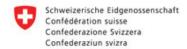


Debating policy options for Georgia

By the ISET Policy Institute





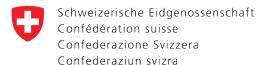
INCLUSIVE GROWTH, OR NO GROWTH AT ALL?

Debating policy options for Georgia

January 2016, Tbilisi, Georgia.

This publication is a result of a series of discussions to promote Inclusive growth dialogues in Georgia organized by the ISET Policy Institute, with the support of Swiss Cooperation Office (SCO), South Caucasus.





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PREFACE

Consider the following policy questions:

Can more bureaucracy – more sophisticated educational standards and quality assurance measures – help bring better education to Georgia's darkest corners? If not, what other out-of-the-box solutions may be available to Georgian policymakers and anybody who cares?

Can farmer cooperation work for the poorest strata of Georgia's rural population? If so, how can it be sustained beyond the duration of donor-financed projects? How should access to agricultural land be regulated taking into account local interests and Georgia's development needs? How much land consolidation is about right in a country plagued by low agricultural productivity, on the one hand, and a lack of alternative employment opportunities in its shrinking cities, on the other?

And talking of productive employment, is this more likely to be generated by small and medium enterprises (SMEs) that are receiving so much attention and donor support, or large and often demonized food processing and textile plants?

Is high end tourism a viable win-win option for investors and Georgia's rural communities? How can government make sure that investment in tourism does not lead to conflicts over scarce water and energy resources, overdevelopment and environmental degradation?

None of these questions have clear-cut answers, hence the need for bold experimentation and research into the consequences and impacts of past and current attempts at an answer. Hence also the need for an open and well-informed public debate.

This publication is itself the result of an interesting experiment, supported by the Swiss Cooperation Office (SCO) for the South Caucasus. An experiment that was as much about research into alternative policy options as it was about debating the results of this research with Georgia's civil society organizations, the business community, international donors and policymakers.

A total of 10 debates were organized and hosted by the International School of Economics at Ivane Javakhishvili Tbilisi State University (ISET) over the course of 14 months in 2013 and 2014. On a number of occasions, we followed up with site visits to remote mountain regions, schools, farms and industrial enterprises. Additionally, we examined all available evidence and produced more than 30 articles, published on the ISET Economist Blog (www.iset-pi.ge/blog) and in print media.

All in all, this experiment was concerned with one overarching question: how to make sure that economic growth, of which Georgia has seen a great deal since the Rose Revolution of 2003, does trickle down to people at the bottom of the country's income distribution. While not providing definitive answers, this volume brings together the most important insights from more than a year of research and public discussion about different aspects of this question, organized in five "inclusive growth" clusters: (i) development of Georgian agriculture and (ii) tourism sectors (both are of key importance for rural livelihoods), access to (iii) education, (iv) water and energy resources, and last but not least, (v) private sector jobs.

Like any success, this initiative has many fathers (and mothers). The idea was first communicated to me in early 2013 by Rudolf (Rudi) Schoch, then head of SDC's regional South Caucasus office. Rudi, Beka Tagauri and Gaga Nikabadze from SDC helped to further develop the concept and provided useful (critical) feedback along the way. The project was guided by a devoted steering committee including, in addition to ISET and SDC staff, Dato Kirvalidze (formerly Georgian minister of agriculture), World Bank's senior economist Rashmi Shankar, Juan Echanove, Attaché for Agriculture and Rural Development in EU's delegation to Georgia, and Mercy Corps-Georgia director Irakli Kasrashvili. Almost all ISET-PI colleagues contributed to the project. Olga Azhgibetseva, Irakli Galdava, Levan Pavlenishvili, and the entire agricultural economics team (Pati Mamardashvili, Salome Gelashvili, Ia Katsia, and Irakli Kochlamazashvili) conducted background literature review and field research. Giorgi Bakradze prepped panel participants and moderated. Koka Kalandadze and Karina Strateanu produced and edited introductory videos. Framing remarks were delivered (in style) by Professor Adam Pellillo, who also helped develop dialog scenarios and summaries. All project logistics, as well as follow up site visits were organized, Swiss-style, by Teona Khaindrava. Finally, Andrew Hargreaves, Nino Nanitashvili and Giorgi Balakhasvhili handled the editing, layout and printing of this publication.

I am extremely grateful to the entire ISET team without whose enthusiasm this project would not have been possible. And, of course, many thanks to my beloved family, Ania, Katya and Jan, for their patience and support.

Eric Livny

President, ISET Policy Institute

Tbilisi, January, 2016

INTRODUCTION

Once the wealthiest Soviet republic, Georgia has since fallen far behind other post-Soviet states (except for, perhaps, Tajikistan, Kyrgyzstan and Moldova) in almost any parameter of wellbeing. Adjusted for purchasing power parity, Georgia's annual income per capita in 2012 was close to \$5,900 (a little higher than in resources-poor Armenia). Moreover, the "median" Georgian, as opposed to the "average" Georgian, is much poorer than is suggested by the per capita income estimate. Like any average measure, the income per capita figure masks significant inequality in the distribution of income, and Georgia is much less equal as compared to all of its other post-Soviet peers (with the possible exception of Russia).

Following the collapse of the Soviet Union, the Georgian nation went through a process of rapid dis-investment and de-industrialization. It was forced to shut down industrial plants, sending scrap metal abroad and pushing workers into subsistence farming or early retirement. Thanks to the country's moderate climate and good soil condi-

tions, hunger never became an issue, yet inequality and associated political pressures rapidly reached catastrophic dimensions, unleashing cycles of violence, undermining the political order and inhibiting prospects of economic growth.

The Rose Revolution of 2003 restarted the process of economic growth, averaging 6.6% per annum and peaking at 12% in 2007. Yet behind the glistening façade of these growth statistics lay political and social uncertainty resulting from widespread poverty and inequality. Between 2007 and 2011, the share of people living under the poverty threshold grew by 43%1, as reported by the National Statistics Office of Georgia. Equally alarming are the official unemployment statistics, particularly for new entrants into the labor market (people in the 20-24 age bracket). However, official unemployment data does not tell the whole story. In 2014, only 15% of the Georgian population were employed in the official economy. Another 23% of the employed were categorized as self-employed, but a very large share of these were actually

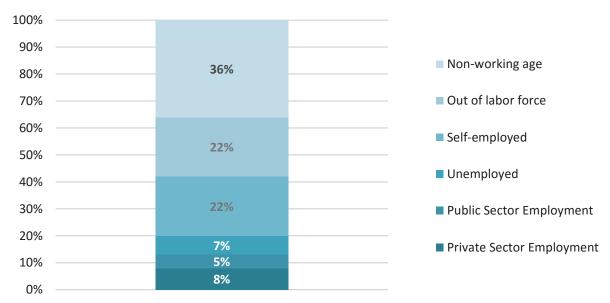


Figure 1: Georgian occupation structure in 2014. Only 13% are employed in the official economy.

Source: GeoStat

¹ National Statistics Office of Georgia

subsistence farmers who should have been labeled as under-employed at best.

As shown in Figure 1, thus far Georgia has failed to engage the majority of its working age population in the formal sector of the economy. This has important implications for aggregate productivity, poverty and inequality.

Arguments have been advanced by some economists that it is perfectly reasonable to expect inequality levels to increase when a country starts to develop from very low levels of productivity, as is presumably the case in Georgia. These arguments find support in a theory that was popularized by Simon Kuznets in the 1950s. According to this theory, market forces tend to bring about higher levels of income inequality in the early stages of development; but, after a certain threshold of average incomes is achieved, this inequality would decrease.

Though perhaps logical, this theory lost its appeal after the 1960s, not least because the group of countries constituting the so-called "East Asian Miracle" – Hong Kong, Indonesia, Japan, South Korea, Malaysia, Singapore, Taiwan and Thailand – demonstrated the possibility of inclusive growth. Now, while the East Asian Miracle demonstrates the possibility (and benefits) of inclusive modernization and industrialization, the lesson of the recent Georgian experience is that economic growth must trickle down in order for it to be sustained. In other words, in the political realities of the 21st century, inclusivity is a necessary condition for successful development.

Near universal literacy, open access to information and social networks have provided the poor with political mobilization possibilities that were unthinkable in the 20th century. Even though rural development and redistribution policies come at a short-run cost to the economy, they are essential for political stability. And without political stability, no investment, domestic or foreign, will take place.

Nevertheless, achieving inclusive growth is easier said than done. The most obvious problem is the

tradeoff between economic efficiency (job creation and growth) and redistribution policies. The need to provide the poor with a minimum level of income and access to social services, such as healthcare and education, reduces the amount of resources available to the private sector. Ultimately, it is up to each society to decide how much it is willing to lose in economic efficiency in order to achieve a "fair" distribution of resources and social justice and thus ensure political stability. This is a normative choice to be made within the realm of politics. Science can play a role in this process, by clarifying certain concepts and quantifying the impacts and outcomes of various policy scenarios, but the choice is fundamentally a political one.

One major purpose of development research is indeed to help avoid costly mistakes and maximize the bang for the scarce public buck. In their efforts to promote inclusive growth, policymakers, donors and development practitioners may want to employ standard tools of applied economics analysis to simulate the impact of proposed policies on their immediate beneficiaries as well as to assess associated costs (direct costs and efficiency losses), implementation risks and unintended consequences. While common in Europe, none of these standard tools are used in Georgia.

Yet another useful possibility is to move in small steps, conducting carefully designed development experiments before scaling up and mainstreaming policies at the national level. Donor-financed development projects provide an ideal setup for experimentation at the local level. Well-designed and rigorously evaluated experiments, often involving randomization, are increasingly common in the development landscape. An excellent summary of these ideas is provided in "The Experimental Approach to Development Economics" by Abhijit V. Banerjee and Esther Duflo (2007, Massachusetts Institute of Technology).

Third, unless dealing with urgent or complicated technical matters (such as the lari devaluation), Georgia's policymaking process could benefit from

greater participation of all interested parties. On the one hand, by engaging in dialogue with relevant stakeholders and beneficiaries, policymakers, donors and development practitioners could make sure that economic strategies and policies address actual societal needs. On the other hand, inclusive and well-informed dialogue between government agencies and the general public would help mitigate conflicts and facilitate broader public support for the required economic reform measures, even if costly in the short run.



OWNERSHIP OF AGRICULTURAL LAND: POLITICAL STABILITY AND SOCIAL COHESION VS. ECONOMIC EFFICIENCY

Georgia embarked on land reforms in 1992, allocating small plots of land to former kolkhoz and sovkhoz members without proper registration. In total, 760,000 ha land was distributed in the first wave of privatization. A large part of land remained in state ownership and was rented out.

A total of 2.4mln ownership certificates were issued in 1998-2004 with the help of international donors. The creation of digital maps only began in 2008, and, as yet, is far from complete. It is not known exactly how much land (of different types) is in private, foreign or domestic, ownership and how that land is used because data are incomplete and outdated. The latest census in agriculture was conducted in 2004 and new census data will not be available before the end of 2015. In 2011, USAID's Economic Prosperity Initiative estimated that at most 20-30% of the total number of plots are properly registered.

One pressing issue that comes out very clearly in any agricultural policy discussion is the urgent need to complete the process of land registration and titling in order to ensure individual property rights, establish an effective land market and enable land collateralization to promote agricultural lending, investment and productivity improvements. Having better information on land ownership and use patterns is also key for effective policy making.

The main hurdles for completing land registration and titling is the fact that people are not aware of the need to register and/or are unable/unwilling to pay the registration fee of 250-300 GEL per ha. The 2012 policy of free primary land registration resulted in 461,256 land plots being registered, but the process was extremely costly and labor intensive and would have to be continued for several more years.

Land Fragmentation And The Future Of Georgian's Agriculture

The second question concerning agricultural land - what should be done about land fragmentation? - is far more contentious because of competing ideological worldviews reinforced by different interpretations of the underlying "facts". Some participants in the debate see the root cause of all problems with Georgia's agriculture (amongst other things) being excessive land fragmentation. According to this view (which was propagated by the Saakashvili administration in 2004-2012), too many Georgians are stuck in agriculture.2 As the argument goes, "no developed country has more than 3-4% of its workforce in agriculture." The conclusion drawn from this (correct) observation is that, in order to develop, Georgia has to go through a rapid process of land consolidation and urbanization. This resulted in projects such as Lazika (a new modern city to be established on the Black Sea coast), miniscule agricultural budgets and the "active" neglect of agricultural policy during much of Saakashvili's rule (when subsidies started being thrown at rural dwellers in 2010-2012, it was for purely political reasons).

There is no doubt that land fragmentation is an obstacle for some kinds of agricultural production. However, there is no consensus as to whether Georgia should specialize in those kinds of scalesensitive agricultural activities (e.g. wheat, maize and similar crops), or if it should strive to carve its own market niche in smaller-scale "branded" products such as wine, cheese, or even special kinds of yogurts and churchkhela.

² The discussion of the land fragmentation question follows "Agriculture: An Engine of Inclusive Growth in Georgia?" by Adam Pellillo, Norberto Pignatti and Eric Livny (The ISET Economist, 4 December 2014).

Table 1: Over the last 20 years, land consolidation has proceeded slowly and very unevenly

| Land cultivated by households | | | | | | | |
|-------------------------------|------------------------|---------------------------------|-------------------|--|--|--|--|
| Region | Average plot size (Ha) | Size distribution range (Ha) | Inequality (Gini) | | | | |
| Adjara | 0.3 | [0;1] | 0.33 | | | | |
| Imereti | 0.5 | [0;6] | 0.41 | | | | |
| Guria | 0.7 | [0;17] | 0.41 | | | | |
| Samtskhe-Javakheti | 0.9 | [0;5] | 0.43 | | | | |
| Samegrelo | 0.6 | [0;18] | 0.49 | | | | |
| Shida Kartli | 0.5 | [0;5] | 0.56 | | | | |
| Mtskheta Mtianeti | 0.4 | [0;4] | 0.62 | | | | |
| Kvemo Kartli | 0.6 | [0;48] | 0.63 | | | | |
| Kakheti | 0.6 | [0;39] | 0.72 | | | | |

Source: Own calculations based on 2011 GeoStat data

There is no simple economic answer to this question. On the one hand, we should consider the benefits of large-scale industrial farming from the food security and efficiency points of view. On the other, by displacing smallholders, large-scale farming would cause a major disruption to traditional Georgian landscapes and ways of life – a price the Georgian nation may not be particularly happy to pay. And even from the economic point view, the massive displacement of smallholders in the democratic context of the 21st century is bound to translate into major political risks that would be to the detriment of investment (in agriculture and in any other sector of the economy for that matter). Moreover, such displacement, even in the short run, would be hard to justify in the absence of productive urban employment options for the displaced farmers. Putting a whole generation of farmers on welfare is hardly more efficient than keeping them on their land, where they are able to feed themselves and even produce a small surplus to sell in local markets.

Urban services comprise a very large and increasing share of GDP in many developing nations, yet, as argued by Dani Rodrik, they are very unlikely

to "deliver rapid growth and good jobs in the way that manufacturing once did." Rodrik's skepticism stems from two observations:

- First, although banking, finance, and other business and ICT services are high-productivity activities that can help lift economies with an adequately trained work force, in most developing countries such internationally demanded ("tradable") services cannot absorb more than a fraction of the labor supply.
- Second, other types of locally demanded ("non-tradable") services, such as retail trade, hairdressing and taxi driving, can certainly absorb excess agricultural workers; yet such jobs do not promise a lot of productivity gains. Moreover, any growth in such low productivity services is ultimately self-limiting. Rodrik's point becomes evident if one analyzes the taxi service market in Tbilisi. As more and more villagers started driving taxis in Tbilisi, taxi fares fell to a level only slightly above earnings in low-productivity agricultural jobs, therefore reducing or completely eliminating incentives for the arrival of new drivers (and their shoddy Ladas).

The predicament in which Georgia's nascent services industry finds itself is quite consistent with Rodrik's analysis. While Georgia's urban economy is hardly advancing, agriculture is currently one of the fastest growing sectors. It is encouraged, on the one hand, by the re-opening of traditional export markets in Eurasia and the prospects of the Deep and Comprehensive Free Trade Agreement (DCFTA) with Europe, and, on the other, by a spate of government and donor initiatives. The latter include efforts to complete land registration and start an effective land market, repair rural infrastructure, improve skills and provide cheap finance and other services.

It is certainly true that smallholder agriculture in Georgia is getting a great deal of attention because of its political significance and because the country does not have many other options. Yet, there are many 'positive' reasons for agriculture to serve a locomotive function.

- First, Georgia's agriculture is rife with lowhanging fruit (both figuratively and literally).
 In other words, productivity gains would be relatively easy to achieve in many traditional agricultural activities with very modest financial investment, organization and processes.
- Second, as improved agricultural productivity will inevitably translate into lower poverty levels, the next rural generation is likely to be better educated and, hence, better prepared for employment in the modern sectors of the Georgian economy. Thus, rather than causing massive displacement of the rural population, gradual increases in smallholder agriculture productivity would feed into further investment in light manufacturing and urban

- services, with both "labor push" and "labor pull" effects going into full force.
- Third, when looking at global trends, there seems to be increasing demand for differentiated agricultural products (both primary and processed). Examples are microbrewery startups in the United States, agritourism or the slow food movement in Italy. With its multitude of soil and climate conditions, ancient culture and traditions, there is great potential for Georgia to generate unique, high value and geographically denominated products and to engage in innovative agroprocessing and organic farming.³

The latter point is worth elaborating. Greater differentiation in agricultural production and related agribusiness activities (rather than homogenization and mass production) is currently driving some of the most interesting success stories in agriculture around the world. In a globalized world, where mass products can easily be reproduced – at ever decreasing costs, driving profit margins to zero – well-trodden paths no longer show much promise. What matters is what cannot be easily reproduced or copied. Georgia and other developing countries should try new approaches that build on their own strengths and on what makes them unique.

Fortunately for Georgia, the country's history, culture, biological diversity and agricultural traditions enable it to do much better than just import some "modern" high yield crops and engage in large-scale (capital intensive) agricultural production of standardized agricultural products. Georgia can focus on the high value added (more labor intensive) segment of international markets, turning its weaknesses (such as the abundance of labor force in the countryside) into strengths.

³ Innovation and greater emphasis on local branding of agricultural products are discussed in Georgian Churchkhelas: Thinking Out of the Traditional Box by George Basheli and Eric Livny

FOREIGN INVESTMENT AND FOREIGNERS' ACCESS TO AGRICULTURAL LAND4

Until 2012, Georgia had been encouraging foreigners to purchase land and bring modern technology and management to the country's ailing agricultural sector. On the one hand, this extremely liberal approach was a boon for investment by global food industry giants such as Ferrero (which has a 4,000 ha hazelnut plantation in Samegrelo) and Hipps (growing organic apples and producing aroma and apple concentrate in Shida Kartli). On the other, it catalyzed the creation of joint ventures in agricultural production and food processing, which quickly assumed leadership in their respective market segments. Examples of the latter are:

- Marneuli Food Factory and Marneuli Agro (a cannery and 1000ha of modern vegetable production)
- Chateau Mukhrani (pioneering a business model combining grape growing, boutique winery and hospitality services)
- Georgian Wines &Spirits (GWS, the largest exporter of traditional Georgian wines)
- Nergeta ("discovering" Georgia's great potential as a kiwi producer) and
- Imereti Greenery (a 4,000m2 hydroponic greenhouse fully substituting for Georgia's imports of lettuce).

Somewhat more controversial was the arrival of foreign farmers who settled in the midst of Georgian village communities. The South African Boers were among the first to receive a warm welcome (and citizenships) in 2010. About a dozen Boer families set up farms in Sartichala and Gardabani. In 2010-2012, Georgia's openness also triggered the migration by a few scores of Panjabi families, who bought agricultural land in Kakheti, Kvemo Kartli and other regions. Towards the end of Saakashvili's rule, in 2011-2012, Georgia also became an investment

target for farming enterprises from the politically and economically troubled Iran and Egypt.

While good for the economy, the arrival of foreign farmers sparked popular protests across the entire country. The root cause of trouble in practically all cases was the hasty repurposing and privatization of pastures and agricultural land around Georgian villages.

One issue was (and still is) incomplete land registration. For example, about one third of Ferrero's 4,000 ha of landed properties was found to be owned or physically occupied by Megrelian farmers. In this particular case, a complicated compromise involving land swaps and compensation for affected smallholders was brokered by the Georgian government. Many other, less prominent and easier-to-ignore cases are still awaiting resolution, feeding mutual hostility and simmering conflicts.

Second, regardless of registration status, the privatization of pasture lands surrounding Georgian villages is an extremely sensitive matter. The arrival of new investors, whether foreign or domestic, reduces the amount of "free" pasture land available for local communities. Conflicts arise the moment new investors attempt to fence and cultivate their newly acquired properties.

In most documented cases, investors were able to accommodate villagers' demands by hiring the main troublemakers (e.g. as security personnel), renovating churches, schools and roads, or by providing free machinery services, seeds and training. In a number of instances, however, negotiations failed and open conflicts broke out.

Under the United National Movement's rule, such conflicts were typically repressed through agile police and local government actions. Protesters guilty of violating private property rights were ar-

⁴ This section is based on "Moratorium on Foreign Ownership of Agricultural Land. Xenophobia, Myopia or What?" by Eric Livny (The ISET Economist, 13 Sep 2013) and "Should Georgia Sell its Agricultural Lands to Foreigners?" by Eric Livny and Salome Gelashvili (The ISET Economist, 23 February 2015).



A Punjabi farmer on the 40ha of land he purchased in the vicinity of Rustavi. An image that shook Georgia.

rested; some were jailed. The situation changed in 2012 following the Georgian Dream coalition's rise to power. Amplified by the media, the calls to stop the "foreign invasion" produced a policy shift. The police would no longer be deployed to suppress protests and repel property invasions, effectively allowing some of local communities to squat on investor-owned land.

In June 2013, foreign investment in Georgia's agriculture was put on hold with the introduction of a temporary one-year moratorium on the acquisition of agricultural land by foreigners. Foreign investors and any businesses with foreign shareholders, including banks, were no longer able to come into possession of agricultural land or to use it as collateral. The moratorium was lifted a year later, following a legal challenge by Transparency International. However, to date, transactions involving agricultural land are not registered by the Public Registry pending new legislation.

It is unlikely that the Georgian government and/ or parliament need to be reminded of the immediate negative implications of the law. It is universally recognized that Georgia's agriculture is in dire need of investment in physical capital and technology – all of which can only come from outside. By preventing foreigners from investing in the sector, the law also slowed down the efficiency-enhancing process of land consolidation. But were there any benefits associated with the moratorium? And, indeed, what problem did it attempt to solve?

A cynical and not particularly thoughtful interpretation is that the law was triggered by the specter of "Indians buying all of Georgia" and that it had no purpose other than addressing the racist sentiment of Georgian plebs. Indian investors are the problem, the cynical argument goes.

Yet, the problem is real. It has little to do with xenophobia and is not unique to Georgia. Unless carefully designed and implemented, large-scale privatization of state-owned agricultural land in immediate proximity to Georgian villages has the potential to trigger violence and social unrest that would have far graver consequences for investment – both foreign and domestic – than the notorious moratorium. The organized protests that Georgia saw in early 2013 under the slogan "Georgian land for Georgians" provides a foretaste of what could still follow if Georgia's policymakers fail to find a solution to the fundamental problem of how to bring much needed investment in Georgia's agriculture without threatening the livelihoods of small-scale subsistence farmers.

The (temporary) moratorium on foreign land ownership did not solve any of the above problems and posed new dilemmas. It created a lot of uncertainty as to the future direction of Georgia's economic reforms. It did not address foreign investors' concerns about securing their property rights and investment. Nor did it help increase agricultural productivity and the incomes of Georgia's smallholder farmers. By imposing the moratorium, however, the Georgian government showed awareness of the challenges inherent in rapid agricultural development and attempted to gain time in order to work out an acceptable solution.

Hopefully the time thus gained will not be wasted. The social calm and political stability that the moratorium sought to achieve may be difficult to maintain given its negative implications for foreign and domestic investment in Georgia's agriculture. One does not go without the other, certainly not in the long run.

TOWARDS SUCCESSFUL FARMER COOPERATION⁵

There are many reasons to love the concept of farmer cooperation (and cooperation more generally). To begin with, there is a great aesthetic value in seeing people coming together, sharing resources and helping each other. After all, instinctive collectivism has been a basic condition of human existence from time immemorial. But, there are also powerful economic reasons for farmer cooperation.

Smallholders are often too small to independently access markets, and can be easily exploited by middlemen and local monopolies. Service cooperatives can increase the bargaining power of smallholders versus banks, service providers, input suppliers, processors and the government. This light form of cooperation is quite effective and relatively easy to manage and sustain, which explains its prevalence in North America and Western Europe.

A more ambitious (and far more demanding) form of cooperation is pooling fragmented small holdings into larger farms. Examples of such production cooperatives are the Israeli kibbutzim and

Soviet collective farms. These are said to benefit from economies of scale in primary agricultural production.

However, in spite of its aesthetic value and compelling economic reasons, farmer cooperation (of both types) has been a spectacular failure in many transition economies, particularly on the territory of the former USSR, including Georgia. In the words of Tim Stuart, development practitioners in the post-Soviet space are often confronted "with the reality of failed farmer groups that evaporate once the project ends, with unused equipment rusting in the corner of a field, an image, which has become a cliché of dysfunctional development in the popular press. And for many people engaged in development, farmer groups are a byword for failure."

Of course, failure and success are terms defined relative to expected results. For the likes of Juan Echanove, coordinator of the EU's ENPARD program, the journey of a thousand miles in farmer cooperation begins with a single step. His expectation is that dramatic changes in the legal and finan-

⁵ This analytical summary is available on the ISET Economist blog

cial context for agricultural cooperation in Georgia will encourage the creation of bottom up farmer organizations based on the traditional forms of mutual help and resource sharing that have always existed in Georgia. According to Echanove, Georgian farmers have always established informal groups

and associations on their own initiative and often without any external support. Such groups typically focus on a very narrow but functional scaling up of everyday economic activities, including joint arrangements for pasture management and feeding, collective plowing and harvesting, etc.

Who Is To Take Farmer Cooperation To Then Next Level?

While bottom up cooperation may indeed flourish in the new policy context, there is agreement among all analysts that for farmer cooperation to move beyond its primitive forms to the next level, Georgian villagers have to be provided with the prerequisite skills and resources. A related question, posed by Simon Appleby, an Australian agronomist and agribusiness consultant with many years of experience in South East Asia and Georgia, is "If development agencies are the 'wrong' people to be involved in farmer groups and co-ops, who are the 'right' players to be involved?" To his mind, "while it may be jarring to the collectivist sensibilities of some, it is worth looking at corporations as enablers and incubators of co-ops."

Indeed, Juan Echanove sees a very wide spectrum of possibilities for private sector involvement, with or without donor assistance. For instance, some farmer groups will emerge to gain access to better and/or cheaper inputs (fertilizers, seeds, fuel) or services (mechanization, vet services, artificial insemination). In these cases the key business partners are not the buyers of the products, but the providers of services and inputs. And, importantly, donors — ENPARD, and USAID's REAP program — will target these businesses rather than farmer groups.

Echanove is quick to admit that the issue becomes trickier if the goal is to create farmer groups jointly selling their primary products. However, even in this case there will be groups such as mandarin or hazelnut co-ops that will face no problems selling their products to a myriad of middlemen, processors and exporters. If these co-ops do things the right way, Echanove argues, they will have more

or better quality products to sell. The buyers are already there, and farmer groups won't need any help in engaging with the private sector.

Finally, there will be co-ops directly placing their products in local markets, and there is nothing wrong with that, according to Echanove. Producing more and/or at a lower cost for sale in nearby town marketplaces would be an easy and realistic improvement. In many parts of Georgia there is simply no alternative, and we don't always need to look for complex solutions.

One problem with Echanove's arguments, however, is that in none of the simple cases would private sector actors have an incentive to provide Georgian villagers with the skills and resources to do things the right way and to manage cooperation. For instance, while input providers would be quite interested in marketing their products (e.g. fertilizer) to individual farmers, they gain no advantage in helping to organize and train groups of farmers who, once organized, i) would be much tougher to negotiate with, and ii) could switch to competing providers. For exactly the same reason, no single buyer of hazelnuts or mandarins would invest time and effort to help organize and train farmer co-ops, even though it may be more convenient to deal with larger and more reliable growers.

Thus, while businesses may be the (only) right players to be involved in enabling and incubating farmer co-ops, special government or donors schemes would have to be developed to incentivize potentially interested corporate actors. While costly, such schemes could be justified if the resulting supply chain relationships have the poten-

tial to be sustained beyond the necessary period of incubation without additional subsidies.

As Simon Appleby explains based on his experience in South East Asia, the government could compel large food processors to take on co-ops as supply chain partners. Government (and donors) could also use "carrots", such as tax holidays, low interest loans or grants. That said, there would be no need for the government to play an active role in micromanaging farmer groups. With corporations providing suppliers with a comprehensive support package (finance, inputs, training, and guar-

anteed forward contracts), co-ops would pop up in response to business opportunities. Given their small size (3-5 families) and the blood or friendship bonds on which they are often based, the internal management issues of typical co-ops would not be very complicated. According to Appleby, over time co-ops could diversify their activities from basic post-harvest treatment, storage and logistics, to deep processing, foodstuffs trading and financial services, but this process may take many decades. Rushing the process, however, carries huge operational and financial risks.

Private Sector Engagement With Farmer Co-Ops: The Case Of Tkis Nobati⁶

The challenge of incentivizing corporations to integrate smallholder co-ops into their supply chains is not a trivial one. It should not be forgotten that corporations – e.g. large processors – have other options. They can choose to go it alone by developing their own supply base or through contracts with large farms that don't need incubation, and can be trusted to deliver on time and in consistent quality.

However, recent Georgian experience suggests that there could be situations in which businesses have the incentive to engage in nurturing formal or informal farmer groups. While exceptional, these situations provide an excellent sense of the underlying economics.

In 2008, upon graduating from ISET, Gaga Abashidze took over a small family business which for years had been buying and processing rose hips gathered by Georgian villagers in the Shida Kartli region. The business model was extremely simple. Villagers harvested and delivered the fruit. Gaga processed and then exported the rose hip juice to Europe and Japan. The villagers saw no advantage in cooperation, and Gaga saw no need to engage them as a group.

Things changed when Gaga "discovered" the lucrative market of organic rose hip products, which

required adopting a more complicated business model. First and foremost, moving to organic production required certifying all stages in the process, from harvesting to post-harvest treatment/storage and processing. However, as Gaga quickly understood, there was no way to certify hundreds of villagers. To acquire international organic certification, his supplier had to be a legal entity that could be trained and certified. Of course, once incorporated, his supplier could also come into possession of necessary equipment, contributing to the efficiency of harvesting, post-harvest treatment and storage, reducing processing costs and improving the quality of the final product.

Gaga had two options for re-organizing his supply chain: (i) to help create and work with a farmer organization, or (ii) expand his own business. Weighing up these two options, Gaga chose the farmer organization/outsourcing alternative for two main reasons.

First, many of the startup costs could be shouldered by the village community, including labor and land. Second, while there was little to be saved in labor costs by hiring his own workers, the coop would be eligible for donor assistance to offset capital, training and certification costs.

⁶ This section summarizes the results of the site visit to the Tkis Nobati cooperative in Saguramo, which was organized with the help of the Regional Communities Development Agency (RCDA) and Elkana.

Gaga knew that the co-op would be a reliable business partner. On the one hand, he had a long history of working with individual members of the group and trusted its leadership. On the other hand, having access to a lucrative export market, he could afford to pay a premium for organically certified rose hips, essentially killing any incentives for the group to switch to a different buyer. As much as Gaga needed the group to supply him with a certified product, the group needed him to gain access to the organic export market. Thus, both parties were to be locked into a sustainable win-win relationship.

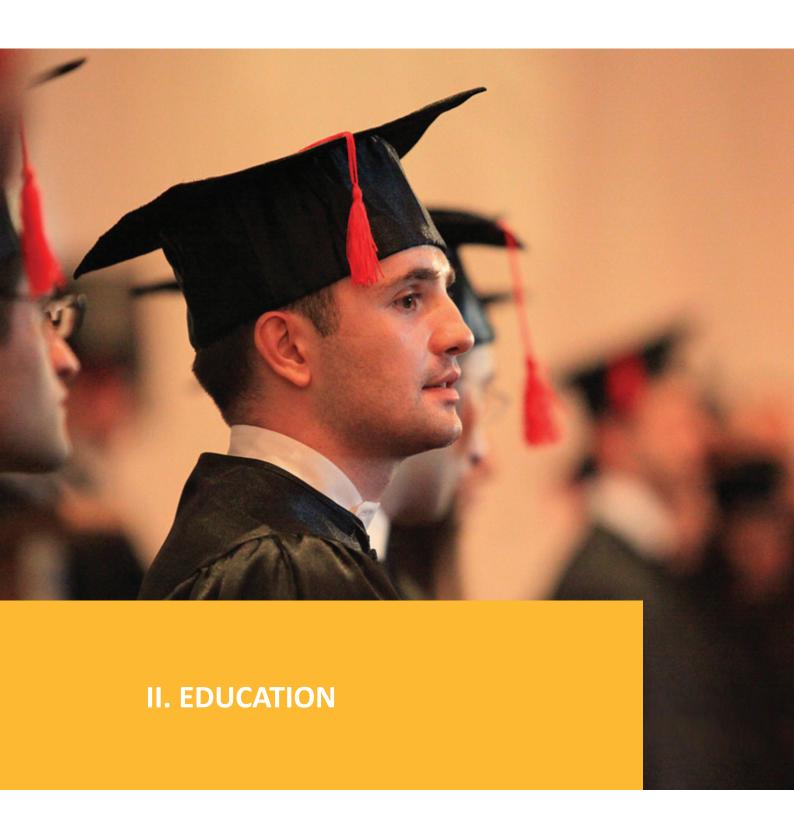
This particular account of Tkis Nobati, a small Georgian cooperative in the vicinity of Saguramo, is not meant to detract from the role played by other players (e.g. the Regional Communities Development Agency, which channeled donor funding, and Elkana, which assisted in the bio-certification process). Rather, the point is to draw attention to the economic rationale for private sector engagement with Georgia's budding agricultural co-op movement.

The most important insight to be gained from the exceptional story of Gaga Abashidze and the Tkis Nobati cooperative is that while the costs of private sector engagement in incubating small-holder "supply" co-ops could be subsidized by donors or governments in the short term, supply linkages thus created are likely to be quite fragile. In

the presence of alternative suppliers, co-ops would have to be very well managed to maintain consistent quality and reliability. Otherwise, we may see many more disturbing images of donor-financed equipment "rusting in the corner of a field".

To conclude, farmer co-ops can indeed serve many different purposes. Yet, significant productivity improvements in Georgia's agricultural sector will only be possible on the basis sustainable supply relationships between farmers and downstream processors and retailers. Only such linkages (embodied in explicit or implicit forward contracts) can provide the basis for new technology adoption and investment.

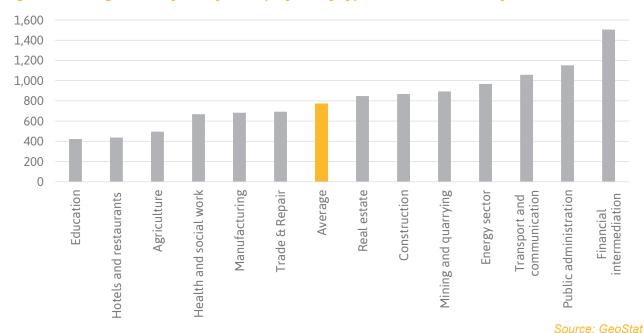
As Georgia starts exporting to new markets (to Europe under the DCFTA, for example) there will be stronger incentives for smallholder farmers to come together in order improve product quality and achieve market access. Cooperatives and farmer associations may certainly provide the organizational vehicles for taking advantage of new export opportunities. The Georgian parliament and government may want to consider amending the Law on Cooperatives in a manner facilitating corporate involvement in the creation of smallholder co-ops. For example, corporations could be allowed to acquire a stake in co-ops (or "smallholder partner-ships") in return for investment in commonly managed storage or processing facilities.



Despite spectacular growth performance during the past several years (averaging more than 6% since 2005), Georgia remains a poor country. In 2011, Georgia's GDP per capita reached USD 3,605⁷, just below the Marshall Islands in the Pacific and just above Armenia. Still worse, more than half of Georgia's population live on incomes that are much lower than this average figure. This is because Georgian society is plagued by a very high level of income inequality. To add insult to injury, many of the poor and extremely poor are either long-term unemployed or out of the labor force, not being able to contribute to the country's economic performance.

A key problem with poverty is that it tends to reproduce itself through education channels: poor people cannot afford good (and sometimes any) education for their children and, consequently, as education is one of the main determinants of their offspring's productivity and wages, children from poor families tend to stay poor. Thus, the lack of investment in human capital has the potential to lock poor "dynasties" in a vicious circle. Moreover, if the number of such dynasties reaches a critical threshold the whole country may be trapped in poverty. Hence the critical role of education, and the quality of public education for the poor in particular, in breaking the vicious circle of poverty and inequality.

Figure 2: Average monthly salary of employees by type of economic activity, 2013



Very unfortunately for Georgia, the collapse of all state institutions in the early 1990s left the country's education system in ruins. What is particularly worrying today, however, is that judging by the 2013 level of salaries in the education sector (see chart above), the system hasn't even started to recover, despite a succession of reforms and many millions spent on teacher training and retraining, school boards and guards, the improvement of curricula and textbooks, as well

as investment in computerization and infrastructure.

In the subsequent four sections we discuss the key quality and inclusivity challenges facing all segments of Georgia's education system: preschools, schools, vocational colleges and universities. When possible, we propose potential solutions as debated in face-to-face discussions and on the ISET Economist pages in 2013-2015.

⁷ World Bank

FIRST THINGS FIRST: EARLY CHILD DEVELOPMENT⁸

More than 50% of 3-5-year old Georgian children, the vast majority of whom are from poor rural families, had been excluded from the early learning system before 2013. This is a real time bomb if one considers the impact preschool education has on learning outcomes, labor productivity and wages.

The situation in Georgia's small towns and rural areas is far worse than in Tbilisi and large Georgian cities, which during the last 10 years have experienced a boom in private kindergartens. While private kindergartens cater for the needs of the emerging middle class, the outright exclusion of the rural, poor and socially disadvantaged strata of the population creates a true barrier for greater social mobility in Georgia.

Clamping down on the development of (excellent) private kindergartens would of course not make anyone better off. Instead, what is needed is an out-of-the-box solution for expanding preschool education options for children in rural areas. Indeed, one of the first decisions by the Georgian Dream coalition was to make public preschools free for all children, regardless of social status. Although this may be a good solution for locations (mostly towns) in which public preschools exist and have the capacity to expand enrollment, Making

preschool education free does not solve the problem of very small towns and Georgian villages that suffer from a severe deficit of public preschools and qualified teachers.

Preschool education does indeed come first. There is considerable research evidence supporting the view that increasing the availability of early learning opportunities has the largest effect on the future of children. Early learning affects children's brain development, builds their cognitive and socio-emotional skills and improves performance at all subsequent stages of education. This, in turn, helps increase people's productivity and earnings as adults, helping to break the vicious circle of poverty, reduce crime and, as a result, increase aggregate welfare.

Much of this evidence is available on the website of economics Nobel Prize laureate (2000) James Heckman who has made the theme of early childhood development the focus of an arduous advocacy campaign. In his words: "The best way to improve the workforce in the 21st century is to invest in early childhood education, to ensure that even the most disadvantaged children have the opportunity to succeed alongside their more advantaged peers".

BRINGING GENERAL EDUCATION TO GEORGIA'S DARKEST CORNERS9

It is hard to overestimate the impact (both positive and negative) teachers have on children's minds, their career prospects and aspirations. Despite that being so, the second half of the 20th century has seen the teaching profession going into freefall as far as social esteem (and pay) is concerned.

This apparently global crisis in public schooling has mainly affected the poor: the rich and the educated were able to adjust by opting for far more expensive private options or by re-discovering

"homeschooling" and "un-schooling" alternatives. The impact of this crisis is, therefore, strongest in weaker social environments where the teacher is often the only beacon of light (and enlightenment), as well as serving as the leading moral and intellectual authority.

While falling short of a comprehensive assessment, the Teacher Education and Development Study in Mathematics (TEDS-M), which was carried out by the National Assessment and Examination Center in 2008, speaks volumes about the

⁸ Based on "Breaking the Vicious Circle of Poverty and Inequality" by Eric Livny (ISET Economist, 2 October, 2012).

⁹ Based on "Like Teacher, Like Son" by Eric Livny and Giorgi Tsutskiridze (ISET Economist, 22 Nov 2013)

low quality of Georgia's future elementary math teachers. Georgia ranked last among 17 participating countries in both teaching methods and subject comprehension (mathematics).

The relative social status of Georgia's educators is surely a key factor in the country's sorrowful performance in international tests that measure students' achievements in reading, math and sciences.



Georgian classroom in Barisakho.

For example, in 2006 and 2011 Georgia was ranked 37/45 and 34/45, respectively, in the Progress in International Reading Literacy Study (PIRLS), which examined the reading comprehension skills of children aged 9-10.

While only the aggregate results of these and similar tests are currently available to us, it is clear

that Georgia's performance in such tests is a function of the country's demographics and economic geography. Far more than half of Georgia's population – the urban poor and subsistence farmers – have their children trapped in extremely low quality public schools that fail to present them with an 'equal opportunity', let alone prepare them for the 21st century 'knowledge economy'.

Alternative Models Of Teacher Recruitment And Training¹⁰

Georgia's education system requires new outof-the-box solutions rather than more of the same teacher-training-curricula-reform type of medicine. First and foremost, the system urgently needs new blood. And this is mainly about two things: teachers' prestige and compensation.

The main policy question concerns what will bring the best and the brightest of Georgian uni-

versity graduates into the country's smaller towns and villages to teach and contribute to the process of change. One simple but unaffordable option would be to dramatically increase teacher salaries. A more complicated but relatively inexpensive solution would be to launch a National Service Program requiring (and enabling) the best university graduates – recipients of government scholarships – to

¹⁰ Based on "Like Teacher, Like Son", by Eric Livny and Giorgi Tsutskiridze, and "President Margvelashvili and Cartu-International Charity Foundation Unveil Plans to Usher a New Era in Georgia's Public Schooling", by Eric Livny

give back in the form of serving one or two years as a teacher and/or a community organizer in Georgia's social and economic periphery.

As Simon Appleby has pointed out, a similar scholarship scheme was introduced in Australia after the Second World War to attract teachers to isolated rural communities. Talented school-leavers could apply to have their university fees and a modest living stipend covered by the government in exchange for a commitment to serve in public schools in remote areas for a period of twice the duration of their scholarship.

For such a national service program to be effective, young and inexperienced teachers have to be

trained and supported. Naturally, not all of them will develop a passion for teaching and stay in the profession; but many will, particularly if the government, the schools and local communities in question

provide adequate incentives and resources.

Since 2009, Georgia has been implementing a highly successful experiment in alternative teacher recruitment as part of the "Teach for Georgia" (TG) program. TG's approach is rooted in the observation

that Georgia's pedagogical universities are unable to attract young talent, instead becoming a refuge for those students achieving the lowest scores on the national student examination test. The alternative provided by TG is to target university graduates and mid-career professionals who are considering retiring or taking a break from their daily routines. Individuals are carefully selected from a large pool of candidates (almost 300 in 2015), go through intensive pedagogical training organized by TG and get placed as teachers in remote and often desperate communities in the Georgian highlands. TG offers decent compensation (up to 1,000GEL/month for teaching in isolated mountain locations). Far more importantly, however, it helps people find or rede-

The policy debate about the quality of public schooling is very much about a country's commitment to social mobility as embodied in the 'equal opportunity' slogan.

Eric Livny and Giorgi Tsutskiridze "Like Teacher, Like Son" ISET Economist, 22 Nov, 2013

fine their purpose in life. Over the past five years, almost 550 TG teachers have gone on to serve in villages and small towns ranging from Svaneti and Adjara to Racha and Samtskhe-Javakheti, serving as role models, teachers and community leaders.

The Problem Of Students' Incentives¹¹

A key problem needing to be tackled by any government reform or donor program is that of incentives. For many rural children, and girls in particular, attending school and completing their studies is a futile endeavor in the absence of any opportunity to continue their education. For many, the dominant strategy is early marriage and establishing a family. Very telling in this regard is the story of Dzevri, a small village in Imereti.

With close to 300 households, Dzevri is a small and utterly unremarkable village in the Terjola municipality. It would have remained utterly unremarkable, had it not been for the decision by an Ameri-

can couple, Roy Southworth and Cathy McLain, to settle in the village and make it the center of their philanthropic enterprise in Georgia. While Roy (the World Bank's country director for Georgia in 2004-2010) was busy transforming Georgia's economy, Cathy – an educational psychologist by vocation – created a private foundation, the McLain Association for Children (MAC), to take care of special needs and vulnerable children in Georgia's countryside.

As Cathy recalls, the idea of engaging with Dzevri's struggling school started after the third wedding the American couple had been invited to

¹¹ Based on "Bringing Light to Georgia's Darkest Corners", by Eric Livny and Maka Chitanava

by their new village neighbors. On all three occasions, the bride was in her early teens (15-16) and about to drop out of school.

The phenomenon of early marriage that Cathy and Roy encountered is, in fact, quite common in the Georgian countryside. According to a 2013 survey by UNICEF, about 9% of all school dropout cases are related to marriage. For many young girls, early marriage and motherhood is a strategy for dealing with a hopeless situation in which they have neither the educational background to qualify for government scholarships nor the financial resources to cover the cost of further education.

Cathy and Roy decided to respond to the early marriage problem with scholarships covering the cost of college education at public institutions. The program was first launched in May 2012, which was a bit late for students to register for the mandatory national admissions test. As a result, only two scholarships were awarded that year, however, the program quickly gained momentum thereafter. Six students qualified for MAC Foundation's scholarships in 2013 and 11 in 2014. In 2015, the school's principal, Manuchar Panchulidze, expects 23 kids – the entire age cohort – to graduate and continue to universities and professional colleges.

What is particularly gratifying is the profound impact that the promise of modest scholarships (of about \$1,500/year) had on students' motivation. Being acutely aware of the opportunity, the children from Dzevri are now doing quite well in the national student admissions tests, and many qualify for full or partial government grants, thereby saving Cathy and Roy's funds for other important causes.

PROMOTING EQUAL OPPORTUNITY IN HIGHER EDUCATION

Judging by some of the available quantitative performance indicators, Georgia is doing very well, certainly if compared to countries with the same level of income per capita. For instance, the World Economic Forum ranks Georgia very high according to enrolment in primary and secondary education. Moreover, the introduction of national tests and merit-based government scholarships in 2005

was a great leap forward towards a meritocracy in higher education and social mobility. Students who perform well in these tests are eligible for government scholarships that allow them to study, free of charge or at a discount, at any public or private university, thereby contributing to social mobility and potentially ending the vicious circle of poverty and inequality.

Alternative Models Of Teacher Recruitment And Training¹²

However, as we saw in the Dzevri example, the system is strongly biased towards children from relatively well-off urban families that have access to private tutoring (considered essential for success in the national tests) and/or can afford paying for university education. A highly disproportionate number of poor children drop out of school, do not register for the national tests, or fail them.

Another factor distorting educational choices is distance from the capital. In particular, children from Georgia's outlying regions tend to study closer

to home rather than in the presumably better Tbilisi-based institutions. This bias persists even when controlling for performance in the General Ability Test (GAT) administered by the National Assessment and Examinations Center (NAEC).

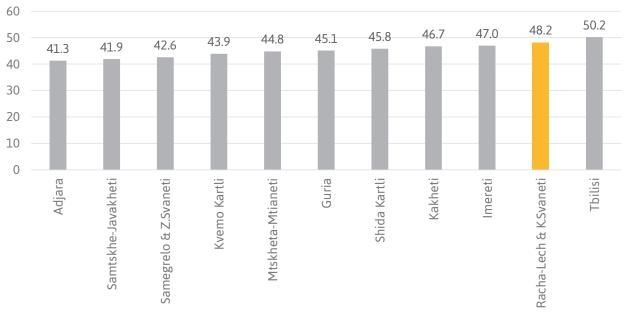
For example, in 2012, students from Racha-Lechkhumi and Kvemo Svaneti (R-L-KS) came in second place after Tbilisi in terms of average GAT performance (see Chart 1). Yet, as reported by Maia Chanqseliani (2012), not as many Rachvelis as one would expect ended up enrolling in the best

¹² Based on "If You Are So Smart, Why Are You Stuck in Kutaisi?" by Eric Livny and Giorgi Kelbakiani

Georgian universities (Chart 2). Thus, despite ranking second on the GAT, R-L-KS was only in seventh place in terms of the share of students admitted to Tbilisi-based universities. Conversely, a dispropor-

tionate number of Rachvelis chose to study closer to home (e.g. in Akaki Tsereteli Kutaisi State University, which is in 43rd place on Chanqseliani's ranking of Georgian higher education institutions).

Figure 3: GAT average scores, by regions, 2012

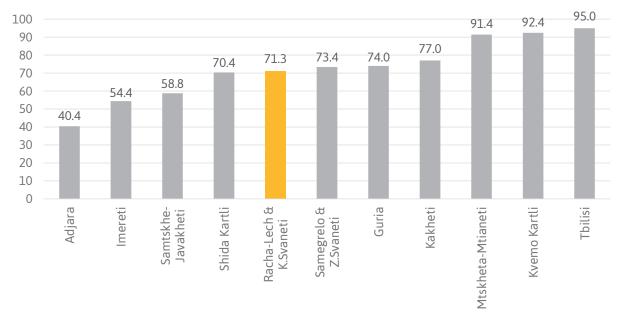


Source: GeoStat

Racha-Lechkhumi &Kvemo Svaneti region is 2nd after Tbilisi on the General Ability Test, but 7th on the share of students admitted to Tbilisi-based universities.

One may discount the significance of Chanqseliani's ranking and Rachvelis' educational choices given the fact that many of the programs offered by Kutaisi State University are of rather decent

Figure 4: Percent of students studying in Tbilisi, by regions, 2012



Source: GeoStat

quality, at least by Georgian standards. Yet, what Chanqseliani's ranking does capture is the quality of peer and network effects in education, which re-

search shows to be extremely important factors in determining learning outcomes and future earnings. In other words, the quality of the human environment in which students find themselves early in their life – not what they study, but who they are studying with – has a tremendous impact on their

future success. Essentially, by

choosing, or being forced, to study in Kutaisi, Rachvelis diminish their chances of moving up the social ladder.

The reason that distance plays an important role in determining educational choices has to do with the fact that government scholarships do not cover the costs of housing and living expenses for out-of-town students. The higher costs of living in the

capital may prevent students from Racha and other rural locations from studying in Tbilisi regardless of their GAT performance.

The distance and cost-of-living factors reinforce existing regional disparities while generating welfare losses for the individuals involved and the economy as whole. To reduce these losses, state scholarships should include a living stipend component to encourage the (perhaps) slow but smart Rachvelis to study in the better human environment offered by the more prestigious Tbilisi-based universities.

Eric Livny and Giorgi Kelbakiani "If you are so smart, why are you stuck in Kutaisi" ISET Economist, 22 Nov, 2013

To sum up, although the quality of, say, mathematics or engineering education at some of provincial universities may not be inferior to that offered by Tbilisi State Technical University, the sorting of students according to distance and cost-of living factors significantly affects educational outcomes, occupations and, consequently, social mobility.

Cash Transfers: Impact On Educational Outcomes¹³

While government scholarships are, unfortunately, biased towards urban elites, other policy tools, such as targeted cash transfers, may be available for the government to fight poverty and create a level field in education.

Importantly, the rationale for cash transfers goes beyond relieving short-run poverty. As explained by eminent development economists Abhijit Banerjee and Esther Duflo in their 2011 book Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty: people are poor because of all kinds of detrimental factors, such as family, geography, and just bad luck. Yet they are unable to get out of poverty because they are trapped. Living barely above subsistence level, it is very difficult for them to become more productive because they spend most of their scarce income on food consumption.

Unable to invest in skills and education and, therefore, lacking in professional qualifications, the poor remain poor. And, to add insult to injury, so do their children.

If one subscribes to this reasoning, then the availability of financial resources is crucial for getting people out of this vicious cycle. Yet, this policy position is controversial. The opposing view is that cash transfers reduce people's incentives to solve their own problems, with the funds being largely spent on conspicuous consumption (ceremonial activities, movies, televisions, etc.) instead of education, health, and other long-term investments.

Thus, in the end, the effectiveness of such transfer programs depends on what recipients do with the money. Do they squander it or spend it on

¹³ Based on "Education for the Poor" by Zura Abramishvili and Lasha Lanchava, The ISET Economist, 20 Feb 2015.

education and investing in their own skills?

To answer this question in the Georgian context, Zurab Abramishvili and Lasha Lanchava looked at the impact of the Georgian State Social Assistance Program (SSAP) on university enrollment. The program was introduced in 2005 and continues to run. By using a sophisticated regression discontinuity analysis that compares applicants who are just above and just below the cutoff point for receiving social assistance Abashidze and Lanchava are able to show that cash transfers increase the chance of university enrollment by 0.8 percentage points - not a minor improvement considering that the university enrolment rate in the sample is 12.7%. The effect is stronger for males (by 1.7 percentage points), possibly reflecting gender-specific preferences (a bias towards males) by parents in the South Caucasian countries. The treatment effect is also stronger (by 1.1 percentage points) for city dwellers (as compared to inhabitants of rural areas). Accordingly, the effect is strongest (by 2.4

percentage points) for male children in urban families.

The study by Abashidze and Lanchava provides support for the effectiveness of the SSAP program in improving educational outcomes for the poor. In essence, they find that the SSAP increases university enrollment for the poor by anywhere between 5% (for rural girls) and 20% (for urban boys). If unconditional transfers have such a strong impact on the university enrollment of the poor, the government may consider other complementary approaches to nudge the poor to invest in skills and education. In particular, it might adopt conditional transfer programs, such as needs-based university scholarships, that would encourage students from poor family backgrounds to continue their education. Such measures would reduce the pressure to leave the educational system and start working early with low education and correspondingly low productivity and income levels.

RESETTING THE SYSTEM OF VOCATIONAL EDUCATION AND TRAINING

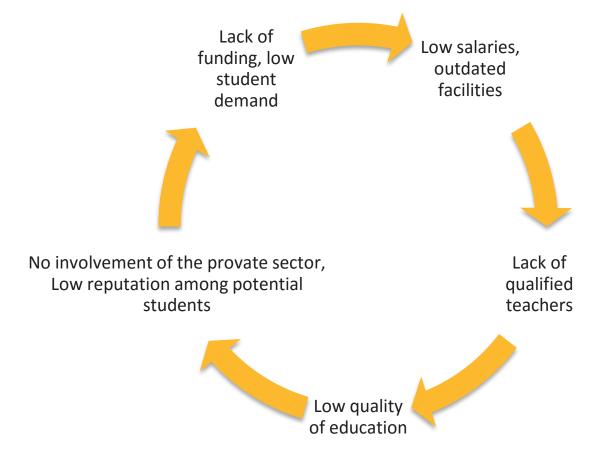
It is well documented that Georgia's labor market is plagued by a skills mismatch: the supply of labor does not properly reflect employers' demands in terms of both professional qualifications and work ethic (see, for example, the 2013 Global Competitiveness Report). This results, on the one hand, in very high unemployment (particularly among younger Georgians) and low capital productivity, on the other.

If modernized, vocational education and training (VET) institutions could serve as a key mechanism for aligning workers' skills/specializations with labor market needs. At present, however, the Georgian VET system is failing to perform this critical role: inadequately financed and unreformed, it is unable to provide high quality training in relevant disciplines, and is thus not an attractive option for Georgian youth. Moreover, VET training carries a social stigma that further detracts from its labor market

value from the point of view of would-be-students and employers alike.

Regrettably, the situation in the VET sector represents yet another vicious circle. Most public VET colleges lack vision and leadership. Their human resources (faculty and management) have been depleted by many years of neglect and negative selection (all good people left). While any reform must start with a gradual renewal of faculty, the level of compensation in the VET system makes it nigh on impossible to attract high quality teachers. The training programs, professional literature and equipment available to most public VET colleges belong to the Soviet era with little chance of being upgraded given the absence of industry linkages that are essential for keeping abreast of changes in technology and relevant pedagogical methods. Not surprisingly, the quality of VET students leaves much to be desired, resulting in a "garbage in, garbage out" modus operandi, with almost no light at the end of the tunnel. Neither teachers nor students at VET colleges have any idea about the kind of skills that are demanded by the labor market. Career planning, an aspect of decision-making that is very important for future students, is simply unknown in Georgia.

The vicious circle in the public VET system can be schematically described as follows:



All stakeholders agree that the system is broken beyond repair through standard administrative interventions such as teacher training, curriculum reform and the rigorous evaluation/certification of teaching programs.

From this it follows that to be successful, any reform of the VET system requires external institutional anchors – in both government and the private sector – to provide (i) the resources (human and material) and (ii) the individual and institutional incentives for change (both positive, such as bonuses and extra funding, and negative, such as the revocation of licenses and accreditation).

Furthermore, those institutions performing the role of "external anchors" have to be directly in-

volved in the governance of public VET colleges. Only in this way will they be able to exert influence on the process of strategic planning, budgeting and key appointments, on the one hand, and monitor the progress of organizational restructuring, on the other.

An example of successful transformation is provided by the solid public-private partnership between the Spektri VET college and Knauf, one of the world's leading manufacturers of modern insulation materials, paints, floor systems, construction equipment and tools. Given Knauf's interest in promoting its products on the Georgian market, the company partners with Spektri in a variety of ways, including the supply of sophisticated training equip-

ment (simulators), construction materials and tools, improving the general teaching infrastructure, training Spektri instructors by Knauf professionals, and the provision of internships and employment opportunities for Spektri graduates.

Unfortunately, this kind of win-win approach represents an exception to the general rule whereby businesses limit their involvement to participation in discussions and ceremonial meetings organized from time to time by the Ministry of Education and Science.

The difficulties of matching demand and supply in the VET "market" are understandable. Investing in poorly governed and managed public VET colleges represents such a formidable challenge that, while facing severe shortages of qualified technical personnel, large international companies operating in Georgia would rather go it alone.

Given this "market failure", one major conclusion emerging from the discussion is that government and donors may want to play the role of a catalyst for bringing private businesses and VET colleges together. One the one hand, this may entail Ministry of Education and Science participation in pushing through necessary governance reforms and otherwise supporting the process of organizational change at selected VET colleges. On the other hand, given the social value and inherently sustainable nature of public-private partnerships in the VET field, there could also be a role for international donors in financing the startup costs of such collaborative undertakings as well as facilitating professional linkages and information sharing between Georgian VET colleges and similar institutions in other countries.

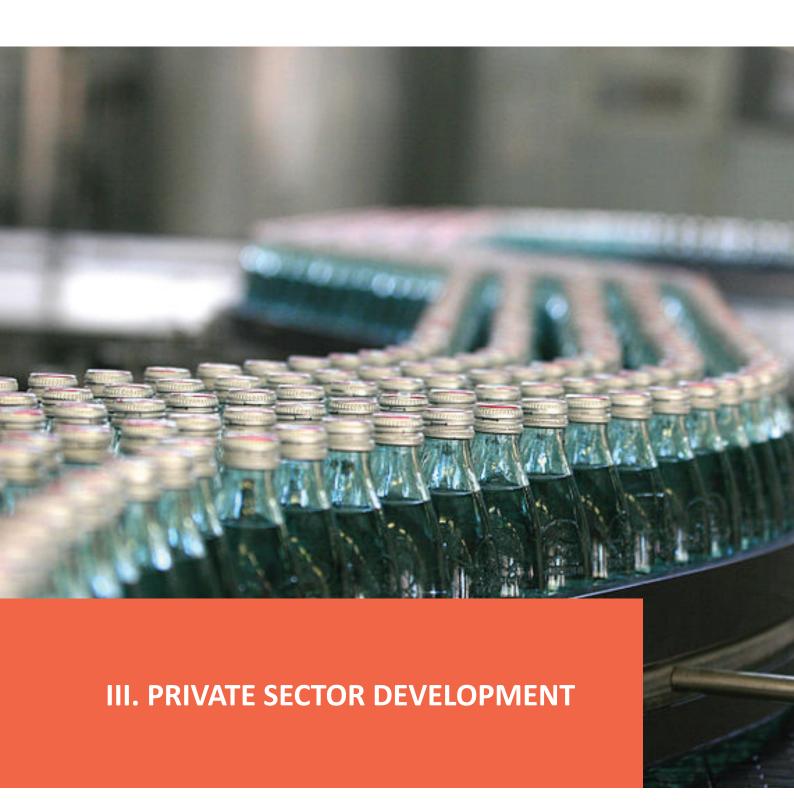
Other recommendations were as follows:

 Students' educational choices as well as VET curricula and programs should be informed by regular employer surveys and labor market performance data. Given the "public good" nature of such data and infor-

- mation, their production should be financed by the government.
- Both state and non-state VET institutions are currently eligible for government funding through government vouchers provided their courses are certified (to be eligible, students must successfully pass a NAEC-administered test). The aim is to cover operational costs, but not things like infrastructure investment. Private VET colleges may also be considered for targeted program financing provided these address agreed upon social objectives.
- established by a government agency. This is suboptimal given that government agencies are, almost by definition, not very well informed about changes in technology and labor demand conditions. It would be essential to privatize the "standard setting" function and let professional business associations or guilds define the standards and priorities of VET education (as is common practice in leading industrial countries, such as Germany and Switzerland).
- Large companies, such as BP, major retail chains, banks and hotel networks are able to systematically meet their demands through in-house training programs. It is small and medium companies (SME) that are mainly affected by the weakness of the public VET system. One way to harness SME resources in the reform effort might be to engage SME associations or interested groups of SMEs in the governance and management of selected VET colleges.
- Finally, while the public VET system may take years to be thoroughly reformed, quick results may be achieved by redeploying public resources from some of the dysfunctional professional colleges to alternative training

modalities, such as apprenticeship programs administered by interested private companies. Business internships or apprenticeships jointly financed and regulated by the government and professional business associations could go a long way in generating demand for vocational training and technical education, quickly and efficiently addressing

any gaps in knowledge and skills, and better matching unemployed or underemployed workers to productive jobs. Importantly, such programs would also help buy the time that is necessary to restructure the entire public VET system and bring it in line with the technological demands of the 21st century.



It is often argued that small- and medium-sized enterprises (SMEs) can serve as an engine for inclusive economic growth. Yet the Georgian SME sector currently exhibits relatively low labor productivity, especially among the smallest firms.

The importance of SMEs for economic development cannot be understated: most successful large firms in developing countries have graduated from the SME category. The breadth of the SME category itself reflects, and helps create, a strong and deep entrepreneurial culture. It is also well documented that SMEs tend to dominate a

country's new/fast growing industries, therefore it is important to ensure that economic and legislative settings are conducive to SME development, so that the dominance of old and large firms does prevent the economy from quickly responding to a dynamically changing environment. At the same time, a well-developed SME sector is often said to be a source of price-reducing and quality-improving competition — which is particularly important for small-size markets like Georgia that are prone to monopolization or oligopolization. All in all, the SME sector can be crucial for the long-term economic development of Georgia.

SMALL OR LARGE?

For the moment, SMEs are relatively small players in the Georgian economy, even though their numbers are large. In 2012, the share of SMEs in total business turnover was only about 17%. Their share in total production value in the business sector was only slightly higher, at about 18%. Lastly, the share of SMEs in total value added in the business sector was about 20%.

Thus, contrary to the established theory, in Georgia it is large firms that are mainly responsible for the creation of jobs, producing economic value, and, most clearly, exports. Moreover, the size and degree of vertical integration achieved by Georgian manufacturers turn out to be crucial for their ability to withstand competition from very large (and often subsidized) Turkish and other international businesses in the absence of any significant tariff or non-tariff protection.

An excellent case in point is Chirina Ltd., currently one of the largest poultry producers in the country. Chirina represents a unique greenfield investment that was initiated, financed and managed a prominent member of the Georgian Russian diaspora. Having earned his personal wealth in the Russian chemical industry, Revaz Vashakidze chose to repatriate a part of his fortune to Georgia in order to invest in a modern, fully integrated poultry production plant capable of competing with cheap imports

of frozen meat products, which had dominated the Georgian market until 2013. Designed and built as a turnkey project by Israel's Agrotop in 2011-2013, Chirina is a unique vertically integrated complex. Its products – fresh and frozen chicken meat sold under the BiuBiu brand – already account for about 1/6 of Georgia's total consumption of poultry. With the doubling of its processing capacity planned, Chirina will become a major food industry player in Georgia. This will result in Georgian agricultural producers being integrated into its supply base, applying downward pressure on prices and expanding the range and quality of products available to Georgian consumers.

According to Keti Vashakidze, Quality Manager and Organizational Structure Developer at Chirina, the company currently employs around 250 workers in its farming and food processing activities located outside Tbilisi. It expects to double production and significantly increase employment when additional broiler farms become operational in early 2015. Furthermore, Chirina contributes to the creation of many additional jobs through its retail partner (operating its distribution fleet and mobile retail network) and suppliers of agricultural inputs, all of which are SMEs. Finally, Chirina contributed to the wellbeing of Georgian consumers by bringing to the market affordable, high quality and fresh

poultry meat substituting for the low-quality, mass-produced frozen products imported from Turkey and Brazil.

Chirina's example suggests that, contrary to the established 'Worldbankese' mythology, the key to Georgia's success in technological upgrading, job creation and SME development may be held by large, well-invested food processing and manufacturing businesses. The notion that Georgia should prioritize SME development (at the expense of

large enterprises) is akin to putting the cart before the horse. Rezo Vashakidze, the owner of Chirina

The current policy is to support smallholders, who are 50% of the population. While I understand the political significance of doing so, training and subsidizing such a large mass of subsistence farmers will inevitably lead to a waste of resources. In my opinion, the emphasis should be on medium and large business, which would integrate smaller businesses and smallholders into their supply chains or provide alternative employment in processing and services. It is unfortunate that the EU and other donors are supporting such a wrong approach.

Interview with Rezo Vashakidze in Competitiveness of Georgian Agriculture: Investment Case Studies, by Simon Appleby and Eric Livny, September 2014.

is quite blunt on this point. In his view, the Georgian government is using agrarian policy to achieve its social policy objectives, which is a mistake.

IMPROVING ACCESS TO FINANCE AND PROMOTING AN ENTREPRENEURIAL CULTURE

There is wall-to-wall agreement among analysts that access to finance is a key constraint for the development of Georgian businesses. On the one hand, there is the problem of cost: bank loans and, even more so, credits provided by microfinance organizations (MFOs) are exorbitantly expensive. On the other hand, businesses (and individuals) are constrained in their borrowing by very high collateral requirements set by banks, forcing them to borrow – at even higher rates – from MFOs and pawnshops.

According to Archil Bakuradze, chair of the Georgian of Microfinance Association, MFOs remain the main source of finance for SMEs and for startups, in particular. He indicated that 350,000 individuals (including 75,000 farmers) are financed by microfinance organizations. The excessive collateral requirements are also a key concern for Kakha Kohrekidze, head of the Georgian SME association.

Angela Prigozhina, WB Country Sector Coordinator in the South Caucasus, argues that Georgian SMEs suffer from the fact that Georgian banks

provide real estate-based access to finance. Given the low price of agricultural land in the Georgian periphery, agricultural SMEs are most vulnerable in this regard.

International donors and the Georgian government are both attempting to address the financial bottleneck facing SMEs and businesses operating in the agricultural sector. The government launched ambitious programs for subsidized agricultural loans and vouchers (to buy seeds, chemicals and implements), but these suffered from poor targeting and monitoring, resulting in quite a bit of waste.

According to Giorgi Tsikolia, the recently-established Entrepreneurship Development Agency has been mandated by the Georgian government to help start-up entrepreneurs gain access to information, education and finance. Angela Prigozhina emphasized the importance of providing medium-term support (incubation, funding or loan guarantees) for high-risk innovative projects that are unlikely to be financed by more conservative commercial banks and microfinance organizations.

Tsikolia outlined the main parameters of "Produce in Georgia" – a recent government initiative aimed at helping manufacturing startups get off the ground. "Produce in Georgia" would provide selected startups with access to land and infrastructure as well as reduce the collateral requirements required by commercial banks by arranging for insurance and technical assistance. Additionally, "Produce in Georgia" would subsidize the interest rate on commercial loans during the first two years of a project.

Giorgi Darchia reported an interesting experiment that was conducted by USAID's Economic Prosperity Initiative (EPI). Commodity loans, provided by EPI through microfinance organizations and agriculture input providers, allowed farmers (organized in informal co-ops) to gain access to key inputs (at a discount) thereby helping offset operational costs. EPI's approach included a capacity building/advising component helping farmers to develop better funding proposals and business plans.

While dealing with its symptoms (high interest rates), none of these interventions can address the fundamental problem of high risks plaguing the

Georgian economy. These risks are related Georgia's geopolitical situation between the European rock and the Russian hard place, as writes Eric Livny; the commercial risks of operating in a small market; currency risks related to limited domestic savings and the high degree of dollarization; the underdevelopment of insurance, long-term supply contracts and/or forward markets for agricultural products; and a shortage of entrepreneurial and managerial skills reflected in the poor quality of projects.

The good news is that Georgia's country risk goes down over time, bringing about a gradual reduction in interest rates for both loans and deposits. MFOs and banking institutions are also learning how to operate more efficiently, reduce operational costs and more accurately assess commercial risks related to agricultural and other SME projects. The skill level in the private sector is also growing over time as a result of accumulated experience and spillovers from international activities in the Georgian economy. Given all of the above, Georgian businesses of all sizes are likely to see their access to finance improve in future years.

FACILITATING INVESTMENT BY FOREIGN AND DIASPORA ENTREPRENEURS

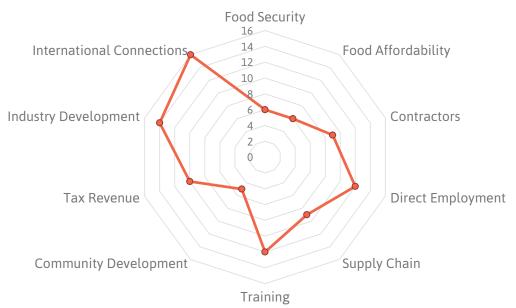
The role of foreign and diaspora investment in promoting the competitiveness of Georgian agriculture was the subject of a study conducted by Simon Appleby and Eric Livny over the course of 2014 with support from USAID's EPI project. Specifically, Appleby and Livny look at the impact of foreign-invested businesses on job creation and workforce development; product and process innovation (including technology spillovers affecting suppliers, competing agribusinesses and smallholders); expansion in the range and quality of products available to Georgian consumers; import substitution and improvement in access to international markets; and, last but not least, work ethic and the general culture of doing business in Georgia (a total of 10

dimensions). Figure 1 below depicts the cumulative scores of the eight enterprises included in the study along each of these dimensions. The aggregate impact along each dimension runs from 0 (no impact) to 16 (strong impact).

According to Appleby and Livny, foreign-invested businesses play an extremely important role in helping to bring industry standards to the global level and promoting international linkages (14/16 and 16/16, respectively). They have a moderate effect on direct employment and general workforce development (10/16), and moderate-to-weak impact on tax revenue¹⁴, community development and other aspects of the business environment.

¹⁴ Many enterprises report positive EBIDTA, but are yet to turn a profit given the amount of upfront investment they had to undertake

Figure 4: The impact of the foreign investment on the Georgian economy



Source: GeoStat

Importantly, many successful foreign-invested enterprises involve Georgian diaspora entrepreneurs. An excellent case in point is Rezo Vashakidze's investment of more than 80mln USD in Chirina Ltd. This project was found to be truly exceptional in its ambitious design and faultless implementation. The company's modern facilities are testimony to the fact that Georgia is on the path towards economic revival.

Vashakidze's investment was conceived in the post-Rose Revolution years, and it would not have been possible in the corrupt and crime-infested Georgia of the 1990s. It is perhaps rather symbolic that some of Chirina's facilities are located in Gamarjveba, on a spot that witnessed a much earlier attempt to build a modern poultry plant using the same technology and the help of the same Israeli consultants. That attempt had failed miserably because back in 1996 Georgia lacked the basic "law and order" conditions for doing business and ensuring investors' property rights.

Chirina Ltd., as well as other major investment projects undertaken by international Georgian entrepreneurs, should remind us that the Georgian diaspora, in Russia and elsewhere, is as a gold-mine of financial resources and entrepreneurial

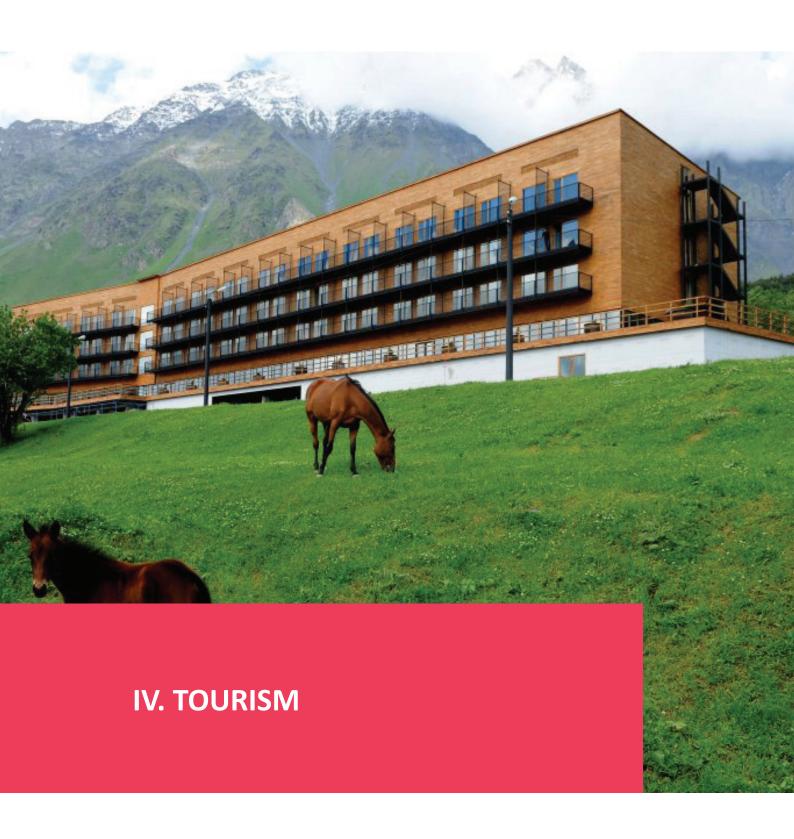
talent that Georgia can potentially harness. Georgia should be actively courting dozens of Rezo Vashakidzes, creating the conditions for them to come back and invest their financial and human capital in Georgia's young economy. There may be many potential policy tools to achieve this objective (as could be learned from the experience of Israel and, perhaps, China), but, first and foremost, the country should make this a top priority.

Appleby and Livny conclude their study as follows:

"It is within the power of the Georgian government to improve the food security, employment, and general economic situation in the Georgian countryside through a careful revision of the policy context and operational activity. A mixture of smallholders, farmer co-operatives, SMEs, and foreign-invested large commercial enterprises are likely to be the beneficiaries of sound policy.

For domestic and foreign investors to risk their capital in Georgia's agricultural sector, a stable regulatory environment is required and concrete steps must be taken to enhance investor confidence. In some cases this involves repealing policies that damage the business climate, such as the moratorium on farmland purchase by foreign-invested entities, draconian visa restrictions upon existing farmland investors from abroad, and harsh administration of welfare payments discouraging rural dwellers from taking seasonal work when it is available. Issues identified as inhibiting the Georgian business enabling environment must be addressed as a matter of urgency, in particular infringement of private property rights.

In other cases would require introducing new initiatives swould be required, such as a mechanism to swiftly review and react to complaints about inefficiencies in inter-agency coordination, local government, and tax administration; PPPs or tax concessions to encourage food processors to invest in their smallholder supply chain; reforming the VAT administration system; and financing workfare programs to encourage under-employed smallholders to develop modern small-scale orchards to support their families."



Tourism¹⁵ has long been considered one of the few economic options available to Georgia. Yet, given that the country's attraction may lie in its very lack of development, tourism presents both opportunities and threats. In Georgia, it's often said that tavisupleba mxolod mtebshia - freedom is only in the mountains. Indeed, the mountains have long shielded the small Georgian nation from much larger invaders, helping it maintain its freedom, as well as its unique culture, language and faith. Even today, getting into Georgia's mountains is no easy task. Separated from the 'mainland' by the 3,000m high Abano pass, Tusheti, is an excellent case in point. The sheer "otherworldliness" of Tusheti, as well as its well-preserved indigenous traditions and architecture, are a powerful motivator for many Georgians and international visitors alike to undertake the bumpy excursion to Omalo (and beyond).

The number of visitors to Tusheti has been growing quite rapidly in recent years, raising an important policy dilemma: what is the "optimal" level of development for this wild region of Georgia? On the one hand, tourism is strengthening the local economy by providing locals with an additional source of income. On the other hand, the arrival of 21st century invaders (in the shape of tourist "armies") will undoubtedly strain the local infrastructure, requiring significant investment in roads, water supply and other utilities. Too much investment may strip Tusheti of its uniqueness. Too little may carry risks for health and the environment.

The policy challenge is therefore to anticipate such risks and plan ahead. If managed well – in the sense of preserving the pristine landscapes and environment, on the one hand, and ensuring that some of the benefits flow to the affected communities, on the other – tourism can be a great boon, outweighing any costs associated with "crowding out" community-based hospitality services or straining the environment.

In particular, the arrival of modern tourism operators, such as the new Kazbegi Rooms Hotel, can help create four-season jobs and additional opportunities for local SMEs specialized in hospitality services (tour guides, transportation, family-based hotels and restaurants), primary agricultural production, and arts and crafts. Additionally, and very importantly, modern hotels may act development agents, filling the coffers of local government with tax revenues and engaging in charitable giving to local schools, hospitals and churches.

While having a positive short-to-medium term impact on incomes, tourism is not known to be a driver of long-term productivity growth. Certainly not to the same extent as the manufacturing or IT sectors. Still, it allows improvement of the lot of local communities in the economic and cultural sense, changing children's work ethic and their attitudes towards personal development and the environment.

TOURISM AND LOCAL DEVELOPMENT: THE CASE OF KAZBEGI ROOMS HOTEL¹⁶

The complex love-hate relationship between the new Kazbegi Rooms Hotel and the local community in Stepantsminda village was in the focus of a debate on the role of high-end tourism in promoting inclusive growth in Georgia that ISET hosted in

July 2014. A follow up excursion to the Kazbegi municipality, meetings with local farmers, service providers and Rooms Hotel management helped clarify some of the issues and raise many more questions.

¹⁵ Based on "Tourism and Rural Development: The Case of Tusheti" by Adam Pellillo and Irakli Kochlamazashvili, October 2014.

¹⁶ Based on Kazbegi Rooms: with a View to Improvement of Regional Development Policies, By Eric Livny



Rooms Kazbegi: Positive Impacts

Kazbegi is a tourist heaven in the picturesque Tergi (Terek) river valley that offers many attractions such as bird watching, mountaineering, and historic castles and towers. Located some 10km south of the Georgian-Russian border, Kazbegi boasts a spectacular view of Mount Kazbek and Gergeti Trinity Church. As a gateway to Russia, it serves traffic flows and tourism (offering heli skiing and casinos).

The result of a 15mln USD investment project, Rooms Hotel opened in July 2012, providing a major boost to the meager hotel capacity in the region. The property was privatized in 2010 (at no cost) with the investors – Tbilisi Holiday Inn shareholders – taking upon the obligation to build a modern hotel. Although the first year was not an easy one, since then Rooms has seen the number of arrivals double, including a 23% increase in the first six months of 2014 relative to 2013.

Rooms is by far the largest employer in Kazbegi. It is the company's explicit strategy to train and employ as many villagers as possible. The logic is straightforward: if available, locals are cheaper, don't need housing, and are less likely to leave. At present, about 60% (100 of 170) of the hotel's staff are local hires, most of whom went through

a 6-month in-house training program in languages and hospitality services. A major constraint for hiring more locals, however, is the proud highlands culture (translating into a "client-is-always-wrong" approach to service) and a lack of language skills. Thus, only one local woman is employed in the customer-facing part of the operation (as a waitress) while others are doing back office work, maintenance, kitchen, cleaning and security. The most senior local hire is the head of security.

Not only is Rooms a boon for local employment, but also, as all stakeholders agree, its arrival did not have any negative impact on homestay owners who continued catering to backpackers and budget travelers. There is no displacement or competition among such properties and Rooms. In fact, the town has generally become a much more popular tourist destination, which benefits everybody, including the Alexandre Kazbegi museum, souvenir shops, and restaurants.

People always used to come to Kazbegi from Gudauri, but did not stay in the town because of the lack of hotel capacity. Now, they tend to stay overnight, which is a great boost for the local economy. Locals and expats living in Georgia account for about 30-32% of total visitors, and according to

Valeri Chekheria, the CEO of Rooms, this is a fast growing segment. Internal weekend tourism can be seen as a great (voluntary and non-distortionary) way to redistribute income from Vera and Vake to the Georgian periphery.

There are also specific activities that Rooms leaves to the locals, such as traditional Georgian cuisine (e.g. khinkali, a local specialty), horse riding,

local tour guides and transportation services. The transportation services and local guides are in fact under contract with Rooms. There are many products that Rooms sources from local farmers (many of whom are supported by USAID's New Economic Opportunities project), such as cheese, salad leaves, broccoli, potatoes and trout. What possibly could go wrong?

Infrastructure Bottlenecks

While most local infrastructure bottlenecks – public toilets, safe road crossings, intermittent electricity supply and road quality – are equally damaging for businesses and households, an insufficient water supply created a zero sum game situation between Rooms and the entire Kazbegi community, becoming a major source of conflict in the winter of 2012/13 soon after Rooms started operating.

The water supply in Kazbegi and much of rural Georgia is the responsibility of the United Water Supply Company of Georgia – an LLC with 100% state ownership. While having at least two years to prepare for the launch of Rooms, the company took no steps to upgrade the water infrastructure in anticipation of increased demand, subjecting the entire town to seasonal outbursts of anger and misery. Ironically, since consumption by Georgian households is not metered, Rooms is the water company's only paying client in Kazbegi – paying about \$10-15,000/month. Yet, to date, the water company has been unable to allocate sufficient resources to deal with the root cause of the problem: the size of water reservoirs. Instead, the company

has been tinkering with holes and leakages in the water collection system and piping.

As far as the environment is concerned, Rooms would like to promote its green image and qualify for an eco-certificate by encouraging guests to reduce electricity and water consumption and by sorting its waste. However, there is no local recycling option – at the end of each day a single truck collects the entire load of garbage and dumps it not far from the river. The only thing Rooms can do is involve its staff in regular cleaning actions (e.g. in the nearby forest), but it has been extremely frustrating to see that in just a few weeks the place is again littered by locals.

Road infrastructure is also an issue. The government has invested large amounts of resources in improving the main Gudauri-Kazbegi road, but the "last mile" from the village center to the hotel has not be repaved, despite the government's explicit commitment to do so as part of the privatization deal. Until now, Rooms could not (and did not want to) invest its own resources (estimated at 100,000 GEL) in paving the road.

Greater Role For (Local) Government

So far, the role of local government in developing tourism infrastructure or helping local businesses in Georgia's periphery has been quite limited. For instance, at present, tourism is the responsibility of one person in the Kazbegi municipality, who has no budget and limited capacity to coordinate. Large private businesses, such as Rooms, can certainly help with ideas, skills and resources. However,

they cannot be expected to fix all infrastructure problems such as the waste management, sewage and water supply systems. Businesses would be more than willing to pay part of their taxes to the local government, providing it with incentives and resources to invest in tourist-friendly infrastructure and public goods. Georgia's tax administration system is, however, overly centralized, weakening

the fiscal incentives of local government. Incidentally, the casino operated by Rooms is potentially

remote regions in order for them to officially register, receive support and grow.

a major contributor to the local budget (generating approximately \$200,000/year, depending on the number and types of tables operated), however, the Kazbegi municipality has not been authorized to use the money for local needs. Instead, these funds (and about 30-50,000 GEL in monthly VAT

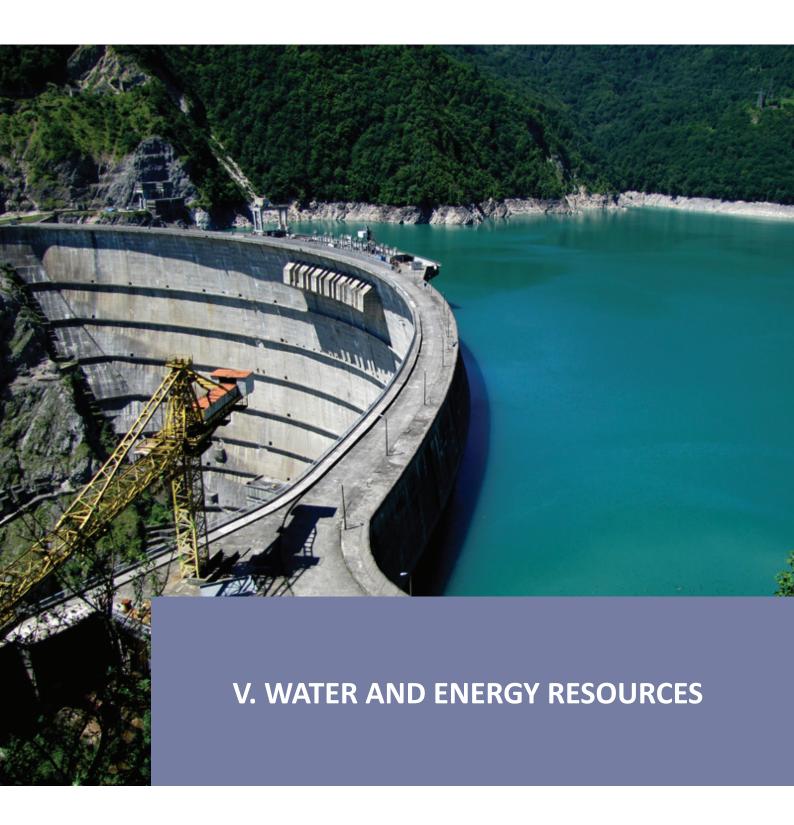
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payments made by Rooms) are finding their way to the national government's coffers.

Eric Livny Kazbegi Rooms: with a View to Improvement of Regional Development Policies.ISET Economist Blog, September 2013.

Another issue for large businesses operating in the periphery is the fact that 99% of local service providers are operating in the shadow economy. Rooms has a hard time doing business with locals unless they are legally registered. An appropriate (budget neutral) policy response to this bottleneck could be a blanket tax exemption for small businesses and individual entrepreneurs operating in

Finally, there is a role for government in managing the negative impacts of tourism on the environment by installing sewage and waste management systems, protecting rare animal species and promoting people's awareness of these environmental issues. After all, it should not be too difficult to explain to Georgia's youth that good citizenship and patriotism are not only about supporting the national rugby team, but also about not polluting the Motherland.



USE AND GENERATION OF ENERGY

Georgia is very rich in hydro power resources, and yet, rather paradoxically, it is characterized by very significant energy poverty. The same is true for Georgia's immediate neighbors. Per capita electricity consumption in the South Caucasus region is only about one quarter that of the OECD average.

On the one hand, this reflects a lengthy period of de-industrialization (indeed, until well into the 2000s, Georgia's main export was scrap metal). On the other, most Georgians simply cannot afford the use of energy for air-conditioning and heating or powering energy-intensive equipment, such as washing machines.

Firewood is the most common source of heating energy in Georgia's regions. Unfortunately, as has been shown by a number of studies, it is used very inefficiently, causing environmental damage.

While most Georgian households are connected to the electricity grid (only 28 villages are yet to

be connected), almost 30% do not have access to natural gas. According to a survey conducted by the Association of Young Professionals in Georgia's Energy Sector, firewood is used for heating by around 96% and 26% of rural and urban households, respectively. Facing energy poverty, in winter many Georgian households move into a single heated room and minimize their use of energy-intensive equipment.

Achieving energy efficiency is also a major challenge for Georgia. On the one hand, this is a matter of firms and households being liquidity constrained —modern insulation and energy efficient technologies require costly investment that many Georgians cannot afford. On the other, this is a matter of awareness. Businesses and individuals could borrow to invest in energy efficient technologies or better insulation that would save them money in the medium term; but they don't.

Hydropower Development, Economic Growth And Poverty

As discussed in the Georgian National Competitiveness Report (ISET, 2013), "Georgia became a net electricity exporter in 2007, however, export levels are modest due to growing domestic demand and limited transmission capabilities. There is an obvious coordination problem in the sector: investment in HPPs will not happen without guaranteed access to regional markets, and private investment in transmission infrastructure is conditioned on a guarantee of sufficiently large volumes of traded electricity. In economists' jargon, the sector is characterized by an externality in investment decisions."

The cornerstone of the chosen government approach is public investment into the transmission infrastructure connecting the Georgian and Turkish grids. This involves building new and improving existing power lines and back-to-back stations at a total expense of 220mln euros. The funds are provided by the European Bank for Reconstruction

and Development, the European Investment Bank, the European Union Neighbourhood Investment Facilities, and Kreditanstalt fur Wiederaufbau.

The Government of Georgia has allocated the land plots and liaised with the Turkish authorities to ensure the connection to the main grid across the border. According to the blueprint, the new lines will motivate investor interest in the construction of HPPs on a concessionary Build-Operate-Own (BOO) basis. More than 36 HPPs (including six large, 100-702 MW plants) are currently under memoranda of understanding (MoUs) with foreign investors, though about 50% are in need of additional investment.

Located in Georgia's outlying regions, hydropower projects are likely to generate considerable local employment during the capital intensive construction phase. Furthermore, new power generation facilities are frequently the reason for improvements in local infrastructure such as roads, electricity transmission equipment and even water supply. Once operational, generation of hydro and other renewable energy resources (e.g. wind and solar) could furnish off-grid energy solutions for re-

mote mountainous regions or and/or supply existing and new electricity-intensive industries – boosting employment and contributing to local budgets.

But there are tradeoffs to consider. New hydropower plants rarely have any impact

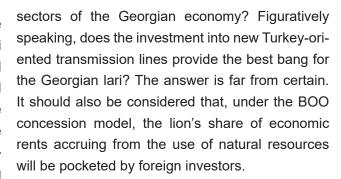
on local employment or public revenue beyond the construction phase. The new state-of-the-art Aragvi HPP, to take one example, employs only three local technicians and sells its electricity to the national grid rather than to the nearby Gudauri resort (the initial rationale for this HPP, as conceived by the Austrian owners of the Gudauri Marco Polo Hotel back in the late 1980s). Likewise, the ongoing development of Georgia's hydropower potential does not translate into lower electricity prices for Georgian households or industrial consumers. This is because, according to the government's policy blueprint, instead of flowing into the domestic market - and applying downward pressure on prices any surplus electricity is supposed to be siphoned off by the Turkish grid.

Thus, it may be worthwhile to take a step back and consider the power industry and the above

policy blueprint in the broader context of the Georgian economy. Would the economy as a whole benefit from an increase in electricity exports? What would the spillovers from this activity be to other

Georgia could do a lot more to promote its competitiveness – and job creation at home – if it were to use its hydro resources to reduce the costs of local producers and households, and spur investment in energy-intensive industries with the potential to export higher value-added and more sophisticated products.

Georgian National Competitiveness Report, 2012/13



The public revenue raised in the form of the transmission tariffs seems to be a modest return on the massive capital outlays and negative environmental impact. Georgia could do a lot more to promote its competitiveness and job creation at home if it were to use its hydro resources to reduce the costs of local producers and households, and spur investment in energy-intensive industries with the potential to export higher value-added and more sophisticated products.

WATER SUPPLY AND ECONOMIC DEVELOPMENT

Despite being abundant in water resources, Georgia faces enormous challenges in irrigation and water supply for both residential and commercial use. For one thing, dilapidated sewage, wastewater management, and water supply systems are a cause of frequent interruptions of supply schedules, and a source of risk for human health and the environment. This problem has no solution other than sustained investment over several years.

Another major issue is that the tap water tariffs, as set by the Georgian National Energy and Water

Supply Regulatory Commission (GNERC), were designed with social policy functions in mind: much of the residential sector is not metered and the flat fees charged for water consumption are ridiculously low. The entire cost of maintaining tap water supply is thus shouldered by the Georgian private sector and taxpayers. This is not only a problem of fairness, but also of economic efficiency. At present, Georgian households enjoy the luxury of using free tap water for washing their cars and watering their gardens, while businesses (e.g. food process-

ing companies) face very stiff tariffs, reducing the available amount of resources for investment and affecting product prices.

Georgia's residential water distribution sector involves two main actors. In the Tbilisi metropolitan

area (Tbilisi, Rustavi and Mtskheta), the water distribution system is owned and managed by the private Georgian Water and Power Ltd. (which also

owns several water reservoirs and nearby hydropower plants). In all other municipal centers (towns and large villages), except Adjara and the conflict zones, water supply and distribution is in the hands of the United Water Supply Company of Georgia (UWSCG), owned by the Georgian Ministry of Regional Development and Infrastructure (MRDI).

UWSCG is at the forefront of investment in water supply infrastructure using government funds and loans from international donor organizations such as ADB, EIB and World Bank. To improve tariff collection and reduce waste, UWSCG installs water metering systems in all locations in which it performs infrastructure investments. Unfortunately, little improvement is happening in all other locations in which water infrastructure is legally the responsibility of local governments. While perhaps not obvious, another negative implication from the lack of metering concerns the company's ability to accurately forecast water supply needs and plan ahead, exposing customers to supply shortages, particularly in winter time (see Kazbegi Rooms: with a View to Improvement of Regional Development Policies, by Eric Livny).

Georgia's irrigation sector is currently managed by the United Amelioration Systems Company of Georgia (UASCG), a Ltd. under the Georgian Ministry of Agriculture. Old Soviet-era irrigation and amelioration infrastructure is one issue directly affecting agricultural productivity. Another major problem is that the company does not operate as a business. The flat 75 GEL per hectare tariff does not even cover basic maintenance costs. While existing irrigation infrastructure allows the supply of water to 88,000 ha of land, UASCG has contracts covering only half of this land, from which only 30%

"In Georgia, unless you are an honest guy by nature, it makes no sense not to steal water".

Participant in the debate

of fees are collected. As a result, UASCG has to be heavily subsidized by the government and cannot undertake investment without borrowing or receiving support from international donor organizations.

Simon Appleby from YFN Georgia and Jean-Frederic Paulsen from Wellington LLC – industrial consumers of Georgian energy and water supply utilities – noted some improvement in irrigation after the establishment of the UASCG with overall responsibility for the sector. One major issue yet to be tackled is damage to existing networks and the theft of water by Georgian smallholders.

Another problem is the lack of a civilized "protocol" for communication with customers. According to Jean-Frederic Paulsen, Georgian utilities do not provide early prior warning when suspending energy and water supplies. If notice is given at all, it is received just hours before terminating the supply (of electricity and water), which badly impacts business. Due to frequent brownouts, especially in Georgia's regions, businesses have to invest in expensive stabilizers and UPS units.

Mr. Paulsen also noted the excessive amount of paperwork and time required by businesses at the initial stages of getting connected to the electricity grid and water supply network. He warmly welcomed GNERC's intent to prepare and initiate grid codes for regulating supply and service quality standards and establishing stricter monitoring requirements.

Going Forward

Georgia's Association Agreement with the EU, signed in June 2014, includes a number of provisions requiring the Georgian government to comply with EU energy efficiency regulations and standards. One opportunity to improve energy efficiency in the residential sector would involve smart metering, nudging consumption away from peak load time. The government may also subsidize the interest on loans to help offset the cost of modern insulation, solar panels and energy efficient bulbs in residential buildings. The Association Agreement thus provides an opportunity to develop and implement a sound strategy to achieve energy efficiency and develop renewable energy resources.

All stakeholders agree that the use of energy and water supply polices to achieve social policy or political objectives leads to an enormous waste of resources without necessarily achieving its stated objectives. It would be far more efficient to charge consumers the real cost of tap or irrigation water while providing direct subsidies to those in need. This, for instance, is the essence of the recent re-

forms implemented by the Ukrainian government to contend with the country's highly corrupt and inefficient gas distribution system.

Perhaps most importantly, the use of energy and water supply policy to achieve social and political objectives also creates an excuse not to develop competitive markets in these sectors. This directly influences the quality of services provided by utility companies. Facing no competition, they are in no rush to connect new clients to the grid and don't see excessive paperwork as a problem for their own business. Lack of competition is also behind the frequent brownouts and the failures to plan ahead and communicate with clients. Finally, a tariff system which forces businesses to pay not only for their own consumption of water (and other resources) but also for that of their residential neighbors ultimately limits the ability of businesses to expand, create jobs and employ those same neighbors. Such a system therefore fails to achieve the very social policy objectives it is supposed to achieve.

Apendix 1. Summary of Project Activities

I. AGRICULTURE

- · Three dialogues:
 - (i) Ownership of agricultural land: political stability and social cohesion vs. economic efficiency
 - (ii) Agricultural cooperatives: contribution to rural development in Georgia
 - (iii) Family farming: Follow up visit to agricultural cooperative Tkis Nobati ("Gifts of Forest") in Saguramo
- Two analytical studies:
 - (i) Cost-Benefit Analysis of the SDC financed project "market alliances against poverty in Samtskhe-Javakheti region of Georgia."
 - (ii) Family farming: role in the sustainable development of the agriculture sector and poverty reduction in Georgia
- Project presentation:
 - (i) Restoring Efficiency to Agricultural Production (REAP)

II. EDUCATION

- Dialogue: Vocational Education and Training (VET) System.
- Project presentation: Modernization of Vocational Education and Training (VET) and Extension Systems related to Agriculture in Georgia (implemented by UNDP with funding by SDC)

III. PRIVATE SECTOR AND DEVELOPMENT

 Dialogue: Small and Medium Enterprises (SME) and their Importance for Georgia's economic development.

IV. TOURISM

- Dialogue: The Role of the Tourism Sector in Promoting Inclusive Growth in Georgia
- Follow up visit: Site visit to the Kazbegi Municipality, Kazbegi Rooms Hotel, and Stepantsminda

V. WATER AND ENERGY

- Dialogue: Access to Energy and Water Supply in Georgia
- Follow up visit: Aragvi HPP and Gudauri
- Project presentation: Renewable Energy and Energy Efficiency" projects by BP

Apendix 2. Blog Articles

I. AGRICULTURE

Legal And Institutional Context

- 1 Does it Make Sense to Subsidize Smallholder Georgian Agriculture, and if so How? By la Katsia, Pati Mamardashvili, Salome Gelashvili and Irakli (Rati) Kochlamazashvili
- What Happens When Institutions are Designed to Provide Bullet-proof Protection against Fraud? By Eric Livny
- 3 Georgian Tangerines. By Irakli (Rati) Kochlamazashvili
- 4 The Georgian Wine Industry: Recent Past and the Way Forward. By Jacques Fleury
- 5 Save the Georgian Bazaar! By Olga Azhgibetseva and Florian Biermann

Land Ownership

- 1 Moratorium on Foreign Ownership of Agricultural Land. Xenophobia, Myopia or What? By Eric Livny
- 2 Should Georgia Sell its Agricultural Lands to Foreigners? By Eric Livny and Salome Gelashvili
- 3 Know Thy Land or a Tale of Two Georgian Regions. By Eric Livny

Farmer Cooperation

- 1 Agricultural Cooperatives Fishing for Competitiveness. By Eric Livny, Adam Pellillo, Irakli Kochlamazashvili, Nino Kakulia and Nino Doghonadze
- 2 Farmer Groups: Why We Love Them, Why We Do Them and Why They Fail. By Tim Stuart
- 3 Farmer Groups: Why We Love Them, and When They are Successful. By Eric Livny

Skills And Innovation

- 1 Agriculture: an Engine of Inclusive Growth in Georgia? By Adam Pellillo, Norberto Pignatti and Eric Livny
- 2 Georgian Churchkhela: Thinking Out of the Traditional Box. By George Busheli and Eric Livny
- 3 No Smart Farmers in Georgia. By Robizon Khubulashvili
- 4 Farmers without Verve. By Salome Gelashvili
- 5 Does Productivity Increase with Farm Size? By Eric Livny

II. EDUCATION

Quality Of Preschools And General Education In Rural Areas

- 1 President Margvelashvili and Cartu-International Charity Foundation Unveil Plans to Usher a New Era in Georgia's Public Schooling. By Eric Livny
- 2 Bringing Light to Georgia's Darkest Corners. By Eric Livny and Maka Chitanava
- 3 Common Language, Education, and Nation Building. By Eric Livny and Elene Grdzelidze
- 4 "Invisible Hand" in the Georgian Preschool Education Sector. By Nino Doghonadze

Quality Of Higher Education

- 1 The Roots of Education are Bitter... is its Fruit all that Sweet? By Nino Doghonadze and Eric Livny
- 2 Removing Educational Bottlenecks. By Giorgi Tsutskiridze
- 3 Education That Matters. By Nino Abashidze
- 4 Can Georgia Develop a Knowledge-Based Economy? By Florian Biermann and la Vardishvili

Values

1 American Dream vs. Georgian Dream. By Nino Doghonadze

Government Scholarships And Access To High Quality Education

- 1 If You Are So Smart, Why Are You Stuck in Kutaisi? By Giorgi Kelbakiani and Eric Livny
- 2 Education for the Poor. By Lasha Lanchava and Zurab Abramishvili

Poor Educational Choices And Labor Market Mismatch

- 1 The Educational Choices We Make... By Eric Livny
- 2 Math Education an Engine of Economic Growth in the 21st Century. By Givi Melkadze
- 3 Career Guidance for Unemployed Georgians. By Florian Biermann
- 4 Georgia's New Immigration Law: Many Losers and no Winners. By Florian Biermann and Eric Livny
- 5 The "Over-Education" Trap. By Eric Livny
- 6 A Personal View on Why People "Choose" to Get Higher Education in Georgia. By Giorgi Mekerishvili

III. PRIVATE SECTOR AND DEVELOPMENT

- 1 Georgian Churchkhelas: Thinking out of the Traditional Box. By Eric Livny and George Basheli
- 2 Can Georgia Develop a Knowledge-Based Economy? By la Vardishvili and Florian Biermann
- 3 The Ethics of Empty Stomachs. By Nikoloz Pkhakhadze and Florian Biermann
- 4 The Washington Consensus and Georgia. By la Vardishvili
- 5 Georgia Caught Between the Russian Rock and the EU Hard Place. By Nikoloz Pkhakhadze and Eric Livny

IV. TOURISM

- 1 Kazbegi Rooms: with a View to Improvement of Regional Development Policies. By Eric Livny
- 2 Travel and Tourism to Georgia: Making Sense of Definitions and Numbers. By Giorgi Bregadze and Revaz Geradze
- 3 Tourism and rural development: the case of Tusheti. By Adam Pellillo and Irakli Kochlamazashvili

V. WATER AND ENERGY

- 1 Kazbegi Rooms: with a View to Improvement of Regional Development Policies. By Eric Livny
- 2 Can Big Business Gain Access to Cheap Electricity? By Irakli Galdava
- 3 Access To Electricity: Is Off-the-Grid an Option? By Norberto Pignatti, Irakli Galdava and Giorgi Kelbakiani
- 4 Electricity Generation in Georgia I: The Seasonality Problem. By Norberto Pignatti and Giorgi Kelbakiani
- 5 Electricity Generation in Georgia II: Blowing Wind into the System.

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