2010 to attract experienced and wealthy investors. A Memorandum of Understanding was agreed upon with the agrarian unions in South Africa. As a result, more than 100 Boers were invited to Georgia and given extensive tours across the country. The Government was able to offer the potential investors a high level of safety (crime rates in Tbilisi had been one of the lowest in Europe) and

ease of access to state services.

Although more than 100 potential investors were targeted through this activity, only nine families decided to stay in Georgia and start businesses. The biggest challenge was to find large land areas for agricultural activities, and the fragmented nature of the Georgian land structure made it very difficult and expensive to consolidate land parcels. The nine remaining Boer families are nonetheless important for Georgian agricultural development. Most of them are located in villages in eastern Georgia, not far from Tbilisi, and they own more than 1 000 ha of land plots in total. Most of the businesses are in the grain sector.

The Hartszenberg Bros company, for example, is located in the Sartichala village. The company expanded its business in 2016 and invested about GEL 1 million (USD 400 000) in building a 1 000-tonne storage and drying facility for its own business. The plan is to further expand the business and install another facility that will generate more income by offering storage services to local smallholders and family farms. While in the beginning of the harvest season, the price for a ton of maize is around GEL 370 to GEL 400 (USD 150 to USD 160), it goes up to GEL 500 (USD 200) or more at the end of the year. Paying GEL 30 (USD 12) per ton for a six-month storage service would allow farmers to earn at least an extra GEL 70 (USD 28) per ton. Not an insignificant amount.

The initiative shows the importance of proactively reaching out to potential businesses for a country like Georgia that is lacking in infrastructure and technological know-how. This can only be done if Georgia can offer something else in exchange. In the World Bank's latest Doing Business 2018 ranking, Georgia has climbed up to the ninth position among 190 nations, which is a very important incentive for investors. The key challenge remains the land structure in the country, which cannot be easily resolved until the land registry reform is finally completed.

## **AGRICULTURAL INFORMATION AND CONSULTATION CENTERS**

In 2013, the Ministry of Agriculture (Note that the Ministry of Agriculture was merged with the Ministry of Environmental Protection in December 2017.) started to form Agricultural Information and Consultation Centers (ICC) in municipalities of Georgia. The purpose was to have ministry representation in each municipality, which would be responsible for:

- collecting and analysing agriculture-related data;
- distributing information and providing consultations;
- providing trainings and education for local farmers; and
- popularizing modern approaches in agriculture.

Basically, these centres act as public extension services in the regions. Apart from regular advisory services to farmers, international organizations and the Ministry of Environmental Protection and Agriculture also contribute support to organizing trainings related to agriculture (FAO, 2018b).

As of 2017, the ministry has formed such centres in 54 municipalities across the country. The only remaining ones are smaller municipalities, such as Kazbegi, for example, which has a population of

only 3 700 people. Local farmers in such municipalities are expected to use the services of neighbouring municipalities.

Agricultural Information and Consultation Centers are usually staffed with four to seven people and have basic equipment, including computers and a four-wheel-drive vehicle. Between 9 percent and 25 percent of the employees are women (FAO, 2018b). Staff members are usually people who have worked at agricultural units of self-government entities, which were abolished after the ministry created its own representations in the municipalities. Currently, there is an apparent need for the further building of capacity at the centres and integrating them with other government entities. For example, the agricultural information that is collected is not systematized, and methodologies vary from municipality to municipality, often contradicting with the data collected by Geostat, the official statistics service of Georgia. In four years of existence, the centres are now quite well-known among local farmers (Association of Young Economists of Georgia, 2016). However, only 1.4 percent of the respondents to a survey conducted by UN Women affirmed that they consult agricultural issues with extension service staff, women being a minority among them (UN Women, 2016). In fact, the small staff capacity doesn't allow them to reach out to most of the small farmers.

The agricultural development strategy also highlights the importance of developing extension services in Georgia. FAO has worked with the Ministry of Agriculture on developing a draft strategy for extension services. The Extension Strategy for 2018–2019 was approved in December 2017. The existing regional ICCs will be integrated under the extension agency and will have more specific tasks, rather than being responsible for all agricultural activities in a municipality.

In 2018, extension packages were delivered in some pilot regions, and the results were monitored regarding the substance of the communication and the number of farmers reached out to. The required adjustments will be made, and the model will be upscaled in 2019 (FAO, 2018b).

Access to information and extension services is overall more challenging for women. Despite that women head nearly one in three farms (31 percent), they are not usually regarded as farmers but rather identified as “wives of farmers.” As such, they are less likely to be part of communication channels (FAO, 2018b). Women's limited access to transportation, in addition to their higher work burdens at home, also limit their possibilities to reach extension services (FAO, 2018b). Accessing information and extension services is also a challenge for people living in high mountainous regions, both men and women, and especially those from ethnolinguistic minorities. Language is particularly a barrier in Kvemo Kartli and Samtskhe-Javakheti (FAO, 2018b).

In 2012, the Swiss Agency for Development and Cooperation-funded and Mercy Corps-implemented Alliances Lesser Caucasus Programme (ALCP) developed “Women's Rooms” that seek to improve the access of women to information in rural areas. These facilities operate in several municipalities of Kvemo Kartli and Samtskhe-Javakheti, as well as in Batumi, Khelvachauri, Keda, Shuakhevi and Khulo (FAO, 2018b). The Women's Rooms, financed by municipalities, function as resource centres and communal spaces for the local population, especially women. Thanks to women's engagement in these public spaces, the participation of women in community meetings has increased from 3 percent to 33 percent, on average (FAO, 2018b).

## Box 5. Novel solutions for resolving access to information for smallholders and family farms – the Traktor platform (kalo.ge).

One of the key problems for farmers in Georgia is a lack of access to relevant agricultural information. There are many types of information that farmers need, such as warnings about upcoming frosts and tips on how to deal with them, information on where to buy different agricultural inputs, or practical tutorials on relatively new species of plants that are gradually entering the country.

In 2015, the non-governmental organization Mosavali (“harvest,” in English), with support from People in Need, started to develop an online platform that would make the relevant information more accessible for small-scale farmers. Surveys from Caucasus Research Resource Centers and focus groups conducted by Mosavali showed that, contrary to the widespread belief, people in rural communities are increasingly using the Internet and smartphones. Thus, Mosavali saw opportunity in creating an online hub for smallholders and family farmers. Thus, traktor.ge (now rebranded as kalo.ge) was created, offering for its users tailored “how-to” YouTube videos on various agricultural questions and providing village-level weather information. The platform also provided more comprehensive analysis how to be prepared for the upcoming season. A calendar was developed so that farmers would not miss important agricultural activities needing to be done. Experts were hired to provide more in-depth consultations to farmers on various agricultural issues. Finally, traktor.ge began adding deals from various agricultural input suppliers, allowing farmers to make informed choices and to have the inputs home-delivered upon purchasing.

Since the launch of traktor.ge, the site has quickly become the most popular online education tool for Georgian farmers. It has 30 000 unique monthly visitors during high season, more than 10 000 app installs, and 3 million views of its educational content. The platform currently features accessible text and video tutorials on 40 different crops. Traktor.ge's Facebook page has about 20 000 followers. The Web shop features more than 650 agricultural products from ten companies, ranging from pesticides and seeds to hand tractors and tools.

These experiences have shown that there is plenty of room for modern technologies in informing and engaging small-scale farmers.

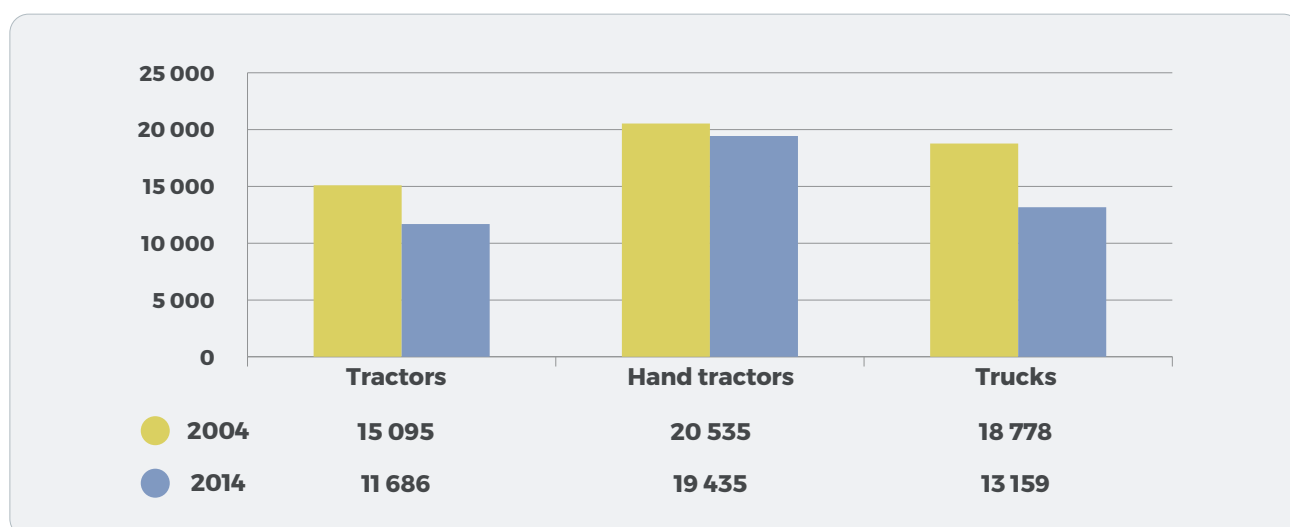
### **MACHINERY**

In 2010, the Government founded the state company “LTD Meqanizatori” to address the machinery issues of small-scale farmers who were not able to own tractors and other heavy agricultural equipment. “LTD Meqanizatori” has 13 service centres across the country, with more than 1 000 units of tractors (Institute of Development and Freedom of Information, 2014). However, these centres often are located far from farmers. A state auditor report from March 2017 concluded that the company has not kept track of its inventory and is not able to provide precise data on the number and condition of the agricultural equipment that it owns (State Audit Service, 2017).



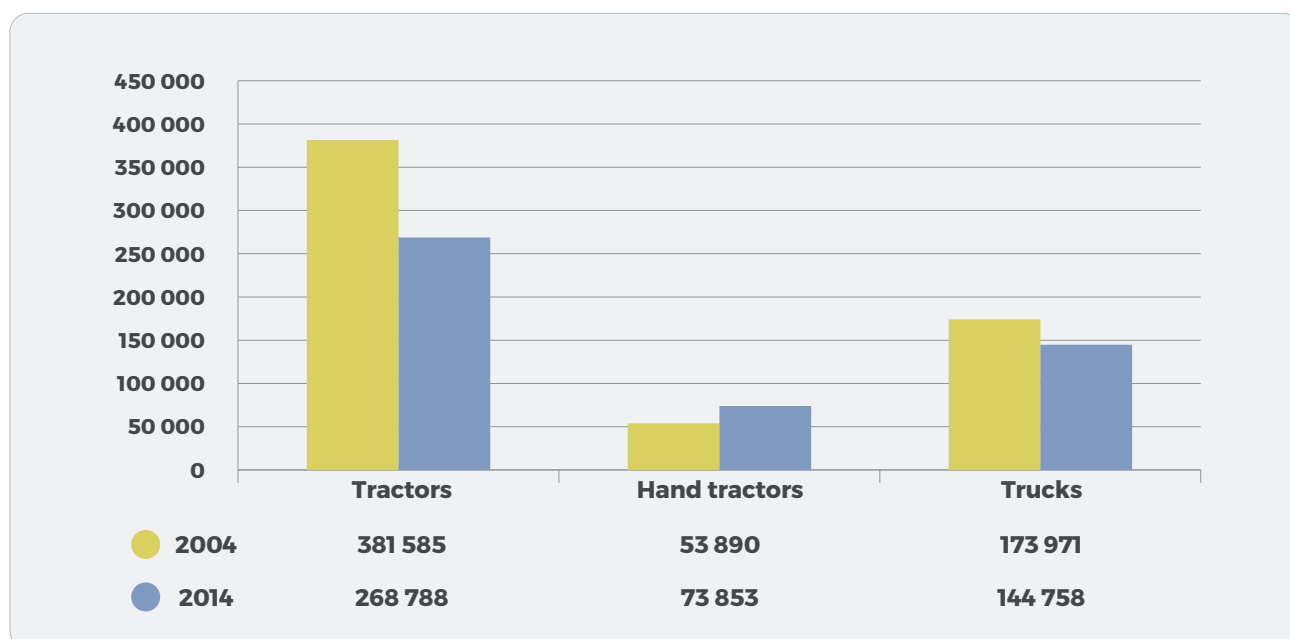
In terms of machinery owned by holdings, Geostat has data from both the 2004 and 2014 censuses (Figure 14 and Figure 15). No sex-disaggregated data is available.

Figure 14. Number of tractors, hand tractors and trucks in property of agricultural holdings, units, 2004 and 2014



SOURCE: GEOSTAT AGRICULTURAL CENSUS 2004; GEOSTAT AGRICULTURAL CENSUS 2014

Figure 15. Number of agricultural holdings that used agricultural machinery and equipment in their holdings during the reference year, 2004 and 2014



SOURCE: GEOSTAT AGRICULTURAL CENSUS 2004; GEOSTAT AGRICULTURAL CENSUS 2014

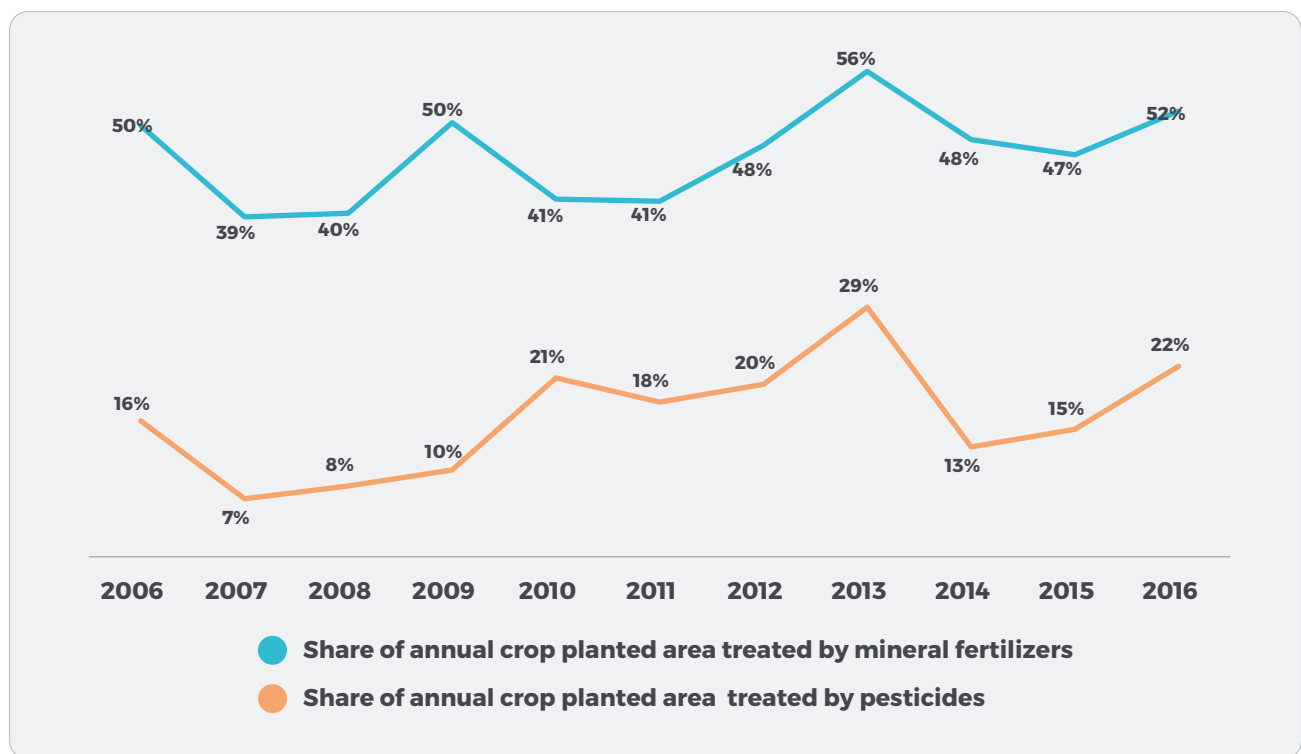
Given that there are roughly 574 000 holdings with agricultural lands in Georgia, it is obvious from Figure 14 and Figure 15 that machinery is scarce. According to the numbers, fewer than half (47 percent) of the holdings with agricultural lands used tractors in 2014, while in 2004 that percentage was more than half (52 percent). One possible reason for this decline is that in 2004, Georgia still had a large number of old Soviet machinery. Although no sex-disaggregated data is available, an FAO

study of 2018 identified, based on qualitative information, that female-headed farms are less likely to have access to machinery (as well as to fertilizers, pesticides and water), given their limited access to transportation and networks. Furthermore, machinery, as well as use of pesticides, fertilizers and water for agriculture, is stereotypically linked with masculine gender roles (FAO, 2018b).

### SEEDS, FERTILIZERS AND PESTICIDES

There has been no village infrastructure census in Georgia since 2011; these censuses usually questioned farmers about how satisfied they were regarding the availability of various inputs. However, the general trend is that problems are less related to the availability of inputs and more to quality and price (Welton, 2013).

Figure 16. Share of annual crop planted area treated by mineral fertilizers and pesticides

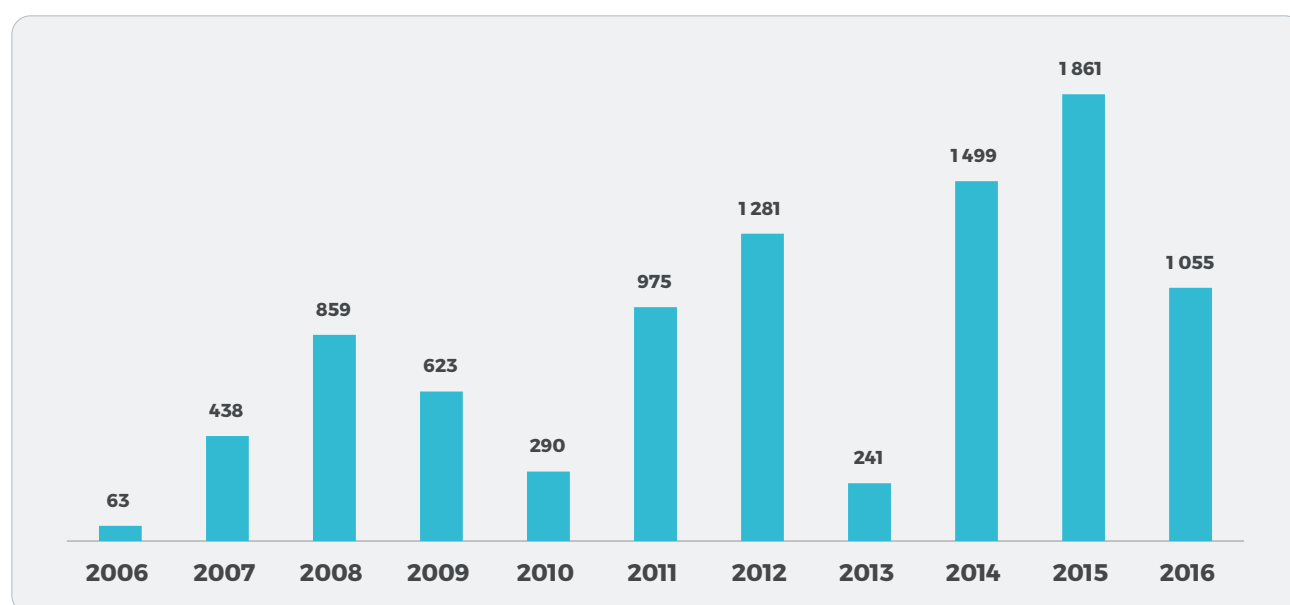


SOURCE: GEOSTAT, ANNUAL AGRICULTURAL REPORTS, 2006-2016.

Figure 16 shows that the share of annual crop planted area treated by mineral fertilizers and pesticides is volatile. There are about five or six large input providers that import most of their products.

In terms of seeds, the largest seed imports are in the potato sector. Mercy Corps and CARE International started to facilitate the import of high-quality potato seeds from the Netherlands and Germany between 2007 and 2008. The idea had been to boost the potato yield and replace the old, low-productivity seeds that had been used over and over in Georgia for many years. Although initially only up to 40–50 tonnes of quality seeds were being imported to the Samtskhe-Javakheti region, gradually farmers saw the benefits of the new seeds and the demand for such seeds increased.

Figure 17. Imports of potato seeds, thousands USD



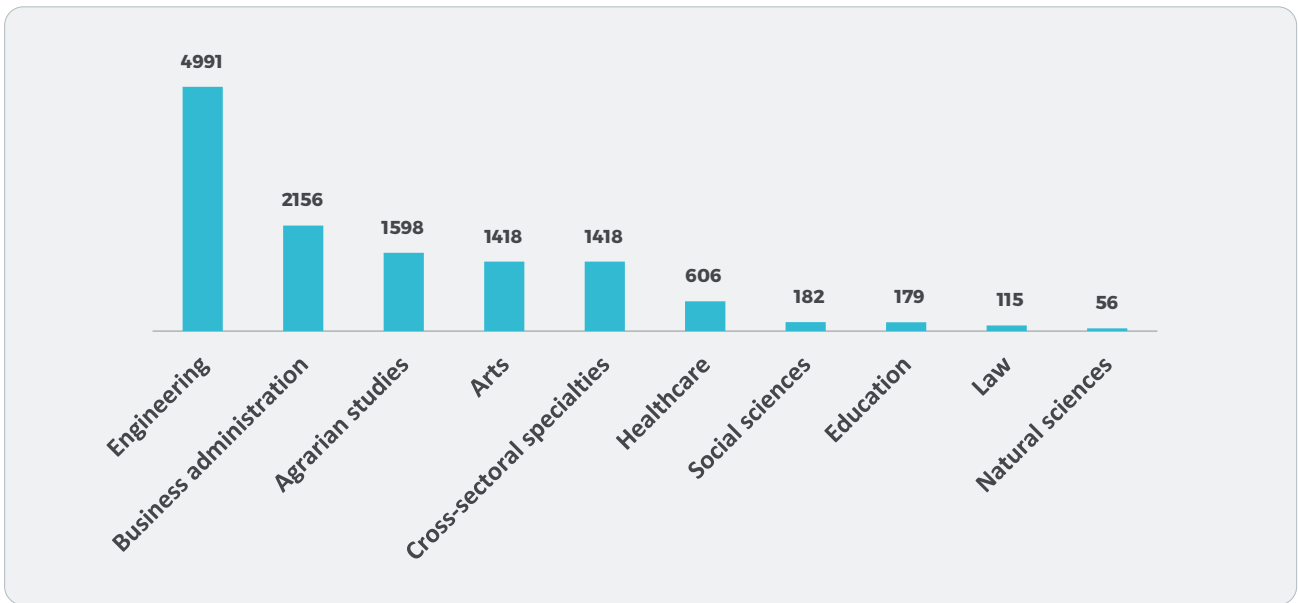
SOURCE: GEOSTAT TRADE DATA. 2006-2017

Figure 17 shows that while the value of imported potato seeds was USD 63 000 in 2006, it exceeded USD 1 million in 2012 and reached almost USD 2 million in 2015.

### 3.3.4 Education, research and development, and innovation in the agriculture sector

Agricultural specialties are being taught at vocational and university levels in Georgia, but recently government spending for vocational education has significantly increased, as it is becoming increasingly popular policy in the Government to address structural employment. Currently, there are 75 vocational education centres in Georgia, including 17 public vocational centres. Sixteen vocational education centres offer at least one agricultural programme with 15 students or more (National Center for Educational and Quality Enhancement, 2018).

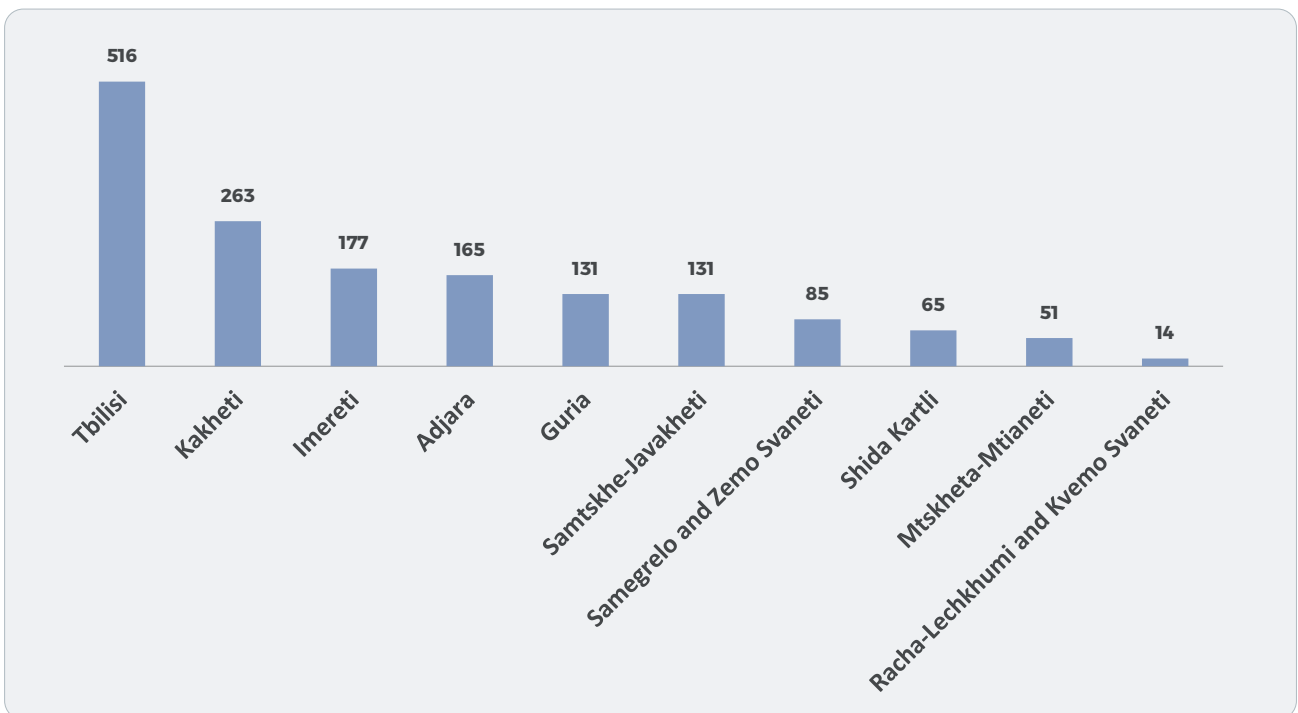
Figure 18. Available places in VET programs, by educational direction, 2016



SOURCE: VET.GE (2016), STATISTICAL BULLETIN OF PROFESSIONAL EDUCATION, AVAILABLE IN GEORGIAN AT [WWW.VET.GE](http://WWW.VET.GE)

Agricultural specialties in vocational education centres are quite popular. Out of 12 719 places offered in 2016, 1 598 were in agricultural programs. The total number of vocational students is also growing. In 2016, 1 112 students graduated from various agricultural specialties, out of a total of 9 943 students (Geostat, 2017e). While across all specialties the male-female ratio is almost equal, in agricultural specialties 43 percent of graduates were female and 57 percent were male (Geostat, 2017e).

Figure 19. Available places in agricultural VET programs, by region, 2016



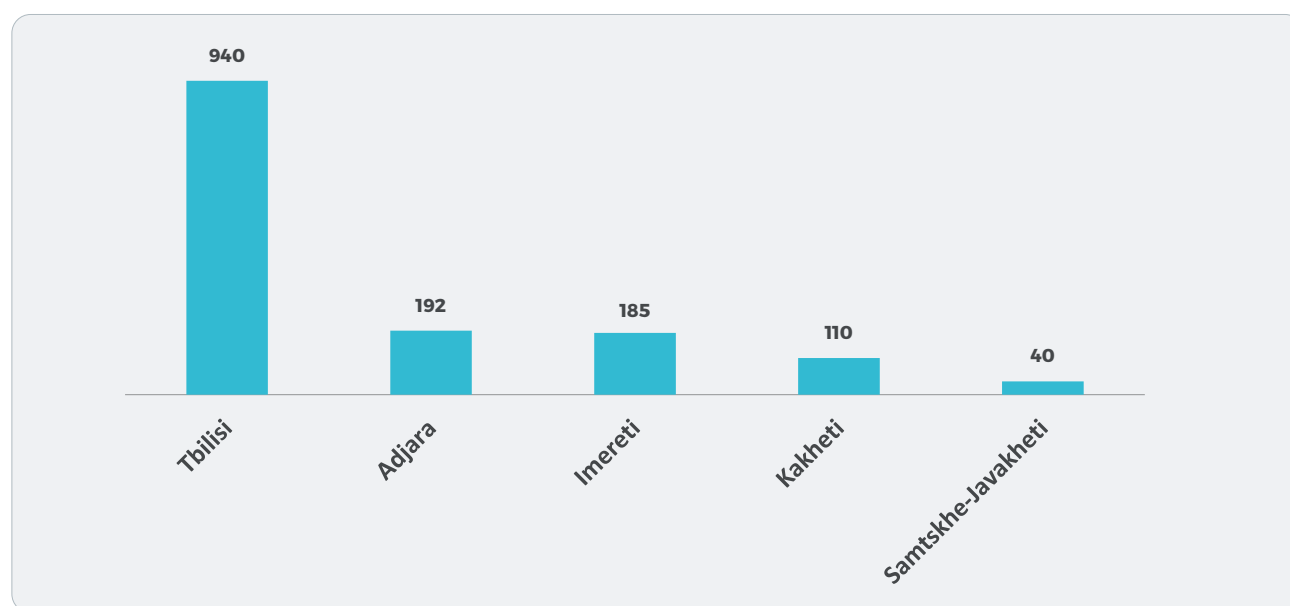
SOURCE: VET.GE (2016), STATISTICAL BULLETIN OF PROFESSIONAL EDUCATION, AVAILABLE IN GEORGIAN AT [WWW.VET.GE](http://WWW.VET.GE)

Geographically, agricultural vocational programs are offered in all regions of Georgia, but Tbilisi still has the most places available (Figure 19) because it has a popular tourism-centred vocational education programme that also offers agricultural specialties.

Although the framework for professional standards is the same for all vocational education centres, not all of them offer the same quality of education and opportunities. In agriculture, the most successful vocational education centre is “Aisi,” located in the village of Kachreti in the Kakheti region. This centre currently has 164 students. In addition to offering regular programs, it also has been functioning as a demonstration farm and an extension centre, with continuous support from the United Nations Development Programme. The centre has established good relations with local agricultural businesses, which makes it easier for students to find internship opportunities. Another successful approach that the vocational education centre has taken is agritourism, which is now especially relevant for the Kakheti region.

As for higher educational institutions, there are ten universities throughout Georgia offering bachelor’s degree programs related to agriculture and food. Based on data from university entry exams, 1 467 places were offered for 13 broad agricultural specialties. Although men are more than 70 percent of all students who graduate in agriculture, women make up 67 percent of all doctoral graduates (Geostat, 2017b).

Figure 20. Distribution of places in agricultural specialties at higher educational institutions, by region, 2016



SOURCE: NATIONAL ASSESSMENT AND EXAMINATIONS CENTER, DATABASE OF THE RESULTS OF THE UNIFIED ENTRY EXAMS [HTTP://WWW.NAEC.GE/#/GE/POST/1683](http://www.naec.ge/#/GE/POST/1683)

Most of the higher educational institutions are concentrated in Tbilisi, so it is not surprising that most agricultural places are also offered in Tbilisi (Figure 20). The Agricultural University has become a very popular destination for students seeking not only agriculture but also other specialties. However, most agriculture-related specialties, mainly in food processing, are offered at the Georgian Technical University.

Most of the agricultural knowledge is being generated through numerous international support projects, which are discussed in detail in Section 4.1.2. Most of the projects have strong analytical components

that are conducted by international experts and a growing number of local research organizations. However, at the level of smallholders and family farms, the role of research and development is very limited. There have been cases of introducing high-quality potato seeds to the potato growers of Samtskhe-Javakheti, along with introducing hybrid corn varieties. But the national research and development in Georgia is weak and generally disconnected from smallholders and family farms.

## **3.4 Environmental and nature development/climate change**

Agricultural development is strongly tied to the existing environment and nature in the country. It is especially important for the volatile and precarious position of small-scale farmers. Not only does climate change have continuous effects on the agricultural sector, but also agriculture itself is one of the key components in climate change: While the agricultural sector accounts for only about 9 percent of the economy, emissions of greenhouse gasses from the agricultural sector amount to 15 percent of the total greenhouse gasses (Third National Communication of Georgia to the UN Framework Convention on Climate Change, 2015).

During the past 25 years, the average annual temperature has increased by 0.3 °C in western Georgia and by 0.4 °C to 0.5 °C in eastern Georgia (Third National Communication of Georgia to the UN Framework Convention on Climate Change, 2015). Some regions also have seen significant increase in precipitation levels; for example, in Svaneti and in mountainous Adjara, the sum of annual precipitation levels for the period 1991–2015 years has increased by 14 percent compared to the period of 1966–1990. While precipitation levels are rising in western Georgia, eastern Georgia is seeing decreases in precipitation levels (Environmental Education and Information Centre, 2017). Georgia's National Plan for Adapting to Climate Change in the Agricultural Sector, adopted in 2017, stresses the fact that the average annual wind speed has significantly decreased in Georgia, along with the average number of frost days.

The impact of climate change on agriculture in Georgia has been assessed in all three reports of the National Communication of Georgia to the UN Framework Convention on Climate Change (UNFCCC). The Third National Communication of Georgia to the UNFCCC (for 2012–2014) was supplemented with extensive research in the Adjara and Kakheti regions. It was established that climate change has an impact on agriculture in following areas:

- intensification of drought areas, resulting in losses of yield;
- strengthening of the soil salination process, accompanied with an increase of evaporation rates;
- rapid mineralization and exhaustion of organic soil mass;
- better hibernation of agricultural crop diseases and pests, and increased rates of hibernation; and
- strengthening of erosion processes and increases in the intensity and frequency of precipitation, resulting in high risks of flooding and hail (Third National Communication of Georgia to the UN Framework Convention on Climate Change, 2015).

One of the important factors in assessing the environment is the level of access to water and sanitation. It is also worth looking at FAO's Food Security indicators, particularly those regarding utilization, to see the situation in Georgia compared to other countries.

**Table 25. Access to improved water and sanitation sources in Georgia, compared with developed countries and the Caucasus and Central Asia, 2013 and 2015**

	Access to improved water sources		Access to improved sanitation facilities	
	2013	2015	2013	2015
Georgia (%)	99.0	100.0	87.5	86.3
Developed countries (%)	99.2	99.2	95.5	95.6
Caucasus and Central Asia (%)	88.4	89.1	95.6	96.0

SOURCE: FAO FOOD SECURITY UTILIZATION INDICATORS [HTTP://WWW.FAO.ORG/ECONOMIC/ESS/ESS-FS/ESS-FADATA/EN/#.WCCNA7JHUI](http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/#.WCCNA7JHUI)

Table 25 shows that Georgia compares well to developed countries and is better than the average of countries in the Caucasus and Central Asia in terms of access to improved water sources. However, access to improved sanitation facilities is slightly worse than in developed countries or in the Caucasus and Central Asia.

**Table 26. Water supply industry and population connected to water supply industry, 2015 and 2016**

	Unit	2015	2016
<b>Water supplied by water supply industry</b>			
Gross volume of water supplied by water supply industry	Millions of cubic meters	683.2	676.0
Losses during transport	Millions of cubic meters	403.9	428.9
Net volume of water supplied by water supply industry	Millions of cubic meters	279.2	247.1
<b>Population connected to water supply industry</b>			
Population of Georgia	millions	3.72	3.72
Population connected to water supply industry	millions	2.15	2.27
Percentage of population connected to water supply industry	%	57.7	61.0

SOURCE: GEOSTAT (2017) ENVIRONMENTAL INDICATORS, [HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=PAGE&P\\_ID=431&LANG=ENG](http://geostat.ge/index.php?action=page&p_id=431&lang=eng)

Georgia has abundant hydro resources, but only roughly 60 percent are connected to the water supply industry, according to national statistics. The lowest access is in remote villages, where there is usually a well commonly used by villagers. For example, in the village of Shavshvebi in the Shida Kartli region, the well became of source of conflict between the new community of internally displaced persons that was created after the 2008 war with the Russian Federation and the host community, which traditionally had been using the well and found it difficult to share it with extra people. Mountainous areas are particularly problematic, as even a small rain can lead to disruptions of the water supply.

Table 27. Frequency of landslides and mudflows and number of human fatalities and vulnerable objects, 1995–2015

five-year period	Landslides		Mudflows		Vulnerable objects		
	Number of landslides (activated or nearly occurred)	Number of human fatalities	Number of mudflows	Number of human fatalities	Affected agricultural land	Vulnerable objects Number of human Settlements	Number of buildings
1996–2000	429	2	145	4	220	326	307
2001–2005	353	2	98	2	4 853	342	2 050
2006–2010	275	3	113	3	3 067	416	1 498
2011–2015	484	2	105	8	1 107	626	911

SOURCE: MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES PROTECTION OF GEORGIA. NATIONAL ENVIRONMENTAL AGENCY.

The data from the Ministry of Environment and Natural Resources Protection of Georgia show that the incidence of natural disasters can be quite high in Georgia (Table 27). On average, 2.3 people die annually from landslides and 4.4 die from mudflows. The Government has a programme for assisting households who lose their houses during natural disasters, providing GEL 25 000 (USD 10 200) for buying a new house. However, the programme is limited, and thousands are in line expecting to receive assistance from the Government.

Within the framework of the preparation of the Third National Communication of Georgia to the UNFCC, the Strategy of Climate Change of Georgia 2014 was also developed. This strategy acknowledged that climate change has tangible impacts on agricultural and that specific measures are needed to tackle the challenges faced by the country’s agricultural sector. In 2017, Georgia adopted a more specific National Plan for Adapting to Climate Change in the Agricultural Sector, which is also largely based on the Third National Communication of Georgia to the UNFCC but explores the impact of climate change in specific value chains:

- **Wheat.** Almost two-thirds (65 percent) of maize is produced in Kakheti, and the rest is almost completely concentrated in other regions of eastern Georgia. The sector is severely suffering from rises in average temperature and increases in drought periods. To tackle this, the National Plan for Adapting to Climate Change in the Agricultural Sector recommends increasing irrigation systems and adopting new agro-technologies.
- **Maize.** About 70 percent of maize comes from western Georgia, where humidity is high, so the dependence on irrigation for maize is not significant. However, high temperatures can lead to serious negative impacts. To increase productivity, the National Plan suggests introducing hybrid seeds and using better ploughing techniques than are currently used in Georgia.
- **Potatoes.** Almost half of the potato production in Georgia comes from the Samtskhe-Javakheti region. Both the total area and yield of potatoes in Samtskhe-Javakheti have increased. While in 1970–1990, the average area of potato production was 1 600 ha and yield was 7.7 tonnes per ha, in 2013–2015 the total area reached over 10 000 ha, and the yield increased to 12 tonnes per ha in 2006–2016. This was mostly due to the introduction of new seeds, which were facilitated by international donors such as Mercy Corps and CARE International. The climate impact on potato production in Samtskhe-Javakheti region is that in May through June, the precipitation level has increased by 10 percent in the past ten years. This has led to high water and flooding in areas



of newly harvested potato seeds. To address this, the National Plan suggests introducing water collecting and draining technologies.

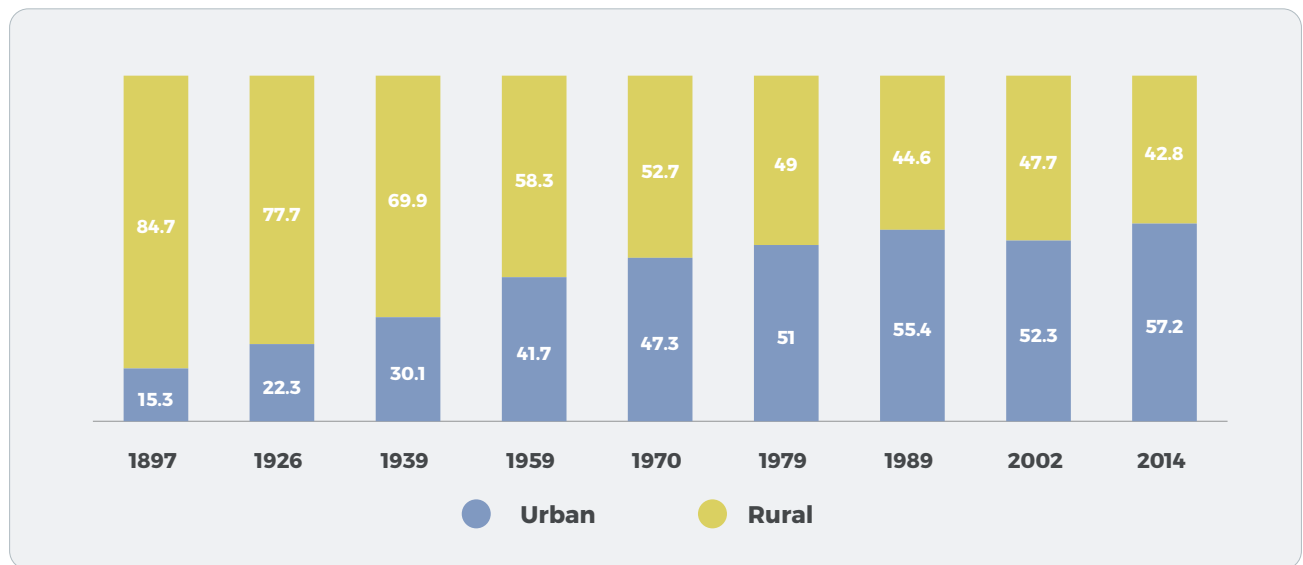
- **Tangerines.** Most of the tangerines in Georgia come from the Adjara region. The expected increase in average temperatures, in general, will positively impact the sector. However, currently the sector is characterized by huge volatility. Tangerines in Adjara are grown on 5 800 ha, but the total production varies from 40 000 tonnes to 150 000 tonnes. The reason for such volatility is the frequent early fall frosts and hail, when fruits are not yet fully developed and are highly susceptible to climatic conditions. The recommendation from the National Plan is to adopt new varieties of tangerines that would allow for the expansion of the yield season and that would be more resilient to harsh weather. This would also make the price for tangerines more stable and predictable. The other recommendation is to promote agricultural insurance among tangerine producers.
- **Hazelnuts.** More than half of the hazelnut production (which reaches 30 000 to 35 000 tonnes per year) comes from the Samegrelo region. Increases in precipitation levels during the vegetation period (40 percent to 45 percent of the annual precipitation comes during the springtime, thus allowing various pests and diseases to spread) – along with droughts in July through August and an increase of hot winds – negatively affects hazelnut productivity. To address these issues, the National Plan proposes more effective gardening practices for hazelnut farms and the planting of wind-protecting trees.
- **Meadows and Pastures.** Of about 1.9 million ha of meadows and pasture areas, half is located in Kakheti region. The decrease of humidity and the increase of strong winds have facilitated erosive processes on pastures in Kakheti. To address these issues, the National Strategy proposes planting grasses that prevent erosive processes. It is also important to have a management plan for the meadows and pasture areas to ensure that they are not overgrazed. Planting wind-protecting trees is an important measure to deal with the increasing number of strong winds.
- **Animal husbandry.** Climate change can directly affect animal feed and water. Warm winters can also facilitate the spreading of diseases and even the introduction of new types of insects. The National Plan recommends diversifying and improving animal feed. For livestock, recommendations also include expanding artificial insemination programmes and reducing the “service” cycle for cows to make the sector more cost-effective.

## 3.5 Rural areas: Population, rural economy, employment and wages

### 3.5.1 Rural population

On 1 January 2017, Georgia’s population was 3.718 million, of which 52 percent were women. The urban population was 2.128 million, 57.2 percent of the total population, and the rural population was 1.589 million (42.8 percent of the total). While in urban settlements women form 53 percent of the population, in rural settings men and women equal 50 percent, according to the 2014 population census (Geostat, 2014). The rural population in Georgia has been steadily decreasing, as seen in Figure 21.

Figure 21. Distribution of urban/rural population, 1897–2014, %



SOURCE: GEOSTAT, 2014 GENERAL POPULATION CENSUS DOCUMENT [HTTP://CENSUS.GE/FILES/RESULTS/CENSUS\\_RELEASE\\_ENG.PDF](http://census.ge/files/results/census_release_eng.pdf)

A comparison of the share of the urban population between 2002 and 2017 shows that the urban population increased by 4.9 percentage points and reached 57.2 percent of the total population. This growth is mainly caused by fast rural depopulation. During the same period, the rural population declined by 23.7 percent, while the number of urban residents decreased by 7.1 percent. The highest rates of depopulation are observed mostly in high mountain territories, due to geographical conditions, tough environment, underdevelopment and more.

Almost one-third (30 percent) of Georgia’s population lives in Tbilisi, the capital city. More people live in Tbilisi than in all other urban settlements combined.

The mean age of the population in Georgia is 38.1 years old – 35.9 for men and 40.1 for women (Geostat, 2014). In comparison with the 2002 census, the mean age of the population increased by slightly more than 2 years for women and 1.5 years for men. This comparison shows that the Georgian population is aging. There are significant differences among the regions, with the youngest mean age being 35.6 years and the oldest being 48.2.

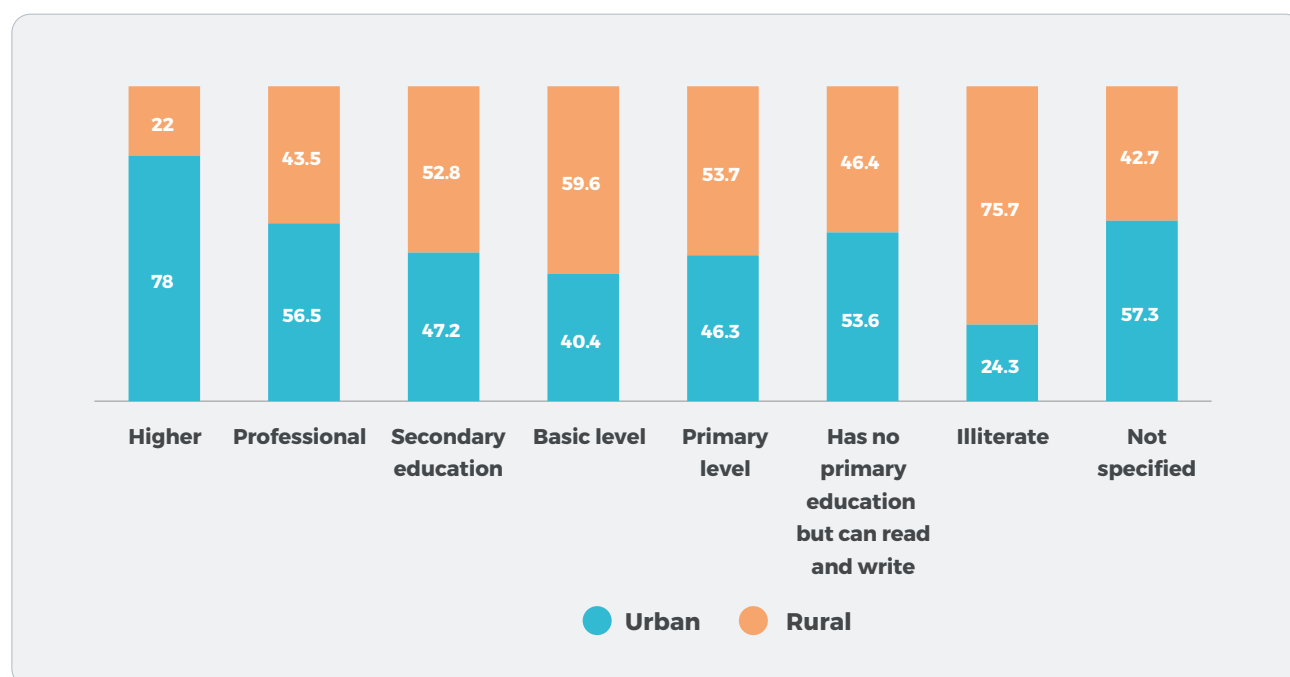
The birth rate in 2016 in Georgia was 15.2 per 1 000, with the lowest birth rate being in the Racha-Lechkhumi and Kvemo Svaneti regions (10.4) and the highest in Adjara (17.7). The birth sex ratio is 104 boys for every 100 girls, much lower than in 2008, when the ratio was 127 boys for every 100 girls (FAO, 2018c). This might be evidence of the existence of sex-selective abortion and a positive trend towards its reduction (FAO, 2018c).

According to the results of the 2014 population census, the average number of private household members (3.3 persons) has decreased by 0.2 from the 2002 population census. The biggest average size of household was reported in Adjara (4.0 persons), while the smallest numbers were in Racha-Lechkhumi and Kvemo Svaneti (2.5 persons).

While almost 42.7 percent of the entire population lives in rural areas, only 22 percent of those who have higher education live in rural areas. Because of limited business opportunities, an absence of

jobs and low incomes in rural areas, educated people prefer to live and work in cities. This is why the education level in Georgia's rural areas is significantly lower than in its urban areas.

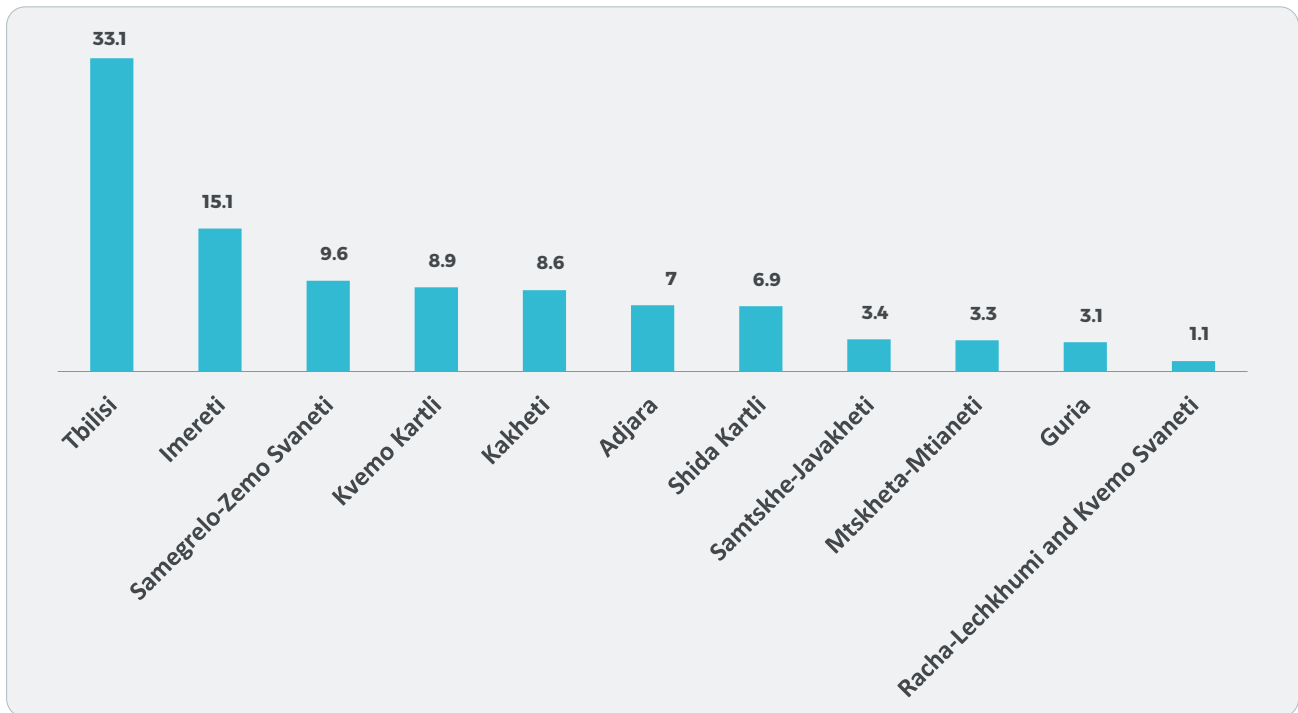
Figure 22. Distribution of population 10 years old and older by achieved level of education, rural and urban settlements, %, 2014



SOURCE: GEOSTAT, 2014 GENERAL POPULATION CENSUS DOCUMENT [HTTP://CENSUS.GE/FILES/RESULTS/CENSUS\\_RELEASE\\_ENG.PDF](http://census.ge/files/results/census_release_eng.pdf)

Internal migrants – those persons who have changed their permanent residence (moved to live in another settlement) within Georgia – account for 28.5 percent of the population. Males constitute 33.6 percent of internal migrants, and the share of females equals 66.4 percent. Because women have lower employment opportunities than men in rural areas and are less likely to inherit family farms, they are more likely to migrate to urban areas in search of employment opportunities (FAO, 2018b). In rural areas of Georgia, patrilocal marriages are a common practice (that is, marriages in which brides move to live in the household or community of their grooms' families), which also explains the higher internal migration rates for women.

Figure 23. Distribution of internal migrants by region, %



SOURCE: GEOSTAT, 2014 GENERAL POPULATION CENSUS DOCUMENT [HTTP://CENSUS.GE/FILES/RESULTS/CENSUS\\_RELEASE\\_ENG.PDF](http://census.ge/files/results/census_release_eng.pdf)

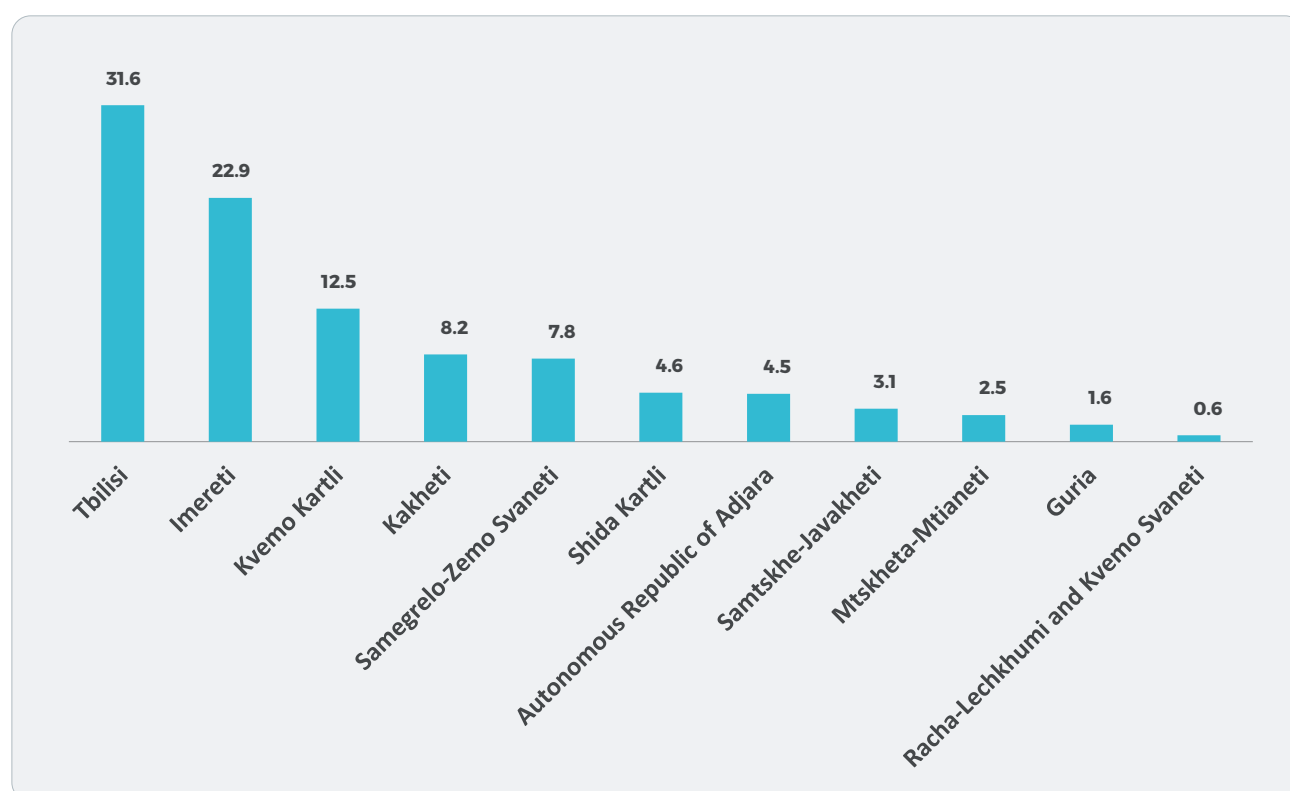
As Figure 23 shows, most internal migrants move to Tbilisi, not surprisingly. Another relatively popular location is Kutaisi. This is mainly due to the fact that a new parliament building was recently built in Kutaisi, thus incentivizing some businesses and labour to go to the town. Other reasons for internal migration are armed conflicts and environmental hazards. Internally displaced persons account for about 7 percent of the total population and are mostly settled in large cities (FAO, 2018b). In all, 53 percent of internally displaced persons are women, and 47 percent are men (Geostat, 2017d).

According to the 2017 migration profile of Georgia, developed by the state commission on migration issues, the flow of emigrants (According to the census methodology, an emigrant is a person who left Georgia and permanently or temporarily lived abroad since 1 January 2002, whose absence in Georgia exceeded 12 months or who planned to stay abroad for more than 12 months.) is increasing – from 88 704 persons in 2014 to 98 288 persons in 2016. However, just 69 855 (2014) and 64 705 (2016) of those emigrants were Georgian citizens. Therefore, it can be concluded that it is foreign nationals rather than Georgian citizens who are leaving Georgia.

According to the 2014 census, 66.1 percent of emigrants had lived in the urban settlements before going abroad, while 33.9 percent had lived in rural settlements (Geostat, 2014). The main destinations of Georgian emigrants are the Russian Federation, Greece and Turkey (listed in order of the numbers of emigrants in each country). More than half of the emigrants (55 percent) are women, who tend to concentrate in the care industry. The sex ratio, though, varies depending on the country of residence. Women are a majority in Germany, Greece, Turkey and the United States of America, while men are a majority in the Russian Federation and Ukraine (State Commission on Migration Issues, 2017).

As is shown in Figure 24, Tbilisi was the previous place of residence for 31.6 percent of emigrants, while Imereti was the previous residence for 22.9 percent, and Kvemo Kartli for 12.5 percent.

Figure 24. Distribution of emigrants by regions (%)



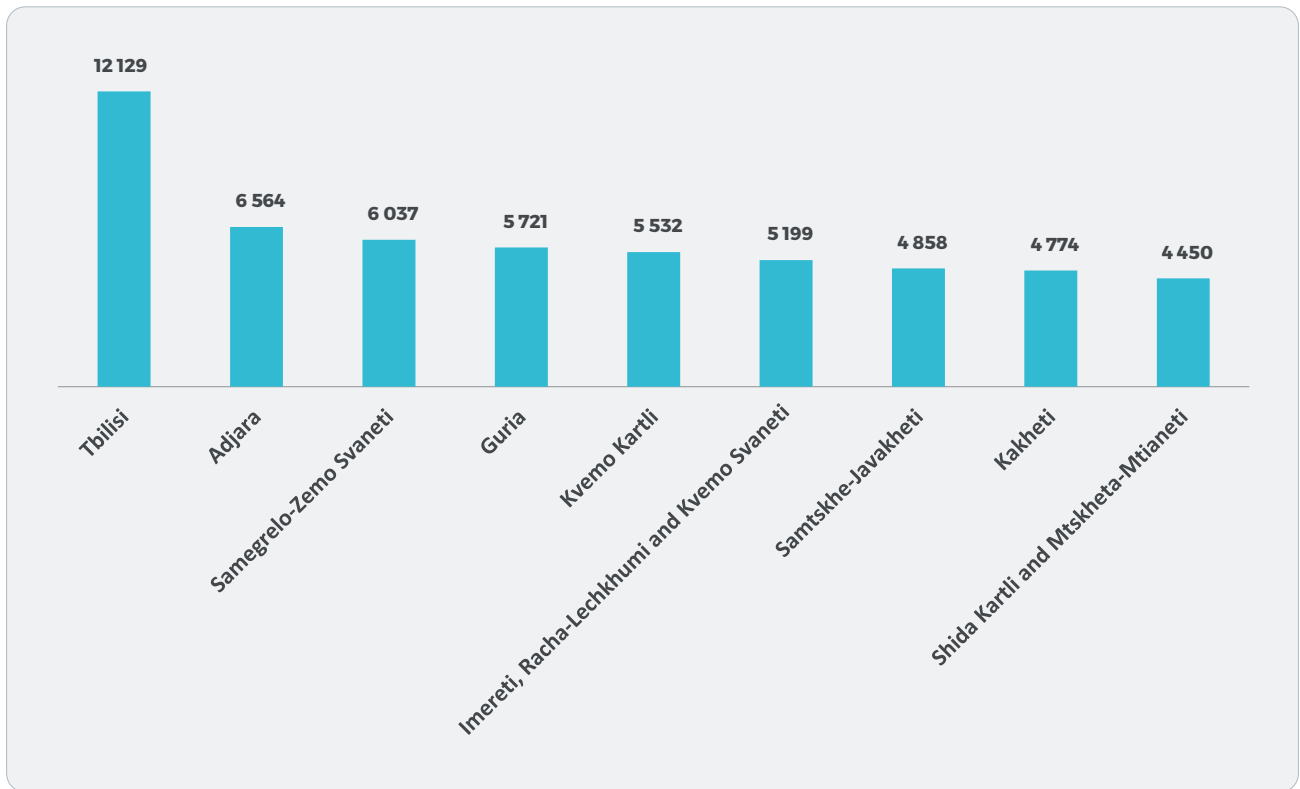
SOURCE: GEOSTAT, 2014 GENERAL POPULATION CENSUS DOCUMENT [HTTP://CENSUS.GE/FILES/RESULTS/CENSUS\\_RELEASE\\_ENG.PDF](http://census.ge/files/results/census_release_eng.pdf)

### 3.5.2 Rural economy

The rural economy is mostly dependent on agriculture. In 2016, the share of agriculture in the gross domestic product was 9 percent, while agriculture plays a significant role in the formation of gross value added (GVA) of Georgia's regions. In some regions, the share of agriculture in regional GVA is more the 30 percent, and it is more than 15 percent in most regions.

Tbilisi is the major contributor to the country's economy. In 2015, the capital city produced almost 49 percent of the GVA. By GVA per capita, Tbilisi is 1.8 times richer than the second-place region (Adjara) and 2.7 times richer than the poorest region (Kakheti).

Figure 25. GDP per capita in Georgian regions, 2015, GEL



SOURCE: AUTHORS' CALCULATIONS BASED ON GEOSTAT DATA

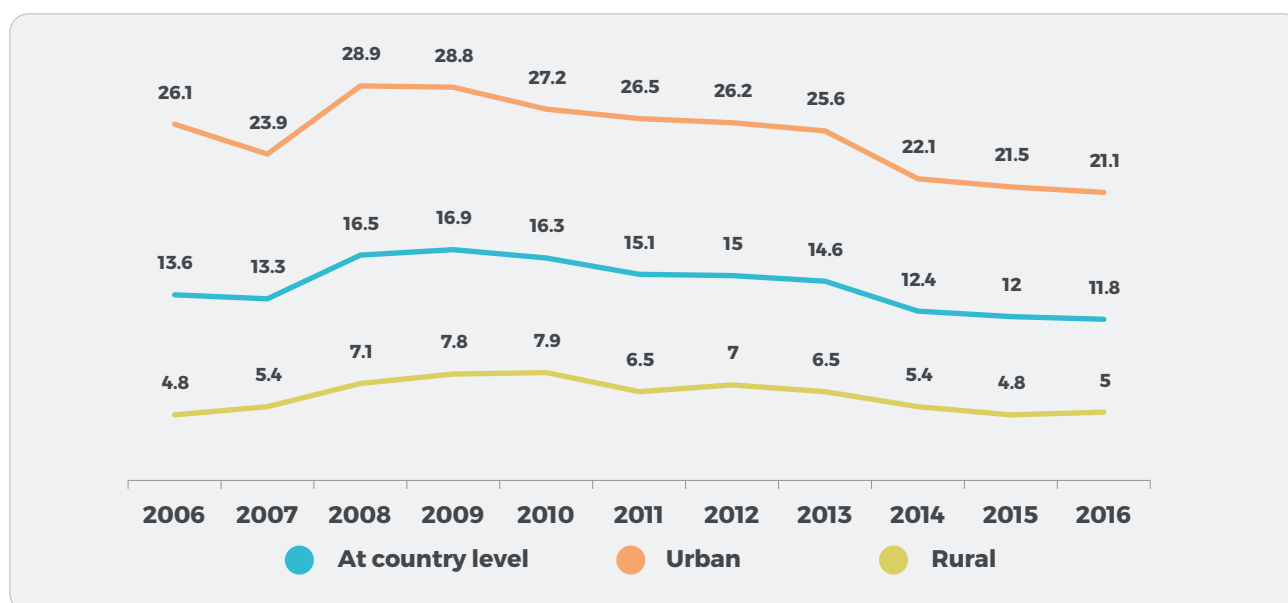
Tbilisi companies created 46 percent of the GVA in industry. Most of the regions contributed only less than 10 percent of the national industrial GVA.

According to official data, in 2016, the amount of foreign direct investment in Georgia was USD 1 584 billion, with 86 percent of the total invested in Tbilisi, 6 percent in Adjara and less than 10 percent in all other regions combined.

### 3.5.3 Employment

The official unemployment rate for Georgia is 12 percent, but the important feature of the Georgian economy is that most people are categorized as self-employed. This would include anyone having agricultural land plots from which they derive some sort of monetary income.

Figure 26. Unemployment rate by urban-rural areas, 2005–2016, %



SOURCE: GEOSTAT

In 2016, hired employees made up only 37 percent of total employment, while self-employed persons comprised 50 percent of the total employed (Geostat, 2018a). In fact, 43 percent of the total workforce was employed in agriculture, and 97 percent of all persons employed in agriculture were self-employed (Geostat, 2018a).

Figure 26 shows that in rural areas, the unemployment rate is much lower than in urban areas. Since the urban population lacks agricultural opportunities, the unemployment rate in urban areas is higher. During surveys, however, most of the people do not consider themselves as employed, as is often exemplified in polls conducted by the National Democratic Institute. These polls suggest that unemployment, as defined by respondents, is often up to 70 percent at the national level and is even higher in rural areas (National Democratic Institute, 2018).

In 2015, 40 percent of the self-employed people were unpaid workers, of which around 70 percent were women. In fact, around 60 percent of all self-employed women were unpaid workers. This figure may be substantially higher, considering that many women who work in family farms do not regard themselves (and are not regarded) as farmers or workers; rather, they see themselves as housekeepers (FAO, 2018c).

In fact, within family farms, there is a rigid gender-based distribution of tasks. Activities that are stereotypically defined as “men’s responsibilities” are those that are more capital-intensive and require mobility, including managing machinery, working as shepherds, dealing with transportation and going to the city or large markets. Activities that are stereotypically defined as “women’s responsibilities” include manual work within the agricultural cycle and in food processing, taking care of animals, milking, producing cheese and other dairy products, and taking care of the household, children and dependents (FAO, 2018b). As identified in focus groups conducted under an FAO study of 2018: “Women involved in unpaid or informal work identified themselves or were identified by others as ‘helpers’ or ‘servants’ whose work is regarded as secondary, despite the fact that they performed harder work with longer hours in the field than men.”

Table 28. Employment in agriculture, 2010–2016

	2010	2011	2012	2013	2014	2015	2016
Total employment (thousands)	1 944.9	1 959.3	2 029.1	2 003.9	1 991.1	2 021.5	1 998.3
Total employed in agriculture (thousands)	849.8	882	909.1	886	888.2	865	865.6
Women (%)	49.4	50.9	50.9	50.2	50.2	50.5	49.3
Men (%)	50.6	49.1	49.1	49.8	49.8	49.5	50.7
Of which, self-employed in agriculture (thousands)	831.1	864.5	889.3	868.1	870.7	839.5	841.8

SOURCE: GEOSTAT

Geostat’s business statistics division collects employment data differently than polling companies. It has quarterly surveys of registered and active businesses. The business statistics division doesn’t cover the public sector and financial intermediaries (banks and micro-finance organizations). Hence, the number of employees is much lower than in official employment figures. The number of hired employees in agriculture is about 24 000, and most of these people work in agricultural supply shops.

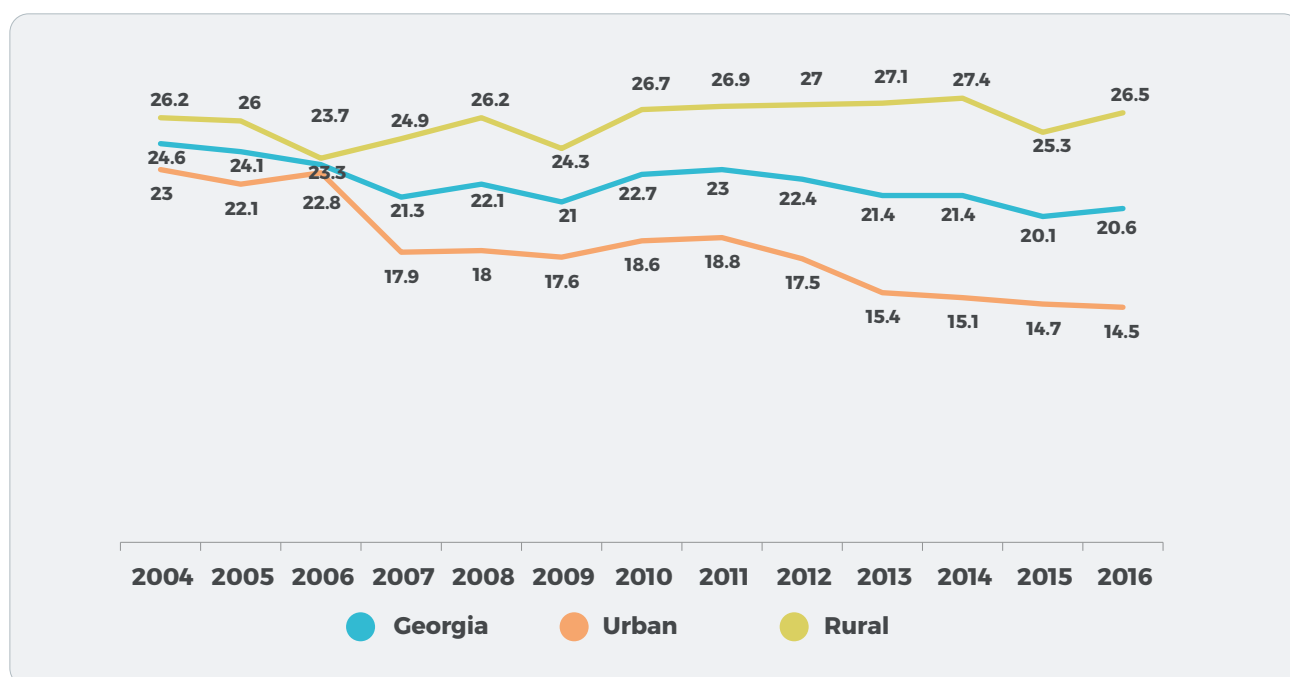
The youth unemployment rate is significantly higher (31 percent) than the unemployment rate for the general population (12 percent). In rural areas, 52.5 percent of young people are considered employed, while 11.1 percent are actively seeking employment and 17.4 percent are considered unemployed (UNICEF, 2014). However, as with the general population, most young people who are considered employed in rural areas are in-fact self-employed in their own households. Young people often do not want to stay in rural areas and be involved in agricultural activities. According to the 2014 general population census, more young people moved to other municipalities within Georgia during the past five years than persons of other ages (Eelens, 2017). Given that social practices regarding the inheritance of farms and land usually privilege sons over daughters, young women are more likely to move to other municipalities than are young men (FAO, 2018b).

### 3.5.4 Income and poverty

National poverty rates are calculated by using two approaches in Georgia – relative poverty and absolute poverty. The relative poverty rate is 60 percent of median consumption, while absolute poverty is calculated based on the minimal cost of calories needed for a working-age male. This is the World Bank methodology. During recent years, there has been a trend of increasing disparities between urban and rural areas. The reason for this is mostly economical; there are high incomes and developed physical infrastructure and services in urban areas. As shown in Figure 27 and Figure 28, the difference between urban and rural areas in relative poverty in 2016 was 12 percentage points, while in absolute poverty it was more than 8 percentage points.

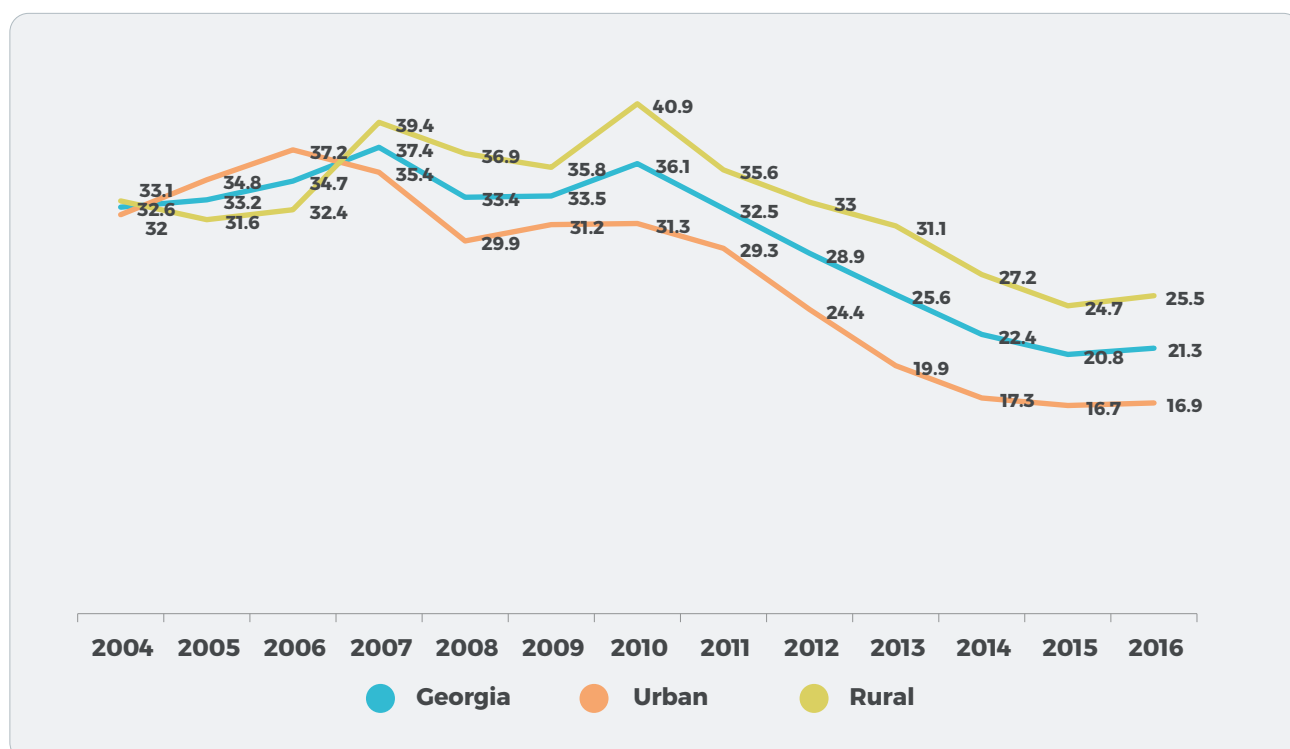


Figure 27. Relative poverty in Georgia, urban and rural, %, 2004–2016



SOURCE: GEOSTAT

Figure 28. Absolute poverty in Georgia, urban and rural, %, 2004–2016



SOURCE: GEOSTAT

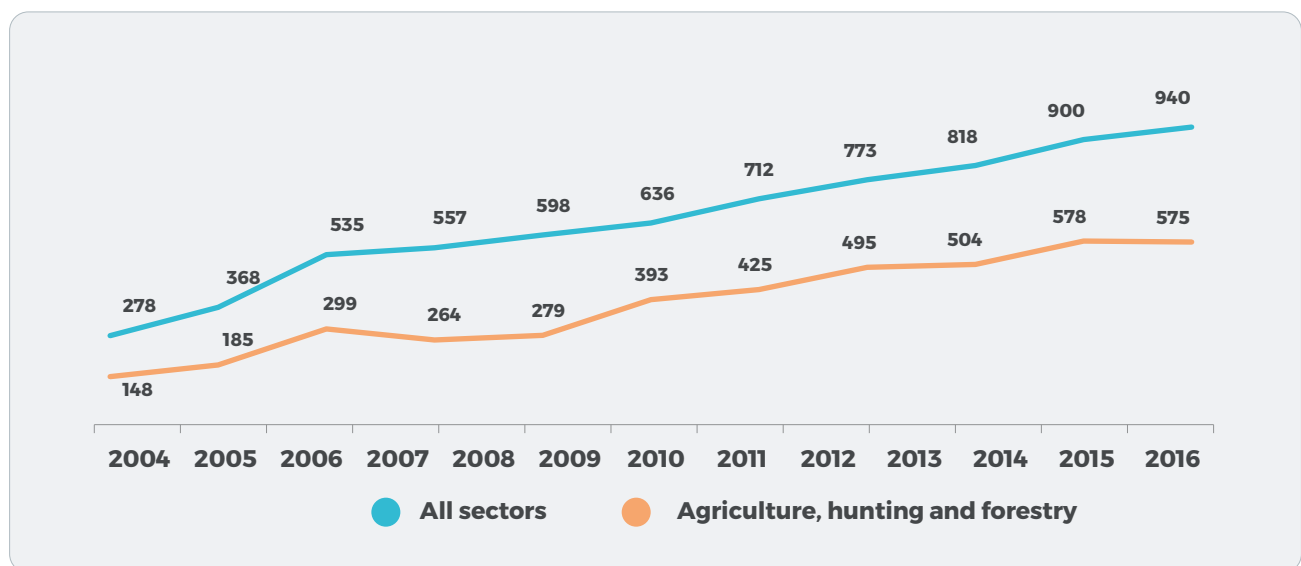
The relative poverty in 2016 was 20 percent among women and 21.3 percent among men. However, female-headed households were more likely than male-headed households to suffer from poverty

(Geostat, 2017d). Given existing social expectations, households tend to become headed by women only in the absence of men to take on this role. Because of this, female-headed households tend to have lower numbers of working-age members and worse ratios of dependents per working person than male-headed households.

Georgia ranked No. 70 out of 189 countries on the Human Development Index (HDI) of 2017 and No. 78 in the gender inequality index of the same year. Georgia ranked No. 74 out of 158 countries on the GINI coefficient, with a value of 38.5 (a value of 0 represents perfect equality, and a value of 100 represents total inequality). The country has still room to contribute to reducing poverty through the reduction of social inequalities, including gender-based inequalities.

Salaries in agriculture are significantly lower than the average salary. Salaries of people working at agricultural input supplier shops are usually low. Tractor drivers earn much more, but the nature of their work is seasonal, and the average annual salary comes down quite low as well. While the average monthly salary of men in Georgia is GEL 1 044, the average salary of men working in agriculture is GEL 613. The overall average salary for women in Georgia is GEL 680; in agriculture, it is GEL 455 (Geostat, 2018a). In agriculture, therefore, women earn 74 percent of what men do, on average. However, it is important to consider that 60 percent of the women who work in agriculture work as unpaid family members. The gender pay gap is more pronounced in the fishing industry, in which women earn 35 percent of men’s salaries (GEL 332 for women and GEL 939 for men) (Geostat, 2018a).

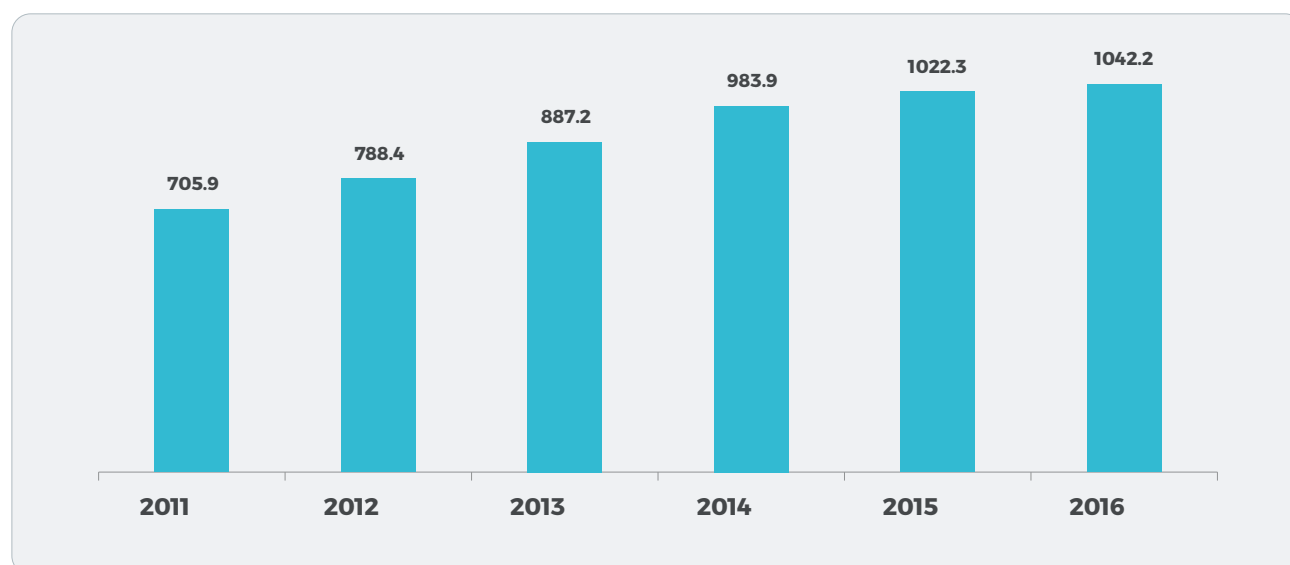
Figure 29. Average monthly salary for men and women in agriculture and other sectors, GEL, 2006–2016



SOURCE: GEOSTAT, EMPLOYMENT DATA, EMPLOYMENT AND WAGES, [HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=PAGE&P\\_ID=143&LANG=ENG](http://geostat.ge/index.php?action=page&p_id=143&lang=eng)

The average income of Georgian households has increased from GEL 706 (USD 419) in 2011 to GEL 1 042 (USD 440) in 2016. Looking at the structure of income, across the board only 37 percent of income was made from salaries, on average, given that most people do not have formal employment.

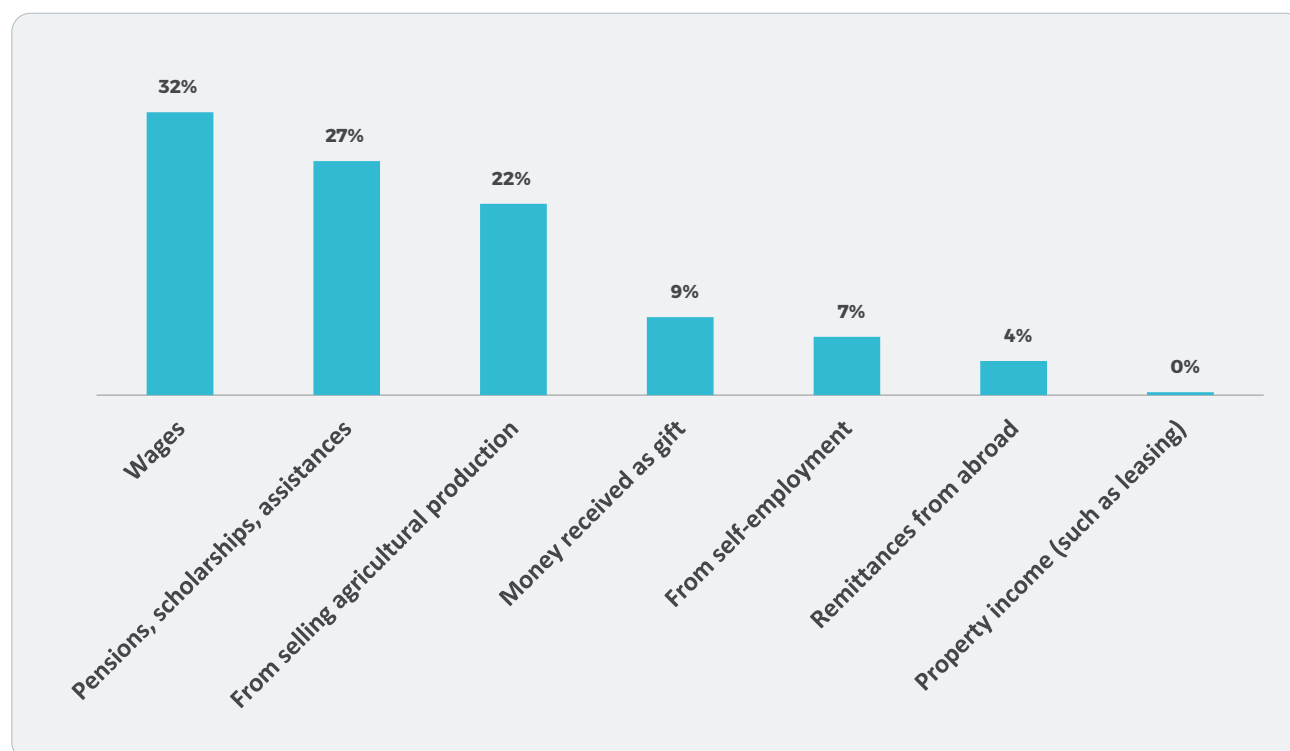
Figure 30. Average monthly income per household, GEL, 2011–2016



SOURCE: GEOSTAT, HOUSEHOLDS INCOME DATA, AVAILABLE ONLINE AT [HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=PAGE&P\\_ID=182&LANG=ENG](http://geostat.ge/index.php?action=page&p_id=182&lang=eng)

In general terms, 32 percent of the income of the rural population came from salaries in 2016. Pensions, scholarships, social assistance and income from selling agricultural products combined to make almost half of rural populations' income.

Figure 31. Distribution of average monthly incomes in rural areas, %, 2016



SOURCE: GEOSTAT, HOUSEHOLDS INCOME DATA, AVAILABLE ONLINE AT [HTTP://GEOSTAT.GE/INDEX.PHP?ACTION=PAGE&P\\_ID=182&LANG=ENG](http://geostat.ge/index.php?action=page&p_id=182&lang=eng)

According to Geostat, in 2016, the total cash income in rural areas was GEL 342 (USD 144) (Figure 31). The largest share of income came from wages, which amounted to 32 percent of income. Pensions and targeted social assistance are also very important for rural areas, at 27 percent. Income from selling agricultural production came in third at 22 percent.

In general, Georgian households rely heavily on social assistance, although the importance is higher in rural areas than at the national level, and it's in female-headed households – which account for 30 percent of all rural households – than in male-headed households. In fact, while female-headed households had only 76 percent of the total incomes of male-headed households, they received the same income per household member (100 percent per capita) (Geostat, 2017d). While female-headed households received significantly less income per capita than male-headed households from self-employment, selling agricultural production, savings, credit and property disposal, they received more income per capita in pensions, scholarships, assistance, remittances and money received as gifts. This is evidence of a higher economic dependency of female-headed households than male-headed households.

The Caucasus Research Resource Centers (CRRC) Caucasus Barometer 2015 data helps explain the coverage of different income sources at the household level. The CRRC survey question reads as follows: “Many households obtain income from several sources. I will read out several possible sources of income and please, tell me whether your household had monetary income from each of these sources in the last 12 months. Please think about the income of all members of your household” (Caucasus Barometer, 2015). In answering the question, 65 percent of respondents said that they had at least one household member during the past 12 months who received pension or social assistance. In addition, 45 percent said they have received income from sales of agricultural products, and 36 percent said they have received salaries in the past 12 months. The Geostat and CRRC data show that pensions and social assistance are important both in terms of coverage – covering almost two-thirds of the rural population – and volume/weight, contributing 27 percent of the total monetary income. Less than half of the rural population sells agricultural products, and this constitutes about one-fifth of households' income. While households who receive wages are the luckier ones, as this contributes to more than a third of income in total, less than one-third had actually been employed.

While few people work at hired jobs in the agricultural sector, more than a third of households have at least someone in the family who is employed. The largest employer in rural areas are the schools. Based on the 2014 general population census, roughly 51 000 people work in the educational sector (about 40 000 of whom are women), far exceeding other salaried sectors such as retail and wholesale trade, public service/local government, and construction. Most of the employees in these sectors are men. But most families in rural areas, almost two-thirds, receive income from pensions or targeted social assistance. Less than half have sold agricultural products throughout the whole year, which reconfirms the proposition that most of agriculture is subsistence-based, and farmers rarely rely on sales of agricultural products.

### **3.5.5 Forestry and fisheries**

Forestry is no longer an important source for of income for the rural population. However, it is very important for other reasons. About 2.8 million ha of land, almost 40 percent of the country, are covered by forests (ENPI FLEG, 2014). There are insignificant rates of plants collection (mostly mushrooms) and hunting (which is mostly recreational), but many villages depend on forests for wood. In significant

parts of the country, villages are still not connected to the national natural gas network, and electricity is too expensive to use for heating and cooking. Thus, wood remains the most-used source for heating and cooking. Development of protected areas and enforcement of stricter rules has affected rural communities. The rural population is usually given a quota of 3 to 6 cubic meters of wood to cut, depending on the region. People need to apprise a local authority of their needs; the authority then provides a license to cut trees.

Forests are also an important source of nutrition and additional income for families living close to forests, through the collection of non-wood forest products. While men are the majority in the wood production and collection sector (both in formal employment and in informal collection), women are a majority in the informal collection of non-wood forest products.

Another tangential subsector in rural areas in Georgia is fisheries. Aquaculture is only in its embryonic phase in Georgia. According to the census, there are 719 holdings with reservoirs for aquaculture, of which 18 percent are headed by women. Some estimations showed that the total number of fisheries is 384 across the country, of which only 122 are economically active (FAO, 2018b). These fisheries produce roughly 3 000 tonnes of fish, while imports in 2014 exceeded 21 000 tonnes (amounting to USD 36.7 million) (The European Union for Georgia, 2017b). Fisheries in Georgia produce almost exclusively trout, and fish feed is imported from abroad. There is simply not enough market to make the production of feed feasible in the country. In addition, the prices on the market are volatile, making it very risky for small-scale farmers to invest in aquaculture. To date, there have been no strategic views or approaches presented by the Government. There is little information available about appropriate technologies and methods. As a result, there have been cases when fishery businesses have seen massive losses due to relatively simple technological inconsistencies in operations (The European Union for Georgia, 2017b).

## Box 6. The balance between top-down and bottom-up approaches. Exploring EU's LEADER approach through the Kazbegi example

Meaningful and effective participation of the local population has been a long-standing challenge for development assistance organizations in the world. A recent European Union-funded experience in Georgia might provide some useful insights and lessons on involving rural communities in important decision-making mechanisms. Through the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD) programme, three large, international non-governmental organizations in Georgia – Mercy Corps, CARE International and People in Need – are running pilot projects in three municipalities using the LEADER approach to rural development. According to ENPARD, “LEADER is an approach developed in the EU starting in 1991 which engages the energy and resources of people as development actors rather than beneficiaries, empowering them to contribute to the future development of their rural areas by forming area based Local Action Group (LAG) partnerships between the public, private and civil sectors” (ENPARD, 2017). Mobilization of the resources of the local people and organizations is the prime driver in local development. It is the basic principle of the LEADER approach that the action targets all types of local public, private and civic actors

and individual inhabitants to create local partnerships and direct local resources towards more effective development.

The result of the intervention in Kazbegi municipality by People in Need was the establishment of a Local Action Group that includes more than 70 volunteers (60 percent women and 40 percent men) from local villages. The LAG uses participatory mechanisms for decision-making, and for preparing, monitoring and implementing the Rural Development Strategy. It is also a platform for negotiating, networking and innovation, and it sets transparency and accountability standards for other local processes. The Local Action Group managed to select more than 60 small-scale projects for funding, about half of which were for individual businesses (one-third of them are women) and the other half were community projects. The decision-making process is done in several phases. First, three members of the Assessment Committee are randomly selected to individually study a grant proposal. Then they collaboratively discuss and make a decision on funding. The money is distributed as cash but transferred for the goods requested in the project. People in Need provides administrative support, including office space, accounting and necessary trainings so that LAG members can comfortably fulfil their tasks.

The piloting of the LEADER approach in Kazbegi showed that it is important for local women and men to be involved in important decision-making and agenda-setting activities, even if they are not getting monetary income from them. With a relatively small initial investment, it seems that the LAG has become a functioning body, complementary to the governmental functions and helping to revitalize particularly remote communities of Kazbegi. It has tangible, direct impacts in the form of supporting business activities, which in turn result in more employment and access to services for the local population. Local Action Groups are also important in terms of competence and capacity development for people directly involved in the LAG. They get hands-on managerial experience and are exposed to important decision-making responsibilities that are much needed in Kazbegi and elsewhere in the country.

### **3.5.6 Rural infrastructure**

In Georgia, 93 percent of the rural population live in individual houses, most of them built during the time of the Soviet Union. The rural population faces poor housing conditions linked to reduced household income, and house and community infrastructure is in worse condition in rural settings than in urban ones. While most of both rural and urban dwellings have electricity, 30 percent of rural dwellings have piped gas, and 34 percent have a direct water supply (tap water), compared with 88 percent and 93 percent of urban dwellings, respectively (Geostat, 2014). Furthermore, only 35 percent of rural homes have direct connection to the sewage system, and 15 percent have a bath or shower, compared with 93 percent and 76 percent of urban homes, respectively (Geostat, 2014).

The number of hours when safe drinking water is available varies per region, but there are generalized shortages along with poor water quality. The persistence of polluted water affecting locals' health remains an issue to be addressed (FAO, 2018b). Because domestic activities are linked with female gender roles, women are the major users of water in households. When they have piped water, women need to be at home most of the time to use the water whenever it is available. When there is no centralized water supply, they are responsible for fetching water, adding an extra burden to their workload (FAO, 2018b).

In fact, since domestic activities are socially linked with female gender roles, infrastructural development (such as women's lower access to transportation and mobility) and the low level of modernization of households – including access to domestic appliances – create an increased burden for local women (FAO, 2018b).

In the past five years, the three major donor international financial institutions – the World Bank, the Asian Development Bank and the European Investment Bank – have lent over USD 1.3 billion to Georgia for infrastructure investments, with roads as the most important topic. The rehabilitation and construction of roads is one of the four key priorities of the Government. According to the 2017–2020 action plan of the Ministry of Regional Development and Infrastructure, the Government plans to rehabilitate over 800 km of road and construct more than 550 km of new road, including completion of the East–West highway that will connect the Turkish border in the west to the Armenian and Azerbaijani borders in the east.

### 3.5.7 Social protection and social infrastructure

Pensions, scholarships and social assistance make up 15 percent of Georgian households' budgets. Almost 20 percent of the population in Georgia is aged pensioners, and in 2016, 23.8 percent of the Georgian population were beneficiaries of pensions or social assistance.

The current social protection system combines two components: targeted social assistance, introduced in 2006 to help households below the poverty threshold, and a pension system.

The law on state pensions of 2005 eliminated the contributory pension system and implemented a flat-rate basic pension based on three components: old-age, disability and survivor pensions, which amounted 5.2 percent of the GDP and 16.2 percent of governmental revenues in 2015. The old-age non-contributory pension has as a main objective reducing and preventing poverty in old age (World Bank, 2015).

Although women have a longer life expectancy than men (77.2 and 68.6 years, respectively), women retire at the age of 60 and men at the age of 65. This explains why 71 percent of those receiving old-age pension packages were women in 2016 (Geostat, 2017d).

Table 29. Old-age pension amounts, GEL, 2012–2014

	2012	2013	2014
Average salary of employees	713	773	818
Subsistence minimum of average consumer	132	137	141
Old-age pension	110	150	150

SOURCE: WORLD BANK, 2015

Because of this flat-rate, old-age pension scheme, the rural poverty rate was reduced from 46.9 percent in 2005 to 28.2 percent in 2014 (compared with 29.5 percent and 17.7 percent, respectively, for urban areas) (World Bank, 2015). The non-contributory pension system is particularly beneficial for family farmers, especially those who work informally, as well as for women – who are overrepresented in unpaid and informal work – and for vulnerable groups.

Table 30. Persons receiving a social package besides an old-age pension, 2016

	Percentage distribution		Sex distribution	
	Women	Men	Women	Men
Disability pensioners	80	72	40	60
Survivor's pensioners	18	12	48	52
Victim of political repressions	0	0	17	83
State compensation receivers	1	9	6	94
Housing subsidy receivers	1	7	6	94
Other	0	0	23	77
<b>Total</b>	<b>Percent</b>	<b>100</b>	<b>38</b>	<b>62</b>
	<b>Number</b>	<b>63 000</b>	<b>104 000</b>	

SOURCE: GEOSTAT, 2017

Besides old-age pension packages, the Georgian system also provides social packages directed to victims of political repressions, state compensation receivers and housing subsidy receivers, although the number of beneficiaries is comparably small.

Targeted social assistance reaches 10 percent of the population (Government of Georgia, 2014). Its social allowances include a pecuniary assistance to families registered in a database if its rating score is less than the fixed minimum acceptable for the subsistence allowance average score. In November 2018, the Government announced that social allowances for vulnerable children under the age of 16 and for families with children will be increased by 400 percent, in line with the reforms following UNICEF recommendations (For more information, please visit: <http://georgiatoday.ge/news/13035/Social-Protection-Allowance-for-Vulnerable-Children-to-Increase> ). Women accounted for around 240 000 beneficiaries and men around 220 000 beneficiaries of social allowances in 2016.

The Healthcare and Social Issues Committee of the Parliament of Georgia developed in 2017 the “Vision for developing the labor and social protection sectors in Georgia by 2030” (Parliament of Georgia, 2017). This vision aims at:

1. Improving the inclusion of marginalized and especially vulnerable individuals, groups and communities in social assistance, labour and other social protection programmes by strengthening outreach and implementing information technologies and innovative approaches;
2. Improving the prevention of vulnerabilities by identifying risks at an early stage, investing in human capital, and developing decent employment and inclusive economic growth; and
3. Implementing a systemic approach so that social protection programmes complement one another and address the individual needs of vulnerable citizens.

However, no particular mention is made of the particular challenges faced by members of family farms or women and men living in rural areas.

In 2016, the Government of Georgia introduced the Law on Development of High Mountainous Regions, which envisages a number of social assistance measures for beneficiaries, including addition to the pensions, targeted social assistance, and salaries of school teachers and local doctors. Although the law is primarily aimed at the settlements located 1 500 m above sea level, the coverage has significantly



expanded and now includes more than 1 700 settlements (out of the total 3 700 settlements) across Georgia. The coverage is based on such criteria as remoteness, availability and quality of agricultural lands and access to roads. Thus, the law now covers many of the most vulnerable settlements of the country. However, there are also other types of settlements that face challenges and would greatly benefit from government assistance. First of all, this would include the settlements of internally displaced persons as well as settlements where the population faces language barriers and has limited access to government services.

The Ministry of Health, Labour and Social Affairs of Georgia has various programmes to increase accessibility and healthcare for the population, including the universal healthcare programme launched in 2013, which improved access to different medical interventions for women, men and children throughout Georgia (FAO, 2018b). Currently, around 50 percent of the population is covered by universal health (FAO, 2018b).

However, access to social infrastructure, such as schools and hospitals, varies in rural areas. In general, conditions are poor in local medical centres, forcing patients to travel to the capital to receive treatment (UN Women, 2014). The extra cost to travel to the capital is a deterrent reducing access to healthcare for women and men from rural areas (UN Women, 2014). Furthermore, private health insurance is more common in urban than in rural areas (UNICEF, 2015). Although no sex-disaggregated data is available on the use of healthcare, this may have a worse impact on women and vulnerable groups, considering that they have less mobility and access to transportation (FAO, 2018b).

Population in the high mountainous villages of Kazbegi, for example, can be very low, and children have to travel to neighbouring villages for school, which can be hard in harsh winter conditions. For example, in Kazbegi municipality, there are 25 villages but only seven schools. Hospitals are not present in every municipal centre. What is even more problematic is that the quality of municipal hospitals is considered to be usually quite low, so people rely on the hospitals of bigger cities: mainly Tbilisi in east Georgia, but also to some extent Kutaisi in central Georgia and Batumi in southwestern Georgia.

Problems with access to basic education and healthcare motivate the population from remote rural areas to move to bigger settlements and to Tbilisi. The Government has introduced some programmes to mitigate hardships in remote areas. First of all, the Law on Development of High Mountainous Regions, which was adopted in 2015 and put into effect in 2016, gave several social and tax concessions to the populations of remote and high mountainous villages, including a small addition to pensions, subsidies for utility fees, and tax cuts for small businesses. Second, the Ministry of Justice started to open public service halls in all municipalities to make government services accessible to the populations of remote areas.

### **3.5.8 Gender equality**

Georgia is a highly male-dominated society, especially in rural areas. As found in a survey conducted by the United Nations Development Programme on public perceptions on gender equality, even though 31 percent of breadwinners in 2013 were women, 86 percent of the urban population and 90 percent of the rural population believed that a man should be the breadwinner in a family (UNDP, 2013). In fact, women generally become the heads of households and family farms only in the absence of men who can perform this role, and land and farms are usually given in inheritance to sons instead of daughters.

In a 2014 United Nations Population Fund survey, the majority of respondents agreed that a woman's main responsibility is to take care of the family (93 percent of men and 86 percent of women) and that "men have the last say in the family" (88 percent of men and 70 percent of women) (UN Women, 2014). This contrasts with the real situation of women in family farms, who are heavily engaged in agricultural work although not well remunerated (FAO, 2018b). Women earn an average of 74 percent of men's salary in agriculture, when they are paid at all (Geostat, 2017d). Around 60 percent of all self-employed women are unpaid workers, and this figure could be substantially higher considering that many women who work in family farms do not regard themselves (and are not regarded) as farmers or workers; rather, they see themselves as housekeepers (FAO, 2018b). In fact, as identified in focus groups conducted under an FAO study in 2018: "Women involved in unpaid or informal work identified themselves or were identified by others as 'helpers' or 'servants' whose work is regarded as secondary, despite the fact that they performed harder work with longer hours in the field than men" (FAO, 2018b).

Women work in highly work-intensive jobs in the agricultural cycle and in food processing – including potato picking, taking care of animals, milking, and producing cheese and other dairy products – together with taking care of the household, children and dependents. Men are usually responsible for tasks that are capital-intensive and require mobility, including managing machinery, working as shepherds, dealing with transportation and going to the city or large markets (FAO, 2018b). Such a division of labour creates a significant imbalance, as women end up working longer on agricultural activities than men. In fact, when analysing the combined daily engagements in the animal production and crop cultivation value chains, women are involved in agriculture for more days than men across all regions: Men spend 263.92 days per year, while women spend 344.25 days per year, a gap of 80.33 days per year (UN Women, 2016). On top of that, women do multiple household tasks, increasing the gap even more. There is a discrepancy between the social perception and the actual time use and availability of women and men. There is a general perception that women enjoy from more free time during the day than men do (FAO, 2018b).

All studies on gender-related issues also have demonstrated that it is extremely hard for women to be engaged in programmes that aid rural development. During the consultation meetings for selecting priorities for the Village Support Program, for example, it was extremely rare for women to participate in consultation meetings. While there is no sex break-down of the participant lists for such meetings, apparently they were commonly attended by men. There was even an incident when a woman incidentally walked in during the meeting and was asked to leave (UN Women, 2016). The involvement of women in decision-making bodies is also minimal. On average, only 9 percent of local council members are women (UN Women, 2016).

Furthermore, women (wives or daughters in a family) need to have a green light from their husbands or fathers before putting new ideas into practice, and eventually they need men's permission to launch business ideas (FAO, 2018b). In a 2013 survey conducted by UN Women, 66.8 percent admitted that they know victims or survivors of domestic violence (UN Women, 2014). Older generations and people with lower levels of education were more tolerant to violence. Around 17 percent of respondents believed that women should put up with violence to keep the family together (UN Women, 2014). However, the majority of people in rural areas consider that gender inequalities do not exist (FAO, 2018b).

In sum, there is a significant gap between the social perception and reality of gender inequalities in rural areas, which poses a challenge to effective advancements in rural women's empowerment. The existing social practices and stereotypes create problems not only for women, but they also have serious

repercussions on agricultural development in general. One obvious reason for this is that the potential of women, including their intellectual resources, is not being fully utilized. In order to improve the livelihoods and productivity of family farms, all those engaged in agricultural production, both women and men, need to be empowered.

### **3.5.9 Major vulnerable groups in rural areas**

While social vulnerability is not always clearly defined, we can differentiate several large vulnerable groups in Georgia. This can include poor people, internally displaced persons, persons with disabilities, people living in mountainous or remote areas, and ethnic and religious minorities. This report has discussed poverty levels and income sources in Section 3.5.4, and various other sections also cover people living in mountainous or remote areas. This section briefly discusses three specific vulnerable groups: internally displaced persons, persons with disabilities, and ethnic and religious minorities. These three groups are large vulnerable groups, and their lives in rural areas are different than their lives in urban areas. There are also other vulnerable groups in Georgia, such as sexual minorities, but there is not enough data on their lives in the rural context.

#### **INTERNALLY DISPLACED PERSONS**

Georgia has 273 000 registered internally displaced persons (IDPs), who account for 7.3 percent of the total population. Of this group, 47 percent are men and 53 percent are women (State Commission on Migration Issues, 2017). This is one of the highest per-capita shares of IDPs in the world (World Bank, 2017). Most of the IDPs are from the 1992–1993 conflict in the Abkhazia region and the 2008 war with the Russian Federation in the Tskhinvali region. Internally displaced persons usually reside in areas adjacent to the border zones (after the 2008 war, many new IDP settlements were swiftly constructed near the Tskhinvali region to provide accommodation) and in Tbilisi, which contains almost 39 percent of all IDPs. Only about 25 percent of all IDPs live in rural areas. For comparison, 51 percent of the general population lives in rural areas (World Bank, 2017). Many IDPs have traditionally had rural livelihoods before conflict, but most of them do not own land or livestock after resettlement. According to an assessment from the World Bank, “not owning a house prevents long-term planning and also means that they lack collateral and access to finance for entrepreneurial activities” (World Bank, 2017).

#### **PERSONS WITH DISABILITIES**

Another large vulnerable group, especially in rural areas, is persons with disabilities. Officially, around 124 000 persons with disabilities (3.3 percent of the total population) are registered by the Social Service Agency and receive assistance (Social Service Agency, 2018). However, it is widely accepted that in reality many more people have disabilities but either have little information, or do not want to be registered as persons with disabilities due to the associated social stigma (Geowel, 2014). According to UNICEF’s 2015 Welfare Monitoring Survey (UNICEF, 2015), 42 percent of Georgia’s population believes that it is at least partially problematic for a household to reveal that they have a child with disabilities in the family, and 32 percent believe that parents would prefer to hide that they have a child with disabilities. Geostat’s general population census also indicates that there is a gap in registration numbers. According to the 2014 general population census, more than 342 000 people identify

themselves as persons with disabilities, which is 8.7 percent of the total population (Geostat, 2014). For comparison, the share of registered persons with disabilities in developed countries usually varies between 10 percent and 15 percent. This discrepancy in the number of officially registered persons with disabilities in Georgia indicates serious gaps in the identification and registration mechanisms. Serious work needs to be done to introduce the social model of identification and to have more inclusive and realistic estimates.

According to the 2014 general population census, about 3.5 percent of Georgia's 1.6 million people living in rural areas state that they have a seeing disability (either a severe disability or they cannot see at all), while 2.5 percent of Georgia's 2.1 million urban population state they have the same problem (Geostat, 2014). While there are no significant differences between urban and rural settlements among officially registered persons with disabilities, the census data reveal that, in general, more people in rural areas consider themselves as having different types of disabilities than do those in urban settlements. This suggests that access to healthcare in rural areas is more restricted than in urban areas.

## **ETHNIC AND RELIGIOUS MINORITIES**

The share of ethnic minorities has seen a decline, from 16.2 percent in 2002 (Geostat, 2002) to 13 percent in 2014 (Geostat, 2014). The rate of out-migration among ethnic minorities is significantly higher than the rate of out-migration of ethnic Georgians. Access to rural advisory services and other public services is documented to be worse for ethno-linguistic minorities because of language barriers.

The largest ethnic minority in Georgia are Azerbaijanis, who make up 6.3 percent of the general population (Geostat, 2014). They are concentrated in rural areas of southern Georgia (Kvemo Kartli region). Over 80 percent of the Azerbaijani minority lives in rural areas. This is a significantly higher rate than with any other ethnic group. Moreover, the median size of a land plot for an Azerbaijani household is 0.2 ha, which is significantly lower than the median size of a land plot for a Georgian household (0.4 ha) or for an Armenian household (1.1 ha). As a result of living in mostly rural areas, being dependent on agriculture, and having small land parcels, Azerbaijanis have worse income, poverty, education, employment and healthcare levels than any other ethnic groups in Georgia (World Bank, 2017).

Roughly 84 percent of Georgia's population are Eastern Orthodox Christian. The largest religious minority group in Georgia is Muslims, accounting for 10 percent of the general population. Shia Muslims are concentrated in Azerbaijani settlements of Kvemo Kartli, while Sunni Muslims are concentrated in Georgian settlements of Adjara and the Kist settlement in Pankisi (World Bank, 2017). The Apostolic Armenian religious minority is concentrated in Armenian settlements of Samtskhe-Javakheti and accounts for roughly 3 percent of the general population (World Bank, 2017). A 2017 World Bank study on social exclusion concluded that "there is no empirical evidence that religious minorities are performing consistently worse on any set of indicators" (World Bank, 2017). However, there have been incidents that have indicated negative public attitudes towards various religious groups.

# 4. Current political priorities and policies affecting smallholders and family farms





## 4.1 Priorities for agriculture and rural development

### 4.1.1 National policies

The Government's approach to the agricultural sector in Georgia has been characterized by much volatility. In 2004, the post-Rose Revolution government started radical deregulation processes, completely cutting subsidies to the agricultural and most other sectors, and decreased the agricultural budget. In 2008, however, the Government started to adopt more interventionist policies, including the distribution of 350 tractors to farmers across the country essentially for free, without a clear vision on how the wider farming community would benefit from the equipment. In 2010, another wave of policy shifts occurred when the Government decided that in the wake of rising global food prices, it needed to strengthen local agriculture. As part of this new strategy, hybrid corn was introduced and almost forced upon local farmers (although the project didn't succeed). Also, 71 state enterprises were created, and the Government started to be a direct player in the Georgian agricultural market (only 15 of these are currently active) (Institute of Development and Freedom of Information, 2014). However, the role of the Ministry of Agriculture still remained low. In 2012, the new (current) government came into power, and the agricultural sector was once again set as a priority, leading to a significantly increased budget. The state budget increased in the agricultural sector, and the introduction of a number of programmes that specifically target small farmers indicates that the Government recognizes the social importance of this group. This is logical, as the complete liberalization of the agricultural sector and the facilitation of developing commercial family farms is a long-term political project with strong socio-economic implications for a large part of the population.

In 2014, the Government of Georgia adopted the Strategy for Agricultural Development 2015–2020. The strategy does not provide clear, explicit vision on how the future of smallholders and family farms should look. However, it provides a more general vision for agriculture and rural areas by aiming to increase competitiveness in agrifood sector, to promote stable growth of high quality agricultural production, to ensure food safety and security, and to eliminate rural poverty through sustainable development (Ministry of Agriculture of Georgia, 2015). The document also sets seven priorities and directions for the agricultural sector in Georgia:

1. enhanced competitiveness of rural entrepreneurs;
2. institutional development;
3. amelioration and soil fertility;
4. regional and sectorial development;
5. ensuring food security;
6. food safety, veterinary and plant protection; and
7. climate change, environment and biodiversity.

All priorities are very important for smallholders and family farms. Some of the key activities from these strategic directions appear to focus on improving farmers' knowledge and information and delivering efficient agricultural extension service support. These also address long-standing problems of Georgian farmers, such as increasing agricultural productivity per hectare through technical support and a massive amelioration program. The strategy also starts to treat the agricultural sector as regional

and subsectoral directions that need a tailored approach for value chains to develop. However, the state support needs to be designed in a way that will allow small-scale farmers to be competitive with their larger counterparts, as well as with big that farms have better starting positions.

The Government also has adopted the Rural Development Strategy for 2017–2020, which includes issues not only about agriculture but about all aspects related to rural development. While not explicitly providing a vision for the future for smallholders and family farms, the overall vision of the strategy includes “ensuring the constant improvement of the quality of life, and the social conditions of the rural population, based on a combination of increased economic opportunities, more accessible social benefits, a rich cultural life, environmental protection and the sustainable management of natural resources” (Government of Georgia, 2016a). The strategy has three priority areas:

1. economy and competitiveness, which envisages the economic recovery of farming and restructuring and modernization through the diversification and development of effective supply chains;
2. social conditions and living standards, which envisages the diversification of the rural economy through strengthening the agriculture-related value chain and promoting various sustainable non-agricultural activities; and
3. environmental protection and sustainable management of natural resources, which envisages the development of tourism in rural areas, based on rural specificity and unique cultural identity (Government of Georgia, 2016).

The 2017 action plan provides details on what must be done to achieve these strategic goals. Competitiveness will be increased through providing financial support to 110 new and existing enterprises, insuring 5 000 ha of land plots, and cleaning and improving around 800 km of irrigation and drainage channels, among other activities. Diversification will be improved through investing GEL 320 million (USD 131 million) in approximately 150 projects by the Entrepreneurship Development Agency and by providing trainings for 3 000 beneficiaries, among other activities. Skills and employment will be achieved through providing more trainings and vocational programmes. In terms of local population inclusion, the action plan envisages organizing at least ten informative meetings and six events related to women’s rights and gender equality. The action plan also covers such directions as bolstering rural tourism, improving infrastructure and services, managing waste, and climate change. Some of the specific activities outlined in the action plan demonstrate a serious commitment from the Government to address rural issues as a whole and to use an integrated approach rather than treating agriculture as a standalone sector. However, many directions seem to require more commitment. For example, ten informative meetings would be hardly enough to achieve local population inclusion.

A clear, explicit vision – not only on agriculture and rural development in general but on smallholders and family farms in particular – is missing both from the Strategy for Agricultural Development and the Rural Development Strategy. Such a vision could be a relevant guidepost for the development of the sector for the Government of Georgia.

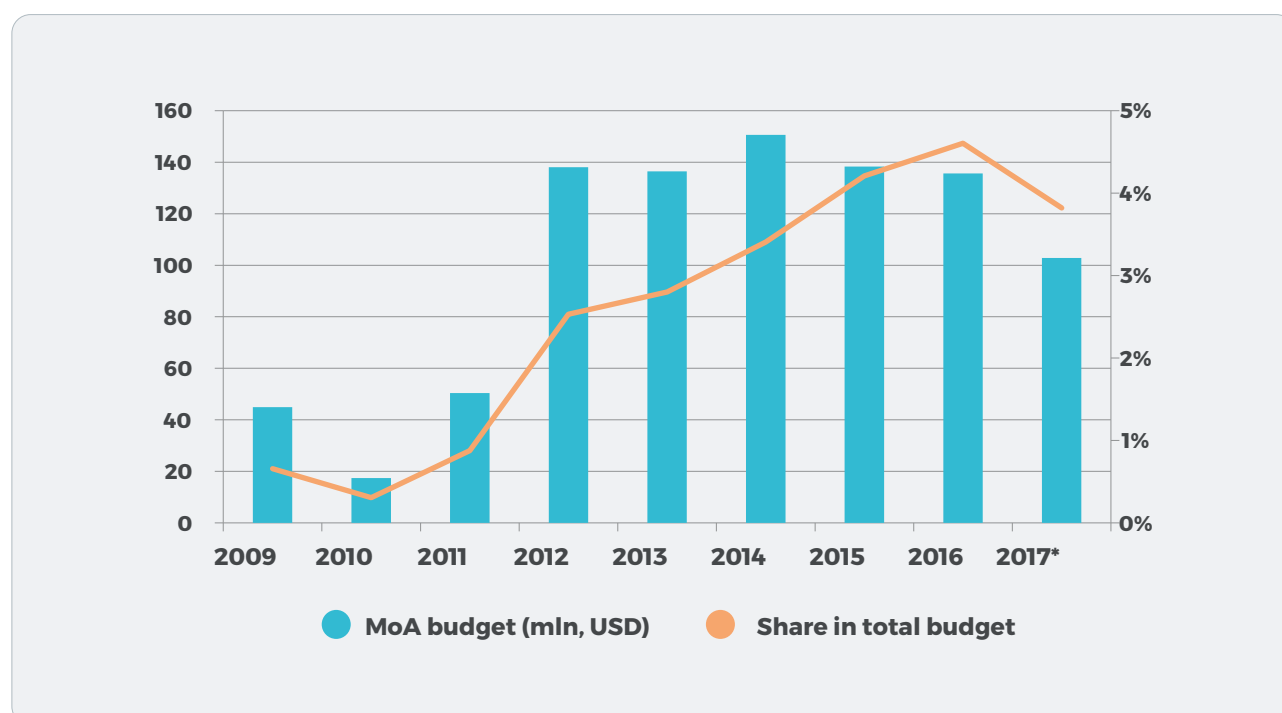
The cross-cutting Social-Economic Development Strategy of Georgia, the so-called “Georgia 2020,” aims, among other things, at developing the country’s agricultural infrastructure, including irrigation and drainage systems, and at developing farmers’ increased access to these systems (Government of Georgia, 2014). The development of infrastructure for the processing and storage of agricultural products, as well as the development of national and local road networks and communications infrastructure, also was forecasted in order to increase the productivity and competitiveness of agriculture.



Although gender-mainstreaming of all policies and programmes is an overall framework of Georgia, and actions to ensure women’s economic empowerment and gender equality have increased in recent years, further actions are necessary to ensure a systematic and holistic implementation of gender mainstreaming in all policies and programmes related to agriculture and rural development, in line with the Sustainable Development Goals and its core principle of leaving no one behind.

Scrutiny of the yearly budgetary allocation (Figure 32) shows how volatile the agricultural and rural sector can be. This is especially important for the most vulnerable groups in the sector: smallholders and family farms. (Note that the Ministry of Agriculture was merged with the Ministry of Environmental Protection in December 2017.)

Figure 32. Budget allocation for the Ministry of Agriculture and its share of the total state budget allocations, millions USD, 2010–2017



SOURCE: MINISTRY OF FINANCE, STATE BUDGET 2009–2017

During the Saakashvili government in 2003–2012, budgetary spending was focused more on security and economic development. Budgetary allocation for the Ministry of Agriculture rarely exceeded 1 percent of the total expenditures. When the new government came into power in October 2012, one of its first major initiatives was to introduce a massive farmer support program, which essentially entailed the processing of most of the arable land in Georgia through tractors and other machinery.

Stark differences on how the governments of the United National Movement (2003–2012) and Georgia Dream (2012–present) view the role of agriculture is clearly seen in the analysis of the budget of the Ministry of Agriculture in Table 31. (Note that the Ministry of Agriculture was merged with the Ministry of Environmental Protection in December 2017.)

Table 31. Budget of the Ministry of Agriculture and specific agricultural programs, millions GEL, 2006–2017

Year	Total ministry budget	Wine and grapes support programs	Grape subsidies	Food Safety	Melioration systems	Concessional agro-credits programme	Spring works for small holder farmers	Sum of the listed programmes	Share of the listed programmes in total budget (%)
2006	63	1	0	6	5	0	0	12	19
2007	111	8	0	7	3	0	0	17	16
2008	71	9	0	6	7	0	0	21	30
2009	75	10	0	7	14	0	0	32	42
2010	31	8	0	4	0	0	0	12	38
2011	85	10	0	5	12	0	0	27	32
2012	228	47	0	9	17	0	0	73	32
2013	227	36	0	17	65	7	0	117	52
2014	266	40	18	25	59	43	50	142	53
2015	314	44	25	30	70	34	46	170	54
2016	330	44	19	27	69	49	51	158	48

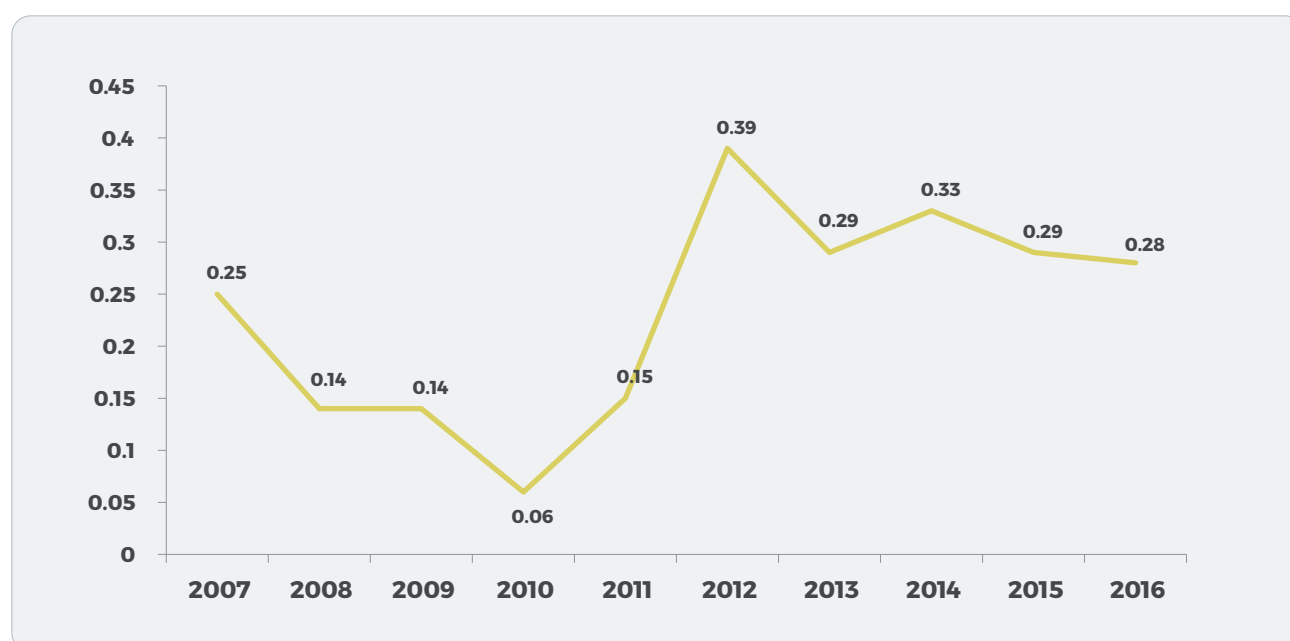
SOURCE: MINISTRY OF FINANCE (2017) STATE BUDGET

First, what is apparent from Table 31 is that the total budget has significantly increased under the new Government. While, on average, the agricultural budget was GEL 73 million (USD 30 million) in 2006–2011, amounting to less than 1 percent of the total budget, it became on average GEL 284 million (USD 116 million) for 2013–2016 (the year 2012 is omitted because the budget was initially drafted by the United National Movement government, but the Georgian Dream government made amendments later in the year after they won the elections in October 2012). Some of the existing programmes were vastly enhanced, such as the “Wine and grapes support programs” and “Melioration systems,” and several new programs were added, such as grape subsidies, a concessional agro-credits programme, and support activities for spring works (providing tractors and other machinery for land ploughing, cultivation and similar works) for smallholder farmers.

The agricultural orientation index<sup>2</sup> for Georgia has been 0.39 or lower for the past ten years, indicating low orientation of the central government towards the agriculture sector relative to the sector’s contribution to the economy. FAOSTAT data on Georgia are shown in Figure 33.

<sup>2</sup> The agricultural orientation index of the Government compares the central Government’s relative contribution to the agricultural sector as compared to the sector’s contribution to GDP. The index is calculated by FAOSTAT and represents one of the FAO custodian SDG indicators. It’s a share of the Government’s expenditure on agriculture in total Government expenditure, divided by the share of agriculture in GDP. An index equal to 1 means a neutral orientation of the central Government towards the agriculture sector relative to the sector’s contribution to the economy. An index of more than 1 means a higher orientation of the central Government towards the agriculture sector relative to the sector’s contribution to the economy. And an index of less than 1 means a lower orientation of the central Government towards the agriculture sector relative to the sector’s contribution to the economy.

Figure 33. Agriculture orientation index of Government in Georgia



SOURCE: FAOSTAT

The new Government had not always been consistent with its agricultural policies from the beginning. Major shifts in political priorities in recent years include massive investments in agriculture and shifting from individual farmers to cooperatives. The reason for this can be explained by the increasing understanding that continuous subsidies for small-scale farmers (free access to agricultural machinery, for example) will incentivize them to remain small; agricultural efficiency will continue to be low and the state will not be able provide expensive subsidized programmes. Most government programs in agriculture do not have strict eligibility criteria on who could apply. As the absolute majority in Georgian agriculture are smallscale farmers, programs usually are aimed at them. While modern cooperatives are still relatively new to Georgia, a number of non-governmental organizations and donors have already been implementing programs that have aimed at creating cooperatives in rural areas. The new law on agricultural cooperatives and the commitment from the state to support such initiatives will help further the development of cooperatives. It is important, however, that the government consistently pursue its course towards developing agricultural cooperatives and that there are no major shifts in this regard. One of the emerging risks, for example, is that with less support from the European Union, the Government will not maintain funding levels for agricultural cooperatives. Thus, many cooperatives might remain on paper without actually being actively involved in agricultural activities, only having been created to receive one-time support from the Government and donors.

## Box 7. Policy of diversifying export markets: the wine sector and the Russian ban

While the wine sector has traditionally been the largest agricultural sector in Georgia, exports prior to 2006 were excessively dependent on a single market: the Russian Federation. In 2005, Georgia exported more than 57 million bottles of wine, and more than 90 percent of these went to the Russian Federation. When the relations between the two countries deteriorated and the Russian Federation imposed a ban on Georgian products, the wine sector suffered a severe blow that also had significant economic and political consequences in the country.

The main objective of the country after the Russian ban was to facilitate the creation of a more resilient export market to avoid the problems experienced in the country in 2006. For this, the Georgian Government started an aggressive marketing campaign to expand the already existing markets, such as Ukraine, and to help wine producers to reach new markets, such as China and the United States of America.

Major export destination countries for Georgian wine in the last pre-ban year (2005) and in the last year of the ban (2012)

Export destination countries	2005		2012	
	Number of bottles (thousands)	Share of total number (%)	Number of bottles (thousands)	Share in total number (%)
Russian Federation	52 336	91.2	0	0.0
Ukraine	2 914	5.1	11 044	47.3
Kazakhstan	389	0.7	4 429	19.0
Belarus	86	0.1	1 553	6.7
China	38	0.1	1 293	5.5
Total	57 380	100.0	23 341	100.0

Source: National Wine Agency

As can be seen from the table, the total number of exported bottles in 2012 still was about half of the pre-ban levels (although 2005 was an exceptional year in terms of exporting wine). Expanding to new markets worked in several countries. For example, from the period of 2005–2017, exports to Ukraine grew by 379 percent, making it the largest export destination for Georgian wine. To Kazakhstan, Belarus and China, the next largest markets for Georgian wine, export levels in 2005 were negligible, and the total volume of exported wine grew about 10 times for Kazakhstan, 20 times for Belarus, and 30 times for China. However, this was still far from substituting for the Russian market. When the ban was lifted in 2013, total export numbers grew exponentially, reaching a peak of 59 million bottles (worth USD 180 million) in 2014. The share of the Russian market reached 64 percent.

The takeaway lesson from the case of wine is the importance of the securitization of strategic export commodities. While it is ultimately up to the private sector to decide how much and where to export, the Government can facilitate opening up new markets through organizing fairs in destination countries. This is important for avoiding such economic shocks as those Georgia experienced after the Russian ban in 2006.

Another major political factor that will have significant effects on smallholders and family farms is the Deep and Comprehensive Free Trade Agreement (DCFTA), which is part of the Association Agreement with the European Union, signed on 27 June 2014. While the DCFTA, in essence, provides access to the European Union market for Georgian farmers, it also envisages introducing a host of EU regulations on food safety, phytosanitary issues, competitiveness policy, intellectual property, and so on in Georgian legislation. This might actually pose significant challenges for Georgian farmers, especially for smallholders and family farms. The harmonization process of the Georgian legislation with the EU regulations is set to be completed by 2030 and will happen in several phases. In this period, Georgian legislation is expected to reflect 86 EU directives and regulations on phytosanitary issues, 101 EU directives and regulations on food safety issues, and 188 EU directives and regulations on veterinary issues (Economic Policy Research Center, 2016). While most of the directives and regulations will only affect large processors, there are a few areas that will impact smallholders, especially primary producers:

- food hygiene
- pesticide levels
- traceability
- food security measures (Economic Policy Research Center, 2016)

For processors and for farms that are not only primary producers, Hazard Analysis and Critical Control Points (HACCP, for high risk and processed food) and Global Gap (for fruits and vegetables) standards will also apply. These standards are already operational for large producers and are expected to become obligatory for small- and medium-sized agricultural farmers as well (Economic Policy Research Center, 2016).

The Georgian Government has already introduced technical standards for honey and milk products, in accordance with the EU regulations. However, milk regulations for small-scale farmers are expected to become effective only in 2020, in case they want to be able to sell milk to milk collection centres or on the market (Economic Policy Research Center, 2016).

The Government's policy is to push some of the regulations concerning smallholders and family farms to a later period, between 2020 and 2030. However, these regulations will eventually come into force, and the population will have to be ready and adapted to the new food safety requirements and other regulations.

In terms of the gender dimension of the policy, Georgia has also adopted a number of laws aiming at improving situation of women in the country, and some progress has been made to address important challenges such as gender-based inequality and violence. However, many gender-related problems persist due to an absence of clear policies. Inequality in women's involvement in agricultural production is still a significant challenge. According to an assessment of the United Nations Development Programme, "while agricultural policies specifically address women's needs in some areas, meaningful gender mainstreaming has not been conducted for national, regional and village level policies in this field" (UNDP, 2018). The assessment calls for gender mainstreaming on the Strategy for Agricultural Development and the Rural Development Strategy and developing a gender-responsive budgeting analysis "to determine any gaps in responsiveness to women's needs and to foster gender equality in the agricultural sector" (UNDP, 2018). Gender equality concerns and the gendered dimensions of specific problems are largely absent from regional development strategies as well.

## 4.1.2 Donor-funded policies

The two largest sources of funding of development assistance organizations in Georgia are the European Union and the United States Agency for International Development (USAID). The focus and policies of these major donors have shifted to reflect the changing needs of Georgian agriculture as well as political trends and agendas in general.

One of the first large projects designed to specifically support Georgia's agricultural sector was USAID's Support Added-Value Enterprises (SAVE), later renamed to the AgVantage project, which lasted from 2002 to 2009 and had a budget of over USD 23 million (USAID, 2009). The main objective of the project was "to raise Georgia's rate of economic growth and lower the country's trade deficit through expanded production, sale and exports of added-value agricultural products" (USAID, 2009). According to the final evaluation of the project:

*Over 120 firms working within 20 market chains received project assistance. Sixty-three enterprises were given grants and complementary technical assistance. Others were assisted with safety/quality requirements and market development. Associations received assistance to establish plant nurseries and carry out demonstration projects. By the end of the project, the enterprises receiving assistance had generated cumulative total sales of \$37,700,000, created 1887 new jobs and purchased raw products from 37,000 farmers (USAID, 2009).*

The project's final report counts the farmer-producers of raw materials as beneficiaries, for a total of 37 000. But the report does not indicate how many of those beneficiaries were small-scale farmers and how many were medium- or large-sized farmers with 4 ha or more of land (USAID, 2009).

In 2010–2014, USAID launched two new projects – Economic Prosperity Initiative (EPI), run by Deloitte Consulting with a budget of over USD 40 million (USAID, 2013), and New Economic Opportunities (NEO), implemented by Chemonics with a budget over USD 20 million (USAID, 2014). Both of the projects had important agricultural and rural development components. While EPI's agricultural component focused on specific value chains (hazelnuts, tangerines, greenhouses and open field vegetables) to increase Georgia's competitiveness in these sectors and expand exports, NEO's worked with local communities to address production constraints of small-scale farmers and focused in particular on vulnerable groups such as internally displaced persons.

Later large USAID-funded projects have further shifted their focus to smallholders and family farms. The Restoring Efficiency to Agriculture Production (REAP) project, administered by Cultivating New Frontiers in Agriculture, is a USD 19.5-million, five-year project "designed to increase income and employment in rural areas by delivering firm-level investment and technical assistance to expand the operation of existing smallholder farmers and rural enterprises" (USAID, 2015). The project is still ongoing, so there is no final evaluation to assess the impact of the project on smallholders and family farms. Another USAID-funded project is ZRDA (which means "growth" when translated to English). It is a USD 14.7-million, four-year project administered by Chemonics. It is designed to promote inclusive and sustainable economic growth in target regions by improving growth of micro-, small- and medium-sized enterprises, increasing productivity of rural households, facilitating market linkages between producers and buyers, and promoting local economic development by establishing and strengthening networks (USAID, 2016). This project is expected to be finished in 2020, and thus no evaluation of the impact on smallholders and family farms is yet available. Both the REAP and

ZRDA projects have strong components of developing the business side of rural areas in Georgia, helping smallholders become more competitive on the market.

In the process of the signing the Association Agreement with the EU, Georgia became a recipient of large sums of grants through the European Neighbourhood Programme for Agriculture and Rural Development (ENPARD). The ENPARD projects are being implemented in three phases and cover the period of 2013–2020. The total amount of grant support is up to EUR 180 million, and a large portion of it goes as direct support to the central budget. ENPARD supports a wide range of activities, implemented by the Government and almost all of the large non-governmental organizations that work in agriculture, but its key objective is to increase access by small-scale farmers to knowledge of improved agriculture technologies and to increase the percentage of small-scale farmers in commercial farming (ENPARD, 2017). Among other activities, ENPARD projects support the establishment and development of Local Action Groups, promote agricultural cooperatives, and provide education to small-scale farmers.

In addition, there are a number of large international non-governmental organizations that have been working in Georgia for many years, including CARE International, Mercy Corps, UNDP, Accion Contra el Hambre (ACH), and People in Need. Combined, these organizations have implemented close to 100 projects in rural Georgia. Providing the impact data for each project would be unfeasible in this report, and the aggravated impact data are not usually produced. However, the 2010 CARE International factsheet on agricultural development work in Georgia provides a good sense of the scale and nature of such projects: “[CARE International has] co-financed agricultural consolidation centres, purchasing milk and honey from farmers and selling packed and labeled products in large market centers; offered more than 4,000 consultations to farmers on agricultural techniques, ran 250 trainings, organized more than 170 on-farm demonstration plots, established 35 farmers’ groups of producers and service providers; and co-funded the purchase of machinery; and established a supply shop in Akhaltsikhe offering quality seed, materials and machinery to 12,000 customers” (CARE International South Caucasus, 2010). The extent of CARE International’s projects in Georgia has decreased since 2010, since the general donor funding started to go down, but the organization has implemented a number of rural development projects, including running the ENPARD-funded Local Action Group in the Lagodekhi municipality.

### 4.1.3 FAO Country Programming Framework for Georgia

The FAO Country Programming Framework (CPF) 2016–2020 sets out four priority areas to support implementation of Georgia’s Strategy for Agricultural Development 2015–2020:

1. **Institutional development.** Under this priority area, FAO technical assistance will focus on supporting efficient market information collection, processing and dissemination among stakeholders, farm registry, coordination support among Ministry of Environmental Protection and Agriculture, the donor community and international organizations and gender sensitive livelihood support programs (FAO, 2016).
2. **Regional and sectoral development – value chain development.** Under this priority area, FAO technical assistance will focus on rural policy development, social protection of rural population, and on- and off-farm job opportunities. Furthermore, FAO will facilitate the creation of high-quality seed and planting material production schemes based on international standards and will support upgrading the skills and technical knowledge of women and men farmers and rural

entrepreneurs to improve their competitiveness, which in the long term would contribute to improved food security and nutrition of the population (FAO, 2016).

3. **Food safety, veterinary and plant protection.** This priority area will focus on measures related to the alignment of food safety measures with European Union legislation, animal health protection, surveillance, monitoring and traceability systems and approximation of phytosanitary legislation and standards to international and EU standards. This CPF priority area will improve the efficiency and reliability of animal health protection, surveillance, monitoring and traceability systems to ensure quality and safe food production, while plant and pest control services will also be strengthened (FAO, 2016).
4. **Climate change, environment and biodiversity.** Under this priority area, FAO assistance will mainly focus on measures related to assessments on the rational use of soils and planning of subsequent rehabilitation measures and promoting climate smart agriculture (CSA). In addition, United Nations Framework Convention on Climate Change priority areas related to forest management planning and rational use of forest resources will be addressed. Outputs under this priority area will include the promotion of CSA (with consideration of needed disaster risk recovery measures) and environmentally friendly agriculture practices to support the sustainable management of natural resources and biodiversity. In addition, capacity in agro-meteorology will also be enhanced (FAO, 2016).

## 4.2 Preconditions for comprehensive policymaking for smallholders and family farms

### COORDINATION

In recent years, Georgia made important steps in the development of its agricultural sector and rural areas. The country has adopted the Strategy for Agricultural Development as well as the Rural Development Strategy. The agricultural budget has more than tripled compared to 2011 and has stayed at that level. ENPARD and other major donor funds continue to support agricultural development. However, these new developments also create challenges for coordinating activities among different state agencies and donor projects. In order to ensure that policies set out in the Strategy for Agricultural Development and other related policies of donor organizations are effectively implemented to improve the lives of smallholders and family farms, it is vital that high-level coordination is reached between agencies and donor organizations. The country needs intersectoral coordination among line ministries with responsibilities for policies, interventions and actions in rural areas. Moreover, coordination with donors is needed, making it possible to avoid overlap in interventions and to avoid major gaps in the interventions, leaving problems (needs, constraints and challenges) unaddressed. Coordination in this way will lead to synergy and avoid opposite-directed policies.



## **CONSISTENCY**

Georgia has seen frequent changes of the views from the governments over the years on how agriculture should develop and how high or how low rural development should be on the list of priorities. Adopting the Strategy for Agricultural Development and the Rural Development Strategy, together with the vast amount of grant money provided by ENPARD and other donor-funded projects, gives hope that there will be less volatility in the course of development of Georgian agriculture. This, in turn, is a precondition for long-term planning and implementation of consistent policies. From the government's side, active application of the multi-annual budget plans per new programmes or by groups of measures are important steps that need to be taken.

## **CLARIFICATION OF THE LAND ISSUE**

Another precondition to be able to have effective policies that have been provided in the above subsection is having organized information on landownership, with accurate cadastre maps and all relevant information. The Government's push on land registration will have significant impact on farmers in Georgia. It will be easier for the state to decide priorities, establish different agricultural development zones, and plan and manage the sector with more complete information. Development of the land market will also lead to larger holdings and strengthening some of the farms. International experience shows that land market development leads to fragmentation, as the actors will purchase land parcels that are not adjacent to land parcels they already own or use. This is yet another argument for a national land consolidation programme in Georgia and elsewhere. At the same time, some farmers will find it easier to relocate to towns. Migration processes will require serious policy analysis from the Government to ensure that changes do not cause harm to the population. Those who will leave agriculture will, unless they are pensioners, need other jobs. Thus, rural development policies and programmes that support job creation in rural areas are important, as are diversification and rural tourism. This is also to ensure that no one is left behind.

## **COLLECTING UP-TO-DATE AND ACCURATE DATA**

Better data leads to better-informed choices and decisions, and it also helps to monitor, evaluate and learn from the implemented programmes. Geostat provides reasonably good data on the national level. However, disaggregated data on the municipal level remains a challenge. With the right collaboration and coordination between the Information and Consultation Centers and Geostat, it seems it should be possible to obtain quite detailed data and then to design government or donor policies specifically tailored to the needs of particular municipalities. Harmonized the monitoring and evaluation system in the Ministry of Environmental Protection and Agriculture will lead to a better-functioning policy cycle.



# 5. Conclusions and recommendations





## 5.1 Conclusions

The aim of this study has been to answer the three research questions posed at the beginning and to draw recommendations based on the findings. The findings for the three research questions are summarized in this subsection, while the next subsection will be solely focused on recommendations.

### 5.1.1 Role and weight of smallholders and family farms in economic, social and environmental development

There are three strong reasons why we should care about smallholders and family farms:

**The first reason is economic:** Smallholders and family farms are the main driving force behind Georgia's agriculture. Agriculture constitutes 9 percent of Georgia's economy, but out of 642 000 agricultural holdings, only 2 000 are legal entities/enterprises and the rest are households (31 percent of which are headed by women). Geostat data does not provide a detailed break-down of how much of the agriculture production comes from households and how much from enterprises. But in most value chains, including wine and hazelnut production (Georgia's leading export commodities), almost all primary producers are smallholders and family farms. Moreover, 94 percent of holdings have less than 2 ha of agricultural land. Furthermore, almost half of the employed people in Georgia work in agriculture, once again underlining the importance of the sector.

**The second reason is social:** The number of smallholders and family farms amount to a majority of the population. About 2.2 million people across Georgia live in 640 000 agricultural households. This is almost 60 percent of the country's population. Thus, no policy on economic, social and environmental development can be formed without adequate consideration of smallholders and family farms.

**The third reason is environmental:** Agriculture and the environment are strongly tied to each other. Emissions of greenhouse gasses from the agricultural sector amount to 15 percent of the total emissions in Georgia. On the other hand, agriculture is heavily dependent on the changing climate. As the average temperature rises, accompanied with changes in wind and precipitation patterns, agricultural productivity takes a huge blow. Thus, resilient policies and adaptation to climate change are strongly needed in order to meet the challenges for smallholders in particular. The Government adopted National Plan for Adapting to Climate Change in the Agricultural Sector in 2017, which highlights some very specific measures, both short-term and long-term. Following these measures would be significant for Georgia's environmental situation and would help enable sustainable and long-term agricultural development.

### 5.1.2 Needs, challenges and constraints of smallholders and family farms

This study has shown that smallholders and family farms face a complex set of needs, constraints and challenges, which are changing over time. For example, access to finances used to be a constraint, since

it was very hard to obtain loans for agricultural households, and interest rates were extremely high. Since 2013, however, government efforts have made it easier and cheaper to obtain agricultural loans, so it is no longer a constraint but has moved into the category of challenges. Also, a similar issue might belong to two or more categories at the same time. For example, agricultural information is strongly needed by smallholders and family farms, but it also is a challenge because of the disproportionate dissemination of that information. Larger/bigger farms have better access to new information, putting smaller and less-advanced farms in a disadvantaged position.

### **NEEDS**

#### Agricultural information

One of the key needs that has been repeated in studies on agriculture in Georgia, as well as during the project inception workshop in April 2017 by various stakeholders and during the individual interviews for this study, is that farmers in general and smallholders in particular need more **agricultural information**. Specifically, farmers do not often have enough information about available governmental and non-governmental support programs, have **limited knowledge about modern technologies and practices**, and need more information how to connect to markets and align production standards to the new regulations being introduced as part of the DCFTA. Farmers need a system that would effectively reach out and notify them about an upcoming frost (for example) and provide tips on how to deal with it; they also need information on where to buy different agricultural inputs or some practical tutorials on relatively new species and varieties of plants that are gradually entering the country.

#### Low level of mechanization

Small-scale farmers still face low levels of mechanization in rural areas. Thus, there is a clear need for access to modern machinery and the relevant training. Although there has been the government's attempt to address this issue by setting up LTD "Meqanizatori" and buying new tractors and other units of machinery, the problem still remains largely unresolved for small-scale farmers. The last two agricultural censuses showed that the number of tractors dropped from 15 000 in 2004 to 11 700 in 2014. Although the tractor park was renewed and outdated units were replaced with new tractors, the numbers are still far off from fully satisfying the more than 500 000 households with agricultural land in Georgia. The fragmented nature of the land makes renting machinery difficult and expensive, as the farmers need to team up with neighbouring landowners to decrease unit costs. This can be problematic, as everyone has his or her own schedule and requires services at different times.

#### Strengthening the participatory approach

A participatory approach is needed to involve more local farmers in setting up priorities that affect their everyday lives. Particular attention needs to be given to ensure that female-headed holdings have access to information, mechanization and participation in decision-making.

Local self-governments and NGOs have been trying to achieve this, but more innovative and comprehensive approaches are needed, such as community development and the LEADER approach, which is being promoted with the support from the EU/ENPARD and the Austrian Development Agency (ADA). The three initial Local Action Group pilot projects were launched in Kazbegi, Lagodekhi and Borjomi municipalities in 2015. These were expanded with five new municipalities. ADA-funded

community development projects in two municipalities are also expected to scale up. More efforts to ensure effective gender-mainstreaming are needed.

## CHALLENGES

### DCFTA and new rules for actors in the agricultural sector

Smallholders and family farms in Georgia face a number of challenges. They will face even more challenges if they are not adequately prepared, as the structure of agriculture, nationally and globally, is quickly changing. With **more DCFTA regulations and directives** being implemented, small-scale farmers will face more imports and competition and will have to adapt their business models in order to match the new requirements. The Government's solution seems to be postponing the enactment of **strict food safety rules** that directly affect small farms. However, this needs to be accompanied by a very aggressive information campaign and demonstrations of real-life examples to the wider public on how DCFTA can work to the benefit of smallholders and family farms and what can be the role of the Government, NGOs and businesses in this field. The Government's relatively new initiative of supporting cooperatives in this context is very important.

### Agricultural insurance

Georgia has experienced several strong climatic impacts in recent years, such as **devastating hail storms, early temperature drops, and severe droughts**. This experience has shown how important it is to have an effective insurance system in place to achieve more stability and predictability. Initial steps have been made already in this direction, but many farmers do not see value even in partially subsidized insurance packages. This can change once small-scale farmers gain regular access to markets and see that being reliable and stable suppliers can bring more income than the small costs of investing in insurance.

### Agricultural information

Small-scale farmers can achieve better results if they have access to information and education. While larger farms and businesses have better opportunities to quickly receive the needed information on, for example, new technology or new market constraints and opportunities, such information reaches small-scale farmers only at a later stage and puts them in disadvantaged positions in relation to large competitors. There are very few mass technological solutions that can be applied to address this situation, such as social networks and user-friendly platforms, which allow quick dissemination of the information.

### Access to finances

**The lack of cash** is a significant challenge in rural areas. Credit requires collateral, but agricultural land parcels are often not enough for the banks, as the value of such land has been traditionally very small. The injection of large sums of money from the Government in its concessional agro-credit programme has significantly eased this challenge for many farmers, as there was more money for the banks to lend. However, when the programme ends, the farmers will still find themselves in a challenging situation, as the banks will be less willing to lend scarce money. After enacting the ban on the possibility to sell agricultural land parcels to foreigners, the price of land will go further down, which will make it even

more difficult for the farmers to use land parcels as collateral.

Women's access to finance is particularly limited, given that gender-based challenges add to the abovementioned challenges. For example, among other documented challenges, women are less likely to own land, and even when they do own it, they are less likely to have it registered in their names to use it as collateral.

Another difficulty is that often farmers become dependent on donor-driven projects. While they receive opportunities during the project phase, after the project ends, farmers often find themselves in a position where they can no longer sustain their agricultural activities.

### Pests and diseases

One of the biggest challenges that particularly hazelnut owners have found in western Georgia is the **brown marmorated stink bug** (*Halyomorpha halys*). The bug has devastated hazelnut harvests, and the local farmers don't have the knowledge or means to combat it.

## CONSTRAINTS

### Small holding size and fragmentation of land parcels

Compared to needs or challenges, constraints are more structural problems that are not easily solvable. One of the major structural constraints for smallholders and family farms in Georgia is **high fragmentation of land**, which makes it expensive to grow crops. Not only the average area of operated agricultural land is very small, around 1.3 ha for male-headed farms and 0.77 ha for female-headed farms, but even these areas are usually further divided. Households usually own two or three land parcels with average area of 0.6 ha.

### Land market development

Another constraint is related to **land market development**. Not only it is unclear how the Government views the development of agricultural land – what parts can be sold, whether there will be specific zones, etc. – but also the majority of agricultural land is not even registered at the National Agency of Public Registry. At the state level, this creates problems with coordination and planning. The result is that there is a weak land market. The fact that only a small share of the total number of land parcels are in the cadastre aggravates the situation.

### Cash-flow issues

**Cash-flow constraints** do not allow small farmers to develop their agricultural activities. The concessional agro-credit programme has somewhat alleviated this problem for a group of farmers, but for a large number of the people living in rural areas, cash-flow problems still remain a serious constraint.



## Geographic constraints

Smallholders also face **geographic constraints**. This is especially the case for people who live in the high mountains. Good agricultural land plots are scarce in such places, and only a limited number of plants can grow there. Mountains are also problematic for keeping livestock. Among other issues, feeding livestock in mountainous areas can be a serious constraint for local farmers, as there are limited grazing areas and long winters.

## Access to reliable agricultural statistics

Agricultural statistics are important for making informed choices and for planning adequate agricultural activities. While Geostat has some data on the country and regional level, there is almost **no data on the municipality level**. Adopting the Strategic Plan for Agricultural, Environmental and Rural Statistics (SPAERS) 2016–2020 is a significant step forward. However, specific results on improved local statistics are yet to be seen.

## Gender-related constraints

Women face significant constraints due to socially-constructed gender stereotypes, roles and expectations in Georgia, especially in rural areas. Women work longer hours, but their job is considered as “low profile” compared to men’s daily routines. Usually, women work in or around the house and in jobs that are not capital-intensive and do not require transportation, such as picking potatoes, taking care of the animals, milking, food processing and preparing dairy products, together with domestic and care work. Men, meanwhile, are usually responsible for tasks that are capital-intensive or require mobility. Moreover, the 2014 agricultural census shows that about 70 percent of agricultural land parcels are operated by men, thus emphasizing the inheritance issue: Families prefer sons to inherit property (World Bank, 2015). Around 60 percent of self-employed women work as unpaid family workers, which demonstrates their economic dependency. Women are also less frequently involved in rural development programmes.

However, even though women work, on average, 80 days more than men per year in agriculture, plus their domestic and care work, there are social perceptions that women have more free time than men and that their work in agriculture is just in the form of help or assistance. Furthermore, it is socially perceived that no gender-based inequalities exist. This gap between reality and social perceptions poses a challenge towards rural women’s economic empowerment.

The existing social practices and stereotypes create problems not only for women but also have serious repercussion on agricultural development in general.

## 5.1.3 Administrative procedures, institutional settings and policy interventions affecting smallholders and family farms

Recent years have seen massive interventions in the agricultural sector, which have had huge impacts on smallholders and family farms. Most importantly, the budget of the Ministry of Agriculture has dramatically increased since 2012 and stayed stable at almost GEL 300 million, amounting to about 3

percent of the total state budget. The increased budget *also* has meant more programmes available for smallholders and family farms.

From donor support, the largest change in recent years has been the EU-funded ENPARD programme, which will allocate EUR 180 million until 2020 to Georgian agriculture. The EU assistance also comes with changes in regulations that are gradually taking place and will have serious impacts on the nature of Georgian agriculture and the way it is done by smallholders and family farms.

Since 2014, Georgia has adopted a number of important documents that have set the path and direction of agricultural development in the country. Most notably, the Strategy of Agricultural Development in Georgia 2015–2020 and the Rural Development Strategy 2017–2020 were created. Among legislative initiatives, particularly noteworthy is the Law on Agricultural Cooperatives, which allowed the Government to implement active support programmes, leading to greater cooperation in rural areas. Overall, more efforts on gender mainstreaming and social inclusion are needed, particularly on their implementation.

## **5.2 Recommendations**

The report has developed 17 recommendations that are arranged into three broad categories. The first set of recommendations addresses structural and institutional gaps in the agricultural sector. These issues constitute the foundation for the further development of the sector. The second set of recommendations aims to empower smallholders and family farms so that they are better able to navigate the changing social, economic, political and environmental conditions. The third set of recommendations is about economic promotion initiatives that would provide opportunities for smallholders and family farms.

### **5.2.1 Structural and institutional gaps**

**Clarify the status of agricultural land.** The findings show that one of the key constraints for development of Georgian agriculture is the land-related uncertainty. There are three key directions that the Government has to take: speeding up the systematic land registration process, clarifying the confusion about land ownership issues – which is part of the new draft of the constitution – and empowering women for their claim of land titles.

First, it is important to ensure that the systematic land registration process is continued, to cover the whole country. This will lay the foundation for defining a more specific strategy on what the state wants to do with its agricultural land, and it will provide clarity for the sector on the directions that the Government envisages for agricultural development. Overall, the Government needs to address the structural problem of small holding sizes and excessive land fragmentation through a national land consolidation programme.

Second, the limitations on the sale of agricultural land to foreigners are still to be defined in legislation. The new rules should still make it possible to allow agricultural investments, which also means access

to European and other markets for farmers in Georgia. The discussion on exceptions on land sales for foreign investments should be transparent, and the law should not retroactively apply to already-existing investments.

Third, the land legislation also needs to define the women's land title rights. Currently, it is a common practice in rural Georgia that most or all land is registered in the male head of household in the family. This put further gender-specific constraints on women in the already conservative society. For example, if there is a dispute or divorce, women will end up in a clearly worse position, as they will not be able to claim rights on either land or real property.

**Accelerate introduction of extension services.** The exact nature of extension centres is anticipated to become clear with implementation of the Extension Strategy 2018–2019. It should facilitate agricultural information sharing and acting as a local hub for farmers, business, non-governmental organizations, state agencies and other stakeholders. It is crucial that staff of these centres not only be well-qualified and know agricultural topics but also that they bring technological knowledge to a municipality. These can include geospatial mapping for various crops in a given municipality, introducing accessible two-way communication with female and male farmers, including from ethno-linguistic minorities and persons living in remote areas, and effective information dissemination mechanisms that reach all. Internship programs can be set up to attract bright female and male students to extension services and to private enterprises.

**Promote agricultural insurance system.** There have already been made important steps by the Government in this direction, but only a few farmers use agricultural insurance systems. The percentage is even lower for female-headed farms. A more aggressive information campaign is needed to demonstrate how insurance is beneficial for farmers. Such a campaign must be coordinated with a wide spectrum of national and international organizations working with rural communities in Georgia, and it needs to be gender-responsive so it reaches both women and men.

**Improve agricultural statistics.** The lack of comprehensive statistics remains one of the key challenges in agriculture, as this makes it difficult for policymakers to plan ahead. Geostat collects some agricultural information, but it is not at the municipal level. Adopting the Strategic Plan for Agricultural, Environmental and Rural Statistics (SPAERS) 2016–2020 is a significant step forward. However, specific results on improved local statistics are yet to be seen. The Government currently runs several agricultural support programmes, such as for agricultural cooperatives or Enterprise Georgia, for example. While providing support, these programmes also can be tweaked to extract valuable information from the beneficiaries. This can be used for more targeted government interventions, such as the Behavioural Insights Team (also known as the “Nudge Unit”) in the United Kingdom, for example.

**Integrate new technologies.** A small country like Georgia provides excellent opportunity for piloting various technological solutions in rural communities. These can include wider application of Internet or smartphone applications, as well as e-learning modules and accessible advice via YouTube. The tractor.ge platform discussed earlier is one example of such services, but there is room for the Government to promote and even create similar technological solutions to address the specific needs of farmers and let them easily connect with a wide range of actors, such as different government agencies, donor organizations, NGOs or businesses. The Government can outsource the creation and management of such projects, especially provided that the Technological Park has taken off with finding technical solutions to many of everyday problems. Such solutions will help incentivize youth to stay in rural

areas by creating employment opportunities in information and communications technology and other new technologies.

## **5.2.2 Empowerment of smallholders and family farms**

**Ensure social inclusion, especially for ethnic minority regions and women.** People in different regions do not have the same access to agricultural inputs and information, especially in ethnic minority and high mountainous regions. Language remains a strong barrier in the mostly Azerbaijani-speaking Kvemo Kartli and Armenian-speaking Samtskhe-Javakheti regions, and there is room for major efforts to address this issue by providing accessible agricultural information and education programmes. Women in rural areas deserve special attention to ensure that their rights are understood and respected. This particularly concerns issues such as land and property registration and ownership. Activities promoting women's involvement in land and property practices should be encouraged, in line with SDG target 5.a. In addition, projects that will incentivize women's employment and business activity should be prioritized when designing various government programmes.

Further recommendations for the empowerment of women and for gender equality within agriculture and rural livelihoods for the Government, civil society and FAO can be consulted on pages 55–58 of the FAO 2018 report *Gender, agriculture and rural development in Georgia*. Country gender assessment series, as well as in the Joint Call for Action, which is the result of the high-level regional conference “Promoting socially inclusive rural development in Europe and Central Asia: Action for the 2030 Agenda” held in collaboration with the European Institute for Gender Equality (EIGE) in Vilnius, Lithuania, from 30 January to 01 February 2017. For more information on the conference, please visit: <http://www.fao.org/europe/events/detail-events/en/c/461793/>

**Expand social assistance package schemes to cover the most vulnerable groups in rural settlements.** While there are some social assistance schemes in the country, such as pensions, targeted social assistance, and benefits defined by the Law on Development of High Mountainous Regions, there are a number of settlements in a disadvantaged position. This would include settlements of internally displaced persons and settlements of ethnic minorities, which are not covered by the Law on Development of High Mountainous Regions. Additional measures need to be taken to either expand this law or create alternative mechanisms to ensure assistance to the most vulnerable groups.

**Diversify the skillsets of small-scale farmers.** Donor programs often focus on one or several crops and incentivize small-scale farmers to grow potatoes, hazelnuts, cabbage or any other crop that is considered to be successful at the time. The Georgian experience shows that in the absence of an effective insurance system and incomplete information about the market needs, smallholders are vulnerable. Very often, farmers ask what they should seed. While there are no ready answers for this question in a market economy, future programs should be designed to equip small-scale farmers with skills that would allow them to retrieve the relevant statistical data (Geostat) and decide by themselves what makes sense to seed. Basic analytic training on supply and demand can lead to significant behavioural changes among farmers. Ultimately, the farmers will decide what to grow and how, but they can be equipped with the right tools and knowledge to make the best-informed choices.

**Communicate DCFTA impacts on smallholders and family farms.** While the DCFTA is clearly a way forward for Georgia, it is clear that there will be winners and losers following the enactment of the regulations and directives. The impacts will particularly be strong on smallholders and family

farms because scales of production and standards will determine the competitiveness of the producers. Small-scale farmers face such problems as the fragmentation of land, low productivity, low quality and low quantity of products. All these might be exacerbated under the new regulations. It is important that the Government honestly and clearly communicate the pros and cons of the upcoming changes and particularly help those who might be worse off as a result of the DCFTA. Several mitigation alternatives can be developed and discussed with the affected communities. This can include informational or educational measures, as well as developing extension services and markets for local farmers. This information should focus on how to develop the production in an increasingly competitive world.

**Provide education tailored to the needs of small-scale farmers.** While there has been a strong push from the Government on vocational education, little is done to accommodate the needs of small-scale farmers. These farmers need short, practical courses that will focus on the type of production they are interested in and offer schedules that will not interrupt their agricultural activities. For effective results, these trainings need to be provided to all those who work in agriculture within the family holding, and not only to the farm managers.

**Mix support and local initiatives.** Completely staying out of all decisions on the local level can be as bad as managing all activities from the top, and future projects must strike a fine balance between the two extremes. Georgia can utilize the European Union's experience with participatory principles, both in central policymaking and in local policymaking, using the LEADER approach. On one hand, it is important to use the bottom-up approach and have the local people on board, let them manage the process, and develop a sense of ownership among themselves to ensure the sustainability of a project. On the other hand, it is important that at the initial phase the donor/implementing organization “show the way” regarding how things should be run and managed.

**Adapt to climate change.** Western and eastern Georgia face different kinds of problems related to climate change. The development of the National Plan for Adapting to Climate Change in the Agricultural Sector is very important, but more subsectors need to be explored. Moreover, the potential effects of climate change and adaptation strategies should be widely disseminated among farmers. Agricultural Information and Consultation Centers can play a role in disseminating the relevant information in their municipalities.

### 5.2.3 Economic promotion activities

**Support investment to increase productivity.** The current study shows that agricultural productivity has somewhat increased, but it still remains a major challenge for farmers in Georgia. Promoting investments in agriculture and increasing agriculture's share in foreign direct investment would be an important step to address this issue. To this end, investment opportunities in the context of the land sale ban should be soon clarified and communicated to the relevant stakeholders.

**Facilitate service and marketing cooperatives, as well as producers' organizations and cooperatives.** The study showed that one of the missing links in agricultural value chains is a mismatch between supply and demand. In addition to strengthening the existing agricultural cooperatives programme that focuses on production, it would also be useful to promote service and marketing cooperatives that would be able to identify and organize the production of small-scale farmers and connect them to larger players. Successful replicable examples are already working in the milk sector. A similar approach might be applied in other sectors as well. Particular attention is necessary to improving women's engagement in cooperatives, in line with the Agricultural Cooperatives Development Agency's priorities.

**Help small-scale farmers accessing new markets, domestic and foreign.** With enforcement of the DCFTA with the European Union, Georgian farmers will potentially have access to a large EU market, and some farmers have already been reaping benefits from this opportunity. However, the Government can facilitate boosting the internal market for Georgian farmers through the state procurement system. One of the recommendations from Oxfam/PMCG has been to split the procurement by regions, which would make the contract requirements smaller and provide more opportunities for local female and male farmers. In parallel, an active information campaign would be necessary to explain to local farmers how the procurement system works and how they can successfully bid. The system should ensure the transparency of the tender procedures and their design, so that no specific or even individual suppliers are prioritized.

Another way of facilitating access to markets is organizing food festivals, which are already a practice in several sectors, such as wine and cheese. This creates opportunities for networking and connecting with potential clients.

**Generate more formal employment.** Forty-three percent of the labour force is officially employed in the agricultural sector. However, there are very few hired salary employees in the sector. In the context of the new developments in agriculture and the Government's serious intention to focus on the sector, there are few practical ways to facilitate formal employment. First, once the specific tasks of the Information and Consultation Centers (ICCs) are clearly established, the Government can start an internship programme for female and male students specialized in agriculture. Vocational Education and Training (VET) centres and universities would be willing to collaborate. Smaller VET centres constantly struggle to find employers who would be willing to accept students. With the support and recognition from the Ministry of Environmental Protection and Agriculture, not only its ICCs, but also private employers will be more likely to accept interns. This would allow them to have closer contacts with the Ministry and be in their database, which might lead to participation in export markets or fairs. Creating formal employment would certainly have positive side impacts as well, such as spreading more agricultural information among the local farmers and creating additional cash inflows for small-scale farmers.

Most importantly, formal employment in agriculture will significantly increase only if most of the sector becomes more formal, rather than subsistence-based. Promoting the creation of cooperatives is an important step in this direction, since they have greater chances of expanding and need to hire employees. Even more employment is generated through large agricultural investments, which again brings us back to clarifying the rules on how foreign direct investment can increase in the agricultural sector while there is a ban on land sales to foreigners.

Around 60 percent of women who work as self-employed are unpaid family members, and the figure could be higher, considering that many women who work in agriculture do not regard themselves (and are not regarded) as workers but as housemakers. The work that women perform in family farms, both in agriculture and within the household – on care and domestic activities – needs to be acknowledged, in line with Article 14 of the Convention on the Elimination of all forms of Discrimination against Women. One form to formalize the contribution of women in agriculture is through the creation by law of the figure of the co-manager and the co-titling of farms, as is being piloted in Belgium and Spain (FAO, 2018c).

Some other relevant recommendations for smallholders and family farms can be found in the concluding observations on the combined fourth and fifth periodic reports of Georgia of the Committee on the Elimination of Discrimination against Women (CEDAW Committee) regarding the homonymous

convention. In particular, the following recommendations can be highlighted:

- That the state party ensure that rural women have adequate access to social care and healthcare and other basic services and economic opportunities, in addition to equal opportunities to participate in political and public life, in particular in decisions relating to the agricultural sector.
- That the state party ensure the availability of nurseries, in addition to shelters and other services for victims of domestic violence, in rural areas.
- That the state party provide sex-disaggregated data on landownership in its next periodic report.
- That the state party further strengthen its efforts to overcome stereotypical attitudes regarding the roles and responsibilities of women and men in the family and in society and continue to implement measures to eliminate gender stereotypes by promoting the substantive equality of women.
- That the state party adopt measures to implement the principle of equal pay for work of equal value in order to narrow and close the gender wage gap, consistently reviewing the wages of men and women in all sectors.
- That the state party facilitate the reconciliation of professional and private lives for women and men, including by expanding the number of childcare facilities and encouraging men to equally participate in family responsibilities, and ratify the Maternity Protection Convention, 2000 (No. 183), of the International Labour Organization.

Moreover, income opportunities in rural areas can also be created outside of the agricultural sector. The Law of Georgia on Development of High Mountainous Regions provides a limited mechanism that incentivizes establishing processing enterprises in targeted settlements. But the scope and coverage of this initiative can be expanded by introducing targeted tax incentives in specific regions. Diversifying income sources and using the community-based rural development approach is important for the sustainable development of rural areas.

**Promote agritourism and rural tourism.** This also relates to the previous point on diversifying the skillsets of small-scale farmers. While tourism is swiftly rising in Georgia, connecting it to the agricultural sector is an obvious but difficult task to implement. However, agritourism has particularly good potential for the local market, as more and more people are demanding natural products and would even pay extra to support the creation of such products that they would eventually consume, such as cheese or wine. Such initiatives would be especially interesting for young people who know English and other foreign languages and can use new technologies for tracking and navigation. Rural tourism also has good potential for women's economic empowerment.





# References





- Agenda.ge. 2015.** *Do men have more property rights than women in Georgia?* Agenda.ge, 25 November 2015. (also available at <http://agenda.ge/en/news/2015/2647>).
- Agricultural Cooperatives Development Agency. 2017.** *Registration for State Program for Supporting Agricultural Beekeeping Cooperatives is Open.* <http://acda.gov.ge/index.php/geo/news/show/61/153>. [Cited 7 July 2017].
- Association of Young Economists of Georgia. 2016.** *Assessment the services of Agricultural Information and Consultation Centers of Ministry of Agriculture of Georgia* (in Georgian).
- Bendelani, N., Turk, P., Amashukeli, M., & Khechuashvili, L. 2014.** *Gender discrimination in Georgian labour market.*
- Bluashvili and Sukhanskaya. 2015.** *Country report: Georgia.* Georgian Center for Agribusiness Development.
- Bogdanova, N. 2017.** Power-Point Presentation on the Role of Smallholders and Family Farms
- CARE International South Caucasus. 2010.** Factsheet [online] <http://www.care.org/sites/default/files/documents/south-caucasus-georgia-armenia-azerbaijan-fact-sheet-2010.pdf>
- Caucasus Barometer. 2015.** Georgia dataset, retrieved from <http://caucasusbarometer.org/en/cb2015ge/INCSOUAG-by-SETTYPE/>
- Caucasus Research Resources Centers Georgia. 2017.** *Interrelations between Public Policies, Migration and Development in Georgia.* Report commissioned by OECD.
- CEDAW Committee. 2014.** *Concluding observations on the combined fourth and fifth periodic reports of Georgia.* CEDAW/C/GEO/CO/4-5. Available at: <https://www.ohchr.org/en/countries/enacaregion/pages/geindex.aspx>
- Constitutional Court of Georgia. Ruling # 563,** <http://constcourt.ge/ge/legal-acts/rulings/avstriis-moqalaqe-matias-huteri-saqartvelos-parlamentis-winaagmdeg-842.page> (in Georgian)
- Economic Policy Research Center. 2016.** *The Impact of the Deep and Comprehensive Free Trade Agreement on Small Farms*
- Eelens, F. 2017.** *Young People in Georgia - An Overview Based on the 2014 General Population Census Data,* available online at [http://census.ge/files/results/publication/en/5.%20YOUTH-Print\\_ENGL\\_F\\_0.pdf](http://census.ge/files/results/publication/en/5.%20YOUTH-Print_ENGL_F_0.pdf). [Cited 15 November 2018].
- ENPARD. 2017.** “Rural Development stakeholders gather to discuss the EU LEADER / Local Action Groups approach and its application to Georgia” <http://enpard.ge/en/rural-development-stakeholders-gathered-to-discuss-the-eu-leader-local-action-groups-approach-and-its-application-to-georgia/>
- ENPI FLEG. 2014.** *Forest Dependency National Report,* available at [http://enpi-fleg.ge/pdf/Forest\\_Dependency\\_tianeti.pdf](http://enpi-fleg.ge/pdf/Forest_Dependency_tianeti.pdf) (in Georgian). [Cited 25 November 2017].

**The European Union for Georgia. 2017a.** *European LEADER approach to rural development in Georgia.* <http://enpard.ge/en/european-leader-approach-rural-development-georgia/>

**The European Union for Georgia. 2017b.** *Production, export and constraining factors of the Georgian Fish Sector* (in Georgian). [Cited 25 November 2017]. <http://eugeorgia.info/ka/article/279/qartuli-tevzis--warmoeba-eqsporti--da-damabrakolebeli-faqtoebi--/>

**Environmental Education and Information Centre. 2017.** National Plan for Adapting to the Climate Change in the Agricultural Sector. Available at <http://eiec.gov.ge> (in Georgian)

**FAO. 2012.** Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome, FAO. (also available at <http://www.fao.org/3/i2801e/i2801e.pdf>).

**FAO. 2014a.** *Building a common vision for sustainable food and agriculture.* Rome, FAO. (also available at <http://www.fao.org/3/a-i3940e.pdf>).

**FAO. 2014b.** What is family farming? In: *2014 International Year of Family Farming* [online]. <http://www.fao.org/family-farming-2014/home/what-is-family-farming/en/>

**FAO. 2015.** *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security – Case Study: Georgia.* Tbilisi, FAO. (also available at [http://www.fao.org/fileadmin/user\\_upload/reu/europe/documents/Events2015/vgg/Rep\\_Georgia\\_en.pdf](http://www.fao.org/fileadmin/user_upload/reu/europe/documents/Events2015/vgg/Rep_Georgia_en.pdf)).

**FAO. 2016.** Country Programming Framework 2016-2020. Also available online at [http://www.fao.org/fileadmin/user\\_upload/FAO-countries/Georgia/docs/CPF\\_Georgia\\_2016-2020\\_signed.pdf](http://www.fao.org/fileadmin/user_upload/FAO-countries/Georgia/docs/CPF_Georgia_2016-2020_signed.pdf)

**FAO. 2017a.** Defining Small Scale Food Producers to Monitor Target 2.3. of the 2030 Agenda for Sustainable Development. Working Paper Series, ESS/17-12. (also available at <http://www.fao.org/3/a-i6858e.pdf>).

**FAO. 2017b.** Joint call for Action. Regional Conference: Promoting socially inclusive rural development in Europe and Central Asia: Action for the 2030 Agenda. Vilnius, Lithuania. 30 January – 01 February 2017. Budapest, FAO. (also available at <http://www.fao.org/3/a-i7020e.pdf>).

**FAO. 2018a.** Food Security Utilization indicators <http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/#.WcCNa7IjHIU>

**FAO. 2018b.** Gender, agriculture and rural development in Georgia. Country gender assessment series. Tbilisi, FAO. (also available at <http://www.fao.org/3/ca0577en/CA0577EN.pdf>).

**FAO. 2018c.** What gender mainstreaming means in practice. Selected cases from the European Union. Budapest, FAO. Available at: <http://www.fao.org/3/i8958en/I8958EN.pdf>

**Geostat. 2004.** Agricultural census data 2004

**Geostat. 2014.** Agricultural census data 2014

- Geostat. 2017a.** Agriculture in Georgia. Annual reports, 2006–2016. [http://geostat.ge/index.php?action=wnews\\_archive1&qy=1&qy1=7&lang=eng](http://geostat.ge/index.php?action=wnews_archive1&qy=1&qy1=7&lang=eng)
- Geostat. 2017b.** Business register. [http://geostat.ge/index.php?action=page&p\\_id=230&lang=eng](http://geostat.ge/index.php?action=page&p_id=230&lang=eng)
- Geostat. 2017c.** Environmental Indicators. [http://geostat.ge/index.php?action=page&p\\_id=431&lang=eng](http://geostat.ge/index.php?action=page&p_id=431&lang=eng)
- Geostat. 2017d.** Women and men in Georgia. Statistical publication. Tbilisi, National statistics office of Georgia. [http://www.geostat.ge/cms/site\\_images/\\_files/english/health/W&M%20in%20ENG\\_2017.pdf](http://www.geostat.ge/cms/site_images/_files/english/health/W&M%20in%20ENG_2017.pdf)
- Geostat. 2017e.** Professional Education data. Available at: [http://www.geostat.ge/index.php?action=page&p\\_id=2102&lang=eng](http://www.geostat.ge/index.php?action=page&p_id=2102&lang=eng). [Cited 20 February 2017].
- Geostat. 2018a.** Employment data, Employment and Wages. In: *National Statistics Office of Georgia* [online]. [http://geostat.ge/index.php?action=page&p\\_id=143&lang=eng](http://geostat.ge/index.php?action=page&p_id=143&lang=eng)
- Geostat. 2018b.** External trade. In: *National Statistics Office of Georgia* [online]. [http://geostat.ge/index.php?action=page&p\\_id=134&lang=eng](http://geostat.ge/index.php?action=page&p_id=134&lang=eng)
- Geostat. 2018c.** Foreign Direct Investments. In: *National Statistics Office of Georgia* [online]. [http://geostat.ge/index.php?action=page&p\\_id=2231&lang=eng](http://geostat.ge/index.php?action=page&p_id=2231&lang=eng)
- Geostat. 2018d.** GDP and Other Indicators of National Accounts. In: *National Statistics Office of Georgia* [online]. [http://geostat.ge/index.php?action=page&p\\_id=116&lang=eng](http://geostat.ge/index.php?action=page&p_id=116&lang=eng)
- GeoWel. 2013.** *Assessment of the Role of Gender in Agricultural Value Chains in Georgia and Armenia*. A report for CARE Value Chains project. Tbilisi. (also available at [http://www.geowel.org/files/care\\_gender\\_-\\_final\\_2013.pdf](http://www.geowel.org/files/care_gender_-_final_2013.pdf)).
- GeoWel. 2014.** *Baseline Study for World Vision Georgia: Caucasus Sub-Regional Social Inclusion of Children with Disabilities Project*. (also available at [https://www.wvi.org/sites/default/files/Social\\_Inclusion\\_optimized.pdf](https://www.wvi.org/sites/default/files/Social_Inclusion_optimized.pdf)).
- GeoWel. 2016.** *Agricultural Labor Market Analysis in Imereti Region*. (also available at [http://www.geowel.org/files/vet\\_mismatch\\_report\\_may\\_9\\_eng.pdf](http://www.geowel.org/files/vet_mismatch_report_may_9_eng.pdf)).
- Government of Georgia. 2014.** *Social-Economic Development Strategy of Georgia: Georgia 2020*. Tbilisi. (also available at <https://www.adb.org/sites/default/files/linked-documents/cps-geo-2014-2018-sd-01.pdf>).

**Government of Georgia. 2015.** *The Law of Georgia on Development of High Mountainous Regions.*

**Government of Georgia. 2016a.** Rural Development Strategy 2017-2020

**Government of Georgia. 2016b.** *The presentation of the project of the spatial planning of the country* [online]. [http://gov.ge/print.php?gg=1&sec\\_id=440&info\\_id=57767&lang\\_id=ENG](http://gov.ge/print.php?gg=1&sec_id=440&info_id=57767&lang_id=ENG)

**Hartvigsen, M. 2013.** *Land reform in Central And Eastern Europe after 1989 and its outcome in the form of farm structures and land fragmentation.* FAO Land Tenure Working Paper 24. [Cited 15 September 2018]. (also available at <http://www.fao.org/3/a-aq097e.pdf>).

**Institute of Development and Freedom of Information. 2014.** *State agricultural enterprises and their role in development of the sector* (in Georgian). [https://idfi.ge/public/upload/pdf/SOEs\\_Agricultural-Sector.pdf](https://idfi.ge/public/upload/pdf/SOEs_Agricultural-Sector.pdf)

**Jijelava, D. & Vanclay, F. 2014a.** Assessing the social licence to operate of development cooperation organizations: a case study of mercy corps in Samtskhe-Javakheti, Georgia. *Social Epistemology*, 28(3-4), 297-317.

**Jijelava, D. & Vanclay, F. 2014b.** Social licence to operate through a gender lens: The challenges of including women's interests in development assistance projects. *Impact Assessment and Project Appraisal*, 32(4), 283-293.

**Kvintradze. 2017.** Recommendations of the Investors Council on the Land Law, *Forbes Georgia* (in Georgian). [Cited 12 October 2018]. <http://forbes.ge/news/2846/investorTa-sabWos-rekomendaciebi>

**Ministry of Agriculture of Georgia. 2015.** *Strategy for Agricultural Development 2015–2020.*

**Ministry of Environment and Natural Resources Protection of Georgia & National Environmental Agency. 2017.** *Frequency of Geological Phenomena, 1995–2015.*

**Ministry of Finance of Georgia. 2017.** State budget 2009–2017.

**Ministry of Infrastructure and Regional Development of Georgia. 2010.** *Roads Department* [online]. <http://www.georoad.ge/old/?que=eng/home&page=32>

**Ministry of Infrastructure and Regional Development of Georgia. 2017.** *Strategy 2017–2020* (in Georgian). [http://www.mrdi.gov.ge/sites/default/files/presentation\\_mrdi\\_-geo\\_-links.pdf](http://www.mrdi.gov.ge/sites/default/files/presentation_mrdi_-geo_-links.pdf)

**National Agency for Public Registry. 2018.** *National Agency for Public Registry* [online]. <https://napr.gov.ge/>

**National Assessment and Examinations Center. 2018.** *Database of the results of the unified entry exams* [online]. <http://www.naec.ge/#/ge/post/1683>

**National Bank of Georgia. 2018.** Statistical Data. In: *National Bank of Georgia* [online]. [Cited 20 November 2018]. <https://www.nbg.gov.ge/index.php?m=304&lng=eng>

- National Center for Educational Quality Enhancement. 2014.** *Vocational Education* [online]. <http://eqe.ge/eng/static/79/education-system/vocational-education>
- National Democratic Institute. 2018.** *National Democratic Institute Library of NDI Georgia Public Opinion Research*. Available online at <https://www.ndi.org/georgia-polls>
- Oxfam. 2017.** *Research on DCFTA impact on small-holder farmers in Georgia*.
- Parliament of Georgia. 2017.** Vision for developing the labor and social protection sectors in Georgia by 2030. [http://parliament.ge/ge/ajax/downloadFile/81369/Social\\_Str\\_eng](http://parliament.ge/ge/ajax/downloadFile/81369/Social_Str_eng)
- PMCG. 2017.** *Mapping out public procurement system of food in Georgia*. Report commissioned by Oxfam's Food Security Network Project. (also available at <http://foodsecuritysc.com/wp-content/uploads/2017/06/pmcg-ENG.pdf>).
- Rural and Agricultural Policy and Development Institute. 2017.** *Evaluation of Preferential Agro Credit Program*. Report commissioned by Oxfam's Food Security Network Project. (also available at <http://foodsecuritysc.com/publication/evaluation-of-preferential-agro-credit-system-in-georgia/>).
- Social Service Agency. 2018.** Statistical information. Available at [http://ssa.gov.ge/index.php?lang\\_id=GEO&sec\\_id=610](http://ssa.gov.ge/index.php?lang_id=GEO&sec_id=610) (in Georgian)
- State Audit Service. 2017.** *Audit assessment of LTD "Meqanizatori" for 2012–2014* (in Georgian). <http://sao.ge/files/auditi/auditis-angarishebi/2017/shps-meqanizatori.pdf>
- State Commission on Migration Issues. 2017.** *Migration profile of Georgia*. Tbilisi, SCMI. (also available at [http://migration.commission.ge/files/migration\\_profile\\_2017\\_eng\\_\\_final\\_.pdf](http://migration.commission.ge/files/migration_profile_2017_eng__final_.pdf)).
- Tax Code of Georgia. 2004.**
- Third National Communication of Georgia to the UN Framework Convention on Climate Change. 2015.** Available at [http://www.ge.undp.org/content/georgia/en/home/library/environment\\_energy/third-national-communication-of-georgia-to-the-un-framework-conv0/](http://www.ge.undp.org/content/georgia/en/home/library/environment_energy/third-national-communication-of-georgia-to-the-un-framework-conv0/)
- Transparency International. 2015.** Moratorium on land sales: stories from large foreign farmers [online] <http://www.transparency.ge/ge/blog/moratoriumi-mitsis-gaqidvaze-mskhvili-utskhoeli-permerebis-istoriebi>
- UNICEF. 2014.** National Youth Survey: analysis of the situation and needs of youth in Georgia, available online at [http://unicef.ge/uploads/Final\\_Eng\\_Geostat\\_Youth\\_SitAN.pdf](http://unicef.ge/uploads/Final_Eng_Geostat_Youth_SitAN.pdf). [Cited 15 November 2018].
- UNICEF. 2015.** Welfare monitoring survey. Available at: [http://data.unicef.ge/en/datasets/2015-welfare-monitoring-survey/explore?question\\_code=a9\\_&weighted\\_by\\_code=weight\\_hh](http://data.unicef.ge/en/datasets/2015-welfare-monitoring-survey/explore?question_code=a9_&weighted_by_code=weight_hh)

**United Nations Development Programme (UNDP). 2013.** Public perceptions on gender equality in politics and businesses. UNDP, Tbilisi. Available at [http://www.ge.undp.org/content/georgia/en/home/library/democratic\\_governance/public-perceptions-on-gender-equality-in-politics-and-business.html](http://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/public-perceptions-on-gender-equality-in-politics-and-business.html)

**United Nations Development Programme (UNDP). 2018.** Gender Equality in Georgia: Barriers and Recommendations, Vol. 2, p. 7. [http://www.ge.undp.org/content/georgia/en/home/library/democratic\\_governance/gender-equality-in-georgia.html](http://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/gender-equality-in-georgia.html) [Cited 15 November 2018].

**United States Agency for International Development (USAID). 2009.** Final Evaluation of the AgVantage project in Georgia, [http://pdf.usaid.gov/pdf\\_docs/Pdacr900.pdf](http://pdf.usaid.gov/pdf_docs/Pdacr900.pdf)

**United States Agency for International Development (USAID). 2013.** Mid-term Performance Evaluation of the Georgia Economic Prosperity Initiative (EPI).

**United States Agency for International Development (USAID). 2014.** Impact Evaluation of the Georgian New Economic Opportunities (NEO) Project. [http://pdf.usaid.gov/pdf\\_docs/PA00JQT7.pdf](http://pdf.usaid.gov/pdf_docs/PA00JQT7.pdf)

**United States Agency for International Development (USAID). 2015.** *Restoring Efficiency to Agriculture Production (REAP)*. [http://reap.ge/index.php?lang\\_id=ENG&sec\\_id=10](http://reap.ge/index.php?lang_id=ENG&sec_id=10)

**United States Agency for International Development (USAID). 2016.** *Zrda activity in Georgia* <http://zrda.georgianeog.org/index.php/en/>

**UN Women. 2014.** *Study of the perceptions and attitudes towards violence against women in Tbilisi, Kakheti and Samegrelo-Zemo Svaneti regions of Georgia*. Tbilisi, UN Women. (also available at <http://georgia.unwomen.org/en/digital-library/publications/2014/11/perception-of-violence-against-women-and-domestic-violence-in-tbilisi>).

**UN Women. 2016.** *Gender assessment of agricultural and local development systems*. Tbilisi, UN Women. (also available at <http://georgia.unwomen.org/en/digital-library/publications/2016/04/gender-assessment-of-agriculture-and-local-development-systems>).

**VET.ge. 2016.** *Statistical bulletin of professional education* [online]. Tbilisi. <http://vet.ge/> .

**Welton, G. 2013.** *Comparative Analysis of Agriculture in the South Caucasus*. Report commissioned by UNDP Georgia. (also available at <http://www.ge.undp.org/content/georgia/en/home/library/poverty/comparative-analysis-of-agriculture-in-the-south-caucasus--2013.html>).

**World Bank. 2015.** *Universal social protection. Universal old-age pensions in Georgia*. Tbilisi, World Bank. (also available at <https://www.social-protection.org/gimi/RessourcePDF.action?id=53953>).

**World Bank. 2016.** *Irrigation and Land Market Development Project*, <http://projects.worldbank.org/P133828?lang=en>



**World Bank. 2017a.** *Social Exclusion and Inclusion in Georgia: A Country Social Analysis*. Washington, DC, World Bank. (also available at <https://openknowledge.worldbank.org/handle/10986/28317>).

**World Bank. 2017b.** World Development Indicators. In: *The World Bank Data Catalog* [online]. <http://data.worldbank.org/data-catalog/world-development-indicators>



# 6. Annex





## 6.1 Case studies

### 6.1.1 Case study 1: The case of hazelnut production in Georgia

#### DESCRIPTION OF THE PROBLEM

While western Georgia has traditionally been a strong hazelnut growing region, hazelnut production has been relatively low because of several factors. First, the largest demand had been coming from Turkish wholesalers. Turkey produces from 70 to 80 percent of the world's hazelnuts, so they only bought Georgian hazelnuts when there was a supply shortage in Turkey. Thus, the demand was unorganized. Georgian hazelnut producers had a relatively insignificant role in the value chain. The second reason for low productivity of hazelnuts in Georgia was that there were no large hazelnut producers or groups who would provide support for small farmers. A third, related factor was that while hazelnuts production was fragmented and most of the production came from small farms, there was little investment in modern technologies and know-how.

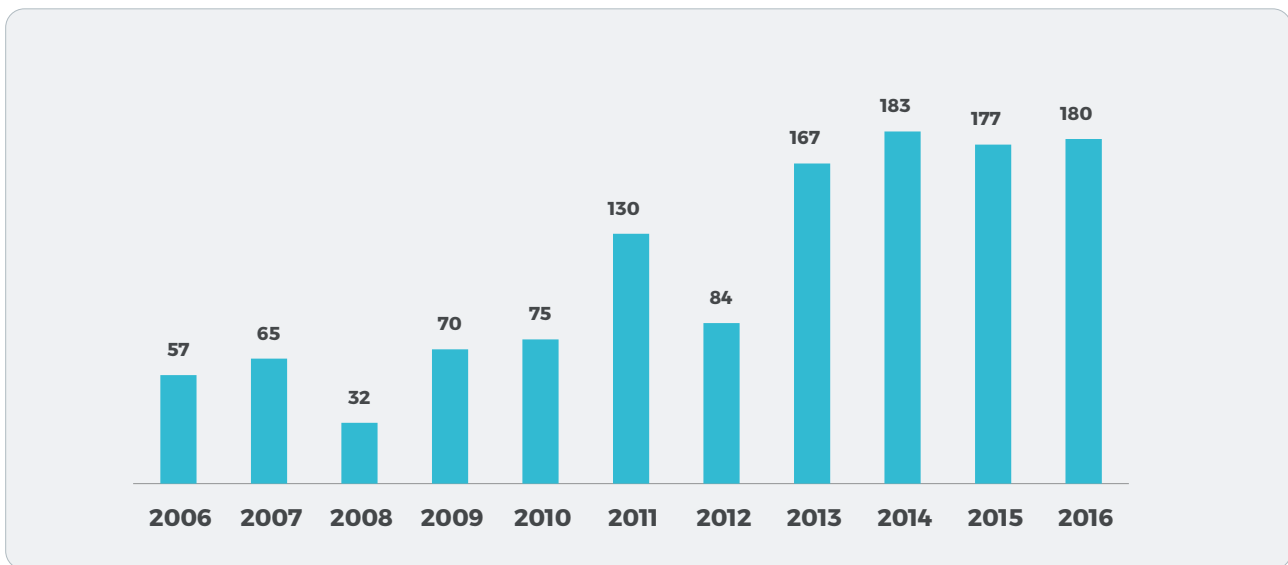
#### OBJECTIVES AND ACTIONS

One way to boost Georgian hazelnut production was gain the interest of a large company, which would invest in new infrastructure and bring in knowledge for local farmers. In 2008, one of the largest European chocolate companies, Ferrero, decided to start its operations in the Samegrelo region. This was a precondition for developing the hazelnut sector.

#### RESULTS AND IMPACTS

Immediately after Ferrero's investment, there were major changes in the hazelnut sector. Ferrero purchased land for growing hazelnuts, but most of its supplies come from the small-scale farmers in Samegrelo. Thus, it is in the interest of the company to enable local farmers to master new techniques and technologies. Several larger hazelnut producers also emerged as a result, such as the cooperative "Darcheli hazelnuts" and "Nutexport." One of the key actors is the association of hazelnut producers, established in 2013, which has more than 500 active members and promotes their interests.

Figure 34. Exports of hazelnuts, millions USD, 2006–2016



SOURCE: GEOSTAT TRADE DATA

Hazelnuts have become the largest agricultural export commodity for Georgia, and the market has been stable since 2013.

## LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

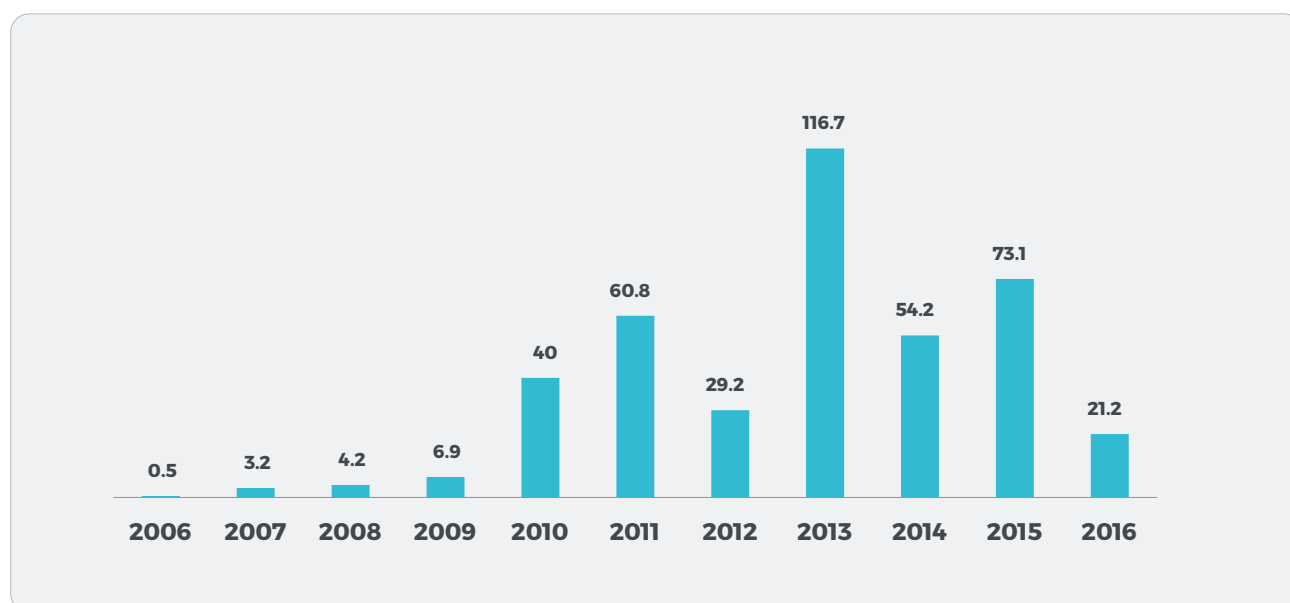
Introducing a large company in a sector can become very beneficial for small producers, but there needs to be clear coordination from the Government to avoid issues related to land delineation with local farmers, for example. Compared to large companies, small-scale farmers are also more susceptible to various insects and pests, as happened during the summer of 2017.

## 6.1.2 Case study 2: Development of beekeeping in Georgia

### DESCRIPTION OF THE PROBLEM

Beekeeping is a small but quickly growing sector in Georgia. It is almost exclusively run by family farms, and hired work in the sector is rare. Another characteristic of beekeeping in Georgia is that because the businesses that operate it are very small, often they are not even registered by the tax authority. Out of more than 87 000 registered and active businesses in Georgia, based on Geostat's 2017 Database of Active and Registered Businesses (Geostat, 2017b), only 25 are classified as businesses.

Figure 35. Exports of natural honey, thousands USD, 2006–2016



SOURCE: GEOSTAT

As can be seen from Figure 35, exports of natural honey have significantly increased compared to eight to ten years ago. However, the business experiences great volatility. While the DCFTA may provide opportunities for Georgian beekeepers to have access to the European markets, new standards and requirements might actually create hurdles for them. These new standards will be especially problematic for small-scale farmers who have limited access to information and resources. Women-headed households and vulnerable households are particularly at risk. Many people involved in beekeeping only know how to run the business through informal communication with other businesses. Beekeepers' knowledge is either outdated or incorrect.

## OBJECTIVES AND ACTIONS

In 2013, the Agricultural Cooperatives Development Agency (ACDA) was formed, and one of its three original objectives was to support the development of beekeeping in Georgia. The objectives of the ACDA beekeeping cooperative support programme are to facilitate forming cooperatives, improve their material-technical base, and provide learning opportunities for cooperative members to increase the quality and quantity of beekeeping products (Agricultural Cooperatives Development Agency, 2017). The programme started in September 2015. It grants up to 100 beehives and additional equipment – for 30 percent of its value – to agricultural cooperatives. Women-only cooperatives and cooperatives with shareholders representing vulnerable group members receive this equipment for 20 percent of its value (Agricultural Cooperatives Development Agency, 2017). In addition, one honey sample per cooperative can be delivered for laboratory examination (Agricultural Cooperatives Development Agency, 2017). They also receive consultancy on technical regulations regarding honey. Only cooperatives with the official status of “agricultural cooperative” are eligible to participate. Cooperatives without such status but that are involved in agriculture can apply for and receive the status from ACDA for free, upon satisfaction of all eligibility requirements.

## **RESULTS AND IMPACTS**

In 2015–2016, the state support programme granted 13 936 beehives to 164 agricultural cooperatives and 28 honey extractors to 28 agricultural cooperatives. Some 27 received 61 400 1-litre honey storage tanks (Agricultural Cooperatives Development Agency, 2017). In 2014, there were 191 000 beehives in Georgia. In 2015, there were 197 000, and in 2016 there were 205 000. Seven percent of Georgia's beehives were received within this programme. In the first phase of the 2017 programme, 98 agricultural cooperatives received 7 588 hives. In the second phase, 51 cooperatives were to receive 3 609 hives, and 19 were to receive 19 honey extractors. Also, 41 800 1-litre storage tanks were to be granted, collectively (Agricultural Cooperatives Development Agency, 2017).

## **LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS**

The establishment of the ACDA and its beekeeping support programme has given incentive to beekeepers to form cooperatives or to move from individual business models to a cooperative model and become registered with the state. This allows the Government to identify the actors in the sector and provide tailored interventions. More importantly, this model opens up access to a host of new opportunities for beekeepers, such as the laboratory, trainings and grants.

To increase the impact of the programme, ACDA can follow a model that is often used by development assistance organizations, incentivizing beneficiaries to share their equipment and know-how with non-beneficiary neighbours. ACDA also can increase cooperation with vocational education centres and can help with developing educational modules tailored towards small-scale farmers.

### **6.1.3 Case study 3: Convergence of government, private and donor support: the case of milk collection centres**

#### **DESCRIPTION OF THE PROBLEM**

Until about 2009, Georgians consumed milk made of dry milk powder imported from the Russian Federation or Ukraine. There were almost no large milk farms, and collecting fresh milk from small-scale farmers was too expensive for milk companies. Transportation time was long, since roads were in bad condition, and petrol and other related costs wouldn't justify buying milk in remote areas. Extended transportation costs would also make it more likely that fresh milk would spoil, thus adding more risks to the company. Also, there was no regulation by the state on milk composition and labelling, and thus milk companies didn't have incentives to collect milk from small-scale farmers.

In 2007, as part of its corporate social responsibility activities, BP provided assistance in setting up seven milk collection centres in the region of Samtskhe-Javakheti, in the communities located close to BP's highly significant Baku-Tbilisi-Ceyhan oil pipeline. However, two years later, only one out of the seven milk collection centres was operating. The reason for its success was that it was close to a resort, Abastumani. All other milk collection centres struggled to operate, as there was very limited access to markets and the only viable alternative was to sell milk to local cheesemakers. The problem, however, was that cheesemakers usually had their own farms, and demand for external sources of milk was small.



## OBJECTIVES AND ACTIONS

Several factors were at play in connecting small farmers to the market. First was the construction of the new road to Samtskhe-Javakheti, funded by the Millennium Challenge Corporation in 2009, as well as the addition of new sections to the East-West Highway, with support from a number of international donors, including the World Bank, the European Investment Bank and the Asian Development Bank. These changes allowed for faster and less risky transportation of milk, incentivizing milk companies to find solutions for tapping into the traditionally strong milk region of Samtskhe-Javakheti. With the support of BP – and then other organizations, such as Mercy Corps and CARE International – a number of milk collection centres were set up. Drivers with special refrigerators would make the rounds to collect milk from farm gates in several villages. Even those farmers who had just a few litres to sell were able to do so.

In April 2015, technical regulations for milk and dairy products were approved, and these regulations have been in force since August 2015. These regulations set conditions for placing milk and dairy products on the market. According to the regulation, it is not permitted to have direct or indirect reference on the label that the product is a milk or dairy product when it is not.

## RESULTS AND IMPACTS

The list of businesses classified as milk producers almost doubled, from 56 in 2011 to 101 in 2017.

Each milk collection centre serves up to 200 small-scale farmers, for whom it is a source of cash. This arrangement provides opportunities for small-scale farmers to reinvest in agriculture and to be able to sell milk or other agricultural products.

## LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

The experience with the milk collection centres shows that for successful intervention, sometimes multiple things need to happen. The Government has a crucial role in anticipating and coordinating activities of different stakeholders and proposing corresponding/matching activities to ensure the achievement of set goals. When major changes need to happen – most importantly regarding how small-scale farmers are used to conduct their everyday activities – Government, businesses and NGOs need to be on board.

## **6.1.4 Case study 4: South African farmers in Georgia: a case of proactive outreach**

### **DESCRIPTION OF THE PROBLEM**

One of the long-standing problems for smallholders and family farms in Georgia has been limited access to various types of agricultural services. Limited access is not only due to the lack of cash but that some of the services are simply almost non-existent. For example, storage facilities are not available in most regions, forcing producers to sell their produce during the high season, when the price is low.

### **OBJECTIVES AND ACTIONS**

While the Government cannot provide all necessary services, active interventions can lead to addressing the problems. Realizing the low productivity and lack of technological know-how of the agricultural sector, the Government of Georgia started an active campaign in 2010 to attract experienced and wealthy investors. A memorandum of understanding was formulated with the Agrarian Unions in South Africa. As a result, more than 100 Boers were invited and given extensive tours across Georgia to show them the agricultural potential of the country. The Government was able to offer the potential investors a high level of safety (crime rates in Tbilisi had been one of the lowest in Europe) and ease of access to state services. The minister of interior himself gave a tour to the guests and provided them with personal identification documents.

### **RESULTS AND IMPACTS**

Although more than 100 potential investors were targeted through this activity, only nine families decided to stay in Georgia and start businesses. The biggest challenge was to find large land areas for agricultural activities, and the fragmented nature of Georgian land structure made it difficult and expensive to consolidate land parcels. The nine remaining Boer families are still quite important for Georgian agricultural development. Most of them are located in villages of eastern Georgia, not far from Tbilisi, and own more than 1 000 ha of land plots in total. Most of the businesses are in the grain sector.

The Hartzenberg Bros company, for example, is located in the Sartichala village. The company has recently expanded its business and invested about GEL 1 million in building a 1 000-tonne storage and drying facility for its own business. The plan is to further expand the business and install another facility that will generate more income by offering storage service to local small-scale farmers. While in the beginning of the harvest season, the price for a ton of maize is around GEL 370 to GEL 400, it goes up to GEL 500 or more at the end of the year. Paying GEL 30 per ton for a six-month storage service would allow small-scale farmers to earn at least an extra GEL 70 per ton. Not an insignificant amount. The Hartzenberg Bros company is also offering a weighing service for local producers, which makes it easier for them to sell maize to clients.

## LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

This initiative shows the importance of proactively reaching out to potential businesses for a country like Georgia, which lacks infrastructure and technological know-how. This can only be done if Georgia can offer something. In the World Bank's latest Doing Business 2018 ranking, Georgia has climbed up to No. 9 position among 190 nations, which is an important incentive for investors, but the key challenge remains the land structure in the country. This cannot be easily resolved until the land registry reform is finally completed.

### 6.1.5 Case study 5: Novel solutions for resolving access to information for small-scale farmers: the tractor.ge platform

#### DESCRIPTION OF THE PROBLEM

As was highlighted during the initial workshop of this project in April 2017, one of the key problems for farmers in Georgia is the lack of access to relevant agricultural information. There are many types of information that farmers need – such as, for example, warnings about an upcoming frost and tips on how to deal with it, information on where to buy different agricultural inputs, or some practical tutorials on relatively new species of plants that are gradually entering the country.

#### OBJECTIVES AND ACTIONS

In 2015, the non-governmental organization Elva, with support from People in Need, started to develop an online platform that would make relevant information, products and services more accessible for small-scale farmers. Surveys from the Caucasus Research Resource Centers and focus groups conducted by Elva showed that, contrary to widespread belief, people in rural communities are increasingly using the Internet and smartphones. Elva saw an opportunity in creating a decision-support tool for small-scale farmers. It therefore created the traktor.ge (now rebranded as kalo.ge) web platform and mobile app, which offers its users tailored tutorial videos demonstrating basic techniques to increase output quality and quantity. It also provides weather information on the village level and provides more comprehensive analysis how to prepare for the upcoming season. The tractor.ge platform also provides farmers with access to high-quality input supplies from existing vendors across the country. Upon purchasing, these inputs are home-delivered to the farmers. The platform also includes an interactive agricultural calendar that shows farmers when to carry out crucial agricultural activities in the field, based on the crops they grow and their location. Lastly, tractor.ge features a “Farm Help” section that allows farmers to receive free advice from experts.

#### RESULTS AND IMPACTS

Since tractor.ge's launch, it has quickly become the most popular online education tool for Georgian farmers. It has 30 000 unique monthly visitors during the high season, more than 10 000 app installs, and three million views of its educational content. The platform currently features accessible text and video tutorials on 40 different crops, and the Facebook page has about 20 000 followers. The Web shop

features more than 650 agricultural products from ten companies, ranging from pesticides and seeds to hand tractors and tools.

## **LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS**

The key lessons from the experience of traktor.ge (currently known as kalo.ge) are that online and mobile tools are effective in reaching a growing group of farmers who have Internet access. In fact, the farmers' experience shows that they can quickly learn how to use the technology to their advantage.

### **6.1.6 Case study 6: The balance between top-down and bottom-up approaches: exploring EU's LEADER approach with the Kazbegi example**

#### **DESCRIPTION OF THE PROBLEM**

International development organizations want to have great, long-lasting and sustainable positive impacts. But even if well-thought-out and pre-planned activities are carried out successfully, they might not lead to the overall success of the project. One crucial reason for this is that pre-designed activities often fail to understand local cultural and social contexts and are slow to react to needs. When a multiple-year project carries out its activities and “ticks the boxes” at the completion of the project, a great deal of important developments, positive as well as negative, might not be accounted for (Jijelava and Vanclay, 2014a). Despite the positive aims and available resources of development projects, certain stakeholders and beneficiaries might still experience negative impacts that need to be anticipated and addressed. Development assistance organizations have acknowledged that projects often leave out important aspects of local contexts and are too donor-driven. Hence, they have started to focus on involving beneficiaries at various phases of their projects rather than simply implementing projects that in their design are detached from target communities (Jijelava and Vanclay, 2014b).

#### **OBJECTIVES AND ACTIONS**

Through the EU-funded ENPARD program, three large international non-governmental organizations in Georgia – Mercy Corps, CARE International and People in Need – are running pilot projects in three municipalities using the LEADER approach to rural development. According to ENPARD, “LEADER is an approach developed in the EU starting in 1991 which engages the energy and resources of people as development actors rather than beneficiaries, empowering them to contribute to the future development of their rural areas by forming area based Local Action Group (LAG) partnerships between the public, private and civil sectors” (ENPARD, 2017). It is the basic principle of the LEADER approach that the action targets all types of local public, private and civic actors and individual inhabitants to create local partnerships and direct local resources towards more effective development. The approach involves active and committed representatives of local government, entrepreneurs, farmers, civil society organizations, citizens and other important local players.

## RESULTS AND IMPACTS

The result of the intervention in Kazbegi was establishing a Local Action Group that included more than 70 volunteers from all sectors in local villages. The LAG uses participatory mechanisms for decision-making, preparing, implementing and monitoring the Rural Development Strategy. It is also a platform for negotiations, networking and cooperation. The Local Action Group managed to select more than 60 small-scale projects for funding, about half of which are for individual businesses and the other half are community projects. Since the decisions are made solely by local citizens, they feel strong ownership of the projects. LAG members who have volunteered the work in the LAG have acquired skills on proposal writing and have been able to apply to other projects as well, including other governmental projects, donor projects and similar.

## LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

The piloting of the LEADER approach in Kazbegi has shown that it is important for local people to be involved in important decision-making and agenda-setting activities, even if they are not getting monetary income from those activities. With a relatively small initial investment, it seems that the LAG has become a functioning body, complementary to governmental functions and helping to reinvigorate particularly remote communities of Kazbegi. It has very tangible direct impact in the form of supporting business activities, which in turn results in more employment and access to services for the local population. The LAG is also very important for people who are directly involved in it, as they are getting hands-on managerial experience and are exposed to important decision-making responsibilities that are much needed in Kazbegi and elsewhere in the country.

However, there are two main problems with the participatory approach that need to be accounted for during such projects. The first issue is that not all beneficiaries can be included in the participatory processes, and selecting representatives can become problematic. The second issue is that even if participatory processes are carried out perfectly, it is not enough to make inferences about the needs of various sub-groups within a community. In every community, there will be stakeholders who can't be represented due to objective reasons – such as family circumstances, for example.

### **6.1.7 Case study 7: Policy of diversifying export markets: the wine sector and the Russian ban**

#### DESCRIPTION OF THE PROBLEM

While the wine sector has traditionally been the largest agricultural sector in Georgia, exports prior to 2006 were excessively dependent on a single market: the Russian Federation. In 2005, Georgia exported more than 57 million bottles of wine, and more than 90 percent of those went to the Russian Federation. When the relations between the two countries deteriorated and the Russian Federation imposed a ban on Georgian products, the wine sector suffered a severe blow, which also had significant economic and political consequences in the country.

## OBJECTIVES AND ACTIONS

The main objective of the country after the Russian ban was to facilitate the creation of a more resilient export market to avoid the results that were experienced in the country in 2006. For this, the Government of Georgia started an aggressive marketing campaign to expand the already existing markets, such as Ukraine, and to help the wine producers to reach new markets, such as China and the United States of America.

## RESULTS AND IMPACTS

Adapting to the new environment was very challenging for the wine sector. Table 32 shows the situation before the ban (2005) and the last year of the ban (2012).

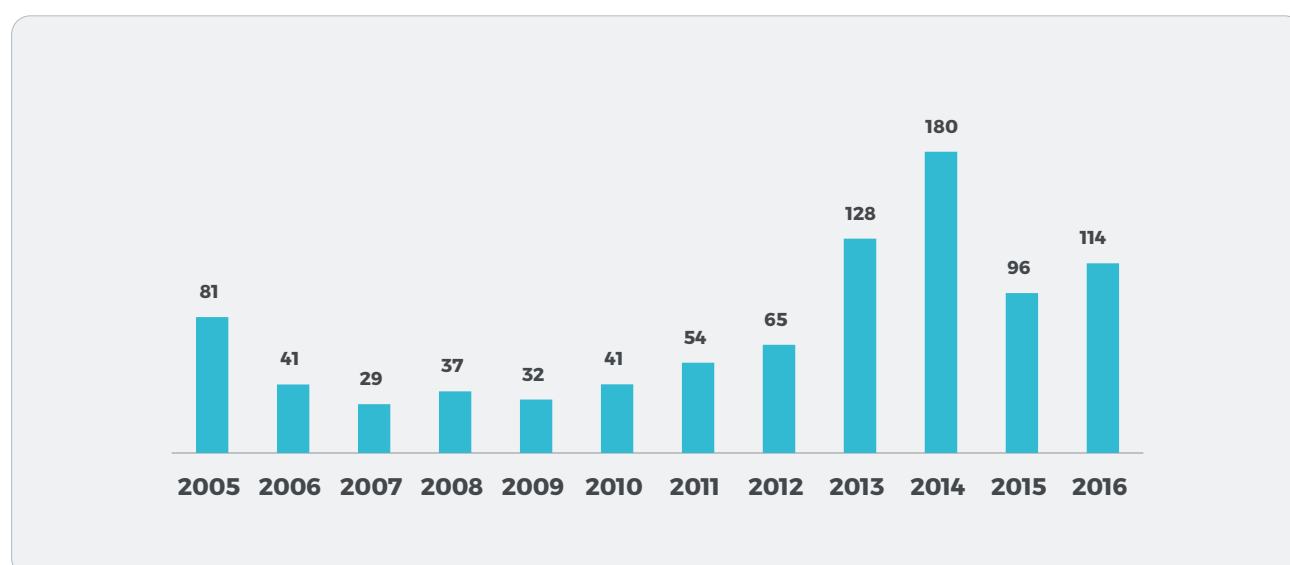
Table 32. Major export destination countries for Georgian wine in the last pre-ban year (2005) and the last year of the ban (2012)

Export destination countries	Exports in 2005		Exports in 2012	
	Number of bottles (thousands)	Share of total number (%)	Number of bottles (thousands)	Share of total number (%)
Russian Federation	52 336	91.2	0	0.0
Ukraine	2 914	5.1	11 044	47.3
Kazakhstan	389	0.7	4 429	19.0
Belarus	86	0.1	1 553	6.7
China	38	0.1	1 293	5.5
Poland	156	0.3	1 135	4.9
Latvia	228	0.4	1 022	4.4
Lithuania	162	0.3	737	3.2
<b>Total</b>	<b>57 380</b>	<b>100.0</b>	<b>23 341</b>	<b>100.0</b>

SOURCE: NATIONAL WINE AGENCY

Table 32 shows that the total number of exported bottles still was about half of the pre-ban levels (although 2005 was an exceptional year in terms of exporting wine). Expanding to new markets worked in several countries. For example, from the period of 2005–2012, exports to Ukraine grew by 279 percent (making it the largest export destination for Georgian wine). To Kazakhstan, Belarus and China, the next largest markets for Georgian wine, export levels in 2005 were negligible, and the total volume of exported wine grew about 10 times for Kazakhstan, 20 times for Belarus and 30 times for China. However, this was still far from enough to substitute for the Russian market. When the ban was lifted in 2013, however, the total export numbers grew exponentially, reaching a peak of 59 million bottles (worth USD 180 million) in 2014. The share of the Russian market reached 64 percent.

Figure 36. Export of Georgian wine, millions USD, 2005–2016



SOURCE: GEOSTAT

## LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

The takeaway lesson from the wine case is the importance of the securitization of strategic export commodities. While it ultimately is up to the private sector to decide how much and where to export, the Government can facilitate the opening up of new markets through the organization of fairs in destination countries. This is important for avoiding the economic shocks that Georgia experienced after the Russian ban in 2006.







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