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ECONOMIC PROSPERITY INITIATIVE: SECTOR ASSESSMENT REPORT

FINAL

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ECONOMIC PROSPERITY INITIATIVE: SECTOR ASSESSMENT REPORT

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)
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ABSTRACT

Georgia is blessed with a strategic location, beautiful physical features and historical treasures, as well as talented, energetic people. In recent years, a democratically elected, forward-looking government has created an empowering, laissez-faire business environment to complement these natural endowments as well as an atmosphere in which business can flourish. Recognizing that this combination of assets and opportunity is rare in the world, the U.S. Government wishes to strengthen, deepen, and institutionalize these developments to ensure continued peace, stability, and democratic political and economic growth. The Economic Prosperity Initiative (EPI) project has conducted sector assessments for agriculture and non-agriculture sectors in Georgia. Through these assessments, the EPI team has identified priority sectors for project intervention and several potential value chains for focus within these sectors.

Keywords: economic growth, sector assessment, value chain, microlinks, Georgia, agriculture, private sector

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EXECUTIVE SUMMARY

Georgia is blessed with a strategic location, beautiful physical features and historical treasures, as well as talented, energetic people. In recent years, a democratically elected, forward-looking government has created an empowering, laissez faire business environment to complement these natural endowments as well as an atmosphere in which business can flourish. Recognizing that this combination of assets and opportunity is rare in the world, the U.S. Government wishes to strengthen, deepen, and institutionalize these developments to ensure continued peace, stability, and democratic political and economic growth.

USAID designed and procured the Economic Prosperity Initiative (EPI) – a four-year USD 40.4 million program – to build upon this context of opportunity. Its broad goal is as follows:

> *"EPI will improve enterprise, industry, and country-level competitiveness by identifying and targeting key external and internal factors to enhance the growth rates and productivity of enterprises in the economy, thereby enhancing the economic well-being of workers in the economy."*

EPI contract sections "Component 2 – Improve the Competitiveness of Targeted Agriculture Sectors" and "Component 3 – Improve the Competitiveness of Targeted Non-Agriculture Sectors" require the evaluation of agriculture and non-agriculture sectors to be carried out, that ICT be one of the sectors evaluated, and that value chains be selected from priority sectors. When the EPI was mobilized in late October 2010, teams of value chain analysts began the process of prioritizing economic sectors by their potential in achieving the goal above, and in meeting various high-level EPI targets of productivity, employment, investment, access to finance, and exports.

This document is the EPI deliverable for "Work Plan Level 22110 Ag Sector Selection", "Action #8 Ag Sector Selection Report #1", "Work Plan Level 32110 Non-Ag Sector Selection", and "Action #9 Non-Ag Sector Selection Report #1". It details the initial research that led to the priority agricultural sectors, non-agricultural sectors and "cross-cutting" sectors as presented in Table 1. Value chains within these initial priority sectors will now be assessed in greater detail to determine priority value chains that EPI will partner to support Georgia's competitiveness growth.

Table 1 **Sector Prioritization**

Agriculture Sectors	Non-Agriculture Sectors	
General Agric.	**General Non-Agric.**	**Cross-cutting**
Wine	Tourism	Logistics & Transport
Nuts	Apparel	ICT
Fruits	Construction materials	Packaging
Vegetables		

Additional sectors and value chains may be added in the future due to new gains in knowledge in project implementation and specific opportunities that may arise.

The team of value chain analysts started with a „long list' of potential sectors for project intervention. This list was developed on the basis of the EPI Scope of Work, the IFC Sector Competitiveness Assessment (including discussion with the document's principal author), proposal-phase research and meetings with key businesses, associations, the government and other stakeholders. The list included all major elements of the Georgian economy that could potentially be the focus of EPI partnerships.

The EPI team then assessed each sector on the basis of the following criteria: market growth, skills and capacities, resources and inputs, market constraints and SME linkages. These factors provide a filter through which to consider opportunities for improved competitive performance of the sectors – with a focus on achieving greater exports, value added, increased jobs and productive investment – and the likelihood that the EPI project would be effective in assisting this growth.

Information for the sector assessments was collected through available reports, offline and online data, government statistical information and more than 115 meetings with individuals, businesses, government and other organizations.

Both the Government of Georgia (GoG) and the private sector understand that the list of potential initiatives to improve competitiveness is a long one. This sector selection process is the first step in identifying and prioritizing those opportunities to improve competitiveness that lie within the EPI project's mandate and resources. The selection of sectors, however, is not simply enough by itself. In order to make informed, sustainable, high-impact decisions on priority initiatives and actions, EPI will work with specific product or service value chains. Subsequent value chain analysis and strategy implementation will allow Georgian producers and businesses to target specific high-return markets, identify where more value could be captured, and prioritize and leverage necessary investments.

To begin the process of selecting initial value chains for EPI focus, the team looked for potentially high-performing value chains within these sectors. In the next step,

the approximately 20 value chains identified in the first-selected sectors will be quickly assessed so as to identify possible initial partners for EPI. During this second „filtering', the EPI team will work very closely with value chain participants as well as with the GoG and other entities.

The complete rating of the 28 sectors examined is shown below; the individual sector reports are included in Annex C.

We wish to emphasize that EPI will continue to assess and consider other sectors and value chains, looking for emerging additional opportunities to support those already identified: such additional sectors will be included in EPI's work plan as justified.

METHODOLOGY AND SELECTION CRITERIA[1]

EPI has quickly identified and assessed Georgia's economic sectors to narrow the value chain selection research and focus on high-potential economic value chains with which EPI will form a partnership, thus supporting Georgia's competitiveness growth. This sector selection process was the first step in identifying and prioritizing those opportunities to improve competitiveness that lie within both the EPI project's mandate and resources.

The goal is not simply to try to identify the „best' sectors and value chains for Georgia's economy, but to identify value chains within sectors that have a high likelihood of sustained growth, that are able to grow with strong constituent leadership, and that are consistent with EPI's mission, resources, project duration and specific goals.

The sector selection is the first part of a two-step process that enables EPI to identify specific value chains that will be the initial focus of project collaboration. The sector assessment uses a quick methodology, combining quantitative and qualitative assessment. The team used quantitative data when available, and qualitative analysis based upon inputs from interviews with private and public sector actors, industry experts, and the consultants' own experience in evaluating sector opportunities in comparable project situations.

The following step, that of specific value chain assessment, will involve mobilization of value chain experts, much deeper data mining and more extensive interviews with value chain stakeholders. It will determine the initial group of value chains with which EPI will work. The work with the value chains will be jumpstarted by developing a competitiveness strategy, including a full value chain analysis.

Initial list of sectors

The team developed an extensive list of potential sectors, drawing on a variety of sources: the EPI Scope of Work, the IFC Sector Competitiveness Assessment (including discussion with the document's principal author), proposal-phase research and meetings with key businesses, associations, the GoG and other stakeholders. The list attempted to include all major elements of the Georgian economy that could potentially be the focus of EPI partnerships.

[1] The methodology for this report is based on Microlinks www.microlinks.org

The initial list of sectors included:

Potential Non-Agricultural Sectors	Potential Agricultural Sectors
Manufacturing 1. Apparel 2. Automotive, Marine, Railway & Aircraft 3. Construction Materials 4. Consumer Electronics & Cables 5. Logging and Timber 6. Packaging (plastic, paper, glass) 7. Pharmaceuticals & Medical Devices 8. Primary Processing / Mining 9. Renewable Energy **Services** 1. Educational Tourism 2. Exportable Services / Outsourcing 3. Film & Television 4. ICT 5. Transport & Logistics 6. Medical and Financial Services 7. Tourism	1. Dairy 2. Fish & Sea Products 3. Fruits (including berries and citrus) 4. Grains 5. Hazelnuts (and other nuts) 6. Honey 7. Meat 8. Non-Timber Forest Products 9. Poultry (including eggs) 10. Tea 11. Vegetables (including potatoes) 12. Wine & Non-Alcoholic Beverages

The initial list of sectors was quite comprehensive, covering the most significant spheres of Georgia's business activity, primarily based on contributors to exports (and import substitution) and employment, as well as taking into account previous work that identified potential priority sectors. Nonetheless, during the course of the work, the team sought out and identified additional sectors that could be of potential interest; these additional sectors have been noted and will be considered in due course. In addition, there remain a few sectors that have not yet been fully assessed – these are either of low likelihood for EPI involvement or they have been difficult to assess in the available time, primarily due to difficulties in obtaining the necessary information. Among these sectors are home furnishings, consumer electronics, ceramics and marine/auto/rail/aircraft engineering.

Information collection

The team collected information via the following methods:

- Available reports
- Published and online data

- Government statistical information
- More than 115 meetings with individuals, businesses, government and other organizations
- Field visits to many locations in Georgia
- The team's own extensive knowledge and experience

The availability of data varied from sector to sector. For some sectors, Georgia collects and maintains detailed data, but for others, relatively little data is available from existing sources. Where possible, the team sought quantitative data; otherwise, the team extrapolated data from various sources (interviews, experience from projects in other countries, etc.) in order to develop understanding of the sectors.

The meetings were much more than simply opportunities to collect information. EPI was very conscious that they provided the opportunity to introduce EPI to potential partner firms and organizations, offering them the chance to engage them in discussion over EPI's approaches and objectives. The meetings also provided excellent „brainstorming' opportunities, with participants actively considering strategic opportunities and avenues for partnership.

Sector assessment

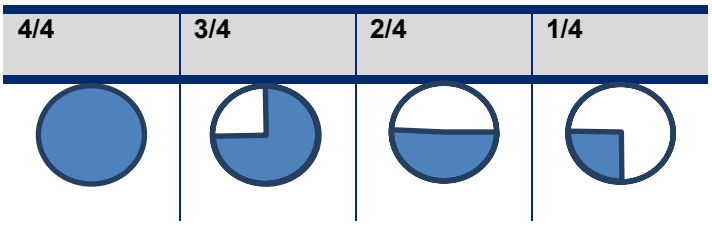
The team assessed these sectors in terms of their competitiveness prospects and the ability of EPI to successfully provide assistance in realizing sustainable outcomes. The following specific criteria were applied:

> Market growth: If the project is to consider working with a sector, a desirable market must exist. This criterion considers the recent growth and trends of the domestic and international market for the sector.
>
> Market growth potential: This criterion considers the anticipated growth and trends of the domestic and international market for the sector, and the underlying competitive advantages or disadvantages.
>
> Skills and capacities: Considers the availability and level of needed skills and capacities, business sophistication, and availability and level of professionalism of business services.
>
> Resources and inputs: Considers the local availability of required resources and inputs. These could be natural or man-made resources or inputs.
>
> Market constraints: Considers the facilitating or constraining elements of the business enabling environment, domestic and international competitive constraints, logistics and transport factors, climate/geography, and political will.

SME linkages: Two of EPI's goals are to create jobs and foster SMEs. This criterion assesses the potential benefits to creation and/or development of SMEs.

Each criterion is composed of 2 or 3 sub-criteria; every sub-criterion was then rated for each sector on a scale of 1-5, with 1 being the least favorable and 5 being the most favorable. This was a subjective, not quantitative, exercise, and was based on the team's interpretation of available data, knowledge of similar sectors worldwide, and their experience gained from similar economic development projects. These ratings are summarized in a matrix for each sector. The importance of individual criteria varies by sector as influencers of growth opportunity and opportunity for EPI involvement. Since the criteria scores are not weighted according to the varying importance of criteria and sub-criteria by sector, EPI's recommendations for the final selection of sectors is only guided and not solely determined by the scores.

To facilitate reference, each sector description (in Annex C) includes a summary table of these criteria, represented by circles that are either partially or wholly filled in. A circle that is completely filled in means that the specific criterion is ranked the highest; a circle that is ¾ filled in means that the criterion is second highest, and so on. Below is a key for these circles:



Sector summaries

The team then prepared concise sector summaries, organized around the above criteria. These sector summaries are included in the annex to this report. They vary in detail according to sector complexity and the information that was available.

Priority sectors selected

The EPI team has recommended ten sectors for further consideration by the project at this time – four agricultural sectors, three non-agricultural sectors, and three cross-cutting sectors. The cross-cutting sectors are integral elements of the value chains and often of business in general. ICT, packaging, and transportation and logistics are considered to be cross-cutting.

Identified potentially interesting value chains within the sector

The team identified approximately 20 high potential value chains for further assessment during the next phase, the value chain assessment, commencing late December 2010.

These value chains were identified in the course of the sector assessment as being of high likelihood for success and for EPI project impact. This is a natural process that emerges from considering sectors on the basis of their component value chains. The value chains were identified in the course of:

- Interviews and discussions and recommendations from actors in the private sector that highlighted current and likely opportunities,
- Review of existing documentation and research,
- Data analysis; and on the basis of
- The team's experience and familiarity with similar sectors and value chains in other countries.

The EPI team has also developed a working list of potential value chains within each sector, established contact lists, collected market/investment information, developed numerous strategic ideas, identified many value chain-related policy and business environment/services constraints, and has begun to identify potential lead firms and individual leaders. This information and data collection will be continued throughout the value chain selection process and indeed throughout the project.

Additional sectors and value chains

The economy is not static and some sectors are particularly dynamic. For this reason, other value chains and even sectors will be identified, investigated, and added as EPI partners over the four-year duration of the project.

ANNEX A: SECTOR RANKINGS

EPI Sector Rankings – Agriculture

Criteria *Sub criteria are each ranked 1-5. Criteria scores are the total of the sub-criteria scores.	Wine	Nuts	Fruits	Vegetable	Poultry	Meat	Honey	Dairy *NEO	NTFP *NEO	Fish *NEO	Grains	Tea
Market Growth (imports, exports, consumption, production) – *Total points: Negative(1-2), Modest (3-4), Some (5-7), High(8-10)*	High (8)	High (8)	Some (6)	Some (6)	Some (6)	Some (7)	High (8)	Some (5)	Some (7)	Some (6)	Modest (3)	Modest (4)
Market Growth Potential (imports, exports, consumption, production) –*Total points*: *Negative(1-2), Modest (3-4), Some (5-7), High(8-10)*	High (8)	High (10)	Some (6)	Some (6)	Some (6)	Some (7)	Some (6)	Some (6)	Some (7)	Some (5)	Modest (3)	Negative (2)
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (10)	Limited (7)	Substantial (9)	Substantial (9)	Substantial (9)	Limited (6)	Limited (6)	Limited (7)	Limited (5)	Limited (6)	Limited (7)	Limited (5)
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High(8-10)*	High (8)	High (8)	High (8)	High (8)	Substantial (6)	Limited (4)	Substantial (6)	Limited (4)	Substantial (6)	Limited (4)	Substantial (6)	Substantial (5)
Market Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Highly Supportive (8)	Few Constraints (7)	Few Constraints (6.5)	Few Constraints (6.5)	Few Constraints (7)	Few (5)	Limited (3)	Limited (4)	Limited (4)	Limited (4)	Limited (4)	Constrained (2)
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High(8-10)*	Some (5)	Modest (4)	Modest (4)	Modest (4)	Modest (3)	Some (5)	None (2)	Some (5)	None (2)	None (2)	None (2)	None (2)
Total Market Value:	**47**	**44**	**39.5**	**39.5**	**37**	**34**	**31**	**31**	**31**	**27**	**25**	**20**

*These tables present the performance of each sector according to six key criteria. Each sub-sector criteria is ranked on a scale of 1-5. Please note that no attempt is made to weight the varying importance of criteria and sub-criteria by sector. Hence, this table acts only as a guide.

EPI Sector Rankings – Non-Agriculture

Criteria *Sub criteria are each ranked 1-5. Criteria scores are the total of the sub-criteria scores.	Tourism	Apparel	Construction Materials	Pharmaceuticals & Medical Devices	Education Tourism	Renewable Energy	Logging and Timber	Film and Television	Consumer Electronics
Market Growth (imports, exports, consumption, production) – *Total points: Negative(1-2), Modest (3-4), Some (5-7), High(8-10)*	Some (6)	Some (6)	High (8)	High (8)	Some (6)	High (8)	Modest (3)	Modest (4)	Modest (4)
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative(1-2), Modest (3-4), Some (5-7), High(8-10)*	High (9)	High (8)	High (8)	High (8)	Some (6)	Some (7)	Modest (3)	Modest (3)	Some (5)
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)	Substantial (10)	Limited (7)	Very Limited (4)	Limited (8)	Limited (5)	Substantial (9)	Limited (5)	Limited (5)
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High(8-10)*	High (8)	Limited (4)	Substantial (6)	Substantial (5)	Substantial (5)	High (8)	Limited (4)	Limited (4)	Very Limited (2)
Market Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (6)	Few Constraints (7)	Limited (4)	Few Constraints (5)	Few Constraints (5)	Constrained (2)	Limited (4)	Limited (3)	Few constraints (5)
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High(8-10)*	High (8)	Modest (4)	Some (5)	Modest (4)	Modest (4)	None (2)	Modest (4)	Some (5)	None (2)
Total Points	45	39	38	34	34	32	27	24	23

EPI Sector Rankings – Cross Cutting

Criteria *Sub criteria are each ranked 1-5. Criteria scores are the total of the sub-criteria scores.	Transport & Logistics	Packaging Materials	ICT
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)	High (8)	Some (7)
Market Growth Potential (imports, exports, consumption, production) –*Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (9)	High (8)	Some (7)
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)	Substantial (9)	Limited (8)
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	High (8)	Substantial (6)	Substantial (7)
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (7)	Few Constraints (7)	Few Constraints (5)
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High(8-10)*	High (8)	Some (7)	High (8)
Total Points	**46**	**45**	**42**

ANNEX B: VALUE CHAINS IDENTIFIED FOR SELECTION ASSESSMENT

Every economic sector is comprised of numerous value chains, each of which encompasses the full range of activities and services required to bring a product or service from its conception to its sale in its final markets.

Many Georgian value chains, (i.e. all or part of the value chain is located in Georgia), were identified during the sector selection process. EPI will consider the following value chains for partnership during the value chain selection assessment, to be concluded by the end of February 2011. Others will be assessed and added as the project progresses, opportunities become more apparent, or as the economy evolves to generate new opportunities.

Sector	Value Chain
Agriculture	
Wine	Wine
Nuts	Shelled, sorted, graded Hazelnuts (Innovative)
Fruits	Blueberry root stock (Innovative) Fresh fruits. Processed fruits (juices, concentrates, purées, etc.)
Vegetables	Fresh root vegetables Canned vegetables and other processed vegetables (juices, concentrates, purées, etc.)
Non-Agriculture	
Tourism	Wine Tourism in Kakheti Region (incl. gastronomy, culture, rural) MICE[2] Tourism in Adjara Mountain / Active Pursuits Educational tourism: University education for foreign students Medical tourism
Apparel	Additional apparel investment in Adjara
Construction Materials	Perlite, basalt, wood product, clay products
Cross-Cutting	
Transport & Logistics	Road, rail, sea, and air logistics – Georgia as a regional hub Air transport (cargo & passenger) Road Transportation to rural areas Cold Storage/Warehousing

[2] MICE: Meetings, Incentives, Conferences, Exhibitions

ICT	None
Packaging	Cardboard & Industrial Paper Plastic bottles & crates

ANNEX C:
SECTOR ASSESSMENTS

SECTOR ASSESSMENTS – AGRICULTURE

Agriculture is one of the few economic sectors in which producers face relatively pure competition in the selling of their products. However, there are still ways for value chain actors to increase income, for example through targeting, understanding and meeting the special needs of markets; by increasing value added within the value chain; by increasing productivity; by reducing unnecessary costs.

EPI has examined a large number of agricultural sectors. These include (in alphabetical order):

- Dairy
- Fish & Sea Products
- Fruits (including berries and citrus)
- Grains
- Honey
- Meat
- Non-Timber Forest Products
- Nuts (especially hazelnuts)
- Poultry (including eggs)
- Tea
- Vegetables (including potatoes)
- Wine

Of these sectors, the following have been identified for further value chain assessment:

- Wine
- Nuts (shelled, sorted, graded Hazelnuts)
  Fruits
    - Blueberry root stock
    - Fresh fruits
- Vegetables
    - Fresh root vegetables
    - Canned vegetables

The key factors pertaining to these sectors are summarized below.

WINE

Wine (and spirit) exports from Georgia represent 25 percent of the value of total agricultural exports, the largest single category. Exports to the Soviet Union and Russia historically accounted for nearly 90 percent of Georgian wine export sales, so the embargo against Georgian products has had a great impact upon the wine sector. Nevertheless, Georgia has focused strongly on improving marketing to other countries and exports of wine are on the increase, with 75 percent of Georgian wine being exported. In addition, Georgian domestic wine consumption has more than

doubled since 2004, with the wine industry offering substantial opportunity for SME linkage. The majority of production is carried out by individual farmers who then supply the value chain. With the emergence of wine tourism as a strong global industry, Georgia is therefore well-positioned to participate in this market.

HAZELNUTS

Georgia is the world's sixth largest producer of hazelnuts (in-shell) and the fifth largest exporter of in-shell hazelnuts; the country is also the third largest exporter of shelled hazelnuts. Six of the top nine importers are located within the EU Zone. World production (for the top nine producers) has grown by an average of 10.1 percent between 2005 and 2008, and exports grew by 16.5 percent per year from 2005 to 2007. With average yields of nearly 1 MT/HA, gross revenue is approximately USD 976/HA, however there is room to improve the hazelnut tree yields, subsequently increasing farm income. Nuts represent 24 percent of the value of Georgia's total agricultural exports (5).

FRUITS

Due to its moderate climate and multitude of micro-climates, fruit production has long been a tradition in Georgia. Large numbers of the population grow fruit themselves or are dependent on fruit production for domestic sales and exports, whether they be in fresh or processed form – if carried out correctly, it can be quite a profitable business. Over 3,000 hectares of fruit trees were planted in Georgia in the 1950s, primarily varieties of apple, pear and plum, while during the 1980s, cherry, peach and nectarine trees were planted. Nearly all of these trees now need to be chopped down and instead replaced with more modern varieties. Production and consumption of apples worldwide has doubled since 1980, and there is a strong affinity for peach consumption in the region, of which Russia is the number one importer in the world.

VEGETABLES

The global vegetable trade is growing steadily, with annual growth rates of 4.6 percent between 1994 and 2004. Improvements and innovations in cool logistics and the increased availability of cool chain infrastructure in export countries will continue to have a positive impact on global trade: Georgia needs more access to cool storage facilities. Tomatoes, onions, peppers and cucumbers are the top four traded vegetables, all of which are grown in Georgia. There is a strong tradition of vegetable production and exportation in Georgia, with many Georgian farmers depending not only on the food itself (subsistence), but also on the income gained from it. The country's moderate climate, varying soils and multitude of micro-climates means that some types of vegetable can be found growing practically all over the country. Georgia consumes approximately five percent more than the world average in vegetables, but still less than number one ranked country, Turkey.

Dairy – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Dairy						

Considerations	Dairy
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Domestic Market Growth, Stability & Trends	2
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (6)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited(1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (7)
Workforce Skills & Capacity and Trends	2
Business Sophistication & Acumen and Trends	2
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	2
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Potential SME creation	2
Linkages to existing SME suppliers	3
Total Market Value:	**31**

Overview

Following its independence, the structure of the Georgian dairy sector went through a number of major changes. As a result of the centrally-controlled production system collapsing, dairy production and marketing were completely privatized, although privatization of land has yet to be completed. Most milk is produced by farmers on smallholds who have approximately 2-3 cows, and these farms can be found throughout the country. Increasingly, medium sized private dairy farms, and medium-large sized cooperative farms are emerging, which use the facilities found on former state and collective farms. Milk production has almost reached pre-independence levels, but still cannot completely satisfy the domestic demand. However, the Georgian dairy sector has a very difficult time competing with inexpensive imported milk powder.

Market Growth - Some

- Average consumption per capita in Georgia for dairy products was 131 kg/person/year in 2009, down from 162 kg/person/year in 2006. This consumption level is quite high relative to some northern European countries (e.g. Scandinavia), where people consume lots of fresh milk, or even when compared to the southern European countries (Spain and France), where large quantities of cheese are consumed (see table below).
- Dairy production facilities face a shortage of raw milk, particularly during the winter, due to the seasonality of milk production as linked to a cow's access to pasture land (or lack thereof).
- In Georgia, a relatively large amount of cheap milk powder is imported, which offsets the local production of milk. Imported milk declined from 3,169 tons in 2009 to 1,371 tons in 2010.
- There is a consistent demand for cheese, which is one of the driving forces behind the dairy processing sector.
- Existing operational dairy factories are interested in processing locally produced milk, but because of the primary production structure (many small scale producers), milk collection and quality control is expensive and difficult to organize.

Skills & Capacities – Limited

- Although they sell some milk, many Georgian producers are milk producers by default, focusing on subsistence milk production as opposed to being commercial dairy farmers. Profits from milk production are not therefore their primary goal.

- Two of the biggest issues facing Georgia are the improper feeding of cattle and health issues. Both of these lead to low production on a per-cow basis, particularly in the winter when the cows do not have access to pastures.
- The private sector share in milk production has increased from about 60 percent before independence, to almost 100 percent in 1997.

Resources / Inputs – Limited

The dairy sector is severely constrained by lack of access to quality pastures and relatively inexpensive concentrate feeds. Low yields of grains and a lack of mechanization means less silage is available for consumption: feeding systems have become largely based on natural pasture and by-products of crops.

Market Constraints – Limited

The concept of marketing is still quite new in Georgia with little attention paid to product variation, packaging, product presentation, and design, meaning there is definite room for the stronger promotion of dairy products.

If the quantity of milk increased, there would need to be an increase in the number of full-service milk collection centers (MCCs) with associated quality control, access to production inputs, applied research, farmer training and extension, and first-line veterinary services and AI.

There is a high cost associated with collecting milk from small dairy farmers, as well as variation in the quality of the milk. The first goal is to increase per-cow milk yields with improved feeding; as this occurs, there will also need to be a simultaneous increase in MCCs.

SME Linkages – Some

Development of the dairy sectors is closely linked with the development of related sub-sectors, such as feed mills, agro-processing (flour mills, vegetable oil mills, and breweries), forage and crop production, and meat processing and distribution. These sub-sectors face similar problems to those in the dairy sector: there could be some linkages between the dairy sector and these other sectors, but all are going to have to grow as a cluster in order for the dairy sector to become more competitive.

Data Relevant to the Dairy Sector

This is a compilation of data for the dairy sector.

Table 1: Production and consumption of dairy products (in ton milk equivalents)

Local production	**631,125**
Imported milk powder for reconstitution	33,000
Imported dairy products	66,125
Consumption of dairy products	730,250

Source: SENTER

Table 2: Fresh Milk and Powder Milk Production Data

	2006	**2007**	**2008**	**2009**
Average Milk Yield / Cow	1,120	1,170	1,172	1,263
Total Amount of Milking Cows	534,643	527,265	545,307	431,354
Total Amount of Produced Cow Milk	598,800,000	616,900,000	639,100,000	544,800,000
Per Milking Cow Total Revenue	1,276.80	1,638.00	2,074.44	2,298.66
Country Total Revenue	**682,632,000**	**863,660,000**	**1,131,207,000**	**991,536,000**

Source: GeoStat

Table 3: Fresh / Powder Milk Prices 2007-2009, Georgia, GEL/MT

Commodity	**2007**	**2008**	**2009**
Fresh Milk - GE	1.4	1.77	1.82

Source: GeoStat

Table 4: Per Capita Consumption of Milk & Milk Products in Various Countries, 2006

Country	Liquid Milk Drinks (Liters)	Cheese (kg)	Butter (kg)
Finland	183.9	19.1	5.3
Sweden	145.5	18.5	1.0
Ireland	129.8	10.5	2.9
Netherlands	122.9	20.4	3.3
Norway	data unavailable	16.0	4.3
Spain (2005)	data unavailable	9.6	1.0
Georgia (2009) *	117	20.0	4.0
Switzerland	data unavailable	22.2	5.6
United Kingdom (2005)	data unavailable	12.2	3.7
Australia (2005)	data unavailable	11.7	3.7
Canada (2005)	data unavailable	12.2	3.3
European Union (25 countries)	data unavailable	18.4	4.2
Germany	92.3	22.4	6.4
France	92.2	23.9	7.3
New Zealand (2005)	90.0	7.1	6.3
United States	83.9	16.0	2.1
Austria	80.2	18.8	4.3
Greece	69.0	28.9	0.7
Argentina (2005)	65.8	10.7	0.7
Italy	57.3	23.7	2.8
Mexico	40.7	2.1	N/A
China (2005)	8.8	N/A	N/A

Source: University of Guelph.

* Georgia cheese & butter data is estimated.

Table 5: Dairy Processing Facilities Assisted by MCC / Georgia

#	Name	Region	District	Village	Beneficiaries
1	Kakheti Livestock Association (Nino Siprashvili)	Kakheti	Signagi	Tsnori	100
2	I/E Iza Gagnidze	Racha-Lechkhumi	Oni	Shkmeri	30
3	Gigi LLC (Misha Samkharauli)	Kakheti	Kvareli	34 Chavchavadze str	300
4	Ango LLC	Adjara	Shuakhevi	Goginauri	50
5	Alpen Milk LLC	Samtskhe Javakheti	Akhalkalaki	38/1 Agmasheneblis	500
6	I/E David Kochlamazishvili	Kakheti	Signagi	Bodbe	200
7	Santa LLC	Kvemo Kartli	Tsalka	Santa	42
8	I/E David Botkoveli	Kakheti	Telavi	Ikalto	55
9	Elvani + LLC	Imereti	Tskaltubo	Partskanakanebi	25
10	Georgian Business Zone LLC	Samtskhe Javakheti	Akhaltsikhe	Tsnisi	250
11	Kakhaberi LLC	Adjara	Khelvachauri	Kakhaberi	50
12	Vazi LLC	Kakheti	Gurjaani	Gurjaani	75
13	I/E Farmers House	Mtskheta-Mtianeti	Mtskheta	Ksovrisi	105
14	Agroinvest LLC	Kvemo Kartli	Gardabani	Gamarjveba	250
15	I/E Jaba Macharashvili	Samtskhe Javakheti	Aspindza	Vardzia	70
16	Lagodekhi Intelligents Organization LLC	Kakheti	Lagodekhi	Shroma	50
17	Atinati LLC	Imereti	Kutaisi	47 Msheneblis str	35
18	Kizikhi LLC	Kakheti	Signagi	Tsnori	200
19	I/E Marina Akolashvili	Kakheti	Gurjaani	Velistsikhe	75

Source: Millennium Challenge Corporation. Agribusiness Development Activity.

Interviews Conducted

Name	Position	Company
Davidson Highfill	Director – Alliances Program	MercyCorps
Matti Lampi	Deputy Team Leader	GRM International
Tamar Gikoshvili	Chair Person	RKI – Dairy (Marneuli)
George Gaiozishvili	Chair Person	Algeteli – 2008 (Tetritskaro)
Jorgen Billetoft	Partner	PEMconsult

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Fish & Sea Products – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Fishery						

Considerations	Fish
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	2
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (6)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	1
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total Market Value:	**27**

Overview

- Georgia's fishery sector has a complex licensing and administrative structure. Fishing companies are allocated licenses for up to a total of 70,000 tons of anchovies. This licence is divided between four big companies – approximately 15,000 tons each – and two smaller ones. Georgia regularly imports 15-25 thousand tons of fish products each year (1).
- Georgia's exports grew 330 percent from 2006 to 2009 (by MT) – nearly all came from Black Sea fishing (4).
- There is some aquaculture (trout) in Georgia. Its advantage of having access to clean water and energy is offset by the lack of cold chain and limited skills in this area. Establishing a fresh fish value chain is a high risk business and requires significant investment.
- Georgia is constrained by the low per capita consumption of fish and the fact that all fish food is imported, keeping the price of fish food high. Additionally, the price of the primary ingredient in fish food (fish meal) has gone up by 350 percent since 2000.

Market Growth – Small

- Domestic
  - Fish imports increased by 21 percent between 2006 and 2009.
  - Per capita consumption of fish in Georgia is approximately 2 kg/person/year on a live-weight basis (3).
- International
  - Global demand continues to grow while supply is constrained by over-fishing and environmental damage to coastal and inland waterways (2).
  - Global per capita consumption of fish is 16.1 kg/person/year on a live-weight basis in 2001 (3), about 8 times that of Georgia.

Skills & Capacities – Limited

- There is a lack of modern equipment and the capacity of the fishing fleet is very low, reducing Georgia's ability to fill its quota of the anchovy catch in the Black Sea. Thus, Georgian companies sell part of their quota to Turkish boats fishing in Georgian territorial waters, so reducing their income and shortening the season by 6-8 weeks (1).
- Trout farming has not yet been carried out on a large scale in Georgia, but is a possibility that needs to be explored as water quality/availability, temperatures and ecological conditions may be suitable in many parts of Georgia (1).

- Mussel and oyster culture farming may also be feasible in the Black Sea, but pollution will be a limiting issue (1).

Resources/Inputs – Limited

- The total catch of anchovies is approximately 70,000 tons. There are about 50 fishing boats/equipment, the majority of which were produced in Soviet times and are currently outdated (1).
- Ecological changes in the Black Sea over the past 40 years have moved the anchovy spawning grounds from the north in the 1970s, to the south (Turkish waters) in the 1990s. Falling oxygen levels associated with *eutrophication*, caused partly by high inputs of agricultural fertilizers, have caused this shift (1).
- From 1988 onwards a massive incursion of the jellyfish *Mnemiopsis leidy*, an important predator of larval anchovy, was partially responsible for a catastrophic decline in Turkish anchovy landings. Landings dropped from 300,000 MT in 1988 to 75,000 in 1990 (1).
- Establishing a value chain for fresh farmed fish requires significant investment, including cold storage and refrigerated transportation to markets. There is a limited knowledge base in fish diseases and hygienic processing.

Market Constraints – Limited

- Sea area that was formerly Soviet territory (fished by Georgia) is now foreign territory (Ukraine, Russia, etc) and cannot be fished. Georgian boats are now restricted to a small section of the Black Sea located off its short coast line, further reduced to <180 km because of issues with the Abkhazia (1).
- While it is possible to develop a value chain for fresh farmed fish, there is no history of exports to the key markets of the EU and CIS (2).

SME Linkages – None

Under the current production system there are no potential additional SME linkages. If aquaculture was developed then possibilities for linkages would exist.

Data Relevant to the Fisheries Sector

This is a compilation of data for the fish and sea products sector.

Key points:

- The bulk of the imported frozen fish and fish products come from the Atlantic and Pacific Oceans. There is no processing and cooling of fish in Georgia, except for Black Sea anchovies (4).
- The local production of canned fish is very small and is limited to several thousand cans. The assortment is poor and is focused on Black Sea anchovy and sprat (4).

Table 1: Total Anchovy Catch in Georgia (tons)

Year	2006	2007	2008	2009
Total catch of Anchovy in Georgia (tons)	16,000	18,000	29,000	38,000

Source: GeoStat

Table 2: Unofficial data provided by one of the leading fishery companies

	2006	2007	2008
Number of Registered Fishing Enterprises in Georgia	131	138	155
Production (GEL)	1,300,000	1,400,000	2,700,000
Value Added (GEL)	200,000	600,000	1,300,000
Number of employees	228	171	180

Table 3: Georgian Fish Trade, MT & Value, 2006-09.

Total Fish Exports	MT	$1,000
2006	6,234	904
2007	7,034	1,948
2008	14,709	6,485
2009	20,587	4,593
Total Fish Imports	**MT**	**$1,000**
2006	15,525	21,686
2007	17,665	27,985
2008	22,648	38,275
2009	18,804	31,156

Source: GeoStat & Invest in Georgian Agriculture.

Interviews Conducted

Name	Position	Company
Davidson Highfill	Director – Alliances Program	MercyCorps
Nika Grdzelidze	Chief of Party	USAID/Ag Vantage Project
Ezben Emborg & David Shervashidze	Sr. Agribusiness Advisor	SEAF Management
Jorgen Billetoft	Partner	PEMconsult

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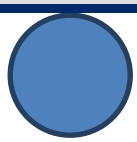
Fruit – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Fruit						

Considerations	Fruits
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (9)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Highly Available (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (6.5)
Lack of Domestic and/or International Competition	3.5
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total Market Value:	**39.5**

Overview

Fruit production has been a tradition in Georgia for many years due to its moderate climate and multitude of micro-climates. Large numbers of the population grow fruit themselves or are dependent on fruit production for domestic sales and exports, whether they be in fresh or processed form – if carried out correctly, it can be quite a profitable business. Historically, Georgia has specialized in grape production (for wine and table grapes), as well as tea production (see separate sector assessment). Fruit production became more commercialized in the late 1960s with a focus on production for export to the rest of the Soviet Union. Over 3,000 hectares were planted in Georgia with various fruit trees, primarily apple, pear and plum. During the 1980s, cherry, peach and nectarine trees were planted.

Market Growth – Some

Oranges, apples, grapes and bananas are the most popular fruits in the world; three of these are grown in Georgia. Since 1980, the production of apples worldwide has more than doubled, with a 12-fold increase in production in China, as well as large increases in Poland, Brazil and Iran. Consumption has grown at the same rate. Global peach/nectarine production, forecast at 16.1 MMT, is dominated by China with over 63 percent of the market. The United States and EU-27 combine to make an additional 32 percent. The consumption of fresh fruit on a global level is forecast to remain steady, with increased consumption in China offset by reduced consumption in the EU-27 as a result of respective availability in each market. World exports are forecast at nearly half a million MT, an increase of 5 percent, with Russia remaining the number one global importer of peaches and nectarines. Fruit production in Georgia is closely matched with its consumption, although some processed fruit is both imported and exported. Due to low yields in Georgia, and a lack of modern technology and varieties, farmers are not particularly interested in producing fruits as a commercial enterprise.

Skills & Capacities - Substantial

With a long history of fruit production in Georgia, there are many experienced producers and specialized agronomists available – this is a very positive aspect of the fruit sector. Although the Russian embargo initially had a harmful effect on processors and exporters, many of them have now developed contracts abroad and have specialized equipment available (e.g. Tetra-Pak) to produce and sell fruit juices and other canned fruits abroad.

Resources/Inputs – Highly Available

Due to the variety of microclimates in Georgia (dry continental, subtropical, tropical, etc), there are a large number of fruit crops produced in the country. Georgia has about 63,400 hectares of fruit trees, which is a lower than its maximum figure of 126,000 hectares or 50 percent, reached in 1990. Apples have historically been one of the largest exported fruit products, with 11,000 hectares producing 100,000 tons. Although the statistical exports showed apple exports to be 7,000 tons in 2006, some estimates showed exports to be as high as 35,000 tons. Official peach exports were 74 tons in 2006, but again, some estimates suggested otherwise, with figures for the export of peaches potentially as high as 700 tons. Some of the country has access to irrigation and there is only partial access to new seedlings because they all need to be imported. Fertilizers and pesticides are readily available.

Market Constraints – Few Constraints

As a result of the break-up of the Soviet Union, Georgian fruit producers and exporters suffered great losses, mainly due to the disappearance of their primary markets. Input costs greatly increased and processing plants fell into disrepair, as did irrigation systems. These factors led to lower yields, higher costs and a greater inability to export. Prior to the embargo, Georgia exported most of its fruit to Russia. The Russian embargo of 2006 thus closed the door to Georgian imports, forcing exporters and processors to immediately find other markets. Establishing new markets however is time-consuming, difficult and competitive, and has posed a great challenge for Georgia.

SME Linkages – Modest

One of the best possibilities is for the EPI to assist fruit processors and exporters to help them gain access to export markets. Through carefully targeted international STTA, they may gain access to new country and company markets. Additionally, fruit processers and exporters can be linked to small farmers and can also be encouraged to plant new varieties of crops.

Data Relevant to the Fruit Sector

This is a compilation of data for the fruit sector.

Table 1: Fruit Production by Regions (1,000 MT)

Region	2006	2007	2008	2009
Shida Kartli	20.3	68.5	17.3	66.8
Samegrelo-Zemo Svaneti	45.9	34.5	33.3	25.9
Kakheti	9.7	13.4	19.2	20.1
Samtske-Javakheti	1.5	18.3	11.2	19.1
Imereti	35.6	26.6	29.3	17.4
Other regions	24.9	29.4	22.2	16.6
Adjara	7.7	16.6	12.7	8.2
Kvemo Kartli	7.7	20.2	12.4	7.1
Total Georgia	**153.3**	**227.5**	**157.6**	**181.2**

Source: Geostat

Table 2: Fruit production by crop (1,000 MT)

Variety	2006	2007	2008	2009
Apple	32.8	101.3	41.5	80.7
Hazelnuts	23.5	21.2	18.7	21.8
Subtropical fruits *	21.2	22.1	23.7	21.4
Peaches	5.3	8.2	13.7	17.6
Pears	22.5	19.6	16.4	11.1
Walnuts	3.9	11.8	6.2	8.2
Sour plums	24.3	18.6	18.0	6.9
Plums	12.8	16.3	12.6	6.3
Cherries	4.8	5.5	4.0	4.0
Quince	1.1	1.5	1.2	2.2
Berries	0.6	1.1	0.9	0.4
Other fruit				0.4
Apricots	0.5	0.3	0.7	0.2
Sub total	**153.3**	**227.5**	**157.6**	**181.2**
Grapes	162.5	227.3	175.8	150.1
Citruses	52.2	98.9	55.2	93.6
Tea	6.6	7.5	5.4	5.8
Total	**374.6**	**561.2**	**394**	**430.7**

* Subtropical fruits include: Kiwi, Persimmons, Feijoa, Mushmulle

Source: Geostat

Table 3: Fruit prices (average/crop) $/kg

Fruit Crop	2006	2007	2008
Apples		0.10	0.20
Pears	0.29	0.29	0.29
Hazelnuts	0.98	0.97	0.98
Walnuts	1.23	1.23	1.23
Grapes	0.46	0.46	0.46
Oranges	0.18	0.18	0.18
Tea	1.08	1.08	1.08

Table 4: Fruit Export Values

Commodity	Fruit Products Export				Change in MT, 2008-09	Change in $ Value, 2008-09
	2008		2009			
	MT	$1,000	MT	$1,000		
Bananas	2111	1660	3177	1684	1066	24
Fruit (fresh or dried)	21079	3878	110000	15703	88921	11825
Apples, Pears and Quinces (fresh)	21238	3749	20	104	-21218	-3645
Apricots, Cherries, Peaches plums (fresh)	1829	624	618	772	-1211	148
Other fruit (fresh)	5241	1193	1000	1549	-4241	356
Fruit (dried)	96	514	63	247	-33	-267
Jams and fruit jellies	697	1027	342	411	-355	-616
Fruit and vegetable juices	6392	8402	3302	2883	-3090	-5519
Marmalades, fruits and other edible parts of plants	228	1568	102	356	-126	-1212

Source: Geostat

Table 5: Fruit Import Value

Commodity	Fruit Products Import				Change in MT, 2008-09	Change in Value, 2008-09
	2008		2009			
	MT	$1, 000	MT	$1, 000		
Dates, Figs, Pineapples, Avocados, Guavas, Mangoes and Mangosteens			435	444	435	444
Bananas	10361	6390	10981	7179	620	789
Citrus fruit (fresh or dried)	5847	2108	7865	3948	2018	1840
Grapes (fresh or dried)	1312	1159	1046	1165	-266	6
Melons, Watermelons (fresh)	2429	317	393	268	-2036	-49
Apples, Pears, Quinces	576	393	1811	1062	1235	669
Apricot, Cherries	1611	324	574	221	-1037	-103
Other fruit (fresh)	1154	558	1249	619	95	61
Fruit (dried)	176	250	190	283	14	33
Jams, fruit jellies	214	590	277	541	63	-49
Fruit and other edible parts	988	2160	738	1682	-250	-478
Fruit and vegetable juices	3806	3571	3628	3188	-178	-383

Source: Geostat

Interviews Conducted

Name	Position	Company
Vano Goglidze	Director	GeoConcentrate (Kula Fruit Juices)
Nika Grdzelidze	Chief of Party	USAID/ AgVantage Project
Ekaterine Kimeridze	Director	GDCI
Mamuka Merebashvili & Irakli Merkvilishvili	Directors	Akhali Mamuli 2008
George Simonishvili	Director	Agrokartli
George Mchedlishvili	Director	Rekha (Cold Storage)
Givi Abalaki	Director	Sveneti (Cold Storage)

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Grains – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Grains						

Grains Considerations	Grains
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Domestic Market Growth, Stability & Trends	2
International Market Growth, Stability & Trends	1
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Domestic Market Growth Potential, Stability & Trends	2
International Market Growth Potential, Stability & Trends	1
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (7)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total Market Value:	**25**

Overview

The small size of many of Georgia's farms, high unemployment, and high grain prices, are all very conducive to the importation of grains so that land can be more properly utilized in higher value agricultural production. The market must be in agreement because Georgia regularly imports over half a million tons of grains each year, primarily because imported grains are significantly cheaper than those grains produced domestically. Approximately 2.4 percent of Georgia's total imports consist of one item – wheat. In 2009, Georgia imported 565,000 tons of wheat and flour, 31,500 tons of corn and 2,000 tons of barley while re-exporting (transit across) 15,000 tons of wheat and 5,400 tons of corn. The country is still, however, a strong net importer, dealing mostly with Uzbekistan, the Ukraine and Kazakhstan (1).

Market Growth – None

As Georgia's economy grows, the people will move away from heavy, high calorie diets centered on bread and pasta, and towards higher protein diets including a greater percentage of meats, vegetables, etc.

Skills & Capacities - Limited

The wheat sector is relatively unsophisticated and uses old production methods. The average farm size is less than 1 hectare and yields are low, at less than 2 MT/HA. In comparison, the world average is 2.86 MT/HA and northern European yields are nearly 6 MT/HA. It is possible that new varieties could be introduced that would significantly increase yields (by approximately 30 percent); better placement of fertilizer with seed, along with the judicious application of herbicides might also increase Georgian yields.

Resources/Inputs - Some

Producers are already buying seed, fertilizer and pesticides from existing input suppliers, selling wheat to flour millers (or using it themselves), or feeding it to livestock. There may be the potential to strengthen links between some of these smaller companies and the larger players, but farmers are fiercely independent and so this may not be easily achieved.

Market Constraints – Limited

As in most agricultural systems, yields are highly dependent on soil types and climatic conditions which are increasingly extreme and highly variable. There are no certified seed multiplication farms in Georgia and the grains sector is one of pure commodity with relatively low value. All of the above factors help contribute to the Georgian grain sector being at a cost disadvantage.

SME Linkages – None

Under the current production system, there are no further potential SME linkages.

Data Relevant to the Grain Sector

This is a compilation of data for the grain sector.

- Approximately 2.4 percent of Georgia's total imports consist of one item – wheat. In 2009, Georgia imported 565,000 tons of wheat and flour, 31,500 tons of corn and 2,000 tons of barley; the country re-exported 15,000 tons of wheat and 5,400 tons of corn, but nevertheless they are still strong net importers.

Table 1: Wheat, Barley & Corn Production Data

		2006	2007	2008	2009
Sown Area	1,000 HA	206.5	194.2	220.7	188.4
Production	1,000 MT	317.7	411	457.8	364.8
Yield	MT/HA	1.54	2.12	2.07	1.94

Source: Geostat

Table 2: Grain Prices, International (Intl) & Georgian (GE). 2008-2010, $/MT

Commodity	2008	2009	2010
Wheat - Intl	259	194	311
Wheat - GE	334	257	342
Barley - Intl	167	159	266
Barley - GE	245	277	314
Corn - Intl	163	174	259
Corn - GE	325	222	366

Source: International Grain Council.

Interviews Conducted

Name	Position	Company
Robert Revia	Director	Garemo Da Analitika
Konstantin Khutsaidze	Head	Unioin Agroservice
Tamaz Niparishvili	Director	I.E. Tamaz Niparishvili

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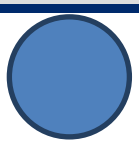
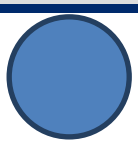
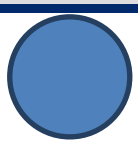
Hazelnuts – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Hazelnuts						

Considerations	Nuts
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) –*Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (10)
Domestic Market Growth Potential, Stability & Trends	5
International Market Growth Potential, Stability & Trends	5
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (7)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Highly Available (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (7)
Lack of Domestic and/or International Competition	4
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	1
Linkages to existing SME suppliers	3
Total Market Value:	**44**

Overview

Georgia is the world's sixth largest producer of hazelnuts (in-shell) and the fifth largest exporter of in-shell hazelnuts; the country is also the third largest exporter of shelled hazelnuts. Six of the top nine importers are located within the EU Zone. World production (for the top nine producers) has grown by an average of 10.1 percent between 2005 and 2008, and exports grew by 16.5 percent per year between 2005 and 2007. With average yields of nearly 1 MT/HA, gross revenue is approximately USD 976/HA, however, there is room to improve the hazelnut tree yields, subsequently increasing farm income. Nuts represent 24 percent of the value of Georgia's total agricultural exports (5).

Market Growth – High

International imports of shelled hazelnuts are increasing by about 5 percent per year, with six of the top nine importers located in the EU Zone (including Switzerland). In-shell trade of hazelnuts has increased annually by 16.5 percent between 2005 and 2007.

Skills & Capacities – Limited

The hazelnut sector consists of about 21 collectors that provide the following services: aggregation, cleaning, sorting, grading, packing, and some may even remove the shells (processing). There is virtually no technical/agronomic assistance provided to the numerous small individual hazelnut producers. The trees are a fixed and depreciating asset and appropriate pruning, fertilization, pest management and irrigation is required to extend their life and increase production. However, only a small number of large producers properly maintain their trees.

Resources/Inputs – Highly Available

Producers and harvesters can purchase needed fertilizer and pesticides from existing input suppliers, while seedling nurseries and some basic equipment are also readily available. Aggregators pay cash immediately upon, or soon after collection of the hazelnuts.

Market Constraints – Few constraints

Because there are so many small independent producers, collection costs are high. The producers may pick produce at different times and use different management/production techniques, thus changing the quality of the final product as well as causing erratic yields.

SME Linkages – Modest

Under the current production system, there are no potential further linkages between Georgian producers and collectors. However, there may be the possibility of helping

Georgian hazelnut aggregators increase their unit value by domestically shelling and then exporting the shelled hazelnuts, as well as the possibility of introducing Georgian hazelnuts to other international buyers.

Data Relevant to the Nut Sector

This is a compilation of data for the nut sector.

Key points:

- Georgia is the world's sixth largest producer of hazelnuts (in-shell) and the fifth largest exporter of in-shell hazelnuts, as well as the third largest exporter of shelled hazelnuts. World production increased by an annual average of 10.1 percent, and the number of exports grew by 16.5 percent per year from 2005 to 2007.
- Average yields are 1 MT/HA and average farm prices are about USD 1,000/MT. Export prices range from USD 2,500– USD3,000/MT (4).
- Nuts represent 24 percent of the total agricultural exports of Georgia (5).
- There are 18,000 hectares of hazelnut trees growing in western Georgia.
- For every 1,000 kg of in-shell nuts, 40 percent will yield actual hazelnuts and 60% are shells.

Table 1: Area of Hazelnuts (1,000 HA)

Commodity	2006	2007	2008
Hazelnut	23.7	25	18

Source: Geostat

Table 2: Production of Hazelnuts by Regions (1,000 MT)

Region	2006	2007	2008	2009
Imereti	3.2	3.2	3.9	3.2
Samegrelo-Zemo Svaneti	13.5	12.0	9.3	11.4
Guria	5.7	4.5	4.2	3.7
Other Regions	1.1	1.5	1.3	3.5
Total	**23.5**	**21.2**	**18.7**	**21.8**

Source: Geostat

Table 3: Hazelnut Collectors/Aggregators & Processors

Company Name	Contact person	Phone No
Nut producing and processing company	Besik Akhaladze	899170698
Kartu Group HCP	Irakli Amanatashvili	895222216
LLC Keskia	Fridon Kodua	899515194
LLC Tskaros Tavi	Koba Gvazava	877431517
LLC Didinedzis meurneoba	Goneli Kukava	899584234
LLC Kristali	Dato Lashqarava	877419587
LLC Kartuli Sio 2000	Begi Sioridze	899989090
LLC GN Company	Mokho Khomeriki	899115370
LLC Argo Natia	Mamuka Todua	
LLC Dioskuria	Ronaldi Shelia	899299845
LLC Impex	Levan Jorjikia	877544445
LLC G-Nut	Shota Bukhaidze	877777374
LLC Georgian Nuts	Kakha Bochorishvili	877797574
LLC Fima Georgia	Aleko Motserelia	899953737
LLC Megobrebi da Kompania	Paata Erqvanidze	899180803
LLC Kardiko	Tengo Arqania	899519214
Ferero International	Merab Murgulia	899583658
I/E Badri Lorchoshvili	Badri Lorchoshvili	899507823
LLC Agro+	David Quhilava	
LLC Verdzi	Gela Dzidzava	895343358
I/E Tskvitava Paata	Badri Lorzoshvili	899508852

Source: Georgian Ministry of Agriculture

Table 4: Top Producers of Hazelnuts with shell

Country	2005		2006		2007		2008	
	($1,000)	(MT)	($1,000)	(MT)	($1,000)	(MT)	($1,000)	(MT)
Turkey	517582	530000	645512	661000	517582	530000	782028	800791
Italy	85820	87879	138779	142109	125226	128231	109220	111841
USA	24451	25038	36323	37195	32781	33568	28349	29030
Azerbaijan	27330	27986	24048	24625	26818	27462	27094	27745
Spain	22487	23027	24228	24810	15755	16134	23437	24000
Georgia	**16008**	**16393**	**22949**	**23500**	**20703**	**21200**	**18261**	**18700**
Iran	17469	17889	17578	18000	17578	18000	17578	18000
China	13183	13500	13671	14000	14648	15000	15625	16000
France	4354	4459	5940	6083	5245	5371	4881	4999
Poland	2989	3061	2575	2637	3388	3470	3353	3434

Source: FAOSTAT

Table 5: Top Exporters of Hazelnuts with shell

Country	2005			2006			2007		
	($1,000)	(MT)	($/Ton)	($1,000)	(MT)	($/Ton)	($1,000)	(MT)	($/Ton)
USA	38099	20056	1900	39793	21152	1881	62670	28911	2168
France	8014	2398	7141	2351	7141	3037	9337	2764	3378
China	7157	4639	1543	8770	4290	2044	19493	9859	1977
Italy	6849	1559	4393	6311	1889	3341	4739	1218	3891
Georgia	**1253**	**496**	**2526**	**1064**	**2273**	**2136**	**1382**	**562**	**2455**
Netherlands	1077	165	6527	502	143	3510	367	87	4218
Canada	833	336	2479	808	492	1642	800	403	1985
Chile	722	264	2735	684	187	3658	2308	982	2350
Turkey	689	136	5066	1164	596	1953	544	183	2973
Spain	609	131	4649	677	310	2184	444	161	2758

Source: FAOSTAT

Table 6: Top Exporters of Shelled Hazelnuts

Country	2005			2006			2007		
	($1,000)	(MT)	($/Ton)	($1,000)	(ton)	UV($/Ton)	($1,000)	(ton)	UV($/Ton)
Turkey	1207482	131770	9164	726668	158583	4582	657223	140117	4691
Italy	118997	14936	7967	55779	7364	7575	136267	20139	6766
Azerbaijan	84214	10822	7782	43826	7150	6130	51069	10023	5095
Georgia	**68958**	**9464**	**7286**	**54012**	**11534**	**4683**	**63739**	**11087**	**5749**
Spain	45882	5637	8139	11874	2032	5844	16481	2914	5656
Germany	24136	2759	8748	22466	3054	7356	30560	4070	7509
Netherlands	18408	2055	8958	16800	2933	5728	18017	2943	6122
USA	14561	4991	2917	6207	2022	3070	9656	1788	5400
France	14405	1599	9009	6896	1019	6767	9635	1425	6761

Source: FAOSTAT

Table 7: Georgian Exports of Hazelnuts (with shell and shelled)

	2005			2006			2007		
	($1,000)	(MT)	($/Ton)	($1,000)	(MT)	($/Ton)	($1,000)	(MT)	($/Ton)
With shell	1253	496	2526	1064	2273	2136	1382	562	2455
Shelled	68958	9464	7286	54012	11534	4683	63739	11087	5749

Source: FAOSTAT

Table 8: Top Imports of Hazelnuts Shelled

Country	2006			2007		
	($1,000)	(MT)	($/MT)	($1,000)	(MT)	($/MT)
Germany	272538	42009	6488	422377	61157	6906
Italy	270359	37095	7288	209901	29650	7079
Belgium	109379	16745	6532	82491	13840	5960
Switzerland	73952	10481	7056	66995	10496	6383
Poland	52533	7134	7364	58645	7548	7770
France	49741	7571	6570	44244	7604	5819
USA	29976	5111	5865	21334	3713	5727
Russia	28027	8478	3306	44244	7604	5814
Spain	22712	3929	5781	26060	4328	6021

Source: FAOSTAT

Interviews Conducted

Name	Position	Company
Kakhaber Bochorishvili	Director	Ecopex Hazelnut Processor

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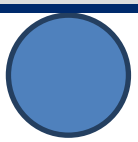
Honey – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Honey						

Considerations	Honey
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (6)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (3)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total Market Value:	**31**

Overview

Although there are 10-15 professional beekeepers in Georgia, most beekeepers typically keep bees as either a hobby or to earn a secondary income. Per-hive yields are low and the price of Georgian honey is much higher than international prices, so it is therefore highly unlikely that beekeeping will become competitive, with or without EPI assistance. There may be a possibility for NEO assistance to be offered, but the professional beekeepers have already received MCC/ADA assistance, and so have equipment for packaging, etc.

Market Growth – High

There is currently a shortage of honey available for the international market. The message about the health implications of honey has impacted upon the international market and the product is becoming a real phenomenon. Domestically, production of honey has increased by 56 percent since 2006, and the number of hives has increased by 75 percent. With no real change in trade, this demonstrates an increase in local consumption, possibly as a sugar substitute: there is a cultural affinity for honey consumption, especially that of different flora sources.

Skills & Capacities - Limited

There are few professional beekeepers in Georgia as honey production is viewed as a sideline business. The average yield of 11 kg/hive is quite low compared with European and US standards, and has declined by 11 percent since 2006 (4). Most of the beekeepers learned the trade from their fathers and grandfathers, but some received training at a beekeeping college located in Georgia.

Resources/Inputs - Some

Producers can purchase required inputs from existing input suppliers. The Georgian climate is not extreme, thus increasing the likelihood of the hives surviving. There is a multitude of fruit, vegetables and other crops growing throughout the year, thus providing for a diverse source of flora and food for the bees.

Market Constraints – Limited

This is probably the most limiting factor for the Georgian honey sector. Honey is largely seen as a commodity from a buyer's perspective and the local honey price far exceeds international prices, thus preventing exports. The distance to the international market of Europe (Germany) is relatively long, increasing freight costs and also decreasing the likelihood of exports. In addition, honey is viewed in Europe as an "animal product", thus making importation of it a challenging prospect. With a total production of 2,500 tons, the market is very small and Georgia's free market approach prevents any special political attention by the Georgian government.

SME Linkages – None

Under the current production system, there are no further potential SME linkages, especially for export, due largely to the high Georgian prices. There is the possibility of linking honey products to tourism.

Data Relevant to the Honey Sector

This is a compilation of data for the honey sector.

- In 2009, Georgia exported 40,713 jars of honey, valued at USD 7,000. In the same year, Georgia imported four tons of honey valued at USD 35,000 or USD 8.75/kg. Very specific honey varieties (chestnut) may find some limited export opportunities to specific markets, but most honey will not be exported. The EU views honey as an "animal product" and Georgia is therefore prevented from exporting commercially to the EU.
- The USA imported honey in 2010 from the Ukraine at an average price of USD 2.67/kg, well below Georgia's average producer price of USD 6.81/kg. Given the figures, Georgia's honey simply cannot compete on the export market.

Table 1: Number & Production of Bee Hives in Georgia (2006-09)

	2006	2007	2008	2009
Number of Bee Hives (1,000)	146.3	183.8	206.9	256.5
Production (MT)	1600	2300	2400	2500
Yield (kg/hive)	10.94	12.51	11.60	9.75

Source: Geostat

Table 2: Top Honey Exporters in World (2007)

Country	Quantity (MT)	Value (1000$)	$/MT	$/kg
Argentina	79,861	134,153	1680	1.68
China	65,288	95,580	1464	1.46
Germany	23,771	85,318	3589	3.59
Hungary	23,872	64,859	2717	2.72
Mexico	30,912	56,454	1826	1.83

Source: FAOSTAT

Table 3: Top Honey Importers in World (2007)

Country	Quantity (MT)	Value (1000$)	$/MT	$/kg
Germany	94,077	191,530	2036	2.04
USA	105,438	162,766	1544	1.54
UK	30,109	84,661	2812	2.81
Japan	37,887	67,280	1776	1.78
France	23,489	63,334	2696	2.70

Source: FAOSTAT

Table 4: Honey Producer Prices, 2008

	$/MT	$/kg
Germany	10,042	10.04
Georgia	**6,814**	**6.81**
Belarus	4,644	4.64
Finland	4,463	4.46
France	3,905	3.90
Bulgaria	3,095	3.09
Ukraine	2,138	2.14
Czech Republic	1,994	1.99
Belgium	1,970	1.97
Russia	1,743	1.74
China	758	0.76

Source: FAOSTAT

Table 5: Natural Honey Prices, 2006-2008, $/MT

	2006	2007	2008	2006-08 Average	$/kg, 3-yr average
Germany	8475.6	9251.8	10042.1	9,257	9.26
Georgia	**4294.4**	**5609.3**	**6813.7**	**5,572**	**5.57**
Belarus	4323.7	4340.7	4643.6	4,436	4.44
Bulgaria	1880.1	2323.1	3094.7	2,433	2.43
Ukraine	1913.1	1909.1	2173.1	1,998	2.00
Czech Republic	1840.3	1961.4	1994.2	1,932	1.93
China	552.6	620.9	757.9	644	0.64

Source: http://faostat.fao.org/site/570/DesktopDefault.aspx?PageID=570#ancor

Interviews Conducted

Name	Position	Company
Tamaz Dundua	Program Manager	Elkana

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Meat – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Meat						

Meat Considerations	Meat
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (6)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	2
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (5)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Potential SME creation	2
Linkages to existing SME suppliers	3
Total Market Value:	**34**

Overview

Since 2006, all classes of livestock have declined in number, except for poultry (layers). Pig numbers are much lower due to an outbreak of African Swine Flu in 2007 and the war with Russia in 2008. Georgia remains 100 percent self-sufficient in sheep and goat production, 76 percent in beef, 37 percent in pork, and 24 percent in production of poultry

Cattle, sheep and goat exports increased 16-fold between 2008 and 2009 due to an increase in the number of exports to Muslim countries for the Hajj, meaning a USD 32.3 million dollar increase in export value. Simultaneously, imports of cattle declined by 50 percent and sheep/goat imports dropped from 305 MT to only 3 MT, thus reducing imports by USD 2 million. Cattle and sheep exports account for 12 percent of the total value of all agricultural exports.

Table 1: Number of Livestock (1,000 head)

	2006	2007	2008	2009	% change, 06-09
Cattle	1080.3	1048.5	1045.5	1014.7	-6.1%
Dairy Cows	591.2	541	560.5	537.6	-9.1%
Pigs	343.5	109.9	86.3	135.2	-60.6%
Sheep and goats	789.2	797.1	769.4	673.8	-14.6%
Poultry	5400.7	6149.7	6682.3	6674.8	23.6%

Market Growth – High

As Georgia's economy grows, Georgians will move towards an increased consumption of meat in their diet, a trend which can be seen worldwide and is highly correlated to an increase in income. More importantly for Georgia, there is a large increase in the number of cattle, sheep and goats being sold for export to Muslim countries for the Hajj.

Skills & Capacities - Limited

Modern livestock production methods are poor, as demonstrated by the available breeds of cattle, low milk production per head, poor diet and skinny animals amongst other factors. This is compounded by farms being small on average, making feed production difficult. Milk collection across the country is sporadic, and milk production is highly seasonal, which usually indicates issues surrounding both the quantity and quality of feed. Most farms have a few pigs, and they are fed on whatever is available rather than a diet to suit their nutritional requirements. There has been some foreign investment in the poultry (egg) sector and it is the only meat group that has grown in production since 2006.

Resources/Inputs - Limited

There are two main categories of livestock, ruminants (cattle, sheep, goats) that survive on grass pasture and just need protein and energy supplements for optimum growth, and omnivores (swine and poultry) that grow best on high energy (grain), high protein (soybean meal) diets. Georgia has an ample supply of pastureland available for grazing on by cattle, sheep and goats. As little supplementation of their diet takes place, the time taken to reach market is increased and animals are often skinny when being taken for slaughter. If swine and poultry are not fed grains and soybean meal as primary components of their diets, then they have a very poor feed conversion ratio, take a longer time to market, are of lower weights, etc. Unfortunately, there is insufficient grain production in Georgia, so most feed ingredients (particularly soybean meal) are imported; although availability is fine, it is viewed as expensive.

Market Constraints - Limited

Georgia recently enacted a law stipulating that all meat sold in the country must be slaughtered at registered slaughterhouses (of which there are two or three), although meat for personal consumption can still be slaughtered at home. Imported meat is much cheaper due to lower costs of production, and moreover, due to economies of scale and lower feed costs. All of the above factors mean that the Georgian meat sector is at a cost disadvantage.

SME Linkages – Some

Georgian animal production is essentially the produce of smallholders. Possible additional SME linkages can occur by linking farmers to the traders who supply the Muslim countries with cattle, sheep and goats for export.

Data Relevant to the Meat Sector

This is a compilation of data for the meat sector.
Key points:

- Georgia's small farm size and high feed costs due to imported grains and protein meals make the swine and broiler sector uncompetitive. Pasture-fed cattle and sheep are more competitive due to their ability to consume and survive on locally grown grass.
- Since 2006 all classes of livestock have declined in number, except for poultry layers. Pig numbers are 60 percent lower due to an outbreak of African Swine Flu in 2007 and the war in 2008. Poultry increased by 23 percent and Georgia is self-sufficient in terms of eggs, with a very small recent number of exports.
- Cattle, sheep and goat exports increased by a factor of 16 due to increased exports to Muslim countries for the Hajj, which meant a USD 32.3 million dollar increase in export value. Simultaneously, imports of cattle were halved,

while sheep and goat imports dropped from 305 MT to only 3 MT, reducing imports by USD 2 million.

- Cattle and sheep exports account for 12 percent of the total value in Georgian agricultural exports. They tend to be exported live so that they can be slaughtered in Muslim countries in accordance with their customs.

Table 2: Commodity	Meat Products Export				2008-09 Change in MT	2008-09 Change in $1,000
	2008		2009			
	MT	$1,000	MT	$1,000		
Live Bovine Animals	487	585	9,332	16,903	8,845	16,318
Live Sheep and Goat	614	1,067	8,531	17,054	7,917	15,987
Meat from Bovine Animals (frozen)	243	303			-243	-303
Meat from Swine (fresh, chilled or frozen)	264	430	46	95	-218	-335
Sausages and similar products	15	24			-15	-24
Total	**1,623**	**2,409**	**17,909**	**34,052**	**16,286**	**31,643**

Source: Geostat

Table 3: Commodity	Meat Products Import				2008-09 Change in MT	2008-09 Change in $1,000
	2008		2009			
	MT	$1,000	MT	$1,000		
Live Bovine Animals	**458**	**1,887**	**218**	**551**	**-240**	**-1,336**
Live Swine			14	97	14	97
Live Sheep and Goat	**305**	**785**	**3**	**4**	**-302**	**-781**
Meat from Bovine Animals (frozen)	7,665	11,893	6,378	10,057	-1,287	-1,836
Meat from Swine (fresh, chilled or frozen)	7,427	16,519	7,244	12,668	-183	-3,851
Meat from Sheep or Goat (fresh, chilled or frozen)	7	41	2	14	-5	-27
Edible offal of Bovine Animals	315	314	359	307	44	-7
Pig fat			1,877	2,134	1,877	2,134
Meat and edible offal (salted, in brine, smoked.)	31	181	19	126	-12	-55
Sausages and similar products	5,801	13,345	4,923	10,617	-878	-2,728
Other prepared/preserved meat	3,116	9,621	2,710	7,964	-406	-1,657
Total	**25,125**	**54,586**	**23,747**	**44,539**	**-1,378**	**-10,047**

Source: Geostat

Table 4: Self-Sufficiency Ratios for Meat Production, 2006-09

	2006	2007	2008	2009
Beef	73	58	48	47
Pork	79	61	47	37
Sheep & goats	99	99	101	98
Poultry	43	31	26	24

Source: Geostat

Table 5: Number of Livestock (1,000 head)

	2006	2007	2008	2009
Cattle	1080.3	1048.5	1045.5	1014.7
Dairy cows (subset of above #)	591.2	541	560.5	537.6
Pigs	343.5	109.9	86.3	135.2
Sheep and goats	789.2	797.1	769.4	673.8
Poultry (1,000)	5400.7	6149.7	6682.3	6674.8
Number of Cattle by Regions (1,000 head)				
Region	**2006**	**2007**	**2008**	**2009**
Adjara	112.2	103.5	87.7	87.5
Imereti	188.1	186.8	204.2	192.7
Samegrelo-Zemo Svanety	175.4	196.2	204.0	198.8
Shida Kartli	85.1	69.9	65.5	75.0
Kakhety	97.0	87.5	89.2	82.8
Kvemo Kartly	164.8	186.2	186.7	158.1
Samtskhe-Javakhety	121.0	101.6	88.6	103.0
Other Regions	136.7	116.8	119.6	116.8
Total	**1080.3**	**1048.5**	**1045.5**	**1014.7**
Number of Milking Cows by Regions (1,000 head)				
Region	**2006**	**2007**	**2008**	**2009**
Adjara	60.0	50.8	42.3	42.9
Imereti	97.0	95.9	97.9	94.9
Samegrelo-Zemo Svanety	92.1	94.5	101.1	100.6
Shida Kartli	49.9	41.6	42.6	44.9
Kakhety	52.3	43.9	49.3	48.2
Kvemo Kartly	95.7	96.9	109.0	86.4
Samtskhe-Javakhety	60.4	54.8	49.5	56.0
Other Regions	83.8	62.6	68.9	63.7
Total	**591.2**	**541**	**560.6**	**537.6**
Number of Pigs by Regions (1,000 head)				
Region	**2006**	**2007**	**2008**	**2009**
Imereti	58.1	34.6	27.4	35.7
Samegrelo-Zemo Svanety	122.9	37.2	23.2	33.0

Kakhety	46.8	7.4	10.4	22.8
Kvemo Kartly	20.0	8.5	4.8	13.3
Other Regions	95.7	22.2	20.6	30.4
Total	**343.5**	**109.9**	**86.4**	**135.2**
Number of Sheep by Regions (1,000 head)				
Region	**2006**	**2007**	**2008**	**2009**
Mtsketa-Mtianeti	57.1	67.0	79.8	50.0
Kakhety	266.1	313.9	300.2	269.4
Kvemo Kartly	230.0	210.1	206.8	131.8
Samtskhe-Javakhety	90.0	72.8	61.7	87.4
Other Regions	53.6	47.2	41.5	63.7
Total	**696.8**	**711**	**690**	**602.3**

Source: Geostat

Table 6: Number of Poultry by Regions (1000 head)

Region	**2006**	**2007**	**2008**	**2009**
Imereti	1211.6	1159.4	1318.3	1186.3
Samegrelo-Zemo Svanety	1013.9	1471.0	1359.2	1207.8
Shida Kartly	265.1	266.3	314.7	446.8
Kakhety	878.7	804.8	1004.4	1088.5
Kvemo Kartly	1211.7	1572.5	1641.4	1644.9
Other Regions	819.7	875.7	1044.2	1100.5
Total	**5400.7**	**6149.7**	**6682.2**	**6674.8**
Production of meat by regions (in slaughtered weight, 1,000 MT)				
Region	**2006**	**2007**	**2008**	**2009**
Imereti	16.7	13.9	11.8	12.7
Samegrelo-Zemo Svanety	11.5	11.6	7.7	8.6
Shida Kartly	6.6	6.3	4.0	2.8
Kakhety	12.2	10.5	8.8	8.3
Kvemo Kartly	14.7	11.4	11.5	10.4
Samtskhe-Javakheti	6.3	6.7	3.5	3.1
Other Regions	15.3	12.6	10.0	8.4
Total	**83.3**	**73.0**	**57.3**	**54.3**

Source: Geostat

Table 7: Production of beef by regions (in slaughtered weight, 1,000 MT)

Region	2006	2007	2008	2009
Imereti	5.1	5.6	4.9	5.6
Samegrelo-Zemo Svanety	3.0	3.4	2.2	4.3
Shida Kartly	3.7	3.5	1.7	1.6
Kakhety	4.7	3.3	3.0	4.1
Kvemo Kartly	7.4	4.8	5.9	6.3
Samtskhe-Javakheti	3.2	4.0	2.8	2.0
Other Regions	5.9	6.7	4.6	5.3
Total	**33.0**	**31.3**	**25.1**	**29.2**

Source: Geostat

Table 8: Production of pork by regions (in slaughtered weight, 1,000 MT)

Region	2006	2007	2008	2009
Imereti	7.8	4.7	3.3	3.2
Samegrelo-Zemo Svanety	6.3	5.5	2.6	1.4
Guria	2.4	1.1	0.8	0.3
Racha-Lechkhumi Kvemo Svaneti	2.2	1.5	0.3	0.1
Shida Kartly	2.3	2.0	1.7	0.5
Kakhety	3.3	2.7	1.2	0.9
Kvemo Kartly	2.2	1.3	0.3	0.7
Other Regions	4.6	2.6	1.2	1.1
Total	**31.1**	**21.4**	**11.4**	**8.2**

Source: Geostat

Table 9: Production of sheep and goat meat by regions (in slaughtered weight, 1,000 MT)

Region	2006	2007	2008	2009
Mtskheta - Mtianeti	0.6	0.7	0.8	0.4
Kakhety	2.9	3.1	3.3	1.8
Kvemo Kartly	2.5	2.3	2.2	1.1
Samtskhe-Javakheti	1.0	0.9	0.7	0.5
Other Regions	0.6	0.5	0.5	0.3
Total	**7.6**	**7.5**	**7.5**	**4.1**

Source: Geostat

Table 10: Production of poultry meat by regions (in slaughtered weight, 1,000 MT)

Region	2006	2007	2008	2009
Imereti	3.5	3.5	3.5	3.7
Samegrelo-Zemo Svanety	2.0	2.4	2.8	2.6
Shida Kartly	0.5	0.6	0.6	0.6
Kakhety	1.3	1.4	1.3	1.5
Kvemo Kartly	2.5	2.9	3.0	2.1
Other Regions	1.4	1.6	1.7	1.9
Total	**11.2**	**12.4**	**12.9**	**12.4**

Source: Geostat

Table 11: Balance sheet for meat

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	1.8	1.8	3.9	2.6
Domestic production	83.3	73	57.3	54.3
Import	32.1	53.3	62.1	61.9
Total supply	**117.2**	**128.1**	**123.3**	**118.8**
Utilization (ths. tons)				
Feed	0.1	0.1	0.1	0.1
Food	112.0	121.0	118.6	115.4
Waste	2.4	1.9	1.2	1.2
Export	0.9	1.2	0.8	0.2
Closing stocks	1.8	3.9	2.6	1.9
Total utilization (including stocks)	**117.2**	**128.1**	**123.3**	**118.8**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	26.0	28.0	27.0	25.5
Self-sufficiency ratio %	**73**	**58**	**48**	**47**

Source: Geostat

Table 12: Balance sheet for beef

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	0.6	0.5	0.4	0.6
Domestic production	33.0	31.3	25.1	29.2
Import	8.0	11.5	12.1	9.0
Total supply	**41.6**	**43.3**	**37.6**	**38.8**
Utilization (ths. tons)				
Feed	0.1	0.1	0.1	0.1
Food	39.8	41.7	35.9	37.7
Waste	1.1	0.9	0.5	0.6
Export	0.1	0.2	0.5	0.0
Closing stocks	0.5	0.4	0.6	0.4
Total utilization (including stocks)	**41.6**	**43.3**	**37.6**	**38.8**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	9	10	8	9
Self-sufficiency ratio %	**81**	**73**	**68**	**76**

Source: Geostat

Table 13: Balance sheet for pork

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	0.4	0.8	3.2	1.7
Domestic production	31.1	21.4	11.4	8.2
Import	8.6	13.6	12.9	13.7
Total supply	**40.1**	**35.8**	**27.5**	**26.3**
Utilization (ths. tons)				
Food	38.4	31.9	25.5	22.2
Waste	0.8	0.6	0.3	0.2
Export	0.1	0.1	0.0	0.0
Closing stocks	0.8	3.2	1.7	1.2
Total utilization (including stocks)	**40.1**	**35.8**	**27.5**	**23.6**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	9	7	6	5
Self-sufficiency ratio %	**79**	**61**	**47**	**37**

Source: Geostat

Table 14: Balance sheet for sheep and goat meat

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	0.4	0.3	0.1	0.1
Domestic production	7.6	7.5	7.5	4.1
Import	0.1	0.1	0.2	0.1
Total supply	**8.1**	**7.9**	**7.8**	**4.3**
Utilization (ths. tons)				
Food	7.5	7.7	7.6	4.1
Waste	0.3	0.1	0.1	0.1
Export	0.0	0.0	0.0	0.0
Closing stocks	0.3	0.1	0.1	0.1
Total utilization (including stocks)	**8.1**	**7.9**	**7.8**	**4.3**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	2	2	2	1
Self – sufficiency ratio %	**99**	**99**	**101**	**98**

Source: Geostat

Table 15: Balance sheet for poultry meat

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	0.4	0.2	0.2	0.2
Domestic production	11.2	12.4	12.9	12.4
Import	15.4	28.1	36.9	39.1
Total supply	**27**	**40.7**	**50**	**51.7**
Utilization (ths. tons)				
Food	25.9	39.3	49.2	51
Waste	0.2	0.3	0.3	0.3
Export	0.7	0.9	0.3	0.2
Closing stocks	0.2	0.2	0.2	0.2
Total utilization (including stocks)	**27**	**40.7**	**50**	**51.7**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	6	9	11	11
Self – sufficiency ratio %	**43**	**31**	**26**	**24**

Source: Geostat

Interviews Conducted

Name	Position	Company
Brent Van Dyke	Volunteer	USAID/Farmer-to-Farmer
Davidson Highfill	Director – Alliances Program	MercyCorps
Matti Lampi	Deputy Team Leader	GRM International
David Shervashidze	Sr. Agribusiness Advisor	SEAF - GRDF
Jorgen Billetoft	Partner	PEMconsult

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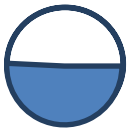
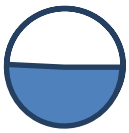
1) Georgian Statistical Office. http://www.geostat.org

Non-Timber Forest Products – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Non Timber Forest Products: Chestnuts Wild berries Herbs Mushrooms						

Considerations	NTFP
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (5)
Workforce Skills & Capacity, and Trends	1
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total Market Value:	**31**

Overview

Georgia has 45 varieties of medicinal herbs and berries which grow wild in the high mountainous regions; 22 of the varieties are collected. However, just four products account for 81 percent of the total tonnage of collected products: eucalyptus, bilberry, dwarf everlast flower and rosehip. High demand for these products – and others such as St. John's Wort – has spurred commercial cultivation in Georgia, which is expected to prove more profitable than traditional agricultural crops like corn and potatoes.

The seasonal nature of this sector and the marginal pay scales for workers limit its impact on the total Georgian economy, especially since this is an informal industry. Currently, 465 tons of dried herbs are exported to the Ukraine because there are a limited number of markets open to Georgian exporters because of a lack of regulation/certification and marketing capacity.

Market Growth – Small

Non-timber forest products (NTFP) are a large and growing market, particularly in Europe. Europe, with an estimated market value of USD 6-8 billion, provides 53 percent of the total world demand (1). This demand is growing by 8-10 percent annually, and the sector is highly fragmented due to a diverse supply of various products.

Skills & Capacities - Limited

The sector is labor intensive and in order to ensure the integrity of the final product, raw ingredients need to be chosen judiciously and handled and processed with great care. Approximately 3,700 families are partially employed in this industry, with between 25 percent and 80 percent of a family's annual income derived from collections. Earnings range from USD 120 to USD 2,100 annually. In addition, it should be noted that this sector is undeveloped and unregulated.

Resources/Inputs - Some

There is a history of collection of NTFP's in certain communities and there is a possibility of generating income for a larger number of gatherers. Depending on the type of herb or medicinal plant, individual collectors can harvest between 10 percent and 33 percent of the total available product, collecting it from late May to November, or until the first snowfall, whichever occurs sooner (1). Collectors may either be hired by a larger collector, or they may collect and then sell their production to the larger collector, who in turn collates, and chills or dries the collected products.

Market Constraints - Limited

NTFP's are gathered on a seasonal basis and sold to aggregators for further processing. The collectors receive a small portion of the total value and a marginal rate of pay for this work. It is necessary to consider geographic limitations, as the products are highly perishable, with limited access to further processing. The processing that does take place (usually drying) is carried out from a wholesale standpoint rather than preparation for retail sale. Georgian processors/exporters generally do not have the ability to meet the demands for quality and quantity that are required by larger clients.

465 tons of dried herbs are currently exported through the Ukraine because there are only a limited number of markets open to Georgian exporters due to a lack of regulation/certification and marketing capacity.

Uncontrolled collection may be unsustainable and may lead to decreased biodiversity. Due to the fact that the industry is still emerging, the supply chain of raw materials is quite weak, processing technologies are outdated, and processing capacity and business sophistication is low. There is little public and private institutional support available to facilitate coordination among industry actors or to provide market information, technical support or financing to enterprises – all of which are clear obstacles for the development of the industry. Collectors would benefit from a handbook of products and promotional prices and/or market information. As a result, Georgian actors can only fulfill smaller orders for raw or semi-finished goods for export to clients primarily residing in the Ukraine or other less restrictive Eastern European markets.

National and international bodies are implementing more restrictive environmentally-focused regulations with the aim of preserving ecosystems, securing biodiversity, and improving food safety. The Ministry of Environment and Natural Resources needs to promote legislation regulating the collection of wild herbs and berries so that Georgian enterprises can achieve certification, allowing them to access the more tightly regulated export markets. Cultivation may be the future for this sector, but additional processing and marketing will be required for this value chain.

SME Linkages – Limited

The possibilities for additional SME linkages depend on the collectors' ability to connect to the market. More linkages may be possible for cultivated medicinal herbs to be collected by processors.

Data Relevant to the Non-Timber Sector

This is a compilation of data for the non-timber forest products sector.

Georgia has 45 varieties of medicinal herbs and berries growing wild in its high mountainous regions, with 22 varieties being actively collected. However, just four

products account for 81 percent of the total tonnage collected: eucalyptus, bilberry, dwarf everlast flower and rosehip. High demand for these products – and others such as St. John's Wort – has spurred commercial cultivation in Georgia, which is expected to become more profitable than cultivation of traditional agricultural crops like corn and potatoes.

Interviews Conducted

Name	Position	Company
Tamaz Dundua	Program Manager	Elkana

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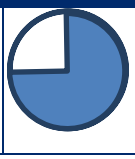
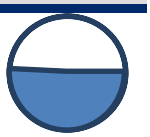
1) USAID/CHF. Herbs & Medicinal Plants Sub-Sector Overview. August 2009.

Poultry – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Poultry						

Considerations	Poultry
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (9)
Workforce Skills & Capacity, and Trends	4
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (7)
Lack of Domestic and/or International Competition	4
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Potential SME creation	1
Linkages to existing SME suppliers	2
Total Market Value:	**37**

Overview

Georgia's small farm size and high grain and feed prices make poultry production difficult, but since laying hens only consume approximately 105 grams of feed per day, the impact is not as large as it would be on broilers. However, poultry numbers increased by 23.6 percent between 2006 and 2009, almost entirely because eight of the larger commercial layer farms invested in laying farms. Georgia is averaging about 100 percent self-sufficiency in table eggs and even managed to export 16 million eggs in 2009, up from one million in 2008. Per capita consumption of eggs is 90 eggs per person per year.

Market Growth – Small

As Georgia's economy grows, and incomes increase, Georgians will increase their consumption of table eggs, not only by consuming eggs in their own right, but as ingredients in processed foods. As a point of comparison, Argentina's per capita egg consumption increased by seven percent as its economic situation improved between 2006 and 2007. Other countries have a much higher per capita consumption than Georgia; Chinese egg consumption for instance is 349 eggs per person per year, compared to 295 in Hungary, and 154 in Portugal. Nearly all emerging and developed countries have a higher consumption per capita than Georgia.

Skills & Capacities - Substantial

There is a dichotomy in the egg production in Georgia. Most farms have laying hens for their own consumption; these run free-range around the farm, living off some basic food and whatever they can scrounge. These farms have access to basic feed ingredients, equipment, etc, but probably do not use the services of veterinarians, preferring to butcher any under-performing hens.

The larger eight commercial farms are intensive operations with several hundred thousand hens per barn. These hens are in cages and are fed nutritionally balanced feed that meets the hens' dietary needs and helps maximize egg production. The commercial farms have access to veterinary staff and on-site production specialists. Clean eggs are packaged in retail containers for sale in markets.

Resources/Inputs – Substantial

Poultry grows best when it has access to high energy, high protein feed that has been nutritionally balanced to meet the needs of a particular breed of chicken during a particular phase of its life. Georgia can import the feed ingredients required to make this feed but although it is readily available, it is viewed as expensive.

Market Constraints – Few constraints

The eggs produced in the backyard are typically for home consumption in a subsistence agriculture approach. If excess eggs are produced then they are sold, but if they are not, then it is not an issue as egg production and sales are part of a diversified income stream, not the only source of income. Data is not kept on income and expenses – egg sales are simply seen as income.

The commercial laying farms produce eggs for sale and this is their sole business. They calculate all costs very carefully, analyzing the cost-benefit of various managerial changes, especially as they must remain competitively priced in comparison with imported eggs.

SME Linkages – Limited

Under the current production system, there is not much further potential for SME linkages. However, it may be possible to use properly managed farms as model farms to encourage other poultry producers to get into the business, so increasing production and the rate of export to nearby Armenia and Azerbaijan.

Data Relevant to the Poultry Sector

This is a compilation of data for the poultry sector.

Key Points:

- Egg imports to Georgia decreased by 50 percent from 2008 to 2009.
- Poultry numbers increased by 23.6 percent from 2006 to 2009, largely because eight of the larger egg laying farms invested in laying farms.
- Georgia is averaging about 100 percent self-sufficiency in table eggs and even managed to export 16 million eggs in 2009, an increase of one million from 2008.
- Per capita consumption of eggs is 90 eggs per person per year, much less than countries of a similar size and economic scale.

Table 1: Number of Poultry by Regions (1,000 head)

Region	2006	2007	2008	2009
Imereti	1211.6	1159.4	1318.3	1186.3
Samegrelo-Zemo Svanety	1013.9	1471	1359.2	1207.8
Shida Kartly	265.1	266.3	314.7	446.8
Kakhety	878.7	804.8	1004.4	1088.5
Kvemo Kartly	1211.7	1572.5	1641.4	1644.9
Other Regions	819.7	875.7	1044.2	1100.5
Total	**5400.7**	**6149.7**	**6682.2**	**6674.8**
Production of poultry meat by regions (in slaughtered weight, 1,000 MT)				
Region	**2006**	**2007**	**2008**	**2009**
Imereti	3.5	3.5	3.5	3.7
Samegrelo-Zemo Svanety	2.0	2.4	2.8	2.6
Shida Kartly	0.5	0.6	0.6	0.6
Kakhety	1.3	1.4	1.3	1.5
Kvemo Kartly	2.5	2.9	3.0	2.1
Other Regions	1.4	1.6	1.7	1.9
Total	**11.2**	**12.4**	**12.9**	**12.4**

Source: Geostat

Table 2: Production of eggs by regions (Million eggs)

Region	2006	2007	2008	2009
Imereti	37.7	42.6	40	39
Samegrelo-Zemo Svanety	27.5	34.9	36.6	38.3
Shida Kartly	9.1	14.0	12.7	19.9
Kakhety	45.0	60.5	67.9	65.0
Kvemo Kartly	106.4	251.8	242.9	226
Other Regions	23.5	34.3	37.4	42.4
Total	**249.2**	**438.1**	**437.5**	**430.6**

Source: Geostat

Table 3: Balance sheet for poultry meat

Supply (ths. tons)	2006	2007	2008	2009
Opening stocks	0.4	0.2	0.2	0.2
Domestic production	11.2	12.4	12.9	12.4
Import	15.4	28.1	36.9	39.1
Total supply	**27**	**40.7**	**50**	**51.7**
Utilization (ths. tons)				
Food	25.9	39.3	49.2	51.0
Waste	0.2	0.3	0.3	0.3
Export	0.7	0.9	0.3	0.2
Closing stocks	0.2	0.2	0.2	0.2
Total utilization (including stocks)	**27**	**40.7**	**50**	**51.7**
Per capita intake				
Population (ths. person)	4401	4382	4385	4436
Kg/year	6	9	11	11
Self – sufficiency ratio %	**43**	**31**	**26**	**24**

Source: Geostat

Table 4: Balance sheet for eggs

Supply (Million eggs)	2006	2007	2008	2009
Opening stocks	11	6	4	5
Domestic production	249	438	438	431
Import	45	0	22	11
Total supply	**305**	**444**	**464**	**447**
Utilization (Million Eggs)				
For hatching	25	44	40	18
Food	262	374	399	401
Waste	12	22	19	8
Export	0	0	1	16
Closing stocks	6	4	5	4
Total utilization (including stocks)	**305**	**444**	**464**	**447**
Per capita intake				
Population (1,000)	4401	4382	4385	4436
eggs/year	60	85	91	90
eggs/day	0.2	0.2	0.2	0.2
Self – sufficiency ratio %	**85**	**100**	**95**	**101**

Source: Geostat

Table 5: Top Georgian Poultry Companies

Poultry Georgia
Koda
Patardzeuli
Karia
Savaneti
Elgudja Nozadze
Mukhrani
Kumisi

Source: Millennium Challenge Corporation. Agribusiness Development Activity.

Interviews Conducted

Name	Position	Company
Ezben Emborg & David Shervashidze	Senior Agribusiness Advisor	SEAF Management

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Tea – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Tea						

Considerations	Tea
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	1
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Negative (2)
Domestic Market Growth Potential, Stability & Trends	1
International Market Growth Potential, Stability & Trends	1
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (5)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	1
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (5)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total Market Value:	**22**

Overview

Georgia was the primary tea producer for the former Soviet Union. During that time, harvested tea leaves were obtained by a highly mechanized „harvester' that defoliated the entire tea bush as opposed to manually selecting the „ripe' tea leaves as was the case in most countries. The tea produced in Georgia was therefore of very low quality and was used as a blend with other superior tea ingredients.

About 60 percent of the tea plantations remain intact since 2005, although exports have declined by 85.5 percent over the same period of time. The country's tea producers have adjusted their methods to picking tea leaves as they become „ripe', but the quantities available for export are relatively small at 868 MT, worth USD 983,000 (USD 1,132/MT) in total. Imports total 862 MT, worth USD 4.81 million (USD 5,574/MT). The Georgian tea sector is a non-player in the international market, exporting less than 0.2 percent of Sri Lankan, Chinese or Indian quantities.

Market Growth – Small

Georgian tea imports increased by 28.8 percent between 2005 and 2009, while tea production declined by 35 percent during the same period (5). Georgian tea exports declined by 85.5 percent from 2005 to 2009 (5). Internationally, the global tea demand is described as „slightly declining' to „relatively stagnant', but there is some growth in the consumption of teas that have perceived health benefits such as green tea, medicinal herb tea, etc (2). Changes in processing and consumption patterns means that consumers now get twice the cuppage per given weight of tea (2) and global per capita consumption of tea is 0.6 kg/person/year (1). Eighty percent of tea production is the produce of five countries: India, China, Sri Lanka, Kenya, and Indonesia (2).

Skills & Capacities - Limited

Technical consulting services are available from the 'Scientific Research Institute of Tea and Sub-Tropical Crops in Guri Region'. Capacities are somewhat limited as the industry spirals downwards due to lower production demands and vastly reduced exports. Four of the nineteen Georgian tea producers are no longer operating.

Resources/Inputs - Some

Of the total of 28,000 hectares of tea bushes in Georgia, only 16-18,000 are under production. The remaining 10-12,000 hectares are not cared for and need to be completely replanted. Fertilizer, pesticides and irrigation equipment is readily available, but not used. The land where the tea plantations are located is in the west of the country and primarily consists of sloping soils with a low pH, in other words, an ideal site.

Market Constraints - Limited

Twenty-five tea processing plants are currently functioning in Georgia. They are located in the following places:

- Guria – Ozurgeti and Chokhatauri
- Imereti – Tskaltubo, Khoni and Tkibuli
- Adjara – Kobuleti
- Samegrelo – Chkhorotsku and Tsalenjikha

Tea leaf exports tend to be dried but as a bulk commodity, with limited value-adding taking place. In 2008, Georgia exported tea to 39 countries and imported tea from 39 countries.

SME Linkages – None

Under the current production system and with local buyers available, there are little to no potential additional SME linkages, largely due to the decline in the industry.

Data Relevant to the Tea Sector

This is a compilation of data for the tea sector.

Table 1: Production of Tea Leaves by Regions (1,000 MT)

Region	2006	2007	2008	2009
Adjara		0.8	0.5	
Imereti	0.4	0.4	0.2	0.3
Samegrelo-Zemo Svaneti	2.3	2.7	2.1	2.0
Guria	3.9	3.6	2.6	3.5
Total	**6.6**	**7.5**	**5.4**	**5.8**

Source: GEOSTAT

Table 2: Area of Tea plantations by regions (Ha)

Region	2006	2007	2008	2009	2010
Adjara	5,435	5,100	4,450	3,700	2,900
Imereti	4,130	3,800	3,200	2,800	2,200
Samegrelo-Zemo Svaneti	12,400	12,400	11,700	10,550	9,900
Guria	12,500	11,600	10,700	9,200	8,700
Total	**34,465**	**32,900**	**30,050**	**26,250**	**23,700**

Source: Georgian Tea Producers Association

Table 3: Georgia Tea Trade, 2008-09

	Export		Import	
Year	**MT**	**$1,000**	**MT**	**$1,000**
2005	6,017	3,095	669	1,997
2006	3,818	1,834	783	2,797
2007	2,303	1,310	803	3,724
2008	2,209	1,455	820	4,162
2009	868	983	862	4,805

Source: GEOSTAT, Invest in Georgia, Market Overview (2009), TradeMAP

Table 4: Top Exporters (2007)

Country	MT	$1,000	$/MT
Kenya	374,329	688,790	1,867
China	292,199	620,342	2,133
Sri Lanka	190,203	544,868	2,865
India	193,459	469,274	2,426
UK	25,353	307,616	12,133

Source: FAOSTAT

Table 5: Top Importers (2007)

Country	MT	$1,000	$/MT
Russia	181,627	432,344	2,380
UK	157,280	307,293	1,954
USA	109,400	288,710	2,639
Pakistan	112,136	213,404	1,903
Japan	47,341	180,119	3,805

Source: FAOSTAT

Table 6: Tea Producers

Company Name	Contact person	Location	Telephone No.
JSC Kobuletis Chai	Temur Jashi	Kobuleti	877410527
LLC Geoplanti	Gocha Dzneladze	Tbilisi	899506026
Anaseuli Experimental Factory	Gia Khuchua	Anaseuli	899573073
LLC Lazi	Goneli Salia	Tsalenjikha	877473737
LLC Terjolis Chai	Alu Gamakharia	Tskaltubo	899552064
LLC Tkibulis Chai	Ucha dalakishvili	Tkibuli	899503946
LLC Bako	Badri Glonti	Ozurgeti	899507195
LLC Sakartvelos Taiguli	Ilia Basilashvili	Ozurgeti	899101691
LLC Ori Nana	Nana Melashvili	Ozurgeti	899519160
I/E Zina Gudjabidze	Zina Gudjabidze	Ozurgeti	899439486
I/E Avtandil Lomtadze	Avtandil lomtadze	Chokhatauri	893181078
LLC Alexandre		Khoni	
LLC Aisi		Khoni	
LLC Zugdidi Tea Production	Revaz Narmania	Zugdidi	899212181
JSC Lesichine	Rezo Keburia	Chkorotsku	NOT OPERATIONAL
LLC Chokhatauri Tea Production	Avtandil meparishvili	Chokhatauri	NOT OPERATIONAL
LLC AG Agro	Tamaz Mikadze	Tskaltubo	899563164
I/E Shalva Khetsuriani	Shalva Khetsuriani	Tbilisi	NOT OPERATIONAL
LLC Skaia	Apolon Arakhamia	Zugdidi	NOT OPERATIONAL

Source: Georgian Tea Producers Association

Table 7: Exporters	Importers
LLC Geoplant (Former Martin Bauer)	Azersuni – (Mariami, Final, Azerchai)
Agrofirm Kobuleti	Lipton
LLC Proekti-21	Grinfield
Anaseuli Experimental Factory	Achmadtea
LLC Shemokmedi Tea Factory	

Source: Georgian Tea Producers Association

Interviews Conducted

Name	Position	Company
Tengiz Svanidze	President	Georgian tea producers association

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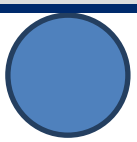
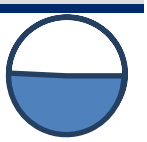
6) Georgian Tea Producers Association

Vegetable – Sector Selection

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Vegetable Sector						

Considerations	Vegetables
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (9)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Highly Available (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (6.5)
Lack of Domestic and/or International Competition	3.5
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total Market Value:	**39.5**

Overview

Georgia has a strong tradition of vegetable production. Many Georgian farmers depend upon vegetables not only for the food itself (subsistence), but also for the income derived from them. The country exports a substantial quantity of vegetables, and with its moderate climate, varying soils and multitude of micro-climates; it means that some sort of vegetable can be found growing just about everywhere. Certain areas focus on root crops, while other areas focus on the field production of vegetables.

Market Growth

In 2004, over 28.4 MMT of fresh vegetables were traded globally, which is about 3 percent of the global production. The limited export of vegetables indicates a higher level of self-sufficiency than is the case for most countries. Nevertheless, the global vegetable trade is growing steadily, demonstrating an annual growth rate of 4.6 percent between 1994 and 2004. Improvements and innovations in cool logistics and an increased availability of cool chain infrastructure in export countries will continue to have a positive impact on global trade. Tomatoes, onions, peppers and cucumbers are the four most frequently traded vegetables (2). Georgia is five percent above the world average in vegetable consumption, but far behind Turkey, the country that is ranked number one (1).

Skills & Capacities

Due to Georgia's long history of vegetable production, there are many experienced producers and specialized agronomists on hand. In southeast Georgia, irrigation is more common; it is less common in west Georgia due to the area's higher levels of precipitation. While the number of hectares planted on has dropped, production has remained steady, suggesting an increase in yields. There are currently about 41,000 hectares of vegetables planted in the country. Although the Russian embargo initially harmed processors and exporters, many of them have now developed contracts abroad and have the specialized equipment necessary to produce and sell canned vegetables and vegetable juices outside of Georgia.

Resources/Inputs

For the first time ever, the world is expected to have produced 1 billion tons of vegetables in 2010. Asia cultivates the most vegetables in the world and has also shown the strongest growth over the last decade. Much of this growth can be attributed to China which cultivates over 22 million hectares of vegetable crops, more than 40 percent of the global total of 52 million hectares. Productivity improvements have been achieved in the vegetable sector for a variety of reasons, including the use of higher quality inputs (seeds), technological advances, better management skills and the increased use of covered vegetable production (2). Even though there

has been a decline in the surface area of land planted with potatoes, there has been an annual growth of 7 percent in the production of potatoes since 2006, due to yields of more than 66 percent higher than in 2006.

Market Constraints

As a result of the break-up of the Soviet Union, Georgian vegetable producers and exporters lost their primary markets, and consequently suffered greatly. Input costs greatly increased and processing plants fell into disrepair, as did irrigation systems. These factors led to lower yields, higher costs and a greater inability to export. Even today, there is a reticence when it comes to trying new plant seeds or varieties, using better and more appropriate fertilizers, or using adequate and correct herbicides to reduce weed pressure and increase yields. Likewise, there is a shortage of agricultural machinery, although the MCC Farm Machinery Centers have helped alleviate this issue.

Prior to the embargo, Georgia exported most of its vegetables to Russia. The Russian embargo of 2006 slammed the door on Georgian imports, forcing exporters and processors to immediately find other markets. Establishing new markets is time-consuming, difficult and competitive and has posed a great challenge for Georgia.

SME Linkages

One of the best possible ways to assist the vegetable sector is through a 3-4 way linkage:

1) Connect innovative and early adopting farmers to better seed varieties with an increased emphasis on timely and appropriate fertilizer applications.
2) Connect these farmers to value chain drivers (VCDs), like vegetable processors (canneries) or cool storage facilities for root crops, through a forward contract mechanism.
3) Using the forward contract as collateral, get either a bank or MCO to finance a portion of the production costs.
4) Use the entire process above as a demonstration and field training center for other farmers, VCDs and MCOs in other areas of the country.

Another way is to help connect the VCDs and their final products to international markets so as to increase exports.

Data Relevant to the Vegetables Sector

This is a compilation of data for the vegetable sector.

Table 1: Sown Area of Vegetables (1,000 HA)

Region	2006	2007	2008	2009
Imereti	4.1	3.0	2.8	3.0
Samegrelo-Zemo Svaneti	3.0	2.7	3.1	2.5
Shida Kartli	4.7	5.7	5.3	3.6
Kakheti	4.5	4.3	6.9	5.1
Kvemo Kartli	7.7	9.7	3.9	4.4
Samtske-Javakheti	1.4	2.2	1.6	1.6
Adjara				
Other regions	4.3	4.4	3.7	3.5
Total Georgia	**29.7**	**32**	**27.3**	**23.7**

Source: Geostat

Table 2: Production of Vegetables (1,000 MT)

Region	2006	2007	2008	2009
Imereti	17.2	15.3	15.9	14.0
Samegrelo-Zemo Svaneti	14.6	8.6	9.0	7.0
Shida Kartli	34.4	36.9	32.9	25.4
Kakheti	21.4	11.6	41.4	17.4
Kvemo Kartli	62.2	79.5	28.9	66.8
Samtske-Javakheti	15.5	20.6	17.0	27.6
Other regions	14.4	17.8	19.9	12.1
Total Georgia	**179.7**	**190.3**	**165**	**170.3**

Source: Geostat

Table 3: Sown Area of Potatoes (1,000 HA)

Region	2006	2007	2008	2009
Adjara	1.7	2.0	1.8	1.4
Kvemo-Kartli	9.4	6.1	6.3	4.5
Samtske-Javakheti	8.4	8.3	10.1	7.7
Other regions	4.0	5.1	5.8	4.4
Total Georgia	**23.5**	**21.5**	**24**	**18**

Source: Geostat

Table 4: Production of Potatoes (1,000 MT)

Region	2006	2007	2008	2009
Adjara	25.5	32.0	31.6	16.7
Kvemo-Kartli	69.8	59.9	24.9	35.3
Samtske-Javakheti	54.3	109.3	108.1	144.1
Other regions	19.1	28.0	28.8	20.7
Total Georgia	168.7	229.2	193.4	216.8

Source: Geostat

Table 5: Potato Yields (MT/HA)

Region	2006	2007	2008	2009
Adjara	15.0	16.0	17.6	11.9
Kvemo-Kartli	7.4	9.8	4.0	7.8
Samtske-Javakheti	6.5	13.2	10.7	18.7
Other regions	4.8	5.5	5.0	4.7
Total Georgia	7.2	10.7	8.1	12.0

Source: Geostat

Table 6: Commodity Prices

	Vegetable Export				2008-09 Change in MT	2008-09 Change in $1,000
	2008		2009			
	MT	$1,000	MT	$1,000		
Potatoes (fresh or chilled)			14,897	128	14,897	128
Onions, shallots, garlic, etc.	643	124	579	120	-64	-4
Tomatoes (fresh or chilled)	26	4	308	67	282	63
Vegetable (prepared or preserved)	6	18	29	55		
Cabbages, cauliflowers, kohlrabi, other	1,944	345	9	19	-1,935	-326
Other vegetables (prepared or preserved other than in vinegar or acetic acid; frozen)	11	18	11	15		
Tomatoes (prepared or preserved)	3	4	3	5		
Carrots, turnips, salad beetroot, radish, other	801	90	18	1	-783	-89
Other vegetables (fresh or chilled)	1,838	867				
Vegetables (frozen)	23	6				
Other vegetables (prepared or preserved other than in vinegar or acetic acid; not frozen)	18	109				
Total	**5,313**	**1,585**	**15,822**	**389**	**13,180**	**-139**

Source: Geostat

Table 7: Commodity	Vegetable Import				2008-09 Change in MT	2008-09 Change in $1,000
	2008		2009			
	MT	$1,000	MT	$1,000		
Other vegetables (prepared or preserved other than in vinegar or acetic acid; not frozen)	4,423	7,663	3,976	6,317	-447	-1,346
Tomatoes (prepared or preserved)	4,545	4,208	4,778	6,169	233	1,961
Onions, shallots, garlic, etc.	27,331	4,821	25,733	3,813	-1,598	-1,008
Dried leguminous vegetables (shelled)	6,681	4,847	7,318	3,723	637	-1,124
Tomatoes (fresh or chilled)	9,332	3,853	6,966	3,519	-2,366	-334
Other vegetables (fresh or chilled)	7,348	2,161	5,320	3,199	-2,028	1,038
Potatoes (fresh or chilled)	32,310	6,003	17,637	2,634	-14,673	-3,369
Vegetables (prepared or preserved)	2,390	1,607	2,475	1,576	85	-31
Cucumbers and gherkins (fresh or chilled)	3,696	932	3,066	1,496	-630	564
Carrots, turnips, salad beetroot, radish, other	1,610	225	3,432	596	1,822	371
Other vegetables (prepared or preserved other than vinegar or acetic acid; frozen)	469	640	315	468	-154	-172
Leguminous vegetables (shelled or unshelled; fresh or chilled)	352	206	220	156	-132	-50
Dried vegetables, (whole)	50	163	230	152	180	-11
Cabbages, cauliflowers, kohlrabi, other	1,133	265	330	129	-803	-136
Vegetables; frozen	37	102	36	67	-1	-35
Lettuce and chicory; fresh or chilled	50	129	20	47	-30	-82
Total	**101,757**	**37,825**	**81,852**	**34,061**	**-19,905**	**-3,764**

Source: Geostat

Interviews Conducted

Name	Position	Company
Ezben Emborg & David Shervashidze	Sr. Agribusiness Advisor	SEAF Management
Paul Clark & Irakly Tekturmanidze	President & Director	TBSC Consulting
Ekaterine Kimeridze	Director	GDCI
Vano Goglidze	Director	Geoconcentrate
Giorgi Mchedlishvili	Director	Rekha (Cold Storage)
Givi Abalaki	Director	Sveneti (Cold Storage)
Lorgen Billetoft	Partner	PEMconsult

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2) "Rabobank". *World of Vegetables*. June 2006. Web. http://www.rabobank.com/content/images/The world of vegetables_intro_tcm43-34783.pdf

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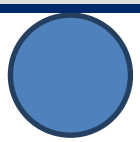
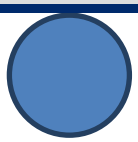
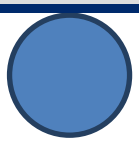
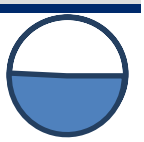
Wine – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Wine						

Wine Considerations	Wine
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (8)
Domestic Market Growth Potential, Stability & Trends	4
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (10)
Workforce Skills & Capacity, and Trends	4
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Highly Available (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Highly Supportive (8)
Lack of Domestic and/or International Competition	4
Transportation & Logistics	4
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Potential SME creation	2
Linkages to existing SME suppliers	3
Total Market Value:	**47**

Overview

Wine (and spirit) exports from Georgia represent 25 percent of the value of total agricultural exports, the largest single category. Exports to the Soviet Union and Russia historically accounted for nearly 90 percent of Georgian wine export sales, meaning that the embargo against Georgian products had a profound impact upon the wine sector. However, Georgia has strongly focused on marketing to other countries and the number of wine exports is again increasing, with 75 percent of Georgian wine being exported. Additionally, Georgian domestic wine consumption has more than doubled since 2004. The embargo presented an opportunity for Georgian wine to find new markets.

Market Growth – Some

In 2009, wine and spirits made up 25 percent of Georgia's total agricultural exports. Georgia's Russian market has collapsed, but exports to other countries remain substantial.

The period from 2003 to 2007 in the Georgian alcoholic drinks market was characterized by the stable growth of sales, both in terms of current value and volume. This period coincided with an increase in consumer incomes, and a significant share of the income was directed towards the alcoholic drinks market. During this period, wine saw quite a high growth in sales, as the most traditional and widespread alcoholic drink in Georgia.

The global economic crisis and the Russian embargo negatively affected sales between 2007 and 2009. Sales of alcoholic drinks in 2009 declined in both terms of current value and volume. Spirits suffered most of all as these products are the most expensive and consumers were trying to spend as little as possible. Overall, volume sales of wine in 2009 also declined, but the decline was insignificant; this was in many respects due to the growth in sales of still white wine. The stability of wine sales, and the growth in white wine sales was as a result of advertising and marketing activity carried out by local wine companies, who faced serious exportation problems, and consequently tried to dominate the local market as much as possible.

The development of the wine market in Georgia in the forecast period depends on the duration of the economic crisis, and whether the period of recovery will be long or short. In general, the two to three years are expected to be necessary in order to restore pre-crisis levels of sales, and in 2013 and 2014 it is possible that higher rates of sales will be seen.

Skills & Capacities - Substantial

The Georgian wine industry has a long tradition of producing wine from the 500+ varieties of grapes grown in Georgia. This tradition dates back to a time before

recorded history. However, evidence found in archaeological records places Georgia as potentially the first region in the world to produce wine: grape growing is relatively highly developed, as is wine production and processing. Over 75 percent of wines produced in Georgia are exported, not only to Europe by truck, but to other countries in sea containers. Bottling technology, although it varies from winery to winery, is relatively modern and good.

In Georgia, wine is produced using both traditional methods as well as modern „European' techniques. Therefore the use of traditional technology and state-of-the art technology exists side by side throughout Georgia. These varied production styles contribute to a wide range of flavor profiles all produced from the same grape and appellation, resulting in a single variety having a greatly varied taste and quality. In the absence of labeling and branding standards, it is common to have two products which have the same name yet have significantly different flavor profiles. This inconsistency makes it difficult for the uninformed consumer to understand and rely upon Georgian wines to be consistent and therefore meet their expectations.

Resources/Inputs – Highly Available

There are 48,100 hectares of vineyards in Georgia, grown primarily in three regions and consisting (primarily) of ten different varieties of grapes. The area of land dedicated to vineyards grew by 10.4 percent from 2004 to 2008, although wine production decreased by 20 percent from 2006 to 2009. Required tools and equipment are readily available, as are other means of production. The Agrarian University houses a "Scientific Research Institute of Horticulture, Viticulture and Winemaking" where wineries can get answers to any questions that they may have.

Market Constraints – Highly Supportive

In recent decades, Georgia was a major supplier of wine to the Soviet Union. Exports to the Soviet Union and Russia accounted for nearly 90 percent of Georgian wine export sales. Wines from Georgia sold at a premium as compared to wines produced in other regions of the Soviet Union.

This premium led to counterfeit products that were produced outside of Georgia or even inside Georgia, but with little consideration for quality as counterfeiters worked to maximize their profits at the expense of the reputation of Georgian wines. The lack of Georgian industry and governmental controls on the export of wines labeled as products from Georgia, led to a reduction in the reliability and reputation of Georgian wines.

Due to the embargo enacted in 2006, Georgian wine can no longer be exported to Russia. As a result, Georgian wine producers reoriented themselves to focus on other export locations (see data below). In the first half of 2010, Georgia exported 8,178 tons of wine, worth USD 17.6 million to 37 countries. The primary buyers were as follows:

1) Ukraine; USD 7,638,000 (4,254 tons)
2) Kazakhstan; USD 2,668,000 (1,217 tons)
3) Belarus; USD 1,871,000 (813 tons)
4) Moldova; USD 731,000 (197 tons)
5) Latvia; USD 679,000 (347 tons)
6) Lithuania; USD 513,000 (262 tons)
7) Azerbaijan; USD 493,000 (189 tons)
8) USA; USD 361,000 (143 tons)
9) Germany; USD 309,000 (139 tons)
10) Armenia; USD 141,000 (46 tons)

SME Linkages – Some

The wine industry offers substantial opportunity for SME linkage. Most production is by individual farmers, who then supply the value chain. Wine tourism is emerging as a strong global industry, and Georgia is well-positioned to participate in this market (see the Tourism Sector Report). The wine industry could offer opportunities to upgrade the product quality and design in the packaging sector.

Data Relevant to the Wine Sector

This is a compilation of data for the wine sector.

Data on imports and exports of wine to and from Georgia is grouped together with data on other beverages, spirits and vinegar. It is therefore difficult to analyze wine specifically, although the indications are positive.

Table 1. Georgian Beverages, Spirits & Vinegar Imports & Exports (2000 – 2009 & % Change)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2000 - 2009 % Change
Beverages, spirits and vinegar Imports (US$,000)	3033.3	4971.1	3275.2	7666.8	11404.8	20384.0	40733.2	36376.7	49564.4	33257.0	996%
Beverages, spirits and vinegar Exports (US$,000)	46857.2	53662.5	60031.4	88591.5	101336.7	164356.7	119557.8	143412.3	138444.0	123776.4	164%

Source: Geostat

According to the U.S. Government's Trade Data and Analysis, Georgia has also seen increases in its wine production, vineyard acreage and consumption.

Table 2. Georgian Wine Production, Consumption & Vineyard Size (2004-08 & % Change)

	2004	2005	2006	2007	2008	% Change 2004-2008
Production (,000 Hectoliters)	950	950	1100	1100	1100	+15.8%
Consumption (,000 Hectoliters)	131	251	260	265	270	+106.1%
Vineyard Acreage (,000 Acres)	153	156	161	162	159	+3.9%

Source: Geostat

Global Wine Trends

Globally, vineyard acreage has decreased by 0.5 percent between 2004 and 2008. Some of the more traditional wine countries contributed to this decrease including Spain, France and Portugal. The most significant increases were seen in Uzbekistan, China, Chile and Australia, all of which are deemed to be „new world' wine regions. Georgia saw a modest increase of 3.5 percent.

Table 3. World Vineyard Acreage by Country, 2004–2008 & % Change (HA, 000)

Countries	2004	2005	2006	2007	2008	% Change
World Total	19523	19585	19554	19553	19424	-0.5%
Spain	2882	2866	2829	2789	2750	-4.6%
France	2105	2110	2081	2054	2017	-4.2%
Italy	1944	1959	1942	1933	1989	+2.3%
Turkey	1475	1475	1524	1500	1450	-1.7%
China	1134	1236	1322	1345	1360	+19.9%
USA	933	935	941	937	939	+0.6%
Iran	837	949	870	870	870	+3.9%
Argentina	526	541	551	558	565	+7.3%
Portugal	550	550	550	545	543	-1.3%
Romania	486	464	471	463	482	-0.8%
Chile	432	440	460	477	480	+11.1%
Australia	387	394	406	425	427	+10.3%
Moldova	342	346	347	350	354	+3.5%
South Africa	289	295	295	297	297	+2.8%
Uzbekistan	259	265	272	292	292	+127%
Bulgaria	320	313	303	297	274	-14.4%
Germany	243	244	245	245	245	+0.8%
Algeria	235	235	230	228	226	-3.7%
Greece	285	279	278	267	214	-24.9%
Hungary	230	212	207	204	202	-12.2%
Brazil	177	181	183	190	192	+8.5%
Ukraine	205	199	185	185	185	-9.8%
Egypt	175	180	180	180	180	+2.9%
India	161	161	160	165	170	+5.6%
Georgia	**153**	**156**	**161**	**162**	**159**	**+3.9%**

Source: TradeMAP

Worldwide wine production has also decreased between 2004 and 2008 by 2.8 percent. Significant decreases in production are seen in Brazil, Bulgaria, France, Portugal, Hungary, Austria, Greece, Spain and Croatia. Over the same period, Georgia's wine production increased by an impressive 15.8 percent, meaning that it performed better than New Zealand and Switzerland (countries producing similar volumes of wine). The most significant increases in production (among the top 25 wine producing countries) can be seen in Chile (+32.7 percent), China (+23.9 percent), Italy (+16.8 percent) and Georgia (+15.8 percent).

Table 4. Wine Production by Country, 2004-2008 & % Change (Hectoliter's, 000)

Countries	2004	2005	2006	2007	2008	% Change 2004-2008
World Total	**291987**	**301363**	**285035**	**284700**	**283898**	**-2.8%**
Italy	44086	53135	50566	49631	51500	+16.8%
France	57386	52105	53400	52127	45692	-20.4%
Spain	41843	43168	36158	38290	36781	-12.1%
USA	24110	27859	24298	25125	24274	+0.7%
Argentina	15464	15222	15396	15046	15013	-2.9%
Australia	15048	14669	14628	9620	14750	-2.0%
China	11700	12000	13000	14000	14500	+23.9%
Germany	10107	9150	9256	9000	10363	+2.5%
South Africa	9279	9052	10130	10200	10300	+11.0%
Chile	6550	8046	8450	8280	8690	+32.7%
Portugal	7340	7481	7267	7542	6049	-17.6%
Romania	5555	6166	2602	5015	5288	-4.8%
Russia	5120	5035	5000	5000	5000	-2.3%
Moldova	3488	3509	3597	3600	3650	+4.6%
Greece	3815	4295	3997	3874	3337	-12.5%
Hungary	3880	5271	3103	3144	3222	-17.0%
Brazil	3925	3199	2372	3000	3000	-23.6%
Ukraine	2400	2400	2460	2400	2400	0%
Austria	2735	2264	2256	2300	2300	-15.9%
Bulgaria	2327	1961	1708	1757	1800	-22.6%
Croatia	1800	1571	1592	1600	1600	-11.1%
New Zealand	1192	1020	1195	1250	1300	+9.1%
Georgia	950	950	1100	1100	1100	+15.8%
Switzerland	1159	1001	1108	1100	1100	-5.1%
Mexico	1100	1028	1028	1050	1060	-3.6%

Source: TradeMAP

Between 2004 and 2008, wine consumption worldwide has increased by a modest 3.5 percent. The most significant increases (according to the top wine consuming countries) were seen in Nigeria (1236 percent), Georgia (106.1 percent), South Korea (66.4 percent), Slovenia (46.7 percent), Ireland (24.6 percent), New Zealand (15.6 percent), Paraguay (14.6 percent), the USA (14.5 percent), Hungary (13.6 percent), Canada (12.3 percent), Belarus (11.8 percent), Norway (9.0 percent), UK (8.1 percent), Netherlands (7.0 percent), Brazil (7.0 percent), China (6.9 percent), Greece (6.1 percent), Belgium (5.9 percent), Sweden (5.7 percent) and Australia (5.5 percent).

Table 5. World Wine Consumption 2004-2008 & Change (Hectoliters, 000)

Countries	2004	2005	2006	2007	2008	% Change 2004-2008
World Total	236812	237606	240915	244294	245012	+3.5%
France	33218	33530	32600	32400	32200	-3.1%
Italy	28300	27016	27000	27900	29100	+2.8%
USA	25227	26308	27204	28574	28880	+14.5%
Germany	19845	19849	19940	19900	19900	+0.3%
China	13286	13500	13700	13900	14200	+6.9%
Spain	13898	13686	13510	13450	13300	-4.3%
UK	10729	12000	11700	11650	11600	+8.1%
Argentina	11113	10972	11104	10900	10700	-3.7%
Russia	10159	10500	10550	10600	10650	+4.8%
Romania	5800	2379	5556	5600	5600	-3.4%
Portugal	4913	4820	4793	4750	4700	-4.3%
Australia	4361	4523	4567	4590	4600	+5.5%
Canada	3607	3793	3987	4000	4050	+12.3%
Netherlands	3340	3474	3511	3550	3575	+7.0%
South Africa	3509	3450	3452	3465	3510	-
Greece	3300	3586	3500	3500	3500	+6.1%
Hungary	3080	3500	3500	3500	3500	+13.6%
Brazil	3177	3719	3466	3400	3400	+7.0%
Switzerland	2933	2849	2771	2750	2725	-7.1%
Belgium	2478	2537	2587	2625	2625	+5.9%
Chile	2547	2644	2600	2600	2600	+2.1%
Austria	2400	2400	2400	2425	2460	+2.5%
Japan	2523	2561	2383	2350	2375	-5.9%
Croatia	1856	1856	1850	1850	1850	-0.3%
Ukraine	1800	1753	1708	1700	1700	-5.6%
Denmark	1612	1560	1530	1500	1500	-6.9%
Sweden	1324	1535	1462	1424	1400	+5.7%
Bulgaria	1350	1350	1350	1350	1350	-
New Zealand	770	817	870	880	890	+15.6%
Slovenia	600	880	880	880	880	+46.7%
Uruguay	848	869	865	860	855	+0.8%
Czech Republic	820	820	820	820	820	-
Ireland	562	682	708	700	700	+24.6%
Norway	578	610	620	625	630	+9.0%
Poland	611	600	600	600	600	-1.8%
Slovakia	600	600	600	600	600	-
Angola	579	580	585	571	566	-2.4%
Belarus	492	543	550	550	550	+11.8%
Peru	507	500	500	500	500	-1.4%
Uzbekistan	446	446	446	446	446	-
Finland	473	494	445	445	445	-5.9%
Nigeria	33	42	70	314	435	+1236%
Morocco	326	300	300	300	300	-8.0%
Paraguay	253	293	290	290	290	+14.6%
South Korea	172	205	243	347	287	+66.4%
Kazakhstan	280	280	280	280	280	-
Georgia	**131**	**251**	**260**	**265**	**270**	**+106.1%**

Source: TradeMAP

More relevant, perhaps, is wine consumption per capita. Here, the most significant increases in wine consumption have been seen in Hong Kong (136.3 percent), UAE (126.1 percent), Georgia (106.1 percent), India (98 percent), Slovenia (46.7 percent), Turkey (40.3 percent), Mongolia (39.8 percent), Singapore (28.7 percent), Ireland (24.6 percent), Guinea Bissau (21.2 percent), New Zealand (15.6 percent), Paraguay (14.6 percent), the USA (14.5 percent), Hungary (13.6 percent), Canada (12.3 percent), Belarus (11.8 percent), Norway (9.0 percent), Netherlands (7.0 percent), Greece (6.1 percent), Belgium (5.9 percent), Sweden (5.7 percent) and Australia (5.5 percent).

Table 6. Wine Consumption per Capita, 2004 – 2008 (liters per capita)

Countries	Total	2004	2005	2006	2007	2008	2004 – 2008 % Change
France	60,876,136	54.57	55.08	53.55	53.22	53.22	-2.5%
Italy	58,133,509	48.68	46.47	46.44	47.99	50.06	+2.8%
Portugal	10,605,870	46.32	45.45	45.19	44.79	44.32	-4.3%
Slovenia	2,010.347	29.85	43.77	43.77	43.77	43.77	+46.7%
Croatia	4,494,749	41.29	41.29	41.16	41.16	41.16	-0.3%
Switzerland	7,523,934	38.98	37.87	36.83	36.55	36.22	-7.1%
Hungary	9,981,334	30.86	35.07	35.07	35.07	35.07	+13.6%
Spain	40,397,842	34.40	33.88	33.44	33.29	32.92	-4.3%
Greece	10,688,058	30.88	33.55	32.75	32.75	32.75	+6.1%
Austria	8,192,880	29.29	29.29	29.29	29.60	30.26	+3.3%
Denmark	5,450,661	29.57	28.62	28.07	27.52	27.52	-6.9%
Argentina	39,921,833	27.84	27.48	27.81	27.30	26.80	-3.7%
Belgium	10,379,067	23.87	24.44	24.93	25.29	25.29	+5.9%
Romania	22,303,552	26.00	10.67	24.91	25.11	25.11	-3.4%
Uruguay	3,431,932	24.71	25.32	25.20	25.06	24.91	+0.8%
Germany	82,422,299	24.08	24.08	24.19	24.14	24.14	+0.3%
Australia	20,264,082	21.52	22.32	22.54	22.65	22.70	+5.5%
New Zealand	4,076,140	18.89	20.04	21.34	21.59	21.83	+15.6%
Netherlands	16,491,461	20.25	21.07	21.29	21.53	21.68	+7.0%
UK	60,609,153	17.70	19.80	19.30	19.22	19.14	+8.1%
Bulgaria	7,385,367	18.28	18.28	18.28	18.28	18.28	-
Ireland	4.062,235	13.83	16.79	17.43	17.23	17.23	+24.6%
Chile	16,134,219	15.79	16.39	16.11	16.11	16.11	+2.1%
Sweden	9,016,596	14.68	17.02	16.21	15.79	15.53	+5.7%
Norway	4,610,820	12.54	13.23	13.45	13.56	13.66	+9.0%
Canada	33,098,932	10.90	11.46	12.05	12.08	12.24	+12.3%
Slovakia	5,439,448	11.03	11.03	11.03	11.03	11.03	-
Macedonia	2,050,554	9.75	9.75	9.75	9.75	9.75	-
United States	298,444,215	8.45	8.82	9.12	9.57	9.68	+14.5%
Finland	5,231,372	9.04	9.44	8.51	8.51	8.51	-5.9%
Czech Republic	10,235,455	8.01	8.01	8.01	8.01	8.01	-
South Africa	44,187,637	7.94	7.81	7.81	7.84	7.94	-
Estonia	1,324,333	7.70	7.70	7.70	7.70	7.70	-
Russia	142,893,540	7.11	7.35	7.38	7.42	7.45	+4.8%
Georgia	4,661,473	2.81	5.38	5.58	5.68	5.79	+106.1%

UAE	2,602,713	2.56	2.98	3.50	3.97	5.79	+126.1%
Latvia	2,274,735	5.71	5.71	5.71	5.71	5.71	-
Lithuania	3,585,906	5.38	5.38	5.38	5.38	5.38	-
Belarus	10,293,011	4.78	5.28	5.34	5.34	5.34	+11.8%
Albania	3,581,655	5.08	5.08	5.08	5.08	5.08	-
Gabon	1,424,906	4.99	4.28	5.23	6.27	5.08	+1.7%
Turkmenistan	5,042,920	4.90	4.90	4.90	4.90	4.90	-
Angola	12,127,071	4.78	4.78	4.83	4.71	4.66	-2.4%
Paraguay	6,506,464	3.89	4.50	4.46	4.46	4.46	+14.6%
Hong Kong	6,940,432	1.59	1.81	2.08	2.50	3.76	+136.3%
Ukraine	46,710,816	3.85	3.75	3.66	3.64	3.64	-5.6%
Lebanon	3,874,050	3.48	3.48	3.48	3.48	3.48	-
Moldova	4,466,706	4.72	2.24	3.36	3.36	3.36	-28.9%
Guinea Bissau	1,442,029	2.42	2.87	2.10	3.03	2.93	+21.2%
Singapore	4,492,150	2.20	2.13	2.91	2.93	2.84	+28.7%
Armenia	2,976,372	2.59	2.69	2.69	2.69	2.69	+3.9%
Bosnia	4,498,976	2.24	2.24	2.24	2.24	2.24	-
Tunisia	10,175,014	2.11	2.06	2.06	2.06	2.06	-2.3%
Mongolia	2,832,224	0.46	0.48	0.38	0.44	0.64	+39.8%
Turkey	70,413,958	0.27	0.38	0.38	0.38	0.38	+40.3%
India	1,095,351,995	0.00	0.01	0.01	0.01	0.01	+98%

Source: TradeMAP

The countries listed above are those with more than a population of 1 million and who drink more than 2 litres of wine per capita per year (except those that have shown growth of more than 25 percent and could be of interest to Georgia). By looking at the data on production, consumption, and vineyard growth, and by considering geographical location, promising countries which could become the focus for wine exports can be grouped as follows:

1) Europe – heavy consumption – France, Italy, Germany, Spain, UK
2) Europe – growing consumption – Slovenia, Ireland, Hungary, Belarus, Norway, Netherlands, Greece, Belgium, Sweden, Turkey
3) Asian Destinations – growing consumption – South Korea, Hong Kong, Mongolia, Singapore
4) Other Destinations – heavy consumption – USA, China, Argentina
5) Other Destinations – growing consumption – New Zealand, Canada, Brazil, Australia, UAE, India

Key points:

- Wine buffs are no longer just looking for particular types of wine. They look for particular types of wine from a particular place. So instead of wanting a Chardonnay, they may want a South African Chardonnay – wines that display a particular taste because of their location, soil type, climate, etc.
- There is a growing interest in local wines, whether at home or on holiday. Local wines can be considered to be „eco-friendly' and add to the local dining

experience. Research reports wine drinkers consider wines taste better when they are drunk locally.

- Historical food and wine pairing rules (red with steak and white with fish) are beginning to be broken. There is apparently no longer any reason to remain bound by archaic rules. Generally, a well-balanced dish will sing with a well-balanced wine.
- Wine drinkers are moving away from adulterated wine – those that are over-oaked, acidulated, centrifuged or otherwise tortured. Basic wine making principles are back in force, so that the wine clearly exhibits the varietal or characteristics of the terroir. In other words, a Georgian wine should taste like a Georgian wine and not pretend to be something else.
- Defective wines are becoming more noticeable as people become more „wine savvy'; they can no longer be sold or served to the majority of wine drinkers.
- Wine drinkers are no longer just seeking expensive wines. There is so much high quality wine being produced in every corner of the world that there is no need to order or serve an extremely expensive wine.
- Because good wine is becoming more affordable and available, it is no longer considered to be a luxury.
- Wines from non-traditional locations are beginning to be considered as competition to traditional counterparts in terms of quality.

Table 7: Production of Grapes by Regions (1,000 MT)

Region	2006	2007	2008	2009	% by Location
Kakhety	80.2	118.6	100	82.7	55.1%
Imereti	36.3	54.5	43.7	30.3	20.2%
Other Regions	35.1	38.2	24	20.7	13.8%
Shida Kartly	10.9	16	8.1	16.4	10.9%
Total	**162.5**	**227.3**	**175.8**	**150.1**	

Source: Geostat

Table 8: Wine Production (1,000 liters)

	2006	2007	2008	2009
Total Georgia	40	62	37	32

Source: Geostat

Table 9: Area of Vineyards by Varieties (1,000 HA)

Name	2004	2008	Growth 2004-2008 %	% of total
Rqatsiteli	19.5	23.1	3.6	48.0%
Saperavi	3.7	9.9	6.2	20.6%
Tsolikauri	6.2	6.2	**0**	12.9%
Other	4.4	4.4	0	9.1%
Tsitska	2.8	2.8	0	5.8%
Mtsvane	0.5	1	0.5	2.1%
Alexandrouli	0.2	0.2	0	0.4%
Tetra	0.1	0.2	0.1	0.4%
Cabernet	0.2	0.2	0	0.4%
Mujuretuli	0.06	0.1	0.04	0.2%
Total	**37.66**	**48.1**	**10.4**	100.0%

Source: Geostat

Table 10: Export/Import Data in year 2008-2009

Commodity	2008				2009			
	Export		Import		Export		Import	
	1000 Lt	$1,000	1000 Lt	$1,000	1000 Lt	$1,000	1000 Lt	$1,000
Wine from fresh grapes	10636	36863	126	394	9552	31997	57	256
Vermouth and other wine from fresh grapes	664	3376	58	257	460	2144	29	129

Source: Geostat

Table 11: Georgian Winery List

#	Name	Address	Contact person	Telephone
	Kakheti Region - Gurdjaani District			
1	LLC "Gurdjaani Wine Cellar"	Gurdjaani, st.Saradjishvili 55	Zaza Shatirishvili	899 141881
2	LLC "Khareba Winery"	Gurdjaani (vill Vachnadziani) & Terdjola	Sasha Kharebava	899 565702
3	LLC "Sakartvelo"	Vill Velistsikhe and vill Akura	Boris Gogichaishvili	899 231515
4	LLC "Georgian Wine House"	Gurdjaani, vill Vachnadziani	Zaza Kikabidze	899 153077
5	LLC "Aliansi"	Gurdjaani, vill Vachnadziani	Zaza Kikabidze	899 153077
6	JSC "Vachnadziani" ("Khareba")	Gurdjaani, vill Vachnadziani	Emzar Nozadze	899 365702
7	LLC "Shato"	Gurdjaani, vill Zegaani	Bitar Bitskinashvili	899 104749
8	LLC "Rtveli 2008"	Gurdjaani	Merabi	899 180003
9	LLC "Askaneli Brothers"	Gurdjaani, st.Koroglishvili 38 (kotekhi)	Irakli Bekauri	899 946404

Source: Georgian Winery Association

#	Name	Address	Contact person	Telephone
	Kakheti Region - Telavi District			
10	JSC "Shumi"	Telavi, vill Tsinandali, st. Leonidze 33	Gjumber Batiashvili	899 585433
11	LLC "Tiki"	Telavi	Davit Dolmazashvili	899 567278
12	LLC "Winemen"	Telavi, st. Gelovani 2 ("Tsinandlis marani)	Konstantin Gagua	899 254959
13	JSC "Georgian Wine Corporation"	Telavi, vill Tsinandali	Misha Khundadze	899 580007
14	JSC "Okami"	Telavi (vill Saniore")	Lado Shatirishvili	877 100200
15	JSC "Telavi Wine Cellar"	Telavi, vill Kurdgelauri	Zurab Ramazashvili	877 410020
16	LLC "Tsinandli Wine Cellar"	Telavi, vill Tsinandali	Simon Chichiashvili	899 549393
17	LLC "Vazi +"	Telavi, vill Artana	Bachana Khalvashi	899 519656
18	LLC GWS	Telavi, vill Achinebuli	Gogita Bregvadze	877 221000
19	JSC "Teliani Valley"	Telavi	Misha Tskhvediani	877 982020
	Kakheti Region - Kvareli District			
20	LLC "Kindzmarauli - XXI"	Kvareli, vill Shilda	Paata Archvadze	899 505482
21	LLC "Guguli"	Kvareli, vill Akhalsofeli	Bidzina Djavelidze	899 502403
22	LLC "Georgian Wines"	Kvareli	Mamuka Gvalia	899 910864
23	JSC "Tbilgvino"	Kvareli, vill Shilda	Zurab Margvelashvili	899 565929
24	JSC Corporation "Kindzmarauli"	Kvareli, st. Chavchavadze 55	Kakhaber Konchoshvili	877 551054
25	JSC "Sarajishvili"	Kvareli, vill Eniseli	Dato Abzianidze	899 202029
	Kakheti Region - Lagodekhi District			
26	LLC "Baisubani's Wine Factory"	Lagodekhi, vill Baisubani	Ziuli Robitashvili	899 505139
	Kakheti Region - Akhmeta District			
27	LLC "Palavani"	Akhmeta	Anzor Kibrocashvili	899 506363
28	LLC "Badagoni"	Akhmeta, vill Zemo Khodasheni	Paata Darcmelia	877 997997
	Kakheti Region - Sagaredjo District			
29	JSC "Manavi"	Sagaredjo, vill Manavi	Guram Bibiluri	899 506516
30	LLC "Napareuli - XXI"	Telavi, vill Napareuli, Badiauri (Sagaredjo)	Sasha Iakubov	877 410226
31	LLC "Dugladze's Wine Company"	Telavi an Sagaredjo, vill Khashmi	Zaza Dugladze	899 982222
	Kakheti Region - Signagi District			
32	LLC "Traditional Kakhetian Winemaking"	Kvareli, st. Konstituciis 18	Zurab Chkhaidze	899 515533
	Tbilisi			
33	LLC "Tiflisski Winni Pogreb"	Tsageri, vill Tvishi (Tbilisi, Lilo, st. Iumashev 27)	Zurab Zarnadze	899 530380
34	LLC "Tbilisi Wine Cellar"	Tbilisi, Lilo, st. Iumashev 27	Davit Akhvlediani	899 569238
	Racha - Lechkhumi Region			
35	LLC "Racha Wine"	Ambrolauri, vill Chrebalo	Omar Chelidze	899 552233
36	LLC "Khvanchkara"	Ambrolauri, vill Bugeuli	Ramaz Bluashvili	899 506014

Source: Georgian Wine Association

Table 12: 2008-2009 Wine Exports by Appellation of Origin

#	Type & Origin		2008	2009	Balance	% of Production
	Wine	Type	0.75 L Bottles	0.75 L Bottles		
1	Kindznmarauli	Red Semi/Dry	1,428,988	1,196,795	-232,193	37.0%
2	Tsinandali	White/Dry	880,596	622,994	-257,602	19.2%
3	Kvanchkara	Red Semi/Dry	727,012	541,388	-185,624	16.7%
4	Mukuzani	Red/Dry	568,128	382,047	-186,081	11.8%
5	Akhasheni	Red/Dry	331,569	200,864	-130,705	6.2%
6	Tvishi	White Semi/Dry	153,815	95,890	-57,925	3.0%
7	Vazisubani	White/Dry	98,651	68,484	-30,167	2.1%
8	Naphareuli	White/Dry	93,150	65,426	-27,724	2.0%
9	Gurjaani	White/Dry	40,362	12,522	-27,840	0.4%
10	Manavi	White/Dry	16,450	23,056	6,606	0.7%
11	Kakheti	White/Dry	10,464	21,430	10,966	0.7%
12	Teliani	Red/Dry	21,612	4,518	-17,094	0.1%
13	Kvareli	Red/Dry	6,040	3,252	-2,788	0.1%
14	Kardenakhi	White/Dry				
15	Tibaani	White/Dry				
16	Sviri	White/Dry				
17	Kotekhi	Red Semi/Dry				
18	Atenuri	Red Semi/Dry				
	Total		4,376,837	3,238,666	-1,138,171	

Source: State Department “Samtrest”

Table 13: Georgian Wine Exports (2008-2009) by Countries of Import, # of 0.75 Bottles

#	Country	2008 Wine	2009 Wine	Year-on-Year Change	% Change	% of Exports
1	Ukraine	6,747,668	4,573,461	-2,174,207	-48%	41.7%
2	Kazakhstan	1,017,070	1,593,820	576,750	36%	14.5%
3	Byelorussia	908,731	1,201,305	292,574	24%	11.0%
4	Poland	665,024	692,136	27,112	4%	6.3%
5	Lithuania	249,216	453,546	204,330	45%	4.1%
6	USA	542,346	407,296	-135,050	-33%	3.7%
7	Latvia	869,909	355,397	-514,512	-145%	3.2%
8	Azerbaijan	86,300	327,601	241,301	74%	3.0%
9	Estonia	314,955	278,454	-36,501	-13%	2.5%
10	Germany	146,740	183,520	36,780	20%	1.7%
11	China	27,214	175,556	148,342	84%	1.6%
12	Israel	156,651	126,622	-30,029	-24%	1.2%
13	Canada	32,480	62,184	29,704	48%	0.6%
14	Turkey	28,488	60,348	31,860	53%	0.6%
15	Kyrgyzstan	35,400	55,162	19,762	36%	0.5%
16	Japan	37,027	53,674	16,647	31%	0.5%
17	Sweden	14,604	44,659	30,055	67%	0.4%
18	Slovenia		30,672	30,672	100%	0.3%
19	Finland	11,022	28,194	17,172	61%	0.3%
20	Hong-Kong	96	27,774	27,678	100%	0.3%
21	Armenia	20,376	24,744	4,368	18%	0.2%
22	Ireland	17,128	24,426	7,298	30%	0.2%
23	Korea	50,756	23,200	-27,556	-119%	0.2%
24	Singapore	38	21,004	20,966	100%	0.2%
25	England	34,460	20,918	-13,542	-65%	0.2%
26	Tajikistan	6,132	19,740	13,608	69%	0.2%
27	Czech Republic	51,458	19,300	-32,158	-167%	0.2%
28	Italy	17,806	19,190	1,384	7%	0.2%
29	UAE	8,004	17,028	9,024	53%	0.2%
30	Netherlands	7,920	12,330	4,410	36%	0.1%
31	Cyprus	14,000	12,006	-1,994	-17%	0.1%
32	Uzbekistan		11,658	11,658	100%	0.1%
33	India		2,418	2,418	100%	
34	Taiwan		2,208	2,208	100%	
35	Bulgaria	2,220	1,920	-300	-16%	
36	Switzerland	2,400	1,440	-960	-67%	
37	Luxemburg		1,200	1,200	100%	
38	France	34,272	858	-33,414		
39	Denmark		720	720	100%	
40	Spain		207	207	100%	
41	Belgium	8,202	134	-8,068		
42	Panama		96	96	100%	
43	Indonesia		12	12	100%	
44	Mongolia		12	12	100%	
45	Nigeria		11	11	100%	
46	Cambodia	12,180		-12,180		

47	Slovakia	7,848		-7,848		
48	Ivory Coast	3,580		-3,580		
49	Greece	1,440		-1,440		
50	Airport	1,284		-1,284		
51	Turkmenistan	30		-30		
	Total	12,192,475	10,968,161	-1,224,314		

Source: Geostat

Table 14: Georgian Wine Exports (2008-2009) by Companies, # of 0.75 Bottles

#	Company	2008 Wine	2009 Wine	Y-on-Y Change	% of 2009 Exports
1	JSC Tbilvino	1,080,270	1,287,955	207,685	11.7%
2	JSC Telavi Wine Cellar	1,422,136	1,166,735	-255,401	10.6%
3	LLC Tbilisski Vinni Pogeb	1,092,492	1,070,368	-22,124	9.8%
4	LLC GWS	1,322,480	1,037,988	-284,492	9.5%
5	JSC Teliani Valey	792,088	809,218	17,130	7.4%
6	LLC Winmen	489,624	641,128	151,504	5.8%
7	LLC Badagoni	215,072	491,748	276,676	4.5%
8	LLC Alaverdi	634,130	347,851	-286,279	3.2%
9	JSC Bagrationi 1882	299,047	275,637	-23,410	2.5%
10	LLC Georgian Wine House	295,002	259,696	-35,306	2.4%
11	JSC Vaziani	625,557	226,762	-398,795	2.1%
12	LLC Kakheti K	165,000	225,900	60,900	2.1%
13	LLC Kindzmarauli	312,774	225,072	-87,702	2.1%
14	JSC Corporation Kindzmarauli	231,454	222,480	-8,974	2.0%
15	LLC Askaneli Brothers	217,248	210,658	-6,590	1.9%
16	LLC Kindzmarauli Cellar	48,288	191,944	143,656	1.8%
17	LLC Georgian Wine Corporation	307,638	169,357	-138,281	1.5%
18	LLC Georgian Wines	156,138	160,524	4,386	1.5%
19	LLC Dugladze Wines Company	393,146	150,552	-242,594	1.4%
20	LLC Vazi+	275,439	134,205	-141,234	1.2%
21	Kakhetian Traditional Wine Making	126,795	130,133	3,338	1.2%
22	HELIOSI+	60,300	129,000	68,700	1.2%
23	Vachnadzianis Cellar		123,960	123,960	1.1%
24	LLC Tsinandali Old Cellar	180,674	122,874	-57,800	1.1%
25	BATONO	7,848	100,334	92,486	0.9%
26	LLC Tiflisis Cellar	41,400	98,940	57,540	0.9%
27	LLC Shumi Wine Company	288,424	84,600	-203,824	0.8%
28	LLC Kakhuri	39,776	72,302	32,526	0.7%
29	LLC Palavani	105,000	69,336	-35,664	0.6%
30	Leo	45,000	60,984	15,984	0.6%
31	Goreli		58,482	58,482	0.5%
32	Kindzmarauli	26,568	57,406	30,838	0.5%
33	LLC Georgia	28,800	56,286	27,486	0.5%
34	Kakheti Wine House	89,000	52,982	-36,018	0.5%
35	Aleqsandrouli		46,520	46,520	0.4%
36	Vinotera	7,935	40,794	32,859	0.4%
37	JSC Okami	27,528	34,560	7,032	0.3%
38	LLC Manavi Wine Cellar	15,480	34,560	19,080	0.3%

39	LLC Aragvi	82,605	30,000	-52,605	0.3%
40	Aguna		29,646	29,646	0.3%
41	LLC Racha Wines	45,296	24,372	-20,924	0.2%
42	LLC Georgian Wine House in Racha	13,440	24,360	10,920	0.2%
43	Shuhman Wines Georgia		21,000	21,000	0.2%
44	LLC Aieti Georgia		19,524	19,524	0.2%
45	LLC Tbilvazi	18,720	18,048	-672	0.2%
46	Besini		16,563	16,563	0.2%
47	Zvari 21		15,360	15,360	0.1%
48	Kartuli Nadimi		15,000	15,000	0.1%
49	Konch and Company	21,300	13,320	-7,980	0.1%
50	Eniseli Bagrationi		12,846	12,846	0.1%
51	LLC Georgian Wine Empier	122,720	8,640	-114,080	0.1%
52	LLC Gurjaani Wine Cellar	52,800	8,400	-44,400	0.1%
53	Phazan Tears		8,000	8,000	0.1%
54	G. W. House		6,000	6,000	0.1%
55	Shato Mukhrani		4,093	4,093	0.0%
56	I/E David Kapanadze	2,508	2,262	-246	0.0%
57	Georgian Legend		2,000	2,000	0.0%
58	Georgian Trimple		1,700	1,700	0.0%
59	I/E Givi Nikolaishvili		1,454	1,454	0.0%
60	LLC Management and Capital		1,248	1,248	0.0%
61	Old seller		1,200	1,200	0.0%
62	I/E Iago Batirashvili		900	900	0.0%
63	I/E Georgian Bio Wine	1,000	804	-196	0.0%
64	Golden Kvanchkara		756	756	0.0%
65	Napareuli old Cellar		500	500	0.0%
66	Ministry of Culture		204	204	0.0%
67	Elkana		118	118	0.0%
68	Baraka		12	12	0.0%
69	Tiki	86,848		-86,848	0.0%
70	Akhasheni-1	80,304		-80,304	0.0%
71	Tempi +	48,720		-48,720	0.0%
72	Georgian Wine Production Company	42,000		-42,000	0.0%
73	GRC	29,856		-29,856	0.0%
74	Chandrebi	28,800		-28,800	0.0%
75	Qeburia winery	11,616		-11,616	0.0%
76	Gergian wine Company	10,800		-10,800	0.0%
77	Kvareli Cellar	8,000		-8,000	0.0%
78	Tsinandali 21 Best wines	7,800		-7,800	0.0%
79	Geomaster	6,628		-6,628	0.0%
80	Samgori alco	4,200		-4,200	0.0%
81	Libery	720		-720	0.0%
82	RM-WINE	171		-171	0.0%
83	Manavi	48		-48	0.0%
84	Mukhrani valley	12		-12	0.0%
85	GWG	12		-12	0.0%
	Total	12,113,668	10,968,161	-1,224,314	100.0%

Source: State Department “Samtrest”

Interviews Conducted

Name	Position	Company
Aleksandre Kharebava	Director	Kindzmarauli - Khareba
Burke McCormack	Investor	Kindzmauruli Winery
Ana Patarashvili	Manager	Schuchmann Wineries
Mikheil Giorgadze	Owner	Gurdjaani wine museum
Tina Kezeli	Executive Director	Georgian Wine Association
Rostom Bakradze	Division Head	Samtrest

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SECTOR ASSESSMENTS – NON-AGRICULTURE

Georgia's non-agricultural sectors include a large number of economic activities that provide products and services for the domestic market and for export. EPI has quickly identified and described Georgia's economic sectors in terms of their status, structure and market potential, in order to narrow the value chain selection process and focus on high-potential value chains for which EPI can make a strong impact in support of their competitiveness growth.

Several „non-agricultural' sectors are cross-cutting in nature, playing integral roles in agricultural as well as other non-agricultural value chains. Examples include transportation and logistics, ICT, and packaging. The sector reports for these cross-cutting sectors are presented in the next part of this Annex.

EPI has examined the following non-agricultural sectors (in alphabetical order). For some (marked with *), the project will continue to collect information during and/or beyond the value chain selection phase.

Apparel
Automotive, Marine, Railway & Aircraft*
Construction Materials*
Consumer Electronics*
Educational tourism
Exportable Professional Services/Outsourcing*
Film and TV
Home furnishings*
ICT – cross-cutting
Timber and logging
Transport and Logistics – *cross-cutting*
Packaging (plastic, paper, glass) – *cross-cutting*
Pharmaceuticals and Medical Devices
Renewable Energy
Tourism

Of these sectors, the following have been identified for deeper value chain assessment:

Apparel
- Additional investment in Adjara

Construction materials
- Perlite, basalt, wood products, clay products

Tourism
- Wine Tourism in the Kakheti Region (including gastronomy, culture, rural)
- MICE Tourism in Adjara
- Mountain / Active Pursuits
- Education tourism: University education for foreign students
- Medical tourism

Transport and Logistics

- Road, rail, sea, and air – Georgia as a regional hub
- Air transport (cargo & passenger)
- Road Transportation to rural areas
- Cold Storage/Warehousing

ICT

- No specific value chain identified through initial assessment phase. Further research to be conducted.

Packaging

- Cardboard and Industrial Paper

The brief summaries below of the priority non-agricultural sectors are followed by more detailed sections on each of the sectors that the team considered. The cross-cutting sectors follow the non-agricultural sector discussions.

NON-AGRICULTURAL SECTORS

APPAREL

The value of global apparel exports is approximately USD 315 billion.[1] Countries such as China, India, and Sri Lanka have significantly increased exports since the expiration of the apparel quota regime in 2005. However, higher cost producers such as Turkey, Mauritius, Tunisia, and Morocco have also grown by focusing on customer service and fast response times.

In 2009, 4,116 people were employed in the sector in Georgia[2]; eighty-five percent of employees were women (3,488)[3]. 269 registered businesses are currently involved in the manufacturing of textile and apparel products.[4] These businesses range from one or two employees working from home, to large-scale Turkish-owned apparel factories in Adjara. A new, Georgian-owned factory is getting started (operations not yet commenced) in Lilo, emphasizing branded apparel for the EU market.

The main near-term opportunity for Georgia in the apparel industry is to increase outsourced production in Georgia for and/or by Turkish firms. Since 2004, four Turkish owned and operated firms have moved their cutting and sewing operations to Georgia: the four companies ship the majority of the 19 million dollars' worth of exports of apparel from Georgia. Georgia's location is an advantage because of its proximity to the EU and Turkey.

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[1] World Trade Organization statistics
[2] Geostat Data
[3] *Ibid*
[4] *Ibid*

The cost economics of Georgian production appear to be very positive for Turkish producers, especially in terms of labor and power costs, which are lower than in Turkey. There is, however, a shortage of skilled Georgian personnel; if that constraint can be overcome, it should be possible for Georgia to attract substantially more investment from Turkey in the future. A 40-fold increase in Turkish investment in Georgia's apparel production would still only account for five percent of all Turkish production.

While import substitution and exports to the region are an option, opportunities are limited because these markets are flooded with cheap imports, and they are small markets. Another goal for this sector would be to support Georgian investment and entrepreneurship in this sector. Georgian investors can of course also invest in outsourced production for Turkey, or, as with the Lilo investment, develop their own direct export clients. With sufficient Georgian-based production, it may also be possible to develop Georgian inputs to production.

CONSTRUCTION MATERIALS

The construction materials sector provides inputs to developing buildings and infrastructure, facilities on which all sectors of the economy depend. Any growing economy needs to source construction materials, either domestically or internationally. Some economies are also able to export such materials.

The global construction materials market grew by 1.8 percent in 2009 to reach a value of USD 539.3 billion. The global construction materials market is forecast to have a value of USD 823.3 billion in 2014; an increase of 52.7 percent from 2009. Imports of construction materials and equipment into Georgia, Armenia, and Azerbaijan are growing rapidly and totalled more than USD 5 billion in 2008. Despite the global slowdown, the construction sectors in Georgia, Azerbaijan and Armenia are likely to remain relatively robust.

It may be commercially viable to manufacture several bulk or low value added materials or products (e.g. aggregates, metal/wood/plastic components, stone, ceramic products) in the region instead of importing them, avoiding the high transport costs. Georgia has deposits of some important raw materials that are important construction materials inputs. It has the locational advantages and strong business environment to think realistically about opportunities to serve the region in terms of some construction materials. Growth in this sector will have a significant impact on employment levels.[5]

There are potential opportunities in this sector for project intervention, which will be further considered during the value chain assessment phase. One is helping to attract more foreign investment to various activities in this sector. Another opportunity is to work with actors in the industry to set standards for products and for

[5] "Georgia Sector Competitiveness Overview". IFC

buildings. Currently there are limited standards that are not well-enforced, which encourages cheap imports of substandard materials from low-cost countries such as China. Improved standards might encourage increased value added investment in construction materials in Georgia. A third opportunity may be to develop resources like basalt and perlite for export.

EPI will continue to assess and collect information on this sector, including basalt, ceramic tile manufacturing and other materials. In the next phase, the value chain assessment activity, EPI will use the data to be collected to more fully evaluate the potential value chains.

TOURISM

The global tourism industry is one of the world's largest and most competitive service industries. It represents approximately 35 percent of the world's exports in services and at least 70 percent of exports in the least developed countries. It generates nine percent of the global GDP and eight percent of world employment, in other words, roughly 235 million jobs. Worldwide tourism is expected to grow between five to six percent in 2010 while the tourism industries of emerging economies are increasing faster than the world average, at a rate of eight percent. For those countries that make a serious commitment to tourism, the rewards can be significant. Countries of a similar size to Georgia, such as Ireland and the Czech Republic, receive 9.9 million and 6.4 million visitors per year respectively.

In Georgia, tourism has accounted for approximately four percent of the GDP since 2006. Georgia receives international, regional (from the Caucuses and Turkey), and domestic tourists. The tourism sector grew by about USD 100 million between 2006 and 2008, and in 2008, the tourism sector reached USD 402 million. These numbers suggest that Georgia's tourism sector has a strong potential for market growth. The Georgian National Tourism Agency announced that during the first eight months of 2010 there were 1.5 million incoming tourists, a number that is 38 percent higher than during the same period in 2009.[6]

Georgia possesses many resources, products and traditions that would be of interest to international, regional, and domestic tourists. The country offers a variety of climates and topography, nature and wilderness, beaches, unique culture and traditions, historical sites, interesting food and drink, and many other attractions. The sector incorporates and impacts many SMEs, and in turn is linked to many other sectors, e.g. agriculture (including wine), possibly education and medical services, and entertainment. Reflecting the structure of the global market within tourism, it will be crucial to target competitiveness improvements in specific value chains within the tourism sectors – e.g. wine/gourmet/cultural/rural tourism, education and medical

[6] Koka Kalandadze "Putting Georgia on the World Map – Georgia striving to become international tourism destination." *Financial* 22 November 2010. p.2

tourism, MICE (meetings, incentives, conferences and exhibitions), and mountain/active pursuits.

Apparel – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Apparel						

Criteria	Apparel
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	2
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	5
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (10)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	4
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	2
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (7)
Lack of Domestic and/or International Competition	3
Transportation & Logistics	4
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total:	**39**

Indicator	Apparel
Industry Size	269 companies, many of these may be small or inactive Four large apparel companies: 300 – 800 employees. They employ between 1,200 and 2,400 employees in Adjara.
Export Performance	Approximately 800,000 pieces of apparel produced by the four factories in Adjara per month. In 2009, Georgia exported USD 19 million[7] Major markets: Turkey and the EU
Workforce	Sewing and cutting skills needed
Academia & R&D	Employers provide trainings
Associations	N/A
Foreign Investment	Four Turkish companies that have invested approximately USD 2-4 million each
Domestic Investment	Lilo factory, approximately USD 3 million is a recent, substantial investment
Major Competitors	Turkey, Morocco, and other fast apparel producing countries that have the capacity to respond quickly to design changes and orders

Overview

Apparel production for export is a sector with a large potential for growth.

Global exports of apparel are approximately USD 315 billion.[8] Countries such as China, India, and Sri Lanka have significantly increased exports since the expiration of the apparel quota regime in 2005. However, higher cost producers such as Turkey, Mauritius, Tunisia, and Morocco have grown by focusing on customer service and fast response times. Furthermore, while Georgia is still improving its efficiency, it is currently producing apparel for brands such as Marks and Spencer and Puma.

In 2009, 4,116 people were employed in the sector[9], while eighty-five percent of employees were women (3,488).[10] 269 registered businesses are currently involved in the manufacturing of textile and apparel products.[11] These businesses range from one or two employees working from home, to large-scale Turkish-owned apparel factories in Adjara. A new, Georgian-owned factory is getting started (operations not yet commenced) in Lilo, emphasizing branded apparel for the EU market.

Since 2004, four Turkish owned and operated firms have moved their cutting and sewing operations to Georgia. The four Turkish owned apparel companies are BTM,

[7] UN Comtrade

[8] World Trade Organization statistics

[9] Geostat Data

[10] *Ibid*

[11] *Ibid*

Adjara Textile, Batumi Textile, and Georgian Textile. These four companies ship the majority, if not all, of the 19 million dollars' worth of exports of apparel from Georgia. This has been confirmed by interviews with the four apparel companies and by interviews with domestic apparel producers. In the next few years, an increasing number of Turkish apparel companies may be encouraged to move their cutting and sewing factories to Georgia. Georgia has the potential to be competitive in this sector primarily because of cheaper labor costs. The average wage in Georgia is approximately GEL 300 compared to GEL 600 to 700 in Turkey. (Further details on comparative costs will be obtained during the value chain assessment phase.)

Georgia's location is an advantage because of its proximity to the EU and Turkey: Georgia has good sea connections to the EU market, both directly and via Turkey. Three of the four existing Turkish owned companies in Georgia send their finished products back to Turkey to be re-exported (with Georgian labels). These companies prefer to ship directly from Turkey because they are headquartered in Turkey; they aggregate the Turkish- and Georgian-produced apparel at their headquarters, sometimes adding finishing touches, and then ship in bulk directly from Turkey. Furthermore, Turkey also has preferential access to the EU. The apparel is transported across the Turkish border by truck and then it is shipped by vessel to the EU.

The majority of the USD 19 million of apparel exports is exported to Turkey. While exact figures were not available, the only portion of the USD 19 million of exports that is not exported to Turkey is the exports of the fourth apparel company, which ships its goods directly from Georgia to the EU. Transportation costs and times to the EU are comparable to Turkey and Morocco, and more favorable than low-cost Asian and African producers.

While import substitution and exports to the region are an option, opportunities are limited because these markets are flooded with cheap imports, and they are small markets. However, excess inventory from the major producers could be sold domestically or regionally at cheap prices. BTM plans to open a line for local production as well as local shops in Tbilisi and Kobuleti.

Georgia's immediate goals in this sector could well be to increase the amount of Turkish production transferred to Georgian production. In 2009, Turkey exported approximately USD 11 billion of apparel products.[12] Current Georgian production represents less than one percent of the total Turkish production value.[13] An increase to even five percent of Turkish production would mean an increase in the number of apparel companies in Georgia from four to twenty or more factories.

Another goal for this sector would be to support Georgian investment and entrepreneurship in this sector. Georgian investors can of course also invest in

[12] UN Comtrade
[13] Geostat

outsourced production for Turkey, or, as with the Lilo investment, develop their own direct export clients. With sufficient Georgian-based production, it may also be possible to develop Georgian inputs to the production.

Market Growth – High

This sector has emerged quite suddenly since 2004. Four Turkish investors have entered the Georgian market over the past six years, and these four companies cumulatively produce approximately 800,000 pieces per month.[14] (Data is not available for the value in dollars.) From interviews with each of these businesses and with Turkish investors, it is expected that this trend may continue for as long as labor costs are lower than they are in Turkey. Each of the four existing Turkish apparel manufacturers in Georgia reported that labor costs are 50 percent of the labor costs in Turkey.[15] Demirhan Lotoz, the Chairman of the Board of the Georgian-Turkish Businessmen Association, believes that this market will boom in the near future and that Turkish investors will mainly fill any available gaps. This is an opportunity for Georgia to increase its apparel sector because Turkish apparel firms, (who have already established working relationships and trust with major EU buyers) are facing rising costs and labor shortages at home. They are therefore currently looking for new locations. Turkey is one of the world's leading apparel producing countries.

Table 1: Top Apparel Producing Countries Value in Millions

	1990	2000	2007	2008	2009
World	108129	197570	347059	364914	315622
Bangladesh	643	5,067	8,855	10,920	10,726
China	9,669	36,071	115,516	120,399	107,261
European Union (27)	-	56,240	105,375	114,314	96,797
intra-EU (27) exports	-	43,286	80,579	86,573	75,115
Hong Kong, China	15,406	24,214	28,765	27,908	22,826
domestic exports	9,266	9,935	4,985	2,867	578
re-exports	6,140	14,279	23,780	25,041	22,248
India	2,530	5,960	9,932	11,495	11,454
Turkey	3,331	6,533	13,886	13,590	11,555
Vietnam	...	1,821	7,400	8,724	8,629

Source: UN Comtrade

The Georgian domestic market includes a number of small Georgian apparel production companies, and a recently opened factory in Lilo. The factory in Lilo is a Georgian investment of approximately USD 3 million. This factory will produce its own brand for sale in Georgia as well as for export and is employing Italian designers. The small companies are contracted by the Government and produce army uniforms, traditional uniforms for dance troops, and other Government apparel.

[14] Based on interviews with the four main apparel companies
[15] *Ibid*

There is also a small but thriving fashion industry, and a number of entrepreneurial fashion designers in Georgia; there is an annual Georgia and Tbilisi fashion show.

Resources/Inputs - Limited

Low cost labor and high labor availability are two key resources for Georgia. Georgia's good transport links with Turkey and the EU are also crucial.

Georgia does not have import tariffs on machinery and equipment.

There is a lack of inputs such as buttons, thread and fabric, and these items are largely imported.

Skills & Capacities – Substantial

Georgia has an educated, underemployed, workforce with some experience in the apparel industry.

At the management and owner level, success in production for export requires skills to manage and deliver a quality product with fast-response times, or with strong branding, and a good understanding of the buyers that serve the EU markets. These skills are not common in Georgia, and typically take years to develop. In the meantime, the Turkish firms provide these skills, and an opportunity for Georgians to develop the skills.[16] Joint ventures or other forms of partnerships would provide other mechanisms to bridge this skills gap. In the case of the Lilo investment, the investor had prior experience in the apparel industry, has a French partner, and is accessing Italian designers.

Some of the other skills important to this sector are cutting and sewing (knowledge of machinery), accounting, and management. At the professional level, mechanics are needed for the sewing and cutting machines, and designers and fabric specialists are needed. The major investors are already concerned about the limited availability of skills; here may be opportunity to assist the investors and the communities to establish training programs to ensure the availability of a growing resource of trained personnel.

Market Constraints – Few Constraints for Turkish Investors but is Highly Constrained for Georgian Investors.

Turkish investors face few constraints in the Georgian market. The companies headquartered in Turkey have already established relationships with buyers and have a substantial knowledge of the apparel sector since they have been involved in the trade for many years.

[16] Inteview with Simon Bell

Those companies that are headquartered in Turkey do not need to seek Generalized System of Preferences (GSP) Plus access, since they send their shipments directly from Turkey. GSP is a "trade arrangement through which the EU provides preferential access to the EU market to 176 developing countries and territories, in the form of reduced tariffs for their goods when entering the EU market".[17] Between 2009 and 2011, 16 beneficiary countries have qualified to receive the additional preferences offered under the GSP+ incentive arrangement.[18] "Any GSP+ beneficiary country must be considered „vulnerable' in terms of its size or the limited diversification in its exports."[19]

One challenge for Georgian companies that want to export directly to the EU is that the local Adjara administration (if they want to ship from Adjara) is not familiar with GSP+ certification and is unable to provide the companies with the certification. (The assessment team needs to examine this issue further with the Adjaran authorities and the investors.) Also, the GSP+ access is not guaranteed after 2011. Georgia has GSP+ access until 2011 with the possibility of being granted an extension.

A constraint to Georgian investment in direct exports to the EU is a lack of knowledge of the international market and value chains.

In the longer term, Georgia may be able to move up the value chain and develop local design and technical skills as well as a local supply base.

The uncertainty of GSP+ access is more of a handicap for those companies that want to export directly to the EU than for Turkish companies that will export their goods through Turkey. Three of the four Turkish apparel companies do not regard GSP+ access as a crucial factor because they are not currently using GSP+: when apparel is exported from Turkey with a Georgian label, they are instead taking advantage of Turkey's free trade agreement with the EU.

SME Linkages – Modest

Currently, the apparel sector in Georgia offers modest opportunities for SME linkages, and there are relatively few small and medium sized businesses producing fabric inputs or packaging inputs. However, if apparel production grows, there will be a growing demand for inputs and a number of small input producers could start related businesses in Georgia. There will be a growing demand from apparel companies for coat hangers, packaging, buttons, zippers, thread, fabric, etc. Each of the four apparel companies expressed an interest in sourcing inputs locally.

[17] European Trade Commission. Web. January 2011. http://ec.europa.eu/trade/wider-agenda/development/generalised-system-of-preferences/
[18] *Ibid.*
[19] *Ibid.*

Potential Roles for EPI

EPI could assist Georgia to put in place the resources and conditions that would increase its appeal to investors in production operations – notably workforce development programs, sites, and services. It could also work with Adjaran authorities to ensure effective response to the GSP+ opportunity.

Interviews Conducted

Name	Position	Company
Ika Bobokhidze	Designer	Fashion Designer Studio
David Jincharadze	General Director	BatumiTex
Mehmet Efendioglu	General Director	BTM Textile (Batumi based)
Nuri Sari	General Director	Georgian textile (Batumi based)
Sebnem Sergul	General Manager	Ajara Textile (Batumi based)

Bibliography

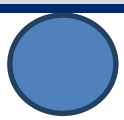
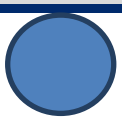
GeoStat Data

"Georgia Sector Competitiveness Overview". *IFC*

UN Comtrade

World Trade Organization statistics

Construction Materials – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Construction Materials						

Criteria	Construction Materials
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth Potential, Stability & Trends	4
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (7)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (4)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Potential SME creation	3
Linkages to existing SME suppliers	2
Total:	**38**

Indicator	Construction Materials
Industry Size	Number of registered organizations: [1] 1. Production of construction materials – 2691; 2. Construction companies – 5761. Number of active organizations: [2] 1. Production of construction materials – 1817; 2. Construction companies - 2430. Exports: USD 23 million in 2009[3] Imports: USD 110 million in 2009[4]
Performance	Production value has grown 462% since 2003[5]. GEL1,752.6 million in 2009 (approx. USD 1,054,539,420) Major export markets: Azerbaijan, Armenia
Academia & R&D	2 main institutions: Technical University and Academy of Arts (mainly architecture) Technical University does some research and the Seismic Institute works on related issues Vocational schools: Speqtri in Tbilisi, one in Gori, and one in Kutaisi are supported by USAID Vocational Education Project
Associations	Constructors' Association Developers' Association Union of Architects
Application of International Standards	Companies can choose the international standards they follow, but no certification or nationally-adopted standards
Foreign Investment	Examples include: Heidelberg Cement (USD 170M), Knauf, Nurol, Estonian manufacturer of electric meters
Major Competitors	Most imports of construction materials come from Turkey and China

Overview

The construction materials sector provides inputs to developing buildings and infrastructure, facilities on which all sectors of the economy depend. Any growing economy needs to source construction materials, either domestically or internationally. Some economies are also able to export such materials.

The global construction materials market grew by 1.8 percent in 2009 to reach a value of USD 539.3 billion. The global construction materials market is forecast to have a value of USD 823.3 billion in 2014, an increase of 52.7 percent from 2009. Brick is the largest segment of the global construction materials market, accounting for 27.9 percent of the market's total value.[6]

[1] According to the Business Registry
[2] *Ibid.*
[3] *Ibid.*
[4] *Ibid.*
[5] *Ibid.*
[6] "Construction Materials: Global Industry Guide - Market Research Report"

Despite the global slowdown, the construction sectors in Georgia, Azerbaijan, and Armenia are likely to remain relatively robust due to oil and gas, infrastructure, and public sector projects. It may be commercially viable to manufacture several bulk or low value added materials or products (e.g. aggregates, metal/wood/plastic components, stone, ceramic products) in the region instead of importing them, avoiding the high transport costs. Georgia has deposits of some important raw materials that are important construction materials inputs. It has the locational advantages and strong business environment to think realistically about opportunities to serve the region in terms of some construction materials. Growth in this sector will have a significant impact on employment levels.[7]

There are potential opportunities in this sector for project intervention, which will be further considered during the value chain assessment phase. One is attracting more foreign investment to various activities in this sector. Another opportunity is working with actors in the industry to set standards for products and for buildings. Currently there are limited standards that are not well-enforced, which encourages cheap imports of substandard materials from low-cost countries such as China. Improved standards might encourage increased value added investment in construction materials in Georgia. A third opportunity is to develop resources like basalt and perlite for export.

EPI will continue to assess and collect information on this sector, including basalt, ceramic tile manufacturing and other materials. In the next phase, the value chain assessment activity, EPI will use the data to be collected to more fully evaluate the potential value chains.

Market Growth – High

Imports of construction materials and equipment into Georgia, Armenia, and Azerbaijan are growing rapidly, totalling more than USD 5 billion in 2008.[8] Between 2000 and 2007, this sector in Georgia grew 494 percent, but it then declined between 2007 and 2009.[9] It is likely that the global construction materials sector will continue to grow as the world economy recovers from the recession.

Cement consumption in Georgia is low at 150-200 kg/capita,[10] while in the EU-15, it is about 500kg per capita;[11] China's per capita cement consumption is over 1,000kg[12]. Heidelberg Cement, a German firm with investment in Georgia, sees great potential in Georgia's cement market.

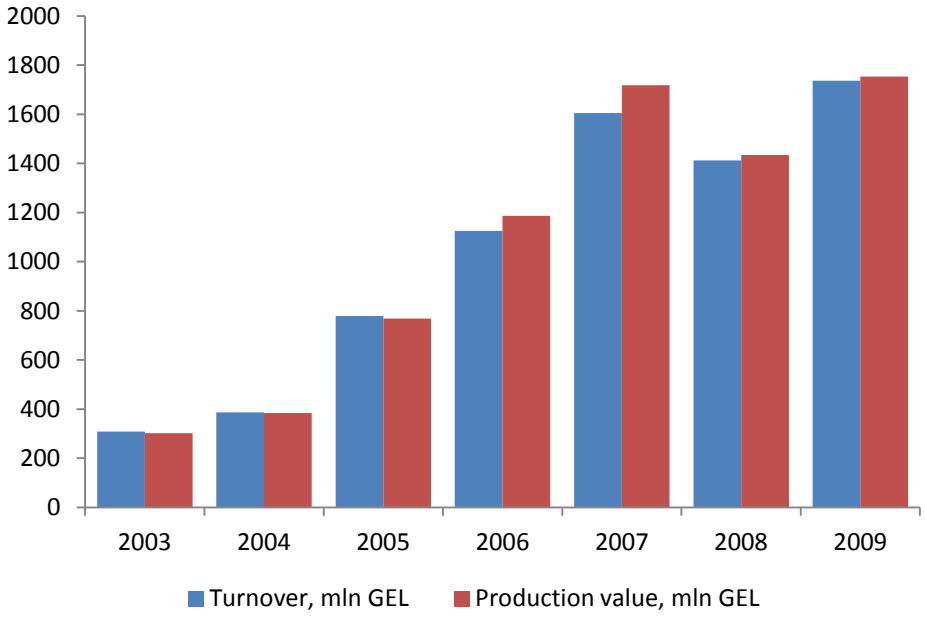
Some of the construction materials produced in Georgia include perlite (which has many uses, including for insulation and filtration of various liquids), cement, concrete

[7] "Georgia Sector Competitiveness Overview". IFC
[8] "Georgia Sector Competitiveness Overview"
[9] National Statistics Office of Georgia
[10] Interview with Heidelberg Cement
[11] "Situation on the Cement Market CEE Stabilises."
[12] "Global Warning – Cement Growth Slowdown?"

and concrete blocks, basalt, facing stone, marble, and polystyrene. Perlite and polystyrene insulation materials are produced locally as well as imported from Iran, the Czech Republic, Italy, France, and Turkey. The most frequently used local raw materials for production of construction materials are perlite, basalt, pumice, slate and tuff: Georgia possesses significant reserves of these materials.[13] Imports in 2009 included: brick (USD 80,000); tile (USD 154,000) and masonry ceramics (USD 1,380,000).[14] The construction materials sector grew by 462 percent between 2003 and 2009[15] in terms of production value.

The value chain assessment will include more detailed market information on selected construction materials, and the likelihood of being able to develop domestic linkages and value addition to serve the local construction industry; and/or to export profitably.

Figure 1: Construction Materials Production Value and Turnover, 2003 - 2009



Source: GeoStat

Skills and Capacities - Limited

Georgia has acquired basic skills for the manufacture of many construction materials because of its historical production of metallurgy and related industries. However, the workforce has limited experience in the latest technologies and techniques and younger engineers and specialists with up-to-date skills are hard to find.

[13] "Energy Efficient Construction Materials Sector in Georgia."
[14] Revenue Services
[15] GeoStat

Many construction companies have difficulties finding skilled labor. There are also no requirements for plumbers, electricians, etc. to be certified, nor are there quality standard certification requirements for the materials themselves. Much of the learning is done „on-the-job', but the number of new projects has stagnated recently due to the financial crisis and consequently, so has the number of new trainees.

In terms of construction, the only permits required in Georgia are those issued by the municipalities. The municipalities follow each stage of the building process, issuing permits and ensuring that the building matches the plans laid out.

Companies that have developed their own products have no laboratories in which to test and certify their products. There are some private certification companies in Georgia, but they do not certify all types of products (for example, cement blocks). These companies also do not have the capital to build their own labs, something which is proving to be a barrier for new companies entering the market as well as for product improvements.

Resources/Inputs - Substantial

Georgia produces cement, concrete, facing stone, marble, and perlite. The country also has the raw material deposits for many important products.[16]

Georgia has the raw materials for cement production, including limestone and gypsum, however, several of these materials are only available from one supplier.

Georgia also produces pumice blocks, a traditional light construction material and the country itself possesses rich pumice reserves.[17]

Perlite could be a special case in Georgia because it has many uses in construction. Perlite is used to enhance heat and acoustic insulation, and the fire ratings of buildings, significantly reducing the weight and volume of construction. Expanded perlite is used separately (as a substitute for sand and broken stone and as a loose-fill thermal and acoustic insulation of floors, walls, roofs) or mixed with other construction materials (as a component in manufacturing heat-insulation products, warm plasters, light mortars, fillers for linoleums, paints, dry building mixes).

However, there is currently just one source and producer of perlite in Georgia and there is very little local usage of the material. There are 23 million tons of proven reserves in Georgia and this company owns all of the reserves:[18] 93 percent of the company's production is exported, mainly to the Ukraine, Russia, and Azerbaijan.

The perlite value chain could be considered for support by EPI since it has many applications outside of construction, such as in the areas of metallurgy, agriculture, winemaking, oil refining and pharmacology. It may be possible to introduce new

[16] Interview with Alexander Tvalchrelidze

[17] "Energy Efficient Construction Materials Sector in Georgia."

[18] Interview with Paravan Perlite

technologies with perlite, but the project would need to carefully consider how it would work with a unique business interest serving downstream value chains.

Market Constraints – Limited

Several investors have already established operations in Georgia to target opportunities in construction materials – Heidelberg in cement, Knauf in plasterboard, Georgia Industrial Group, an Estonian manufacturer of electric meters, GeoSteel (an Indian producer of steel bars), Interplast (plastic components and insulation), metal components, windows and doors, electrical parts, etc.

Georgia's primary export opportunities may be within the region, yet there may also be the potential to export elsewhere. Once additional data is obtained, the value chain assessment will examine various opportunities in selected products.

One major player, Heidelberg, holds about 80 percent of the domestic cement market. Heidelberg is also the only producer of clinker in Georgia. Many of the other cement producers purchase their clinker from Heidelberg because clinker is expensive to produce (it makes up about 80 percent of the cost of total plant investment, which can be between USD 150 million and USD 250 million,[19] and requires large scale production). Heidelberg sells most of its output locally but exports some to Azerbaijan. The company plans to build a cement production facility in Azerbaijan in the coming years and will then produce only for the local market in Georgia.

One of the major challenges for the industry is the lack of standards and the poor enforcement of existing standards. Some standards are established but reportedly there is often little or no enforcement. This leaves room for cheap imports from China which often do not meet international standards. Companies that produce products that meet EU or American standards are more expensive and experience difficulties in gaining a large market share. There may be opportunity to develop new standards and/or building codes, which would provide an incentive for investment in improved materials with value added, and thereby also increase exports.

SME Linkages – Some

There are opportunities throughout the sector for small businesses, but several, such as cement, require heavy, large scale investment. SME opportunities will be highly dependent on which product or value chain is the focus of the project. Currently, there are small companies that make one or two products, such as cement blocks and concrete.

[19] Interview with John Summerbell

Potential Roles for EPI

The information available to the team during the sector assessment was insufficient to adequately investigate the several materials that seem to offer good potential for Georgia and an opportunity for EPI to provide constructive support. Several products, such as basalt, wood products, ceramic tiles and perlite, will be examined more fully at the start of the value chain assessment phase, in January. Value chains that at that time should still be of interest will then be more fully assessed.

EPI's role may be limited by the monopolistic nature of some of the raw materials supply. However, EPI may be able to assist stakeholders in identifying and acting on opportunities to use more fully local materials in downstream value chains. EPI may also be able to help producers in identifying and serving export markets.

EPI should also consider assisting stakeholders to establish and implement more effective materials and construction standards. Improved standards may offer opportunities for increased local investment in construction materials and linkages with value added producers.

Interviews Conducted

Name	Position	Organization
Irakli Samnidze	Assistant to General Secretary	International Investors Association
Omer Ilknur	Project Manager/Architect	Nurol
B. Sajiv	President	GeoSteel
P. Venugopalsamy	General Manager	GeoSteel
Malkaz Khoshtaria	Head of Constructors Association	GEA
Giorgi Jamalashvili	Document Control Center Manager	GeoEngineering
George Japaridze	Generaldirektor	Knauf
Michael Hampel	General Director	HeidelbergCement
Eka Tkeshelashvili	Financial & Legal Director	HeidelbergCement
Nika Kubaneishvili	CEO	Interplast
Tamaz Natriashvili	Director	Institute of Machine Mechanics
Levan Sakvarelidze		Aword
Mariam Mshvidobadze	Financial Director	Black Sea Group
Girogi Jishkariani	Director	Evrobloki
Zaur Gabaidze	Director	Gorgia Ltd.
Lasha Gvajaia	Manager	GeoBuild
Nugzar Samkharadze	General Director	ParavanPerlite Ltd.
Alexander Tvalchrelidze	Executive Director	International Foundation for Sustainable Development – Georgia
John Summerbell	Independent Consultant	

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Education Tourism – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Apparel						

Criteria	Education
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	2
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth Potential, Stability & Trends	2
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (5)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (5)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total:	**34**

Indicator	Industry
Industry Size	Eight universities teach, or will teach, in foreign languages
Export Performance	700+ foreign students have entered Georgian Universities in the past two years Major markets: India, Turkey, Sri Lanka, Iran, and Nepal
Workforce	Teaching and Language skills need to be upgraded
Academia & R&D	20 Departments Teach in Foreign Languages (English, Russian, and French). Medical schools and business schools are the most popular areas of study for foreign students.
Major Competitors	Armenia, Azerbaijan, Ukraine and Kazakhstan, as well as other countries that aggressively offer educational opportunities to foreign students

Overview

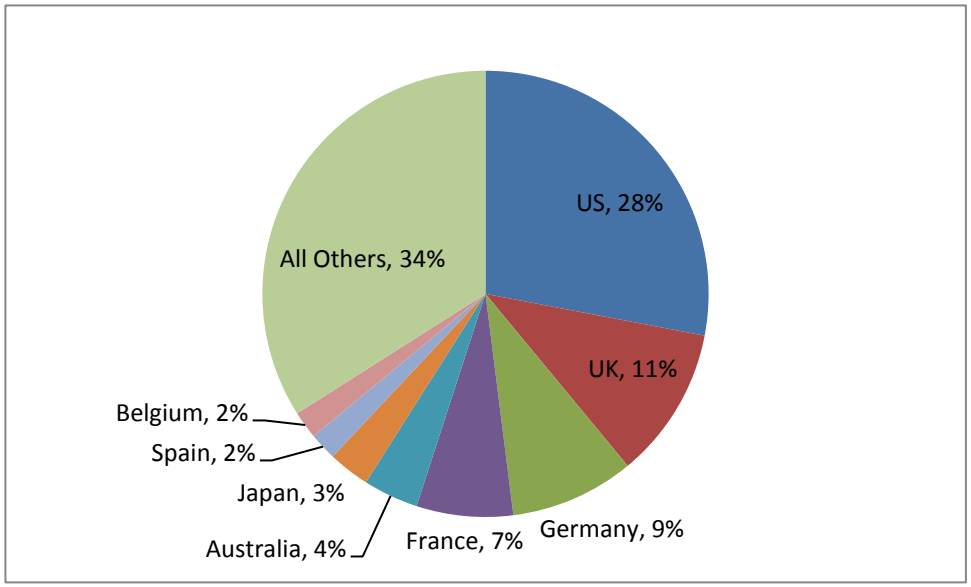
This sector assessment explores opportunities for Georgia to receive foreign students. This is often referred to as educational tourism. Foreign students can be broken into two categories: long-term students and short-term „study abroad' students. Increasing the number of foreign students attending universities and business schools in Georgia could bring additional and higher tuition fees to Georgian universities. Some of the spill-over effects would be an increase in tourism from visiting families, increases in faculty salaries (enabling staff/lecturer retention), improvements in the quality of teaching, improvements in university facilities (such as laboratories), improvements in teaching in foreign languages, improvements in enrollment and registration systems, and improvements in the reputation of the Georgian educational system.

Worldwide, much of the educational tourism market is made up of four major players. In 2000, these were the US (28 percent), UK (11 percent), Germany (nine percent) and France (seven percent).[1] In 2008, the same four countries led the educational market with the following share: US (21 percent); UK (13 percent); France (nine percent); Germany (eight percent).[2] These countries have high admissions requirements and high costs, and will not be in direct competition with Georgia.

[1] "Global Destinations for International Students at the Post-Secondary (Tertiary) Level, 2001". *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

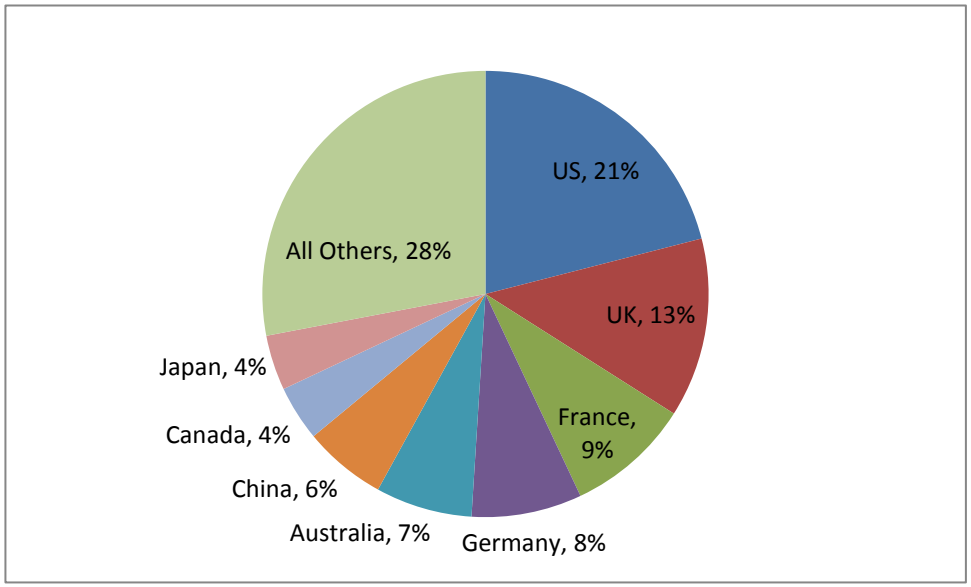
[2] *Ibid*

Figure 1: Global Destinations for International Students at the Post-Secondary (Tertiary) Level, 2001



Source: "Global Destinations for International Students at the Post-Secondary (Tertiary) Level, 2001." *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

Figure 2: Global Destinations for International Students at the Post-Secondary (Tertiary) Level, 2008



Source: "Global Destinations for International Students at the Post-Secondary (Tertiary) Level, 2008." *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

Georgia's direct competitor countries are Armenia, Azerbaijan, Ukraine and Kazakhstan because these countries target students from countries that also make

up Georgia's target markets. In 2010, Georgia had approximately 650 visiting international students.

Several Georgian universities and business schools offer degrees taught in foreign languages, primarily English. Initially, Georgia can launch its educational tourism market by promoting lower admissions requirements and lower fees to competitor countries. Over time, as the quality of Georgian education improves, it would be expected that Georgia's attractiveness as a destination would increase. This sector would then benefit from ongoing and future programs to improve tertiary education. Revenues from foreign students may also be reinvested in educational development. Currently, Georgia's main target markets for foreign students are Turkey, Sri Lanka, India, Nepal and Iran.

India is Georgia's largest market for incoming students. In 2009 and 2010, India sent approximately 600 students to Georgia. Indian and Sri Lankan foreign students at Tbilisi Medical University claimed that they were studying in Georgia because it was an opportunity to study in Europe and because Georgia offers cost savings and lower admissions requirements. India sent students to the following top destinations in 2009:

Table 1: Top 10 Destinations for Students from India 2009

Destination Country	Number of Students
United States	94,644
Australia	26,520
United Kingdom	25,901
New Zealand	4,094
Germany	3,257
Ukraine	1,785
Cyprus	1,076
France	1,038
Malaysia	897 (2007)
Kazakhstan	782

Source: "Top 10 Destinations for Students from India 2009." *Atlas Student Mobility*. Institute of International Education 22 November 2010. Web.

Kazakhstan is one of Georgia's regional competitors for Indian students. Attending university at the Kazakh School of Management is approximately 300 dollars more than a comparable business school, for example, that of the Caucasus University in Georgia. [3]

Turkey is the second largest source of incoming students; many of these Turkish foreign students study at the Black Sea University. Based on interviews with Black Sea University students, Turkish students also study in Georgia because lower admissions grades are required of them. There are approximately 100 Turkish students studying in Georgia, the majority of whom study at Black Sea University (please refer to Table 3). In 2009, the top destinations for Turkish students were:

[3] Based on financial information from the Kazakh School of Management website.

Table 2: Top 10 Destinations for Students from Turkey 2009

Destination Country	Number of Students
United States	12,035
Germany	7,107
France	2,412
Azerbaijan	2,106
United Kingdom	2,084
Austria	2,070
Bulgaria	1,672
Kyrgyzstan	1,033
Kazakhstan	614
Canada	363

Source: **"**Top 10 Destinations for Students from Turkey 2009**."** *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

In the region, Turkey is a major destination for foreign students. The majority of incoming students to Turkey are from Azerbaijan (1,586), Turkmenistan (1,209), and Bulgaria (1,163).[4]

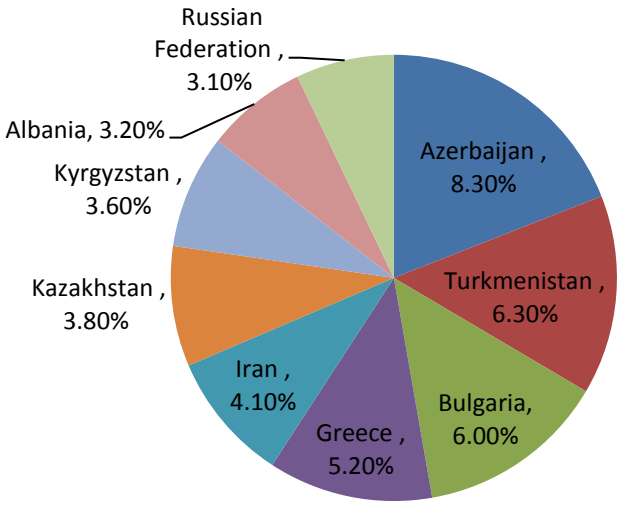


Figure 3: Top 10 Sending Places of Origin for India (2009)

Source: "Top 10 Sending Places of Origin for India 2009." *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

There may be potential to increase the number of foreign students attending university in Georgia.[5]

[4] "Top 10 Sending Places of Origin for Turkey 2009." *Atlas Student Mobility*. Institute of International Education. 22 November 2010. Web.

[5] EPI would not be involved in the recruitment of Iranian students

Market Growth – Some

Short-term market growth potential is dictated by the current enrolment capacities of university departments that are teaching technical courses using foreign languages. There is the potential to increase such capacity over the long term; this would involve training more teachers in foreign languages, or hiring more foreign educators.

In the past two years, there has been rapid market growth in this sector. Two years ago, Tbilisi State Medical University recruited 500 students from India while the Black Sea University also recently recruited 100 Indian students to attend its business school. Tbilisi State Medical University and the Black Sea University have been working with Om Consulting, a business service provider that has been helping recruit prospective Indian and Sri Lankan students. All of the universities that were interviewed plan to continue, or begin to recruit foreign students.

Table 3 is a list of self-reported data on foreign students at Georgian universities.

Table 3: Overview of Universities and the Capacity for Foreign Students

	Number of Foreign Students	Additional Capacity for Foreign Students	Number of Departments Teaching in a Foreign Language	Foreign Languages	Number of Professors at Foreign Language Faculties	Fees for Foreign Students	Fees for Local Students	Countries Represented By Foreign Students	Plan/Intention To Increase Number of Foreign Students	Dormitory Type Facility Where Foreign Students Live
State Medical University	500	1000	1	English	~ 400	$3,000	$1,277	India, Turkey, Nepal, Sri-Lanka, Trinidad & Tobago, other	Yes	No
International Black Sea University	84	~3,500 (New Campus)	All departments teach in English	English	~40 (Will recruit more)	$3,000	$3000	Turkey, Azerbaijan, Russia, Iraq, India	Yes	No. Yes on the new campus
Free University	2-3	N/A	N/A	None	N/A	N/A	N/A	Azerbaijan and Armenia	Yes	N/A
Caucasus University	20	400	1	English	25	$5,340	$4,258	Russia, Pakistan, India	Yes	No
Technical University	None	300	6	English (Plan)	50	$1,192	$1,192	Pakistan, India (plan); Exchange program starting in Jan with Turkish University	Contracts are signed with Pakistani & Indian firms. *	No
Tbilisi State University	25	~ 200	6	English, Russian French	440	$1,277	$1,277	Turkey, Azerbaijan, Armenia, US, Netherlands	Yes	Yes, but need to be remodeled
Ilia University	14	~ 30	1	Russian, English (plan)	20	N/A	(Everyone on scholarship)	Caucasus, Ukraine (plan)	Yes	No

Source: These numbers are based on interviews with all of the universities listed in the table.

Skills & Capacities – Limited

There are many complaints that the quality of education has been declining at Georgian universities in recent years. Furthermore, there is a limited number of faculty and staff who speak foreign languages. Many qualified educators decide to leave the teaching profession because of low salaries, but it is believed that professors could be lured back to the profession if they were offered better remuneration. Current teachers can improve their teaching and language skills through additional training. The money needed to achieve these outcomes could be wholly or partly derived from the fees paid by the foreign students.

Resources/Inputs - Substantial

The universities have foreign language faculties and have the capacity to host 5,000 foreign students.

In fact, universities could use foreign students to fill empty places. For example, the Black Sea University will be building a new campus that is able to host 4,000 students.[1] Their current student population is roughly 1,200 students.[2] In order to be full to capacity, the university will need to recruit approximately 3,500 students.[3] Some of this recruitment will occur within Georgia, but the Black Sea University expects that a large proportion of the students who will fill the remaining places will in fact be foreign students. Many Georgian universities are interested in business service providers who could help them fill the empty places with foreign students.

Overall, the existing capacity for foreign students is roughly 5,000 students. The majority of departments that teach in foreign languages, teach in English.

Market Constraints – Few Constraints

A challenge for this sector is the enrollment capacity of each of the universities (although the capacity is relatively high). Currently, there are roughly 5,000 potential spots for long-term foreign students in Georgia's universities. Some other challenges are the quality of the education, the quality of teachers, the funds each university has for research, the poor quality of labs and other teaching facilities, and the poor quality of critical educational processes such as registration and enrollment.

SME Linkages – Modest

Small businesses have the opportunity to provide services to universities. For example, Om Consulting is an educational consulting company that has been able to recruit over 500 Indian and Sri Lankan students to attend the medical school at Tbilisi State and has recruited 100 students for the Black Sea University.[4] However,

[1] Interviews with Black Sea University administration

[2] *Ibid*

[3] *Ibid*

[4] Interviews with Black Sea University and Tbilisi State Medical University administrators

while Om Consulting has been effective in filling places, the quality of the students remains unknown. There is an opportunity to increase the number of SMEs that could provide similar services. These SMEs could charge universities a fee to recruit students for attendance on programs taught in foreign languages. They could provide these services for both long-term students and study abroad students: there are also a few other educational consulting firms, such as GeoEduConsulting, who could play a similar role.

Other examples of potential SME linkages are: teacher certification companies; educational support companies (tutoring or English language support); apartment leasing and rental companies; incoming tour operators (for visiting families).

Potential Roles for EPI

In the next phase of the value chain selection process, EPI will obtain more information about the international marketplace and competition for foreign students, requirements to succeed in this market, and the interests of Georgian institutions in pursuing this opportunity. EPI could consider supporting this sector, not only as an economically viable opportunity for Georgia, but also with a view to positive synergies with the objective of improving education and training. The sector also presents possible synergies with Georgia's objective of developing as a true regional business hub.

Interviews Conducted

Name	Company
Rima Beriashvili, Deputy Rector	State Medical University
Marina Kipiani,	International Black Sea
Giorgi Meladze, Chancellor	Free University
Miranda Tkabdladz, specialist at the Department of International Relations	Caucuses University
Maia Menteshashvili or Tea Gergedava Department for International Relations	Technical University
Tamar Tsagareishvili, Head of the Office of Educational Process Administration	Tbilisi State University
Otar Zumberidze - Deputy Rector	Ilia University

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Film and TV – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Film and TV						

Criteria	Film and TV
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Domestic Market Growth, Stability & Trends	1
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Domestic Market Growth Potential, Stability & Trends	1
International Market Growth Potential, Stability & Trends	2
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (5)
Workforce Skills & Capacity, and Trends	1
Business Sophistication & Acumen, and Trends	2
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	1
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (3)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (5)
Potential SME creation	2
Linkages to existing SME suppliers	3
Total:	**24**

Overview

Georgia has a long history of filmmaking and during the Soviet period was very advanced in film-making techniques. Now, television dominates the media in Georgia and TV advertising is the major source of revenues in the film and TV sector. The majority of the TV advertising market is distributed between two leading companies: Metro and Windforse.

One area with some potential for development is the film production industry. There has been a general trend for international films from the US and Europe to be filmed in Eastern European locations in order to reduce costs. A well-known example is "Cold Mountain" filmed in Romania, which was said to have saved USD 35 million in production costs. It appears that most of these countries' industries started on a very small scale, for example in art houses. Domestic producers often invested in the development of basic requirements for production capability, and training in the necessary IT skills. While the industry in Eastern Europe was booming for much of the early years of the millennium, more recently it has become increasingly competitive. For example, in the Czech Republic in 2003 there were 15 shoots of high-profile international films, but in 2008 there were only two. Some reasons for the tighter market include increased competition as more alternatives emerge, as well as government subsidization of film production industries.

One Hollywood feature film, "Five Days in August," was produced in Georgia. The film is about the Russian invasion in 2008 and stars Andy Garcia and Val Kilmer. It is scheduled for released in March 2011. Five Georgian language feature films were produced in Georgia in 2010: "Street Days", which will have a London and US premier, "Salt for Svaneti", "Other Bank", "Susa", and "Chantrapas", in addition to a 3D film for which filming has just been completed. This number of films is somewhat higher than the average of three films produced per year.[1]

There may also be possibilities of producing Indian films in Georgia. The Government has reached out to Indian film companies to attract them to Georgia. However, one leading figure in the Georgian film industry noted that it is too soon to begin producing Indian films in Georgia, explaining that the current level of production skills is not adequate for a successful outcome.

Market Growth – Modest

Film production in low cost locations in Eastern Europe has grown substantially since the 1990s, although it has recently become more competitive. The Czech Republic is viewed as the leading country for production and post-production. Romania and Bulgaria are also mentioned as leading countries for low-cost overseas production with industry standard quality services.

[1] "Georgian Film Industry Seeks Co-production with India."

Skills & Capacities – Limited

Limited skills are the major limitation to the development of the film production industry in Georgia. At present, there is virtually no capacity or training in technical production skills, and in particular, there are skill gaps for technical skills in production and post-production (e.g., sound, mixing, grip, set design, and lighting). Several leading figures in the film and production industry believe that bridging this gap will lead to substantial developments in the sector. In particular, two leading figures in the film industry are exploring options for bringing film professors from US Universities to train Georgian professors in order to establish a program, possibly within a Georgian University, thus training students in modern technical production skills.

Between 2002 and 2009, the Swiss Agency for Development and Cooperation supported the production of 47 fictional, documentary, and short films in Georgia, Armenia and Azerbaijan. This support included professional training in a wide range of skills, from script writing to editing and cutting. Nine people from Georgia participated in the training sessions.[2]

Resources/Inputs – Limited

Georgia's landscape allows for outstanding outdoor filming opportunities – this is seen as one of Georgia's advantages in the potential development of the country as a low cost site for filming. For example, Georgia has a wide range of ecological zones, including desert, alpine, coastal, subtropical and temperate rainforest areas. However, Georgia does not have Hollywood-style production sets. The major TV studios' production facilities are used for film production, although they are not adequate for filmmaking of an international standard.

Market Constraints – Limited

Competition from other low-cost film production sites in Eastern Europe is the primary market constraint to the development of a Georgia as a site for the production of international films. In addition, there is little international awareness of Georgia as a potential location.

SME Linkages – Some

A handful of small independent producers make up the film production sector, not including advertising firms such as Metro and Windforse.

Potential Roles for EPI

EPI or USAID could assist in facilitating the development of a training program in technical film production skills, possibly through a partnership with a US university.

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[2] "Cultural Promotion in the Caucasus: New Lease of Life for Filmmakers"

Interviews Conducted

Name	Company
Irakli Chikvaidze	Kinoproject
Nika Javakhishvili	Versio Creative Media Productions

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Logging and Timber – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Timber						

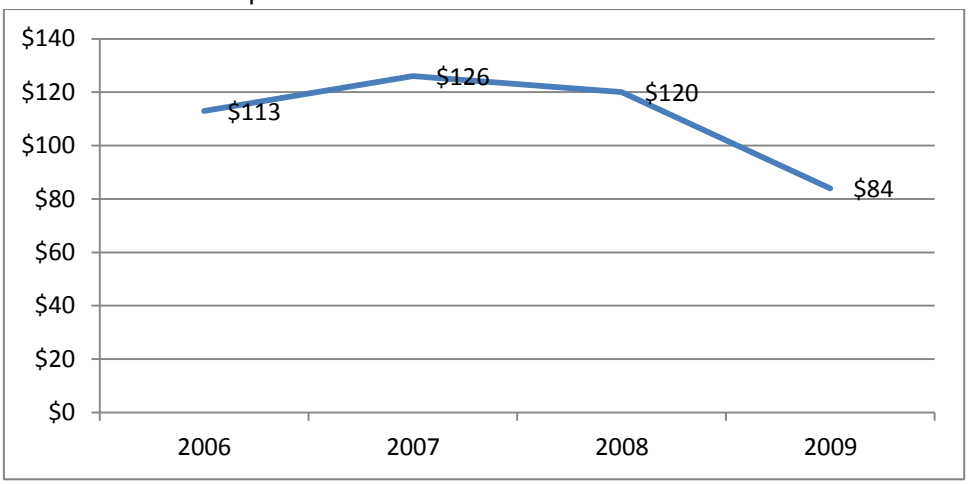
Criteria	Timber and Logging
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Domestic Market Growth, Stability & Trends	1
International Market Growth, Stability & Trends	2
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (3)
Domestic Market Growth Potential, Stability & Trends	2
International Market Growth Potential, Stability & Trends	1
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (9)
Workforce Skills & Capacity, and Trends	4
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Limited (4)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	2
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Limited (4)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total:	**27**

Indicator	Logging and Timber
Industry Size	Five major players in the Georgian market and two major international players
Export Performance	Since foreign investors joined the market, exports have increased.
Academia & R&D	Wood/forestry faculty at the Institute of Agriculture
Foreign Investment	Hualing Group and a recent Azeri investment

Overview

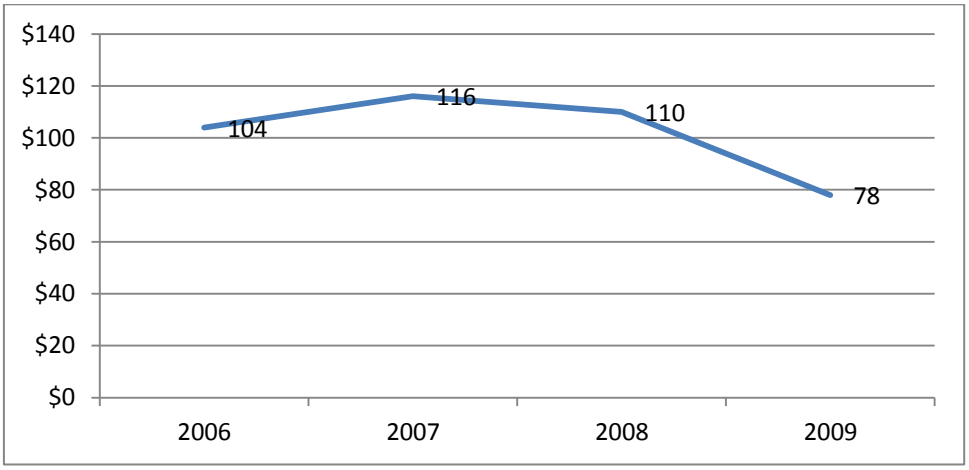
The global timber industry is facing a decline due a decrease in the demand for timber products, declining newspaper consumption, and environmental pressure to reduce packaging materials.[3] Between 2008 and 2009, there was a drop of approximately 30 billion dollars in both timber exports, and imports worldwide.[4] Timber imports have also been declining since 2006.[5] Figure 1 shows that timber imports dropped from USD 113 billion in 2006 to USD 84 billion in 2009.[6] Timber exports have experienced a similar trend, shrinking from USD 103 billion exports in 2006 to USD 78 billion in 2009 as illustrated in Figure 2.[7]

Figure 1: Worldwide Timber Imports in Billions of USD



Source: UN Comtrade

Figure 2: Worldwide Timber Exports in Billions of USD



Source: UN Comtrade

[3] "Georgia Sector Competitiveness Overview", Simon Bell

[4] UN Comtrade

[5] *Ibid*

[6] *Ibid*

[7] *Ibid*

The world's top timber importers are the US (USD 70 billion), Japan (USD 44 billion), China (USD 30 billion), and Germany (USD 26 billion).[8] The top exporters are Canada (USD 44 billion), Germany (USD 36 billion), Russia (USD 29 billion) and the USA (USD 26 billion). Timber and logs form a 400 billion dollar industry.[9]

Even though supply is limited, the costs are high and regulations are numerous (number of trees that can be cut, types of trees, etc.). The two foreign companies that recently invested in Georgia believe that the country is a good place to invest in logging, and in fact, there might be room to attract other international companies to the logging industry or even the potential to turn exported timber into processed exported products like furniture or home furnishings.

In Georgia, there are five active Georgian companies involved in the timber industry, and they focus on exports to China, Israel, Germany, and Italy. There are two large foreign investors, the Hualing Group and a company from Azerbaijan.

Potential value chains for this sector include:

1. Developing a sustainable Christmas tree industry
2. Wood products: paper, packaging, and home furnishings made out of wood.

Market Growth – Modest

The market for both imports and exports of wood products has shrunk since 2008 after both markets previously experienced increases between 2000 and 2007.[10] Even though labor costs are low and Georgia has duty free access to the EU, CIS, and Turkey, it is not a fast-growing market.

Georgia imports the majority of its timber products due to the limited available supply of lumber in the country. However, Figure 3 shows that imports of wood decreased significantly from 2008 to 2009.[11] Figure 4 shows that exports also decreased after 2008.[12]

[8] UN Comtrade

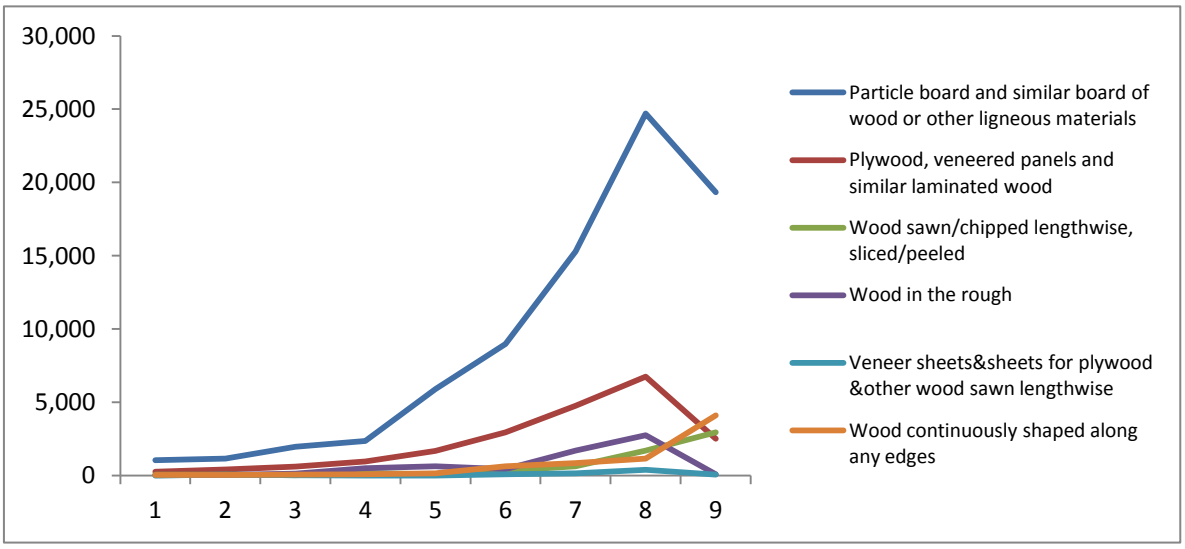
[9] *Ibid*

[10] International Trade Statistics – Wood

[11] Ibid

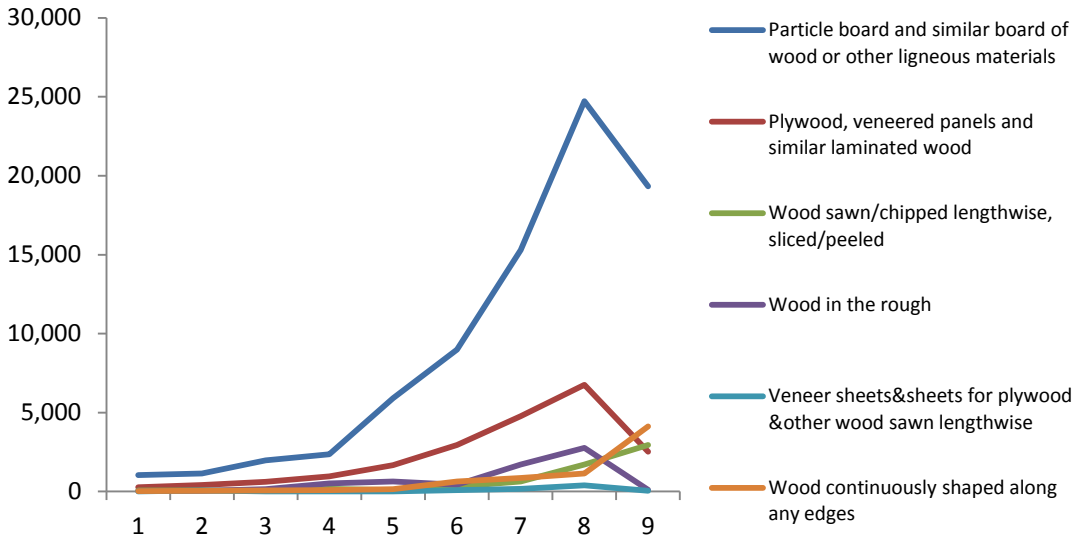
[12] Ibid

Figure 3: Imports of Wood to Georgia



Source: International Trade Statistics – Wood

Figure 4: Exports of Wood from Georgia



Source: International Trade Statistics

Exports have been growing since 2005 when the Hualing Group chose to invest in Georgia's lumber industry and purchased a twenty year license to cut 88,000 square meters on an annual basis.[13] They plan to log in sections so that they can re-plant the trees, and they will be processing beech and pine. Their license covers three areas of the country: Chkhorotsku, Imereti, and Kakheti.[14] The Chinese investor chose to invest in Georgia because of its large supply of beech trees, and at the time, it was trying to meet the market demand for beech trees in Central Asia, which

[13] Interview with Hualing Group

[14] *Ibid*

has largely depleted its own supply. The Hualing Group searched several countries for beech trees before settling on Georgia, and had previously investigated both the Russian and Canadian markets before determining that the competition was too strong in these markets. By investing in Georgia, they are now the largest player in the Georgian lumber market. The company also chose to invest in Georgia because of its GSP + access to the EU.[15] However, after applying in 2006, it took the Hualing Group two years before it could get its license, primarily as it had to prove that it had a sustainable forestry plan. Prior to receiving its license it had mainly focused on timber cutting, and was supplied by smaller Georgian logging companies.

The Hualing Group processed 4,000 cubic meters of timber in 2009 and 20,000 cubic meters of timber in 2010 and it hopes to reach its quota amount of 88,000 within the next 1-3 years. Hualing Group also plans to have a fully integrated chain of production, meaning it will log, cut, finish, and build furniture. There is a wood processing plant in Kutaisi (in the Free Industrial Zone) and it will build a furniture factory and export directly from the free zone. It also has its own transportation infrastructure. Hualing Group is currently exporting to Central Asia, Egypt, Iran, Iraq, and UAE. Ninety-five percent of their products are exported, and five percent are sold in the domestic market.[16]

There are five local Georgian companies and they mainly produce for export.

The global Christmas tree business is a one billion dollar a year business and currently Georgia provides 90 percent of all seeds for Christmas trees in Europe.[17] If

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[15] *Ibid*

[16] Interviw with Hualing Group

[17] **ANGUS CRAWFORD,.“CHRISTMAS TREE PINE CONE PICKERS FACE DANGERS IN GEORGIA.” BBC NEWS . WEB.. DEC 2 2010.**

Georgia were to begin planting and exporting trees directly from Georgia, the country could accrue all of the value added from the Christmas tree industry. More than eight million Christmas trees are sold every year in the UK, and more than half of those are „Norman Firs', grown from seed harvested in Georgia.[18]

Paper, labels, cardboard, and other packaging input needs are in demand from Georgian apparel, fruit, and other manufacturers. The demand for these inputs will lead to an increase in demand for these wood products.

Skills & Capacities – Substantial

Finding loggers is not difficult, since many Georgians have been logging for private consumption (fuel and construction) for many years. Hualing Group has found that it is easy to train Georgians in how to log professionally. However, finding Georgian managers and engineers is more difficult, and currently, there are only 29 timber specialists in the timber sector.[19] A wood/forestry faculty still exists at the „Institute of Agriculture'.

Resources/Inputs - Limited

While timber is available throughout the country, the supply is limited because of the terrain and because of the Government's logging restrictions.

Market Constraints - Limited

The timber industry faces numerous challenges. In addition to global competition from the US, Canada, Russia, and other countries, the Georgian timber industry is heavily regulated. While over 40 percent of Georgia is covered in forest, its mountainous terrain makes it an expensive place in which to log and moreover, the Georgian government has strict policies on logging.[20] In Georgia, trees cannot be logged near a population, or if they are on an incline that is steeper than 25 degrees.[21] The cost of buying a logging license is also high and can range from USD 100,000 to ten million USD. According to the Environmental Agency, seven percent of all of Georgia's trees are protected and only 15 percent of Georgia's trees are commercially logged.[22] These regulations consequently limit the supply.

SME Linkages – Modest

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[18] IBID

[19] Based on an interview with Georgian Timber companies

[20] Interview with Environmental Agency

[21] *Ibid*

[22] *Ibid*

Potential SME linkages would be with producers in paper and pulp, cardboard, other packaging materials, furniture, kitchenware, construction materials, firewood and possibly Christmas tree exporters. Other important potential service sector SME linkages are access to finance, warehousing, and transportation.

Potential Roles for EPI

There is little obvious priority role for EPI in the logging and timber sector. EPI might assist with streamlining procedures, and training of workers, if investors demonstrate an interest in additional investments such as that of Hualing. It is more likely that an opportunity will arise through the use of wood products in packaging and in construction materials.

Interviews Conducted:

Hualing Group

Environmental Agency

Bibliography:

Angus Crawford. “Christmas tree pine cone pickers face dangers in Georgia.” *BBC News.* Web. Dec 2 2010.

“Georgia Sector Competitiveness Overview.” *IFC*.

International Trade Statistics

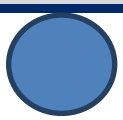
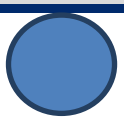
UN Comtrade

Table 1: Wood & Wood Product Exports

Wood and Wood products exports	Exported value in 2001	Exported value in 2002	Exported value in 2003	Exported value in 2004	Exported value in 2005	Exported value in 2006	Exported value in 2007	Exported value in 2008	Exported value in 2009
Wood sawn/chipped lengthwise, sliced/peeled	2,958	4,950	9,581	10,861	13,811	16,407	20,775	19,563	14,996
Particle board and similar board of wood or other ligneous materials	29	0	0	0	3	256	29	238	4,691
Other furniture and parts thereof	253	106	108	224	3,219	703	1,049	2,600	3,753
Railway or tramway sleepers (cross-ties) of wood	0	35	0	48	272	74	0	191	545
Fibreboard of wood or other ligneous materials	2	0	0	0	0	35	9	50	531
Wood in the rough	777	52	0	52	49	257	152	555	407
Wood continuously shaped along any edges	267	122	374	527	834	534	566	446	247
Veneer sheets & sheets for plywood &other wood sawn lengthwise	84	145	281	286	567	541	681	727	233
Densified wood, in blocks, plates, strips or profile shapes	0	2	3	0	0	1	1	0	23
Fuel wood; wood in chips or particles; sawdust & wood waste & scrap	16	1	1	0	1	0	0	33	22
Plywood, veneered panels and similar laminated wood	1	11	4	47	258	218	65	0	21
Packaging materials of wood	11	3	4	9	3	34	21	15	12
Tableware and kitchenware of wood	0	0	0	0	0	0	0	5	6

Source: International Trade Statistics

Pharmaceutical & Medical Devices – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Pharmaceuticals						

Criteria	Pharmaceuticals *Still exploring potential IPR issues
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High(8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth Potential, Stability & Trends	4
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Very Limited (4)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	1
Business Service Provider Professionalism & Availability	1
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (5)
Resource Availability & Accessibility	2
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (5)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Modest (4)
Potential SME creation	2
Linkages to existing SME suppliers	2
Total:	**34**

Indicator	Pharmaceuticals

Industry Size	70 Manufacturers[1] Exports: Nearly USD 25M in 2008 Imports: USD 205M in 2008
Export Performance	Exports have grown 483% since 2001 Major markets: Azerbaijan and Armenia
Workforce	2,373 people employed in manufacturing
Associations	Association of Pharmaceutical Company Representatives in Georgia (APCRG)
Application of International Standards	Many companies claim to adhere to GMP standards, but there is no Government body to certify this
Foreign Investment	Many foreign companies have invested here, but there is no reliable data on the amount of investment
Major Competitors	India, Switzerland, USA, Germany, France

Overview

The domestic distribution market in the pharmaceutical sector is mostly made up of three companies: Aversi, PSP and GPC. These firms have integrated themselves vertically and horizontally into hospitals, pharmacies, clinics, manufacturing and insurance companies. There are many foreign pharmaceutical companies represented in Georgia, such as Pfizer and GlaxoSmithKline, which make up at least one-third of the market in Georgia. There are approximately 70 active pharmaceutical manufacturers[2] in Georgia and some of these produce only one or two products.

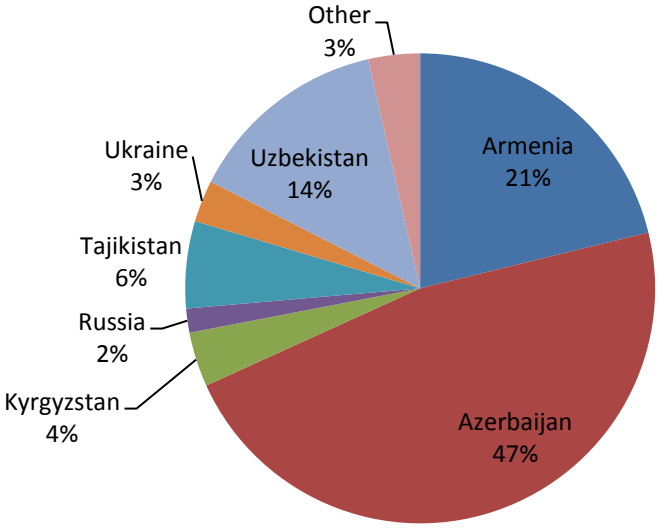
World pharmaceutical imports were worth USD 403.5 billion in 2009 and increased from USD 272.5 billion in 2005.[3]

Georgia's exports of pharmaceutical products totalled about USD 25 million in 2009[4]. In 2008, pharmaceutical exports were USD 24 million and nearly half of all exports went to Azerbaijan.[5]

Georgia's exports of pharmaceutical products have grown 483 percent since 2001.[6]

[1] GeoStat
[2] GeoStat
[3] UN Comtrade data
[4] Interview with APCRG and GeoStat
[5] UN Comtrade data
[6] UN Comtrade data

Figure 1: Pharmaceutical Exports (2008)



Source: UN Comtrade

Georgia's exports to CIS countries in 2009 totalled over USD 10 million.[7] However, by 2013, the CIS countries will require Good Manufacturing Practices (GMP) certification. The only way Georgia can continue exporting to these countries is for the Government to issue GMP compliance certificates, yet the Government does not currently have this capacity. According to the Drug Agency and the Ministry of Health, GMP certification will become mandatory for pharmaceutical companies in Georgia from January 1, 2016.

Some interviewees have expressed concern about the sector being oligopolistic. However, there is the potential for exports, particularly to CIS countries and the Middle East. Georgia already exports to CIS countries and has also exported to some countries in the Middle East; these countries' imports have been increasing over the past 10 years. The project could work with the industry and Government to establish GMP certification. Examples of value chains would be generics and licensed production of low volume, high-value pharmaceuticals for export.

[7] UN Comtrade data

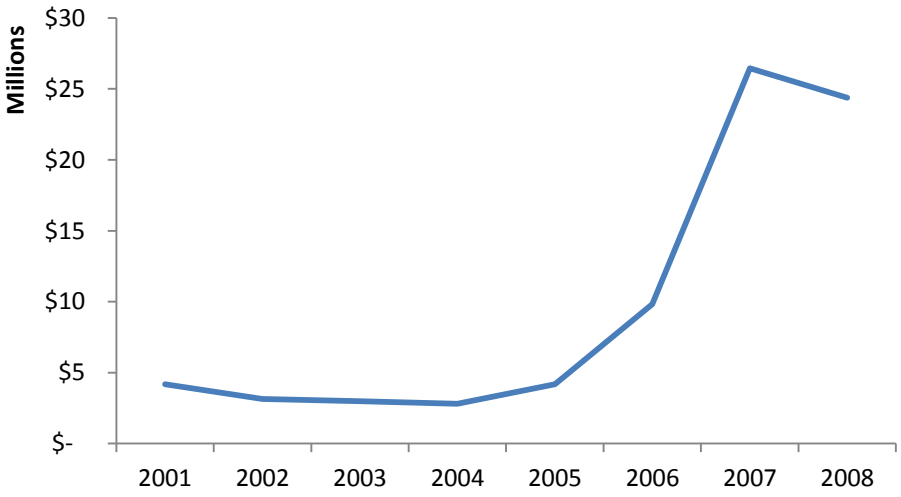
Market Growth – High

In 2007, the size of the Georgian market for prescription medicines stood at USD 177 million, growing at an average of 34 percent per year since 1995, as noted by PMR, a Polish marketing research group. The market consists of about 20 percent (about USD 40 million[8]) local products and 80 percent imports. The primary export markets are Ukraine, Belarus, Uzbekistan, Tajikistan, Armenia and Azerbaijan and total exports were about USD 25 million in 2009.[9] No Georgian firms have GMP certification, although PSP, a Georgian firm, is in the process of registering one of its products in France.

Some pharmaceutical companies in Georgia manufacture products predominantly for export purposes. Even though they sell some products domestically, they are usually distributed through one of the three major companies (Aversi, PSP and GPC) and are a small proportion of their overall sales.

Georgia's exports have grown 483 percent since 2001. The number of imports for pharmaceutical products has been increasing in most parts of the world, and it is likely that Georgia can capitalize on this growth.

Figure 2: Georgia's Pharmaceutical Exports, 2001 - 2008



Source: UN Comtrade

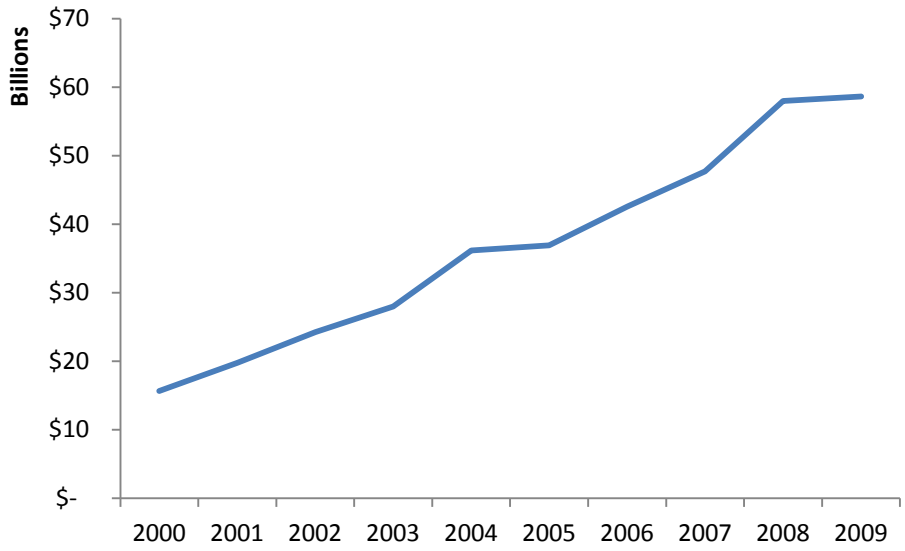
EU-27 Imports of pharmaceutical products have increased by 275 percent since 2000, from over USD 10 billion to close to USD 60 billion.

[8] GeoStat

[9] Interview with APCRG and Geostat

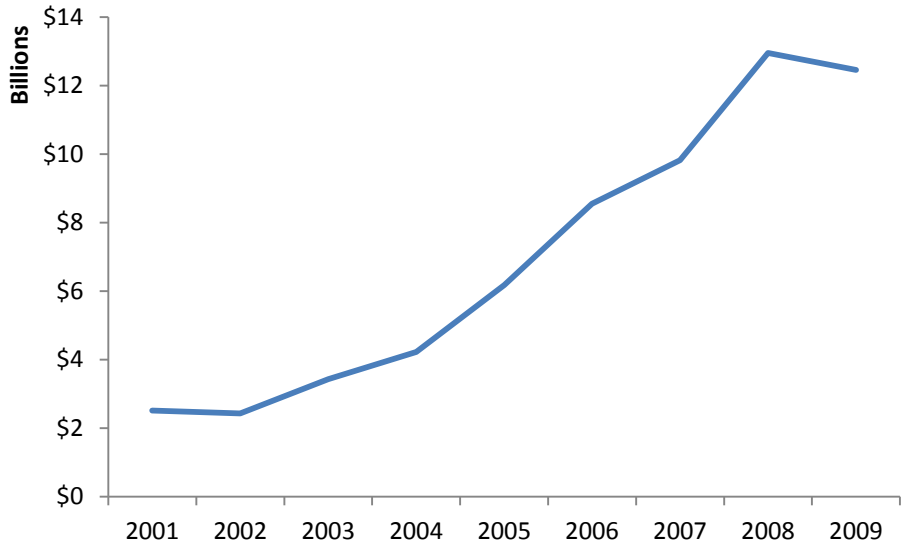
Figure 3: EU-27 Imports of Pharmaceutical Products (2000 – 2009)

Source: UN Comtrade



Pharmaceutical imports by CIS countries grew between 2000 and 2008, but declined slightly in 2009.

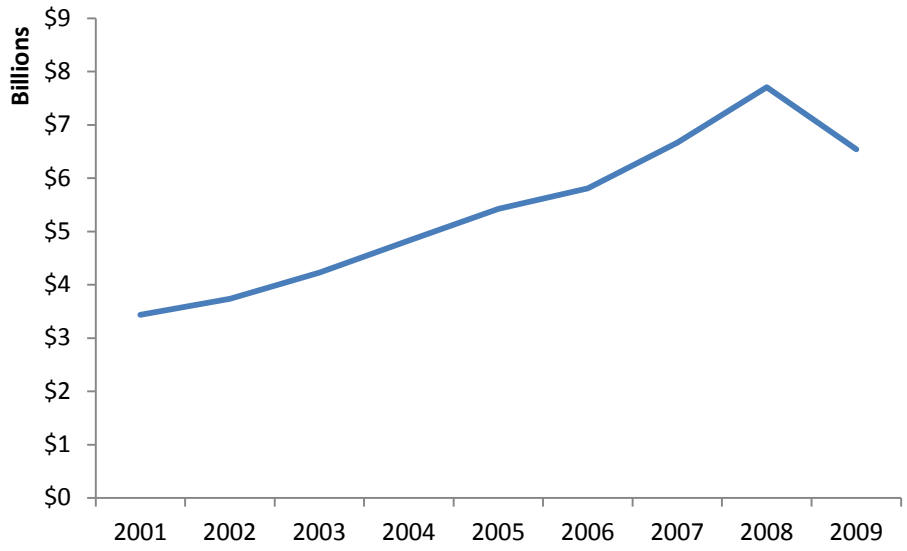
Figure 4: CIS Pharmaceutical Imports (2001 – 2009)



Source: UN Comtrade

Imports of pharmaceutical products to the Middle East increased from over USD 3 billion to almost USD 8 billion between 2001 and 2008.

Figure 5: Middle East Imports of Pharmaceutical Products (2001 – 2009)



Source: UN Comtrade

In medical devices, imports have been increasing for „disposable' medical equipment, such as gloves, syringes, needles, IV sets, catheters, tape, dressing, rubber gloves, tubes, blood collection and sampling kits, etc.[10]

Table 1: Medical Equipment Imports to Georgia from Ministry of Finance of Georgia Revenue Service

Year	Equipment Imports Amount
2006	$29,779,796.00
2005	$28,002,777.00
2004	$14,595,413.00
2003	$10,616,810.00

However, the team did not identify any medical device manufacturing companies and none of the people interviewed knew of any plans to begin manufacturing medical devices.

Skills & Capacities – Very Limited

Recently, Georgia has faced a shortage of skilled personnel, due to the low numbers and poor quality of science and engineering graduates over the previous years.[11] All of the companies that were interviewed had plans to expand, and one of the obstacles to growth that they identified was a shortage of skilled personnel. Significant investment and time will be necessary to rebuild the skills base.

[10] Bea Celler.
[11] "Georgia Sector Competitiveness Overview"

One pharmaceutical company has started an internship program with a local university to allow its graduates to use modern equipment. This firm then recruits its new employees from this pool of candidates. It can be seen that the universities need more investment in modern technical equipment, skills training, and resources.

Resources/Inputs - Substantial

All three of the main pharmaceutical manufacturers import the chemicals that make up the active pharmaceutical ingredients (APIs). These APIs are manufactured offshore in India, China, Germany, and Switzerland. The import of APIs is common in the industry, but the countries that produce high quality products import from countries such as Japan, which have high quality standards.

Market Constraints – Few Constraints

There are three big distributor companies: Aversi (owns Aversi Rationale), PSP (owns GMP), and GPC. These companies started as distributors, but over time they have opened pharmacy networks, clinics, insurance companies, hospitals, and have begun to manufacture pharmaceuticals. Some people who were interviewed have expressed concern that these oligopolistic players collude to set the prices in their pharmacies. While there are approximately 70 manufacturers, the two main manufacturers are Aversi Rationale (owned by Aversi) and GMP (owned by PSP). Aversi produces 59 percent of the total domestic supply and GMP produces 29 percent.[12] GMP mainly produces solid forms, such as pills and tablets.

Counterfeits used to be a major issue in Georgia, but there have been fewer reports of counterfeits entering the country and it no longer appears to be an issue according to the Association of Pharmaceutical Company Representatives in Georgia (APCRG).

In addition to 80 percent of the market consisting of imported pharmaceuticals, Georgia also has a problem with parallel imports.[13] A number of companies import drugs from countries like Romania in order to sell them in Georgia. In March 2009, a new drug law was adopted to simplify the documentation required to register products in Georgia. The new law requires that distributors have a contractual connection with the manufacturer – to stop the problem of parallel imports. This law also attempted to make it easier for new players to enter the distribution market. Recently, a new player has emerged, Pharma Depot, which offers lower prices on medicines, something which has lowered the market price by about 25 percent.[14] Prices have remained stable since this initial fall and Aversi, PSP and GPC still hold the majority of the domestic market for Georgian-produced products.

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[12] Ministry of Health

[13] A parallel import is a non-counterfeit product imported from another country without the permission of the intellectual property owner

[14] Interview with APCRG

A big barrier to export is the lack of GMP certification. To have GMP certification, the Government's drug agency must conduct an inspection and certify the company. Currently, Georgia's drug agency does not certify companies, but certification is planned to be mandatory by 2016. If Georgian producers want to compete on the world market, they must abide by manufacturing standards and compete based on the quality of the product.

SME Linkages – Modest

There are currently few potential SME linkages because the current manufacturers are almost entirely vertically integrated. However, there are about 70 local Georgian manufacturers, among which are some very small manufacturers that make only one to two products. There might be the potential to strengthen links between some of these smaller companies and the larger players by outsourcing some production to the smaller players.

Potential Roles for EPI

The export growth of Georgia's pharmaceutical sector requires GMP certification as a precondition. EPI involvement in the pharmaceuticals sector would most likely be focused on helping to establish GMP certification and assisting Georgian companies to achieve certification. The required legislation and implementation will need to be put in place, and it would certainly be desirable to help the companies achieve certification well in advance of 2016. As a next step, the team recommends that EPI continue to engage with the pharmaceutical companies and the GoG agencies to determine if EPI support would be welcome and useful.

Interviews Conducted

Name	Position	Company
Soso Zazashvili	General Director	Batfarma
Giorgi Vekua	General Manager	Gama
Irakli Margvelashvili	Executive Director	Association of Pharmaceutical Companies Representatives in Georgia
George Antadze	General Manager	GM Pharmaceuticals

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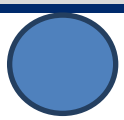
“Georgia Sector Competitiveness Overview”. *IFC*

UN Comtrade Data

Renewable Energy – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Renewable Energy					 *	

*Excludes hydropower

Criteria	Renewable Energy
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth, Stability & Trends	4
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (5)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	1
Business Service Provider Professionalism & Availability	1
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	High (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Constrained (2)
Lack of Domestic and/or International Competition	1
Transportation & Logistics	1
SME Linkages (horizontal & vertical) – *Total points: None(1-2), Modest (3-4), Some (5-7), High (8-10)*	None (2)
Potential SME creation	1
Linkages to existing SME suppliers	1
Total:	**32**

Overview

Renewable energy is not recommended for targeting under EPI. There is little potential for impact beyond the HIPP program, and other renewable sources are not attractive propositions when compared to hydropower.

Georgia's potential hydropower production is roughly 7.27 MWh per capita. This is considerably higher than that of the world's biggest hydropower producers, Norway and Canada, which produce 5.4 MWh and 3.3 MWh, respectively. While there is substantial potential for other renewable energy sources such as wind, solar, biomass, and geothermal, they fail to come close to the massive potential of hydropower.

Hydropower development is the objective of USAID/Georgia's USD 8.9 million Hydropower Investment Promotion Program (HIPP). As a result, there is little opportunity for impact through assistance under EPI. Through HIPP, USAID assists the Government of Georgia in undertaking specific key tasks necessary to attract investments into Georgian hydropower development. HIPP is expected to help attract up to USD 70 million in local and foreign investment to Georgia's energy sector in an effort to add 400 megawatts of clean, green, renewable power to the Georgian grid.

Market Growth – High/Some

Georgia has been a net electricity exporter since 2007. The Turkish market shows high demand for power imports and is currently the primary target for exports. Market rates for power in Turkey are high and are likely to increase further, creating attractive opportunities for power exports. Georgia may even have greater export potential in the long-term if they become a full member of the European Energy Community (EEC), a community established between the European Union (EU) and a number of third countries in order to extend the EU internal energy market to South Eastern Europe and beyond.

Skills & Capacities – Limited

The current level of domestic skills needed to attract and enable productive investment in the hydropower sector is limited. However, the skills necessary to enable investment are already being addressed through the HIPP program. Georgia's long history in hydropower provides a base of hydro-engineering skills, but local hydro-engineering skills are limited in respect to modern engineering and plant operation technologies. Despite these limitations, the capacity within Georgia is adequate to enable investment, as investors provide the skill sets necessary to complement local skill gaps.

Resources/Inputs – High

Georgia has tremendous renewable power resources in hydro, wind, biomass, solar, and geothermal. According to a 2008 assessment under USAID/Georgia's Rural Energy Program, estimated achievable potential for renewable energy are:

- Hydro: 32 Terawatt Hours (TWh)
- Wind: 5 TWh
- Biomass: 3-4 TWh
- Solar: 60-120 Gigawatt Hours (GWh)
- Geothermal: 700-800 GWh

Market Constraints – Few Constraints (Hydro), Constrained (Wind, Biomass, Solar, and Geothermal)

Hydropower is much more lucrative than the other renewable sources. Preferential tariffs would be necessary to enable the development of the other renewable energy sources, but preferential tariffs are not necessary for hydropower. As a result, the Government of Georgia and USAID agree that an emphasis should be placed on the promotion of hydropower development. Legal and regulatory reforms are needed to improve the investment climate for hydro, something which falls beyond the scope of HIPP assistance.

SME Linkages – None

As (1) hydropower sites will be developed by investors, and (2) due to the nature of infrastructure development, there are no obvious opportunities for sustainable SME linkages.

Potential Roles for EPI

As there are already other USAID projects working in this sector, there is limited room for EPI involvement.

Interviews Conducted

Nick Okreshidze, Senior Energy Specialist with USAID/Georgia. November 2010.

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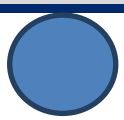
Tourism – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Tourism						

Criteria	Tourism
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (9)
Domestic Market Growth Potential, Stability & Trends	5
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	High (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (6)
Lack of Domestic and/or International Competition	4
Transportation & Logistics	2
SME Linkages (horizontal & vertical) – *Total points: None(1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Potential SME creation	4
Linkages to existing SME suppliers	4
Total:	**45**

Indicator	Industry
Industry Size	According to GeoStat, there are 1,897[1] tourism related enterprises
Export Performance	The number of incoming visitors has increased since 2000. This number has jumped from 1.5 million in 2009 to 2 million in 2010.
Academia & R&D	Four major vocational schools (Two in Tbilisi and two in Batumi). Tourism is also being taught at the University level.
Associations	The Georgian Tourism Association is made up of 43 members and the Georgian Incoming Tour Operators Association (GITOA) is made up of nine members. There is also a Georgian Wine Association.
Foreign Investment	USD37.5 million in restaurants and hotels in 2009[2]
Major Competitors	Very widespread competition, that varies by tourism value chain and segment.

Overview

The global tourism industry is one of the world's largest and most competitive service industries. It represents approximately 35 percent of the world's exports in services and at least 70 percent of exports in the least developed countries.[3] It generates nine percent of the global GDP and eight percent of world employment, in other words, roughly 235 million jobs.[4] The World Tourism Organization's statistics demonstrate that throughout August 2010 international tourism continued to recover after a decline of 4.2 percent last year.[5] Worldwide arrivals between January and August 2010 were 642 million, which is approximately 40 million more than during the same time period in 2009.[6] Tourism is expected to grow between five to six percent in 2010, a principal export earner for 83 percent of the developing countries, and is the number one principal exporter earner for one third of developing countries.[7] The tourism industries of emerging economies are increasing faster than the world average, at a rate of eight percent.[8]

For those countries that make a serious commitment to tourism, the rewards can be significant. France, for example, had the highest number of tourist arrivals in the world with more than 75 million arriving in 2005.[9] This is not surprising given its national promotional budget of more than USD 78 million (in addition to its tourist

[1] Geostat

[2] Georgian Investment Agency

[3] Alan Saffery. Armenian tourism report.

[4] "International Tourist Arrivals Back at Pre-Crisis Peak Level." *Financial*. 22 November 2010. p.19

[5] Saffery, Alan. Armenian tourism report.

[6] *Ibid.*

[7] Alan Saffery. Armenian tourism report

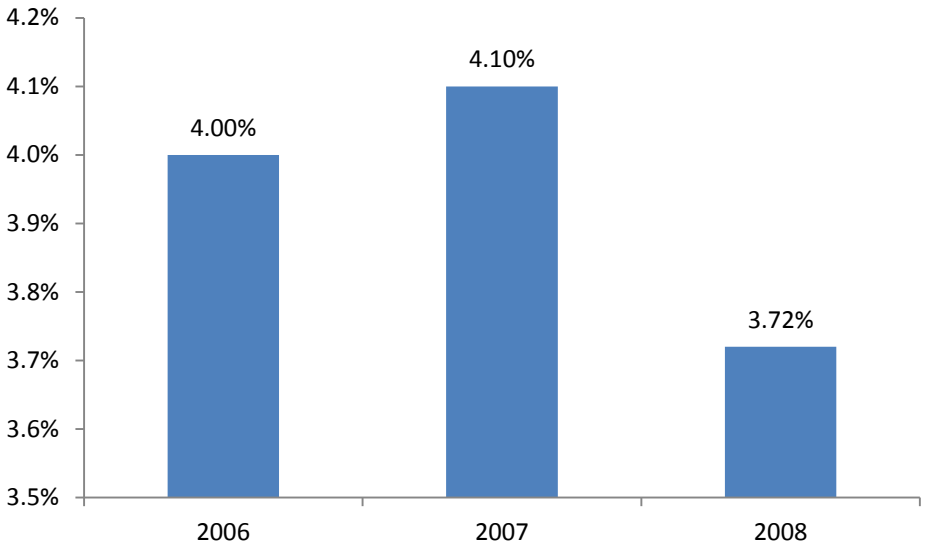
[8] "International Tourist Arrivals Back at Pre-Crisis Peak Level." *Financial*. 22 November 2010. p.19

[9] Alan Saffery. Armenian tourism report.

attractions).[10] The United States is the largest income earner, receiving more than USD 80 billion in revenue.[11] Countries with a similar size to Georgia such as Ireland and the Czech Republic receive 9.9 million and 6.4 million visitors per year respectively.

In Georgia, tourism has made up approximately four percent of the GDP since 2006.[12] Georgia hosts international, regional, and domestic tourists. Regional tourists consist of those coming from Azerbaijan, Turkey, and Armenia. However, an increasing number of western and southern Europeans are also visiting Georgia, despite the 2008 war with Russia and the worldwide economic recession, which has caused a slight decrease in Georgia's tourism contribution to GDP as illustrated in Figure 1.

Figure 1: Tourism as a Percent of GDP



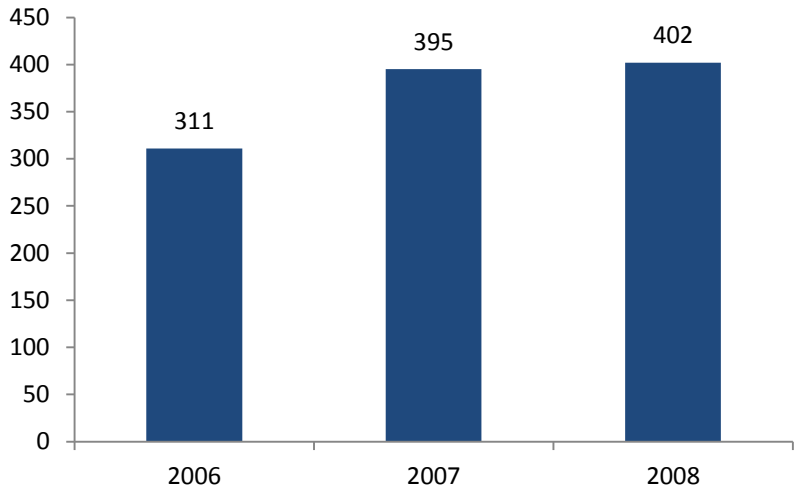
Source: Georgian National Tourism Agency Statistics

However, despite a decrease in the percent of Georgia's total GDP, the value of tourism has continued to increase since 2006 as displayed in Figure 2. The tourism sector grew by about USD 100 million between 2006 and 2008, and in 2008 the tourism sector reached USD 402 million.[13] These numbers suggest that Georgia's tourism sector has a strong potential for market growth. The Government of Georgia places a high priority on tourism, and is investing in tourism development; the Svaneti Information center recently opened in December 2010 and three tourism centers are being constructed in Kakheti, one of which is already functioning. Much

[10] *Ibid*
[11] *Ibid*
[12] Georgian National Tourism Agency
[13] *Ibid*

investment however is still needed to improve sites, access, and other services and infrastructure.

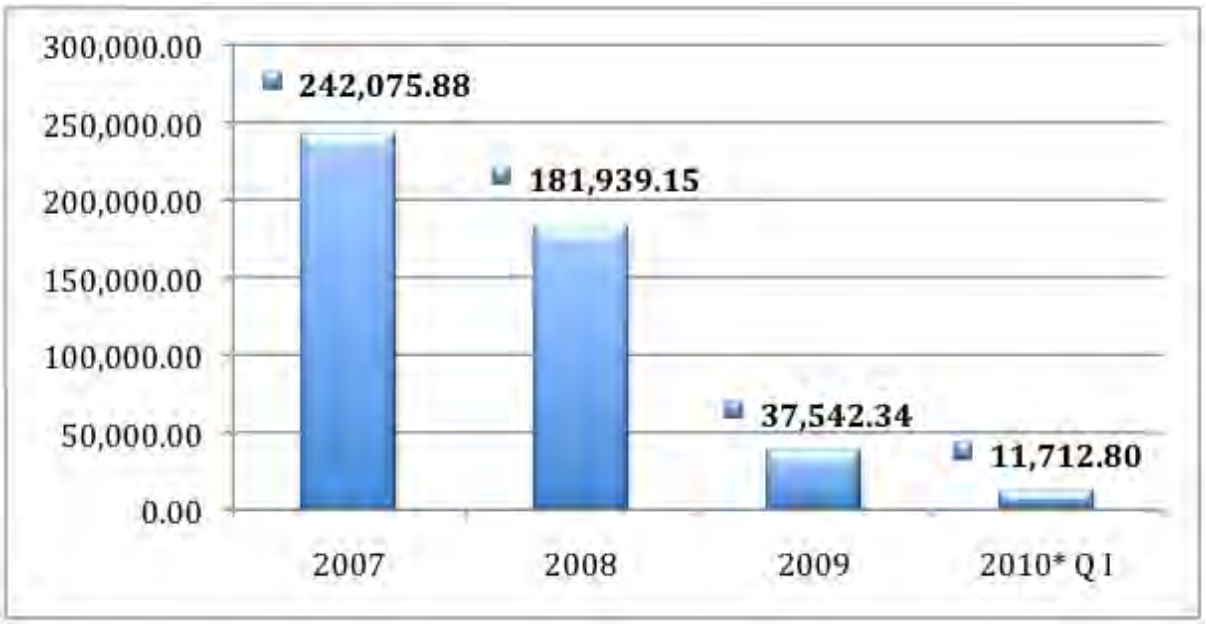
Figure 2: Total Value Added in the Field of Tourism (USD, million)



Source: Georgian National Tourism Agency Statistics

However, despite the increases in value added in tourism, a foreign direct investment in hotels and restaurants has decreased since 2009.

Figure 3: Foreign Direct Investment in Hotels and Restaurant Sector („000 USD)[14]



[14] National Statistics Office of Georgia

Opportunities for the growth of tourism exist throughout Georgia. Some of the areas that are the focus for increasing visitor numbers in Georgia are Batumi, Anaklia (a new resort town on the Black Sea), Telavi, Tusheti, Svaneti and Kakheti (this list is not comprehensive). There are numerous areas for tourism that do not fit into the four value chains listed in this sector report that also need to be further explored, such as Mtskheta.

Figure 4: Map of Georgia

Source: http://www.gocolumbiamo.com/Sister_Cities/kutaisi.php [15]

The three main tourism options in Georgia are leisure tourism, educational tourism, and business tourism, each of which includes several value chains. A separate assessment on educational tourism is included in the Sector Assessments Report. Therefore, educational tourism will not be discussed in this sector assessment.

Leisure tourism has opportunities for growth in Georgia. Potential products include:

1. Wine/Gourmet/Cultural/Rural tourism
2. Winter/Mountaineering/Adventure/Cave tourism
3. High Value Sun/Sea/Sand tourism
4. Spa and Wellness Tourism

Within the category of business tourism, MICE tourism (Meetings, Incentives, Conferences and Exhibitions) demonstrates potential.

Wine/Gourmet/Cultural/Rural tourism: Wine tourism is expanding in most major wine growing regions including France, Spain, Germany, Italy, the US, South Africa,

[15] This map does illustrate all of the areas for Georgian tourism

Australia, New Zealand, Austria, and Chile. Worldwide wine production has decreased between 2004 and 2008 by 2.8 percent[16], although over the same period, Georgia's wine production increased by 15.8 percent, performing better than New Zealand and Switzerland (countries producing similar volumes of wine).[17]

There is increased interest in Georgian wine and wine tourism both domestically and internationally. The main wine tourism region is Kakheti, and the main wine areas are circled in Figure 4 (note, this is not a comprehensive list).

Georgia combines diverse landscapes and historical sites with high quality food and wine. Additionally, Georgia is close to key markets for European wine tourists. Starting in 2011 the Travel Channel will begin to broadcast Isabelle Legeron's wine tasting and touring trip of Georgia. This show should increase awareness of Georgia's wine history and culture for tourists. The Georgian Wine Association and a number of incoming tour operators have been involved in this value chain.

According to the U.S. Government's Trade Data and Analysis, Georgia's wine production, vineyard acreage, and consumption have all increased since 2004. In 2008, Georgia's vineyard acreage decreased.

Table 1: Georgian Wine Production, Wine Consumption & Vineyard Acreage (2004-2008 and percent change)

	2004	2005	2006	2007	2008	% Change 2004-2008
Production (,000 Hectoliters)	950	950	1100	1100	1100	+15.8%
Consumption (,000 Hectoliters)	131	251	260	265	270	+106.1%
Vineyard Acreage (,000 Acres)	153	156	161	162	159	+3.9%

Source: US Trade Data on Georgian Wine

Winter/Mountaineering/Adventure/Cave tourism: Georgia has a few primary ski/mountaineering resorts, Bakuriani, Gudauri, and Svaneti; the first two together attracted 30,000 tourists in the 2009/2010 season.[18] The majority of tourists who visited these ski resorts were Georgian. However, due to their proximities, Bakuriani is also popular with the Azeris and Armenians, whereas Gudauri is popular with Ukrainian tourists.[19] Almost all of the hotel rooms at these two resorts were booked for the 2010 Christmas season.[20] A further attraction is the cave city of Vardzia, a cave monastery that is carved into the side of the Erusheli Mountain in southern Georgia.

[16] Alan Saffery,. Armenian tourism report.

[17] *Ibid*. This number has decreased since 2008 as a result of the war, but post 2008 data is not available.

[18] "Georgia's Winter Resorts Getting ready for the Season to be Opened." *Commercial Times*. 22 November 2010. p.2

[19] *Ibid.*

[20] *Ibid.*

High Value Sun/Sand/Sea: The development of numerous hotels (Hyatt, Radisson, and Hilton) and of the Piazza, the first concert venue in Batumi, is an indicator of recent efforts to attract tourists to the area. The Piazza was inaugurated on November 24 2010 with a concert by Placido Domingo and famous Georgian opera singers. Other examples of events that have taken place in Adjara are the Classical Music Festival that has been held in Gonio for two years, and the International Author Film Festival that has been held in Batumi for five years. If Georgia wants to develop high value sun/sea/sand tourism then the Adjara region needs to develop shopping areas and water sport companies. Recently, the Government of Georgia (GoG) opened a tax free zone in Kobuleti (near Batumi), which will help attract MICE and sun/sea/sand investments. The tourism free zone guarantees investors a 15-year income and property tax exemption for any hotels or projects that are completed by August 1 2011.

Spa & Wellness Tourism: The main area for Spa tourism is the Borjomi region which is famous for its salty sour carbonated water and its mineral spring with restorative health properties. This area also offers the best opportunities for hiking in Georgia.

MICE Tourism: There is potential for MICE tourism in Tbilisi, Kobuleti, and Batumi. Batumi and Kobuleti are perhaps more attractive for this type of tourism because of their coastal locations. Three main draws of Batumi and Kobuleti include: the beaches along the Black Sea, the large number of high quality international hotel chains, and an increasing number of musical and film events. The Georgian Palace Hotel is located in Kobuleti and is the first five star Georgian hotel chain, while a Sheraton Hotel is located in Batumi and will soon be flanked by well-known hotels such as the Hyatt, Radisson, and Hilton.

The Sheraton Batumi has hosted 25,000 visitors since opening on 1 April 2010. The majority of guests were from Georgia, Turkey, Azerbaijan, and Armenia. According to Omar Subaisi, the Sheraton Batumi Hotel, which has a capacity for 404 guests, will be fully occupied during July and August, as well as most of September.[21]

Many of the bookings at the Sheraton have been group and business bookings. Both Calypso travel and the management at the Hotel Georgian Palace in Kobuleti explained that they have had an increase in MICE-related bookings and expect that MICE tourism will grow in the Adjara region.

Market Growth – Some/High

The tourism market was growing substantially prior to 2008. After a small decline due to the war with Russia, this market has begun to rebound. Maia Sidamonidze, the head of the Georgian National Tourism Agency, announced that during the first eight months of 2010 there were 1.5 million incoming tourists, a number that is 38

[21] "Batumi will be an International Destination Soon, Sheraton Batumi Hosted 25,000 Guests since April." *Financial* 5 July 2010. p.17

percent higher than during the same period in 2009.[22] Sidamonidze attributes this growth to improvements in infrastructure (such as roads) and promotion of the country in foreign markets.

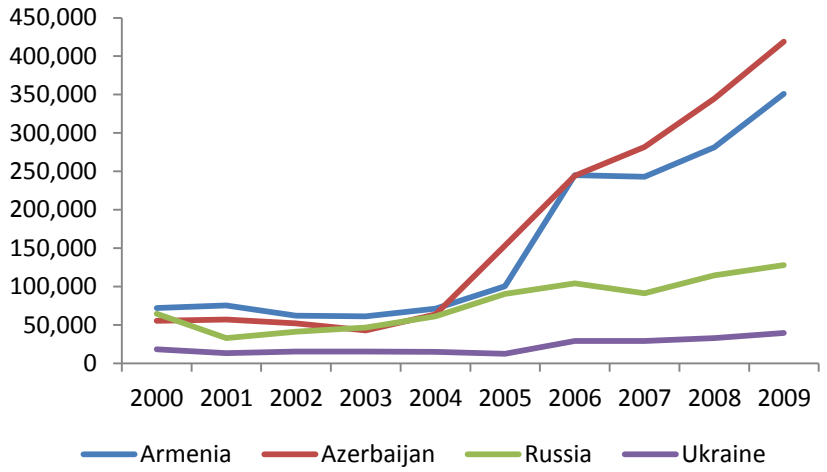
Tourism is a priority sector for the government. On November 8 2010 Saakashvili pointed out three directions for Georgia: infrastructure, tourism, and agriculture. "These three pillars should double the country's GDP in the next five years," he said ". Georgia has the potential to attract five million tourists annually over the next [few] years." Tourism is a sector that can lead to the creation of jobs, linkages with SMEs, and can help spur improvements in infrastructure and development.

Based on data from 2009, the majority of visitors come from Commonwealth of Independent States (CIS) countries. However, there were approximately 400,000 visitors from Eastern and Mediterranean Europe (the greatest number coming from Turkey and Israel), 32,000 from Western Europe, 23,000 from Southern Europe, and 19,000 from North America (the majority from the US).[23] The number of foreign visitors has been growing every year since 2000.[24]

Figure 5 (below) shows that there was an increase in visitors from CIS countries. In 2009 the largest number of incoming regional tourists came from Azerbaijan (418,936), Armenia (351,049), Russia (127,937), and Ukraine (39,339).[25]

In 2009, each of these top four countries had the largest number of tourists visiting Georgia than it had in any other year since 2000.

Figure 5: CIS Visitors



Source: Border Police of Georgia

[22] Koka Kalandadze "Putting Georgia on the World Map – Georgia striving to become international tourism destination." *Financial* 22 November 2010. p.2

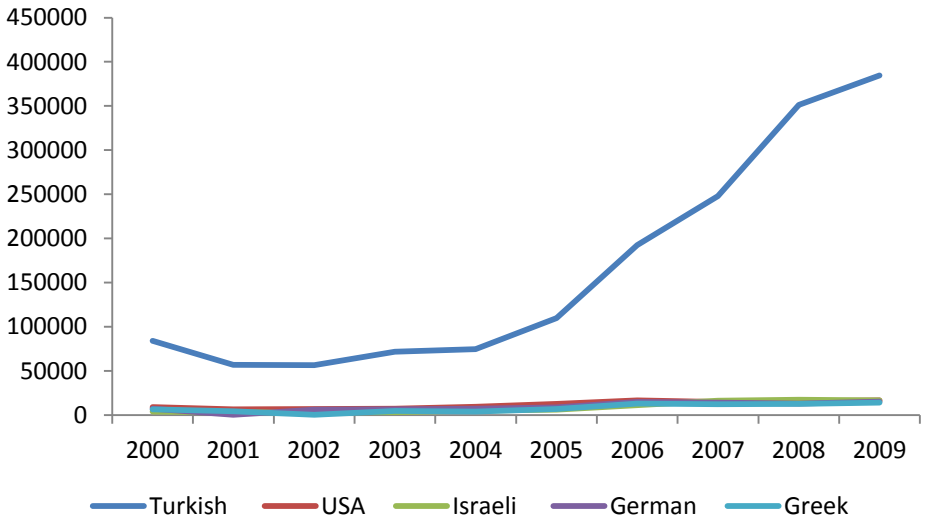
[23] Georgian National Tourism Agency

[24] The numbers available are the number of visitors not the number of tourists. For the purpose of this report, the number of visitors will be a proxy for number of tourists.

[25] Border Police of Georgia

Figure 6 displays the numbers of incoming visitors by numbers of entrants. Countries with the highest numbers of visitors from outside of the CIS are: Turkey (351,410), Israel (16,757), Germany (15,351), Greece (12,914), and USA (8,951). These numbers have also been increasing since 2000.[26]

Figure 6: Number of Foreign Visitors



Source: MIA/Border Police of Georgia

New airlines are entering the Georgian market. In the past few years a number of passenger airlines, some which are low cost, have come to Georgia such as airBaltic, Pegasus, and Ukraine Airlines International. Furthermore, the Government has negotiated Free Air Traffic agreements with many European and Central Asian countries: Georgia and Great Britain (November 2010), the Czech Republic (November 2010), the USA (July 2007) and Ukraine (partially in November 2010), Switzerland (July 2008), and the UAE (November 2007).[27] The increasing number of airlines, and the decreasing number of airline restrictions offer growing opportunities for the tourism industry.

Skills & Capacities – Limited

Although people in Georgia are known for their hospitality, one issue for the tourism industry is the poor quality of service personnel. Tamar Tabidze, director of the Icarus vocational school, Maia Tsereteli, executive director of Key Management Solutions, and Zviad Eliziani, director of Batumi tourism school each explained that there is a great demand for a skilled workforce in the hospitality sector, but there are

[26] *Ibid*
[27] Financial and Commerical Newspapers

few hospitality teachers, and equally, many restaurants and hotels that do not want to invest in training their staff.

In addition, as Maia Sidamonidze stated, "There is a negative attitude towards the service sector, but we want to popularize this industry in order to make [the Georgian] people want to work in it."[28]

The challenges for the value chains are discussed in the constraints section.

Resources/Inputs - High

Georgia has abundant resources on which to base its growing tourism sector.

Wine/Gourmet/Cultural/Rural tourism value chains: Georgia has a long history of wine-making and a more nascent history of wine tourism. However, Georgia has the advantage of having a history in this sector, being the first Europeans to produce wine, a traditional way to make wine (in kvevries), and the production of high quality wine. Georgia also has a wine association and many strong stakeholders.

Wineries in Kakheti include:

Badagoni	Georgian-Italian investment: Georgia's biggest winery producing over 2 million bottles a year
Teliani Valley	Recently updated operation with a modern on-site guest house where wine tours are offered
Shumi	A smaller more typical Georgian winery
Napareulis Marani	Family run operation
Villa Cinandali	Nikolaishvili family invites visitors to participate in making organic wine at their village home
Telavi Wine Cellar	Old traditional brands, common winemaking technology plus kvevri
Alaverdis Marani	Kvevri wine

*Cultural Resources: O*ver 12,000 historical and cultural monuments in Georgia, three World Heritage Sites, ten resorts, and more than 24,000 mineral springs.[29]

Winter/Mountaineering/Adventure/Cave tourism: Georgia is known for its bio-diversity, which is now protected through 24 nature reserves and national parks, all recently opened up to visitors so that they may experience the untouched beauty of Georgia's diverse landscapes. Within these are five major national parks, all with extensive trail systems.[30]

[28] Koka Kalandadze "Putting Georgia on the World Map – Georgia striving to become international tourism destination." *Financial.* 22 November 2010. p.2

[29] "Georgia's Winter Resorts Getting ready for the Season to be Opened." *Commercial Times*. 22 November 2010. p.2

[30] *Department of Tourism and Resorts*. 20 November 2010. http://www.dotr.gov.ge/eng/news.php

High Value Sand/Sea/Sun: Georgia has beaches and luxury hotels. Georgia also needs to develop shopping areas, cinemas, theatres, concerts, and other high value forms of entertainment.

Spa and Wellness Tourism: There are also health resorts and spas famous for their unique microclimates. These spas and hot springs are not currently geared towards Western European tourists and often have poor levels of infrastructure.

MICE Tourism: Some important resources for MICE are conference rooms and high quality and luxury hotels. MICE tourists could also benefit from surrounding shopping areas, cinemas, theatres, concerts, and other high value forms of entertainment. (These still need to be developed).

Other Factors:

Georgia's new tax code (since January 2005) considers incoming tourist revenue to be an export, and hence is free of VAT. This confers a cost-related advantage to the sector.

Furthermore, the industry benefits from Georgia's liberal visa regime. There are no visa requirements for nationals of Israel, Japan, Canada, United States of America and citizens of European Union countries for up to 360 days. CIS nationals (except those from Russia and Turkmenistan) also do not require a visa and all these nationals are allowed to stay for up to 90 days. Passengers on cruise ships who stay in Georgia for less than 72 hours do not require visas either.[31]

Constraints - Few Constraints

One of the challenges facing Georgia's tourism industry is promoting and maintaining a favorable image of the country abroad. There are few airline options in Georgia (although recently this has been improving), and even then, there are infrequent flights, inconvenient flight times (as they occur mostly at night), and there are high travel costs. High accommodation costs, poor quality or underdeveloped tourism sites and infrastructure, logistics, and hospitality services also pose challenges for the development of the tourism sector. In addition, international tourists face a language barrier, due to a lack of English, German, Russian, or other international language signage/interpretation.

The challenges for domestic tourism are similar to those faced by regional tourists, namely high accommodation costs, poor quality or underdeveloped tourism sites and infrastructure, difficult logistics, and poor hospitality services.

Value chain specific constraints:

Wine/Gourmet/Cultural/Rural tourism: Kakheti's hospitality staff lack knowledge of local and international wines, wine etiquette, types of wine glasses, food pairings, grape varietals, and are not able to communicate effectively in foreign languages,

[31] *Department of Tourism and Resorts*. 20 November 2010. http://www.dotr.gov.ge/eng/news.php

particularly English. In Kakheti there is a limited number and low quality of wineries, tasting rooms, and restaurants.

Winter/Mountaineering/Adventure/Cave tourism: Local and well trained nature, trekking, and adventure guides are difficult to find in Georgia. Also, there are few accommodation options, trails, and après-ski options. Vato Asatshvili, Former Deputy Chairman of the Department of Tourism and Resorts (now Georgian National Tourism Agency), described these constraints:

> There is a lack of tourist products at the existing ski resorts. This year we helped to introduce new products at our resorts, for instance Kukushka (small mountain train) in Borjomi and free ride in Gudauri…the Kuskushka boosted the number of tourists by 30 percent compared to the previous year.[32]
>
> It is difficult to access Svaneti and other mountainous tourist attractions. The road infrastructure in some of the more remote areas needs improvement. A new flight was just introduced from Tbilisi to Svaneti. Another challenge is a lack of signage in a language that international tourists would understand such as English.

High Value Sand/Sea/Sun: Foreign language and hospitality skills are lacking in Batumi. With four or five high-end international hotel chains opening soon in Batumi, each of the hotels will need an average of 250-300 employees.

Spa and Wellness Tourism: Underdeveloped tourism facilities, services, and complimentary attractions, in particular for those tourists interested in spas and wellness.

MICE Tourism: Georgia is a relative newcomer in terms of hosting MICE events. As a result of this, Georgians lack knowledge of the specific hospitality skills that are associated with MICE and trained personnel such as: event management specialists; caterers; conference specialists. It is also difficult to access direct flights to Batumi, for MICE events taking place in Batumi. Furthermore, there is no existing conference venue in Batumi, although there are plans to build one.

SME Linkages – High

Tourism has the potential to involve numerous SMEs, such as small vineyards, hotels, restaurants, transportation companies, and bed and breakfast enterprises. There are also many small companies that can be linked with larger companies in the tourism industry. Some examples of value chain specific linkages are listed below.

Wine/Gourmet/Cultural/Rural tourism: Hospitality training, English or other foreign language training, tour operators, wine trainings (sommeliers), tour guides for nearby historical sites, passenger transportation, caterers, wine accessories and crafts,

[32] International Conference Discusses Development of New Ski Resorts. *Business*. 9-15 July. p.15

cheese accessories and crafts, fine arts, bed and breakfasts, vineyards, wine producers, and tasting rooms. Help develop new itineraries that respond to the latest market trends.

Winter/Mountaineering/Adventure/Cave tourism: Hospitality training, English or other foreign language training, tour operators, adventure tourist guides and companies, horse riding, tour guides, climbing and trekking companies, bed and breakfasts, adventure skiing companies, clinics, ski schools, ski shops, mountain biking, and après-ski facilities.

High Value Sand/Sea/Sun: Hospitality training, English or other foreign language training, tour operators, spas, beachwear producers, spa product manufacturers, water sports, entertainment, beach chair renting, and fishing. High value shops, tourism, and souvenirs.

MICE Tourism: Hospitality training, English or other foreign language training, transport providers, tour operators, tour guides, event organizers and printers/publishers.

Potential Roles for EPI

Tourism should be one of the largest industries in Georgia. Georgia's Mediterranean climate, ancient civilizations, good beaches, and spectacular mountains can serve as a starting point on which to build a strong tourism industry. EPI should focus on this sector because there are a number of low cost ways to substantially improve the sector. There are many opportunities for the value chains in this sector to link with other sectors, such as transportation, ICT, and education. Actions to identify target markets, increase arrivals, increase tourist spending, and improve the tourist experience are amongst the themes that should be examined in the subsequent Value Chain Assessment Report, and fully developed in the value chain analysis/strategic plan.

Interviews Conducted

Name	Position	Company
Marina, Metreveli	Tourism Expert	Parliament Committee for Sectoral Economy
Vano Vashakmadze	Deputy Chairman	Georgian National Tourism Agency
Lela Chartishvili	Head of Department	Elkana – Association of Biofarms
Tamar Tabidze	Director	Icarus Training
Tina Kezeli	Executive Director	Georgian Wine Association
Knut Gerber	Director	Vinta.GE,
Maia Tsereteli	Executive Director	Key Management Solutions
Mariam Mrevlishvili	Deputy Head	Agency of protected Areas
Ia Tabagari	Head	GITOA - Georgian Incoming Tour Operators Association
Zviad Eliziani	Director	Tourism School (Batumi based),
Shalva Alaverdashvili	General Manager	Hotel Rcheuli Vila (Batumi based),
Hotel Management		Hotel Georgian Palace (Kobuleti based)
Inga Malakmadze	General Manager	Calypso Travel (Batumi based),

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Pegasus Served More than 5,000 Passengers in First Month in Georgia. *Financial*. 22 Nov 2010. pp. 1 & 4

Alan Saffery. Armenian Tourism Report.

Khelaia Tato. “Tbilisi Awaiting Tourism Boom in 2011. *Financial*. 22 November 2010. pp.1-2.

Table 2. List of GITOA Member Companies

#	Company	Address	Note
1	Caucasus Travel	44/II Leselidze str., 0105 Tbilisi, Georgia	http://www.caucasustravel.com/
2	Concord Travel	82 Barnovi str., 0179 Tbilisi, Georgia	http://www.concordtravel.ge/
3	Exotour	9 Galaktion Tabidze str., 0105 Tbilisi, Georgia	http://www.exotour.ge/
4	Explore Georgia	5, Shevchenko str., 0108, Tbilisi, Georgia	http://www.exploregeorgia.com/
5	GeorgiCa Travel	5, King Erekle str., Tbilisi, Georgia	www.georgicatravel.ge
6	Georgian Discovery Tours	74 Chavchavadze Ave, 0162 Tbilisi, Georgia	http://www.gdt.ge/
7	Intertour	39 Irakli Abashidze str., Tbilisi, Georgia	http://www.intertour.ge/
8	Omnes Tour	4, Abesadze str., 0105 Tbilisi, Georgia	http://www.omnestour.ge/
9	Visit Georgia	14 Nishnianidze str., 0105 Tbilisi, Georgia	http://www.visitgeorgia.ge/

Table 3. List of GTA member companies

#	Company	Address	Note
1	Across Georgia - Universal	27 Kostava str., Tbilisi, Georgia	http://www.acrossgeorgia.ge/
2	Alioni Tour	12 a A. Kazbegi Ave., III floor, Tbilisi, Georgia	http://www.alionitour.ge/
3	Bagrati 1003	2 Tsereteli str., Kutaisi, Georgia	http://www.bagrati1003.ge/
4	Citadines	4 Tavisufleba sq., Tbilisi, Georgia	http://www.citadines.com/
5	Company Harmony	12 Melikishvili str., III floor , Tbilisi, Georgia	http://www.harmony.ge/
6	DS Travel	1 Gulia str., Tbilisi, Georgia	http://www.dstravel.ge/
7	Ecotour Georgia	86 Stalin str., Dedoplistskaro, Georgia	http://ecotour.com.ge/
8	Fortuna Travel Ltd	1 a Bulachauri str., Tbilisi, Georgia	http://www.fortunatravel.ge/
9	Georgian Adventures & Tours	60 Iosebidze str., Tbilisi, Georgia	http://www.geoadventures.ge/
10	Georgian Travel	10 Pushkini str., II floor, room 1, Tbilisi, Georgia	http://geotravel.ge/en/index.php
11	Georgian Holidays	35 a Kazbegi Ave., Tbilisi, Georgia	http://www.georgianholidays.com/
12	International Tour Operator "Intercontinental"	3 Taktakishvili str., Tbilisi, Georgia	http://www.intercontinental.ge/

13	Intertour	39 Irakli Abashidze str., Tbilisi, Georgia	http://www.intertour.ge/
14	Georgian Tour	14 Paliashvili tr., Tbilisi, Georgia	http://georgiantour.ge/
15	ITA GEORGIA L.T.D	37 Rustaveli ave., Tbilisi, Georgia	http://www.itageorgia.ge/
16	Adventure Club Jomardi	Aprt. 32, Build. 3B, Dighomi 1, Tbilisi, Georgia	http://www.adventure.ge/
17	Kaukasus-Reisen	17 Saiatnova str., Tbilisi, Georgia	http://www.kaukasus-reisen.de/
18	Kera Travel	14 B Kazbegi Ave., Tbilisi, Georgia	http://www.keratravel.com/
19	Magic Tour	73 Barnovi str., Tbilisi, Georgia	http://www.magictour.ge/
20	Megzuri	5 Diuma str., Tbilisi, Georgia	
21	NEWKAZ	5 Janashia str., Tbilisi, Georgia	http://www.newkaz.com/
22	Promethea Voyages	45 Kostava str., Tbilisi, Georgia	http://promethea-voyages.com/
23	Psity Travel Organizer	Aprt. 2, Build. 9, D. Dighomi, Tbilisi, Georgia	http://www.psity.ge/
24	Silk Way Travel Georgia	28/2 Chavchavadze Ave., Tbilisi, Georgia	http://swgeorgia.ge/
25	Tbilisi international School of hotel management	76 Samghereti str. Tbilisi, Georgia	http://tisohm.ge
26	TravelShop	10 Abashidze str., Tbilisi, Georgia	http://www.travelshop.ge/
27	Travel Club	4 Leonidze str., Tbilisi, Georgia	http://www.travelclub.ge/
28	IATA Accredited Company Travelland LTD	49 a Chavchavadze Ave., Tbilisi, Georgia	http://www.travelland.ge/
29	Travel Tour	43 Abashidze str., Tbilisi, Georgia	http://www.mytours.ge/
30	Tbilisi Tourist Center	5 G. Akhvlediani str., Tbilisi, Georgia	http://www.ttc.ge/
31	VIA TRAVEL LTD	24 Ir. Abashidze str., Tbilisi, Georgia	http://www.viatravel.ge/
32	Your Travel	16 I. Nikoladze str., Tbilisi, Georgia	http://www.yourtravel.ge/
33	Grand Hotel	3 Telavi str, Tbilisi, Georgia	-
34	Guesthouse Gora	22 Ishkhneli str., Kutaisi, Georgia	-
35	IMglobal	47 Kostava str., Tbilisi, Georgia	http://www.imglobal.ge/index.php
1	Armenian Association of Travel Agents	3-11 Spendiarian Str., 0002 Yerevan, Armenia	http://www.cts.am/
2	Abastumani Tourism Association	35 Rustaveli str., Abastumani, Georgia	http://www.ata.ge/
3	Adjara Tourism Association	84/86 Parnavaz Mepe str., 6007 Batumi, Georgia	www.visit-adjara.ge
4	Azerbaijan Tourism Association (Azta)	2 Heydar Alyev Ave, AZ-1154 Baku, Azerbaijan	http://www.azta.az/index_en.html
5	Elkana Rural Tourism Project	16 Gazapkhuli Str, 0177 Tbilisi, Georgia	www.ruraltourism.ge

6	Kazbegi Mountain House	22 Vaja-Pshavela Ave., Tbilisi, Georgia	http://www.mountainhouse.ge/
7	Tourism Association of Guria (TAG)		
8	Svaneti Tourism Center		http://svanetitrekking.ge/

Arrivals of non-resident visitors at national borders of Georgia by country of citizenship

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total	387,258	302,215	298,469	313,442	368,312	560,021	983,114	1,051,769	1,290,107	1,500,049
EUROPE	347,346	276,612	268,520	282,707	342,379	533,127	935,321	1,009,240	1,243,402	1,447,443
Europe without CIS	347,346	92,555	92,101	108,705	123,831	167,073	300,961	353,498	458,891	496,692
C/E Europe	225,864	195,973	189,348	179,363	228,949	375,068	658,976	681,301	811,766	974,871
CIS	221,671	184,057	176,419	174,002	218,548	366,054	634,360	655,742	784,511	950,751
Northern Europe	8,539	6,402	6,595	6,756	9,129	9,788	17,763	14,533	13,944	16,512
Southern Europe	10,337	7,712	1,772	7,882	8,415	11,637	22,173	19,076	19,541	23,128
Western Europe	14,270	6,303	11,015	13,431	15,911	20,418	32,304	29,630	29,061	31,491
East/Med Europe	88,336	60,222	59,790	75,275	79,975	116,216	204,105	264,700	369,090	401,441
AMERICAS	10,789	7,315	8,156	8,731	11,209	14,842	19,417	16,865	17,489	19,555
North America	10,139	7,044	7,750	8,226	1,053	14,098	18,389	16,294	16,982	18,924
EAST ASIA/ PACIFIC	7,145	5,161	6,865	2,967	4,952	3,244	13,732	9,415	9,459	11,016
MIDDLE EAST	2,152	1,254	1,250	1,835	1,563	973	2,105	2,490	3,245	3,298
SOUTH ASIA	6,058	3,843	5,822	4,505	3,494	6,641	9,977	10,873	13,457	14,572
AFRICA	256	707	586	306	788	431	777	883	640	1,030

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total	**221671**	**184057**	**176419**	**174002**	**218548**	**366054**	**634360**	**655742**	**784511**	**950751**
Armenia	72,169	75,416	61978	61,351	71,261	100,508	245,146	243,133	281,463	351,049
Azerbaijan	55,193	56,859	52115	42,790	63,663	153,467	244,444	281,629	344,936	418,992
Belarus	1,193	1,030	952	1,129	1,160	1,236	1,562	1,601	1,981	2,503
Kazakhstan	1,579	1,061	1011	1,398	1,651	2,825	4,374	5,098	4,523	5,531
Kyrgyzstan	407	356	458	677	859	1,546	1,597	736	787	1,107
Moldova	2,905	2,407	1886	2,820	1,753	1,589	1,528	1,185	1,261	1,880
Russia	64,688	32,662	41390	46,699	61,400	90,277	104,111	91,361	114,459	127,937
Tajikistan	175	54	83	126	136	267	263	150	194	237
Turkmenistan	3,901	150	166	201	226	729	927	451	468	375
Ukraine	18,098	13,062	15550	15,354	14721	12,431	29,163	28,932	32,988	39,339
Uzbekistan	1,363	1,000	830	1,457	1,718	1,179	1,245	1,466	1,451	1,801

Source: MIA/ Border Police of Georgia.

Countries	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	% Growth
Azerbaijani	55193	56859	52115	42790	63663	153467	244444	281629	344936	418992	21
Turkish	84170	57005	56460	71751	74700	109796	192436	248028	351410	384482	9
Armenia	72169	75416	61978	61351	71261	100508	245146	243133	281463	351049	25
Russian	64688	32662	41390	46699	61400	90277	104111	91361	114459	127937	12
Ukraine	18098	13062	15550	15354	14721	12431	29163	28932	32988	39339	19
USA	9308	6536	7132	7486	9609	12928	16622	14818	15652	16934	8
Israeli	4083	3167	3276	3469	5167	6318	11462	16450	17413	16757	-4
German	7275	551	6423	6533	7208	8840	14884	14081	13267	15351	16
Greek	6734	4588	413	4646	4148	7098	13135	12380	12914	14300	11

SECTOR ASSESSMENTS – CROSS-CUTTING

CROSS-CUTTING SECTORS

The following brief summaries of the priority sectors are followed by more detailed sections on each of the sectors.

ICT

The Information and Communications Technology (ICT) sector in Georgia is just starting to flourish. As a percentage of the GDP, the sector has fluctuated between six percent and 7.5 percent since 2005. The internal IT market in Georgia is worth about USD 120 million, and telecom is worth about USD 465 million. The export of ICT goods as a percentage of total goods exports has increased by 139 percent since 2000 (about 6 percent compound annual growth rate (CAGR)), but is still less than half of one percent of total goods exports. This would be a good growth rate for most industries, but for ICT, it is low. The Government is implementing e-Government initiatives and has established the Data Exchange Agency to create a "single window" between business and government.

During this initial stage of assessment, no single sub-segment of the ICT sector was identified as demonstrating significant potential for growth over any other. It is therefore necessary to conduct a more thorough and in-depth study of the sector. Through the other sector assessments undertaken, ICT needs have been identified, confirming the cross-cutting nature and importance of the ICT sector.

TRANSPORT AND LOGISTICS

Georgia has a growing logistics and transport industry, which is aided by its strategic location on the Black Sea. The transportation and logistics sector can serve as a backbone for Georgia's role as a regional hub and it is a key element of every sector and value chain.

Furthermore, the worldwide transportation services market is a multibillion dollar market. Despite the economic downturn and the war in 2008, the value of the Georgian transportation sector (in US dollars) has continued to increase; it has grown six fold since 2000.

Because of its location, Georgia may have the potential to become a regional hub for the Caucasus region as well as landlocked Central Asia: Kazakhstan, Turkmenistan, Kyrgyzstan, Uzbekistan, and Tajikistan. The ports of Poti and Batumi are the only access to the Black Sea for the Caucuses and they provide easy access to Western Europe.

EPI will work with the transport and logistics sector in several ways:

- Supporting market linkage, particularly from rural production areas within Georgia, through improvements to rural road transport services.
- Improvements in storage, warehousing and cold chain capacities.

- Attracting improved air connectivity for Georgia through increased numbers of companies and flights serving Georgia, and supporting the development of air transport services at Batumi.
- Helping Georgia to develop and realize elements of a regional transport and logistics strategy.

PACKAGING

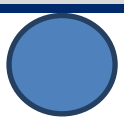
The majority of goods that require packaging typically utilize bulky, low-value packaging (cardboard boxes, plastic bottles, glass jars or bottles). Given its bulk and limited value, such packaging would typically be highly localized, produced nearby to customers in each market, and produced using bulk raw materials (plastic pellets, paper pulp, waster paper, etc.). However, this is not necessarily the case in Georgia.

A large number of enterprises in the packaging, agriculture, wine and transport/logistics sectors are in fact importing significant quantities of plastic and paper packaging from as far away as Belgium (but more commonly Turkey), citing supply and quality constraints in Georgia. Combined imports of plastic and paper products by Armenia, Azerbaijan and Georgia rose from less than USD 200 million to more than USD 600 million in the last five years.

Not only is Georgia clearly not able to satisfy local demand sufficiently but it is also unable to keep up with the fast growing regional demand in Armenia and Azerbaijan. The packaging sector does not offer a big export opportunity beyond immediate neighboring countries as the product is too bulky and low-margin to be transported over long distances.

Generally, packaging can be considered to be a competitive, low-margin sector. However, given the local supply gap and high import costs, producers within the region may, in the short term, have an opportunity to earn high margins from import substitution. A strong and more cost efficient packaging sector may also reduce the cost of inputs into other value chains (pharmaceuticals, agriculture, wine, apparel, etc.), thereby helping to make them more competitive on an international level. The quality of packaging and labeling is also an important element of other value chains' strategies.

Information and Communications Technology (ICT) – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
ICT						

Criteria	ICT
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	4
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Domestic Market Growth Potential, Stability & Trends	3
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)
Workforce Skills & Capacity, and Trends	2
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (7)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (5)
Lack of Domestic and/or International Competition	2
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Potential SME creation	4
Linkages to existing SME suppliers	4
Total:	**42**

Indicator	ICT
Export Performance	ICT goods exports (as % of total goods exports) grew 139% between 2001 and 2008 In 2008, ICT goods exports were approximately USD 10,440,311[1] Major markets: CIS countries, especially Azerbaijan
Workforce	1,000 software developers (others unknown)
Academia & R&D	Free University noted for highest quality program in Georgia, but many other Universities offer degrees
Associations	ICT Business Council
Foreign Investment	HP, Microsoft

Overview

Information and Communications Technology (ICT) is defined as any communication device or application such as radio, television, mobile phones, computer and network hardware and software, satellite systems, etc. as well as the services that accompany them.

The ICT sector in Georgia is in an early stage of development. Most people in the country have a telephone (either mobile or fixed), most of the rural areas are connected to the internet, and the country has a 100 percent literacy rate, meaning the domestic market is as big as the country.

The Government is implementing e-Government initiatives and has established the Data Exchange Agency to create a “single window” between business and government.

During this initial stage of assessment, no single sub-segment of the ICT sector was identified as demonstrating significant potential for growth over any other. It is therefore necessary to conduct a more thorough and in-depth study of the sector than has so far been possible. Through the other sector assessments undertaken, ICT needs have been identified, confirming the cross-cutting nature and importance of the ICT sector. These include web-based applications for hotel and flight reservations; CAD/CAM for apparel design; RFID chips for traceability; registration and enrollment systems for education; etc.

Background

This assessment focuses on elements of the ICT sector consisting of services (including consulting and IT integration), software development (including mobile applications), networking infrastructure (hardware), cyber-security, data storage and management, mobile services, and online services/e-commerce.

Market Growth – Some

As a percentage of GDP, the sector has fluctuated between six percent and 7.5 percent since 2005.[2] The internal IT market in Georgia is valued at about USD 120

[1] World Bank WDI, Author’s calculations

million[3]; telecom is about USD 465 million[4]. Of the internal IT market, hardware and software consultancy, data processing, and other data activities comprise about USD 23 million.[5]

The export of ICT goods as a percentage of total goods exports has increased by 139 percent since 2000 (about six percent compound annual growth rate (CAGR)), but is still less than half of one percent of total goods exports. Imports of ICT goods as a percentage of total goods imports has increased by six percent over the same period. ICT service exports as a percentage of service exports, decreased by 49 percent.[6]

Table 1: ICT Goods and Service Exports

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Growth
ICT goods exports (% of total goods exports)	0.18%	0.64%	0.69%	0.45%	0.34%	0.14%	0.46%	0.36%	0.43%	139.93%
ICT goods imports (% total goods imports)	7.31%	6.52%	6.55%	4.77%	4.98%	5.70%	7.00%	7.09%	7.79%	6.54%
ICT service exports (% of service exports, BoP)			4.28%	5.29%	3.20%	2.78%	2.04%	1.50%	2.15%	-49.74%

Source: World Development Indicators, World Bank

ICT goods include telecommunications, audio and video, computer and related equipment, electronic components, and other information and communication technology goods, but exclude software. However, these exports are unlikely to succeed in the face of tough competition from other main exporters such as India and China due to their current market dominance and low costs.[7]

The number of mobile network subscribers has been increasing since 2004 and has reached approximately 3 million (out of a population of about 4.5 million). The government is completing a project to connect all of the schools in the country to the internet through a project called “Deer Leap”, either through wireless connection

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[2] GNCC Annual Report. 2009
[3] All of the IT sub-sectors that this number includes, are unknown
[4] GeoStat
[5] *Ibid*
[6] Information and communication technology service exports include computer and communications services (telecommunications and postal and courier services) and information services (computer data and news-related service transactions).
[7] Interview with UGT

(EV-DO) or wired connections, something which will help to connect the rural towns and villages to the internet as well: only 70 schools are apparently still waiting to be connected.[8]

In 2009, about 30% of the population used the Internet, and there were 1.3 million users overall. However, very few people have broadband subscriptions.

Table 2: Internet Usage Statistics

Internet				Broadband Subscriptions	
Subscriptions (,000s) 2009	Subscriptions per 100 inhab. 2009	Users (,000s) 2009	Users per 100 inhabitants 2009	Total (,000s) 2009	Per 100 inhabitants 2009
...	...	1,300.0	30.51	150	3.52

Source: ITU

Table 3: Demographic Data

Population		GDP		Ratio of mobile cellular subscriptions to fixed telephone lines
Total (M) 2009	Density (per km2) 2009	Total (B US$) 2008	Per capita (US$) 2008	
4.26	61	12.8	3'004	4.6 : 1

Source: ITU

The Government, through the Department of IT, Communications and Innovation in the Ministry of Economy and Sustainable Development, is implementing “IT Start-Up Days”, during which the Government encourages and provides support to entrepreneurs in the IT sector. The Government provides technical support on business plans and presentations to investors, as well as connecting the entrepreneurs with investors such as HP and Microsoft. The “IT Start-Up Days” began on November 25 and the first session with the investors was held on December 7 2010.

In e-Government, Georgia is relatively advanced when compared to its neighbors. Property registration is online and the Ministry of Finance implemented a tax e-filing system last year. There is an ongoing e-Treasury project that will make documents electronic. This project is funded by the government and is in a testing phase. HP is also investing in e-Government to provide data storage services.

Sakpatenti, the Government office responsible for patents, has plans to start an e-register for online patent applications. The Data Exchange Agency has an initiative to create a “single window” for businesses in Georgia and to share information among various branches and departments such as customs and the Ministry of Agriculture. The Ministry of Finance has an e-Learning program to teach its

[8] Interview with Irakli Kashibadze

employees and intends to expand this program to businesses as well, but at present there is no specific action plan for implementation.

Skills and Capacities - Limited

Training and education is a barrier for the sector. IT training in universities is poor and public universities are more reluctant to change than private ones. Many of these universities lack computers for students to use, and instead leave it up to the student to get his or her own computer on which to practice and learn. However, some universities, such as the Free University (private), have good technology programs.

Table 4. Current IT Enrollment in Georgian Universities

Name of University	Number of Students in IT
Black Sea University	10
Caucasus University	34
Free University (ESM)	32
Technical University	3,500
State University	Average 600 – 700 IT students per year

Source: University offices

IT certifications provide a basis for understanding the skills and capabilities of an individual. Both Microsoft and Cisco certifications are available in Georgia, and they apply to a wide range of activities in the sector. In 2010, 114 Microsoft exams, 5 HP exams, 34 Cisco exams, 1 VMware exam, and 3 Oracle exams were undertaken.[9]

Many IT firms, particularly those that are involved in software development and network maintenance, have a difficult time finding qualified personnel and instead run in-house training sessions for their employees.

In ICT, many degrees, certifications, and acquired skills can be obtained in less than a year. This short time span means that companies that provide training for their employees do not have to invest significantly in time and money.

Resources/Inputs - Substantial

There is one sub-marine cable and one terrestrial cable providing internet access to the country. The sub-marine cable originates in Bulgaria and the terrestrial cable comes from Turkey. These are the only sources of bandwidth for the country. Both Armenia and Azerbaijan also receive their internet connectivity from these cables - through Georgia.

Most rural areas have internet access due to the Government's program aimed at extending internet access to all schools in the country.

There is major investment in IT services coming from multinational corporations like HP, which will increase capacities and spur market growth. HP is in the process of

[9] Interviews with IT Knowledge and Greennet.

signing a contract with the Government to provide data storage services and invest in a service hub, as it has in other countries in the region. The company will hire and train Georgians, which in turn will have a positive impact on the skills and capacities of the population.

Market Constraints – Few Constraints

The number of internet service providers (ISPs) and telecommunications companies is small, but the Georgia National Communications Commission (GNCC), charged with regulating frequency usage, is conducting a review of frequency usage to try to make space for more market players. Currently, 80 percent of internet connections are provided by four companies which, according to the GNCC, are not providing the amount of bandwidth promised to their customers. The GNCC has a project underway to determine the amount of bandwidth that the companies have promised but are not delivering, and presumably, action will be taken against these companies. Georgia ranks 92 out of 118 for broadband tariffs according to *The Global Information Technology Report 2009-2010*, prepared by the World Economic Forum.

According to the same report, Georgia ranks 93 out of 134 in the Networked Readiness Index. Georgia's rankings in each of the Network Readiness pillars are listed in Table 5 below.

Table 5: Georgia's Network Readiness Pillar Rankings

Pillar	Rank	Pillar	Rank	Pillar	Rank
Environment Component	83	Readiness Component	105	Usage Component	90
Market Environment	57	Individual Readiness	93	Individual Usage	73
Political and Regulatory Environment	83	Business Readiness	116	Business Usage	111
Infrastructure Environment	97	Government Readiness	92	Government Usage	88

Source: *Global Information Technology Report 2009-2010*

In terms of software development, there are several firms in operation, but the educational level of potential employees is poor and these firms have difficulty finding qualified labor. Many of them have their own training programs to make up for the low levels of education.

Intellectual property rights (IPR) are considered to be a significant obstacle in the sector. Georgia is number one in the world in terms of software piracy according to the BSA/IDC Global Software Piracy Study. There are indications that issue is now receiving substantial attention by the Government. Caucasus Online, one of the ISPs, however, still provides access to pirated software and music and maintains its own server with these files.

There is limited data available on this sector, and this very lack of data may hinder investment. Comprehensive information on exports, imports and number of companies is not easily available.

SME Linkages – High

In software development, there are between 10-20 small firms. ICT as a sector is generally conducive to small firms, and the Government is actively encouraging small businesses and entrepreneurship in this sector.

While working with other value chains, the project will look to the ICT sector for ways to improve the efficiency, value and availability of products. While working with the value chains, it is likely that opportunities for SMEs will evolve.

Potential Roles for EPI

In compliance with its work plan, EPI will work with Georgia's ICT sector to support the integration of ICT into the fabric of economic growth and employment in order to take advantage of its transformative potential across the Georgian economy.

Since no particular component of the ICT sector was identified through this initial assessment, further, more detailed analysis will be undertaken to identify opportunities and constraints – at the same time also identifying areas for baseline data collection.

Cross-cutting initiatives supporting individual value chains in the agriculture and non-agriculture sectors will be considered in addition.

Interviews Conducted

Name	Position	Company
Irakli Kashibadze	Head of Department	Ministry of Economy Communications, IT and Innovations Department
Irakli Chikovani	Chairperson	Georgian National Communications Commission
David Koshadze	General Director	Information Technologies Consulting and Support
Walter Metz	Director of Consulting	UGT
George Chirakadze	President & CEO	UGT
Giga Shubitidze		ICT Business Council

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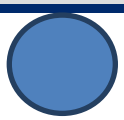
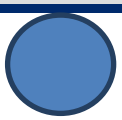
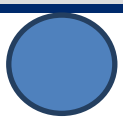
Logistics and Transport – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Logistics and Transport						

Considerations	Logistics and Transportation
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (6)
Domestic Market Growth, Stability & Trends	3
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points*: *Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (9)
Domestic Market Growth Potential, Stability & Trends	5
International Market Growth Potential, Stability & Trends	4
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Limited (8)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	2
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	High (8)
Resource Availability & Accessibility	4
Inputs Availability & Accessibility	4
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*	Few Constraints (7)
Lack of Domestic and/or International Competition	3
Transportation & Logistics	4
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Potential SME creation	4
Linkages to existing SME suppliers	4
Total:	**46**

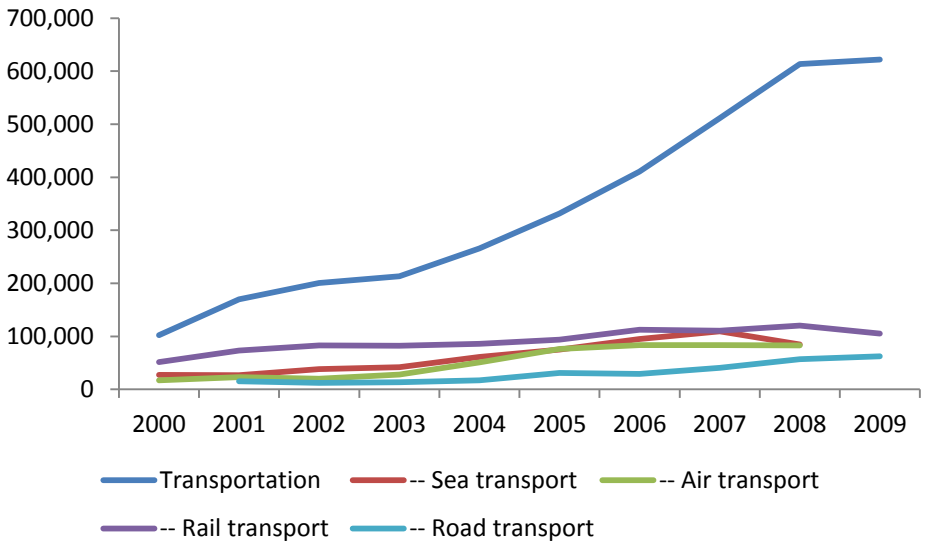
Indicator	Industry
Export Performance	Since 2000 there has been growth in every modal subsector
Associations	Freight Forwarders Association and other transportation associations.
Major Competitors	Russia, Iran and China

Overview

Georgia has a growing transport and logistics industry, which is aided by its strategic location on the Black Sea. The transportation and logistics sector can serve as a backbone for Georgia's role as a regional hub and it is a key element of many other sectors and value chains. This sector assessment examines the various modes of transportation available in Georgia (rail, air, maritime, and road), free industrial zones (FIZs), and the transportation needs of the agricultural sector, in particular issues dealing with the collection, warehousing, and cold storage of produce.

The worldwide transportation services market is a multibillion dollar market. Figure 1 illustrates that the value of the Georgian transportation sector in US dollars increased slightly in 2009, despite the economic downturn and the war in 2008. The transportation sector in Georgia has grown six-fold since 2000.[1] Figure 1 also shows that road transportation increased, even though maritime, air, and rail transport all decreased slightly in 2008.

Figure 1: Value of Transportation Service Exports (Thousands - USD) of Georgian Transportation



Source: "Value of Exports for Transportation – Georgia" *International Trade Center Data*. Web. 20 November 2010

Because of its location, Georgia may have the potential to become a regional hub for the Caucasus region as well as landlocked Central Asia: Kazakhstan, Turkmenistan, Kyrgyzstan, Uzbekistan, and Tajikistan. From a geographical standpoint, Georgia could also supply Turkish ports; the two main ports in Georgia are the port of Poti and Batumi Sea Port (BSP). These ports are the only access to the Black Sea for the Caucuses and provide easy access to Western Europe. Below are two maps

[1] "Value of Exports for Transportation – Georgia" *International Trade Center Data*. Web. 20 November 2010

that illustrate Georgia's geographic advantage. The first map (figure 2) illustrates the transportation routes between Georgia, Eastern Europe, and Turkey.

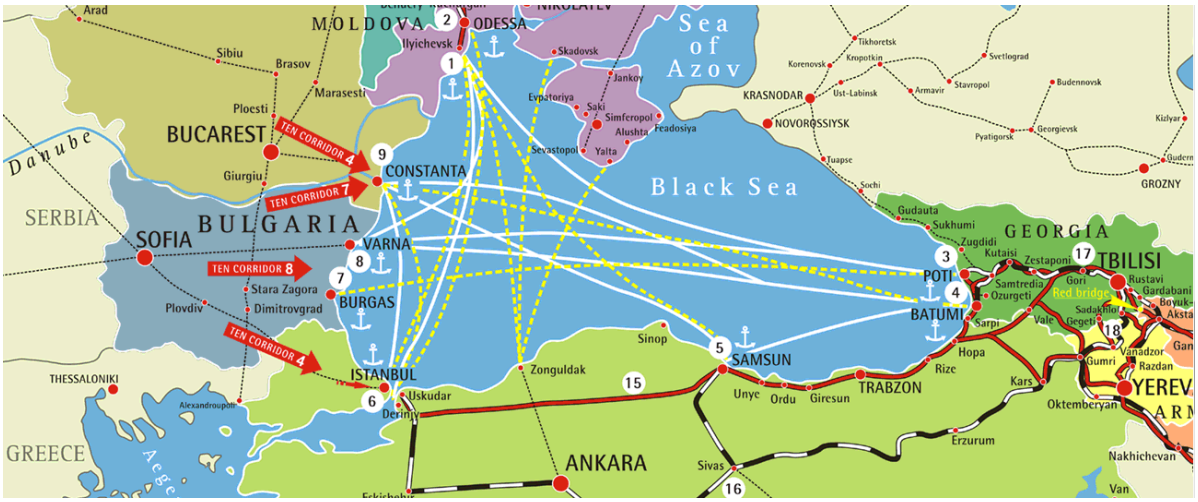


Figure 2: Transit Routes to and from Georgia

Source: Map Received from Georgia TransExpress

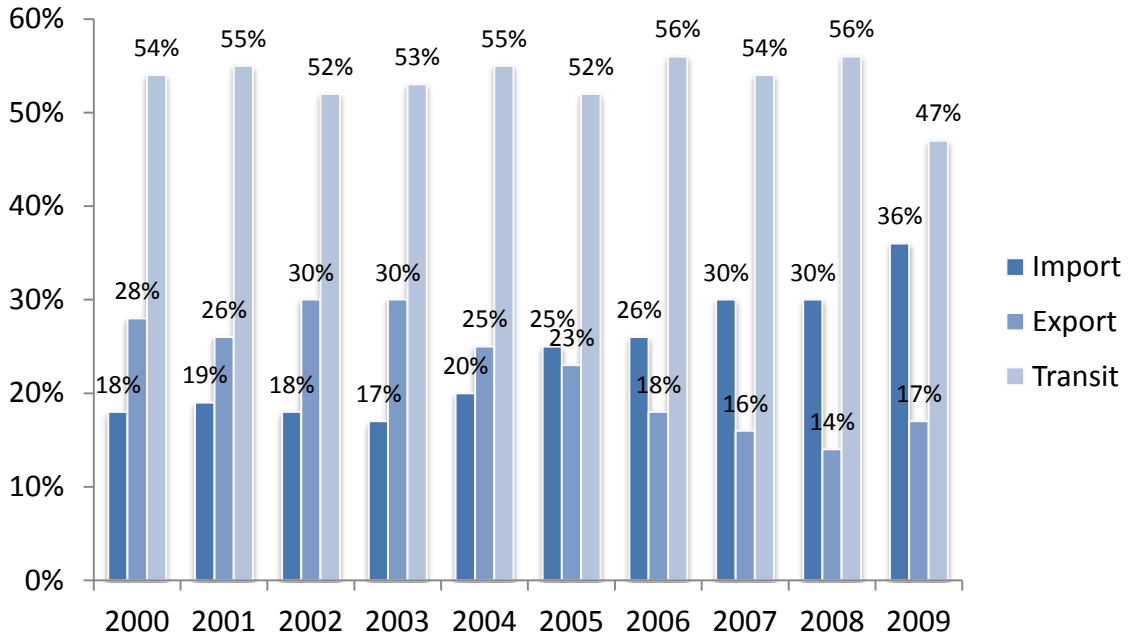
Figure 3 (below) shows that Georgia is an integral part of trade routes between Central Asia and Eastern Europe. The map also shows that Georgia is an important route for imports to the Caucuses.

Figure 3: Transit Routes

Source: Map received from Georgia TransExpress

Transit goods (that enter the country and are later distributed outside of the Georgian market) make up almost 50 percent of all cargo that flows through the port of Poti. Imports have increased from roughly 18 percent to about 40 percent of cargo flows over the past ten years.[2] Exports have decreased from about 30 percent to 15 percent.[3] Figure 4 below reflects the changes in imports, transit and exports over the last ten years.

Figure 4: Cargo Flows as a Percent of Total



Source: Poti Sea Port. Web. 20 November 2010

Georgia's transit sector competes with numerous alternative routes serving the region. The main alternatives are by rail through Russia, by rail or road through Iran, or by rail or road through Turkey. Depending on the location involved, these routes may be less expensive than transit via Georgia. China is spending USD 25 billion on constructing an economic free zone to boost trade to and from Central Asia through China, while China itself is developing its railways to transport goods to Europe in just 21 days.[4] In order to compete with these alternate routes, Georgia needs to reduce its transit costs.

[2] Poti Sea Port. Web. 20 November 2010

[3] Ibid

[4] Poti Sea Port. Web. 20 November 2010

Modes of Transportation

Rail: The rail system is a government owned company. EPI may have limited involvement with rail but there is potential for EPI to deal with the service and procedural interface between rail and value chains.

Road: The road transportation system can be categorized as freight carriers and passenger transportation. Road freight transportation involves trucking companies that distribute imports to the Georgian market, serve domestic transportation needs, take exports to the port of Poti, and transport goods across the Armenian, Azerbaijani, and Turkish borders. Internal road passenger transportation is an important element of the tourism sector value chains.

Maritime: The maritime system includes the port of Poti and BSP. BSP mainly exports bulk oil (from Central Asia to the EU and US) and cargo (scrap metal and used cars) because it can dock larger vessels than the port of Poti. However, the port of Poti is larger and handles most container shipments and some bulk.

Batumi *Container* Terminal: The Batumi Container Terminal is owned by KazTransOil. Ninety-five percent of containers are second-hand cars and five percent contain bulk goods (sugar, construction materials). The only shipping line that comes to the port is MSC.

Air: *Air* transportation can be categorized as freight transportation and passenger transportation. Air transportation in Georgia is dominated by passenger air travel.

Free Industrial Zones (FIZs):

The two free zones in Georgia are the Kutaisi FIZ and the Poti FIZ.

The Poti FIZ was part of the port acquisition agreement that RAKIA (a UAE company that is partially government owned) signed with the Government of Georgia (GoG). There is a 300-hectare territory for the FIZ adjacent to the port. At present, the RAKIA group, which has a 49-year lease on the FIZ, plans to sell off its shares in the port.

Collection, Cold Storage, Warehousing

Improving the productivity of the agricultural sector includes making the collection of produce more efficient and increasing the number of cold storage and warehousing facilities. Increasing the number of cold storage facilities and extending the cold chains closer to the producers would enable farmers to increase marketed produce, reduce spoilage, extend the duration of the selling season, and obtain higher average prices. Cold storage and warehousing should be located both near to the producers and close to the ports.

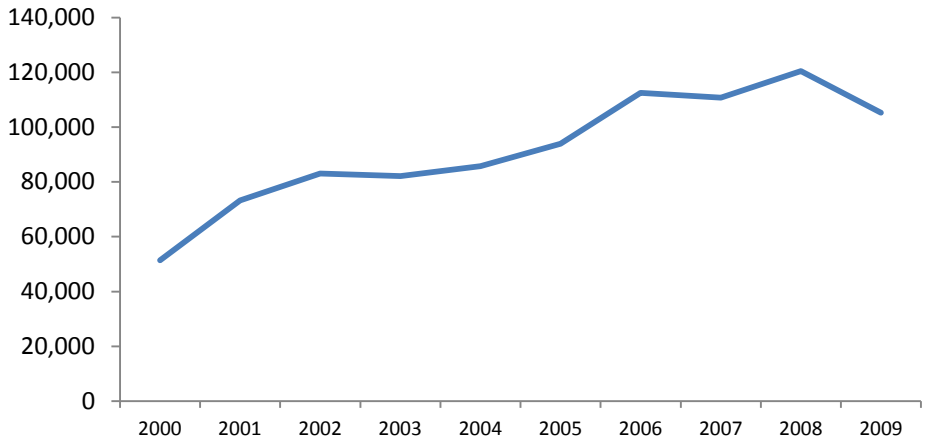
In Georgia, large exporters and distributors own their own cold storage and warehousing facilities. They own the trucks and give farmers two options: the distributors/exporters either pick up the produce for a fee, or the farmers deliver the produce to the warehouse or cold storage facility.

Market Growth – Some/High

Modes of Transportation:

Rail: As seen below in Figure 5, the value of the rail transportation system in USD doubled from 2000 through to 2009. Nearly all of the rail transportation is freight transportation. Freight transportation has also doubled in the same time frame, and there are currently plans to improve the railway system. There will continue to be growth for this mode of transport as long as Georgia's imports and exports continue to grow.

Figure 5: Rail Transport Export Values (Thousands – USD) from 2000-2009



Source: "Value of Exports for Rail Transportation – Georgia" *International Trade Center Data*. Web. 20 November 2010

Air: Figure 6 shows that air transportation has grown substantially since 2000.[5] Most of the increase in this sector has been in the air passenger and supporting auxiliary and other air transport subsectors. Air freight is a small proportion of air transportation and the figures have decreased since 2000.[6] Air freight is generally a more expensive (but faster) way to transport goods than maritime, rail, or road transportation.

The number of air passengers is expected to increase in the next few years in part due to the entry in the market in October 2010 of Pegasus, a low cost Turkish airline. In its first month of operations, Pegasus served more than 5,000 passengers.[7] The ticket prices at Pegasus – to and from Istanbul – are up to 50 percent cheaper than other airlines. Pegasus is planning to add more destinations in Europe in the near future.

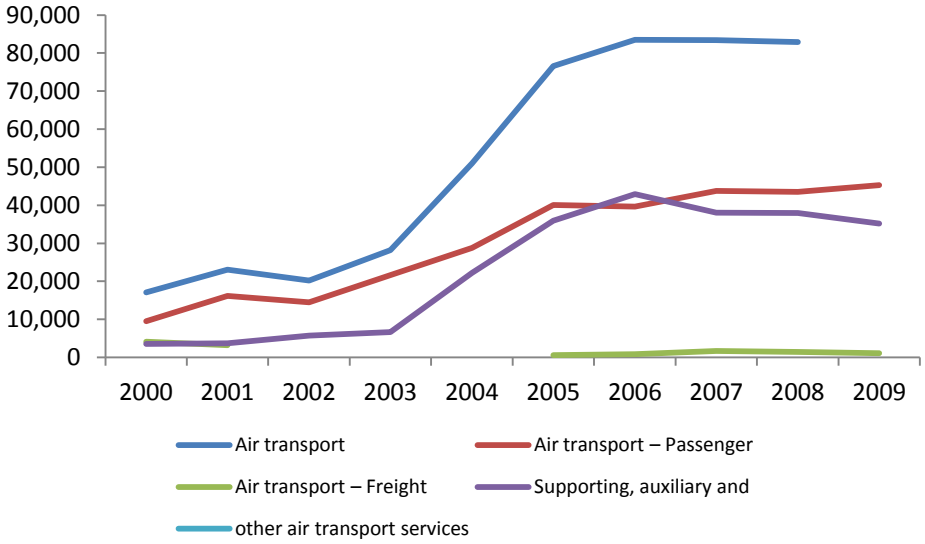
[5] "Value of Exports for Air Transportation – Georgia" *International Trade Center Data*. Web. 20 November 2010

[6] *Ibid*

[7] Pegasus Served More than 5,000 Passengers in First Month in Georgia. *Financial*. 22 November 2010 pp 1&4

Recently, Ukraine International Airlines (UIA) also dropped its prices. Flights from Tbilisi to other parts of Europe are now offered for as low as USD 172.[8]

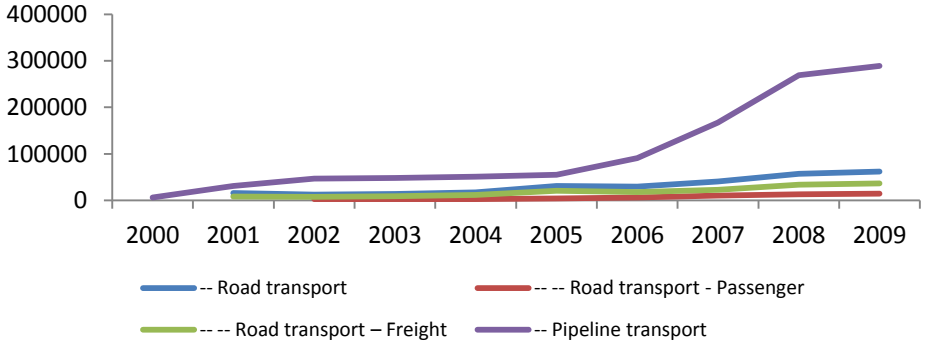
Figure 6: Air Transport Services Export Values (Thousands – USD) from 2000-2009



Source: "Value of Exports for Air Transportation – Georgia". *International Trade Center Data*. Web. 20 November 2010

Road: The road transportation subsector has been increasing since 2000 as shown in Figure 7.[9] The EPI project will not be involved in road pipeline transportation, but road pipeline transportation is categorized in statistical compilations as one element of road transportation.

Figure 7: Road Transport Export Values (Thousands – USD) from 2000-2009



Source: "Value of Exports for Road Transportation – Georgia". *International Trade Center Data*. Web. 20 November 2010.

[8] Pegasus Served More than 5,000 Passengers in First Month in Georgia. *Financial*. 22 November 2010. pp 1&4

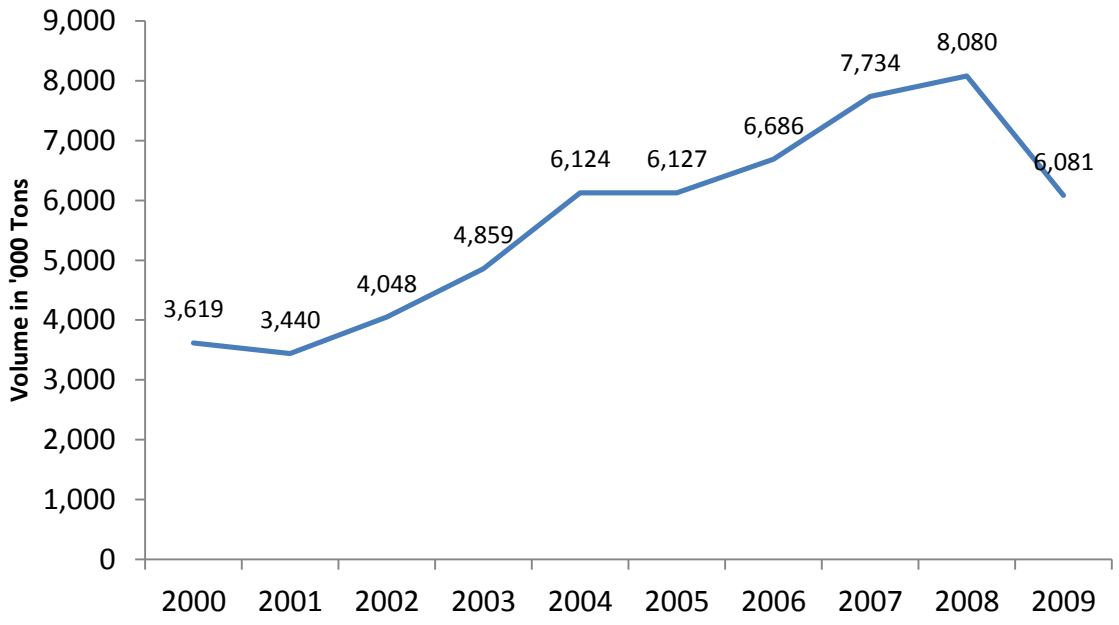
[9] Value of Exports for Road Transportation – Georgia". *International Trade Center Data*. Web. 20 November 2010

Maritime: Overall, maritime transport has also rapidly grown since 2000. However, total maritime freight has decreased by about 30 percent, whereas maritime transport support, auxiliary, and other transport has increased six fold since 2000, dropping in 2008.[10]

Port of Poti: RAKIA constructed a new container terminal capable of handling 100,000 containers per year at a cost of USD 80 million (partially funded by EBRD).[11] Construction began with the development of a new terminal that will be able to store imported cars at a cost of USD 22 million (USD 18 million funded by ADB).[12] Further investment is expected to take place as the world economy improves. In 2009, the port lost 40 percent of its bulk cargo business and 22 percent of its container business.[13] And while the container trade has recovered during 2010, bulk cargo trade is still down by 18 percent (700,000-800,000 tons of bulk cargo) from 2008 rates.[14] The current low volumes are due to the loss of transit goods.

The volume of turnover has grown substantially at Poti since 2000. In 2000, three million tons of goods passed through the port; by 2008 that number reached eight million tons.[15] This number dropped by about two million tons in 2009.[16]

Figure 8: Turnover in Thousands of Tons at Poti Port Values from 2000-2009



Source: "Volume in Tons of Turnover – Georgia" *Poti Sea Port*. Web. 20 November 2010

[10] Value of Exports for Maritime Transportation – Georgia". *International Trade Center Data*. Web. 20 November 2010

[11] Interview with RAKIA

[12] *Ibid*

[13] *Ibid*

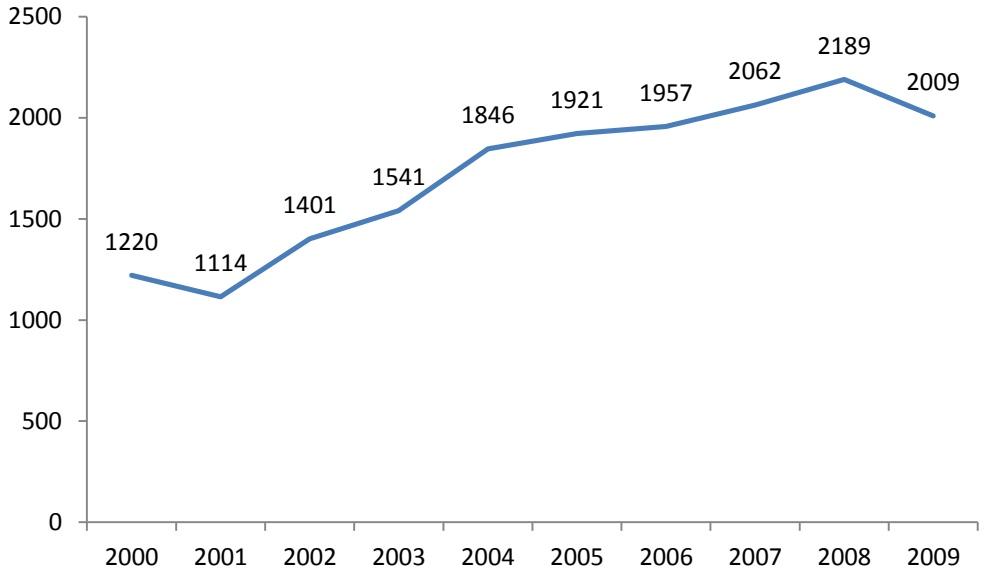
[14] *Ibid*

[15] *Ibid*

[16] *Ibid*

The number of vessels has nearly doubled since 2000 (see Figure 9). By international standards the port of Poti does not receive many vessels, nor does it receive very much cargo: large ports can handle a turnover of more than 100 million tons of cargo per annum.

Figure 9: Vessel Traffic, 2000-2009



Source: "Number of Vessels– Georgia" Poti Sea Port. Web. 20 Nov 2010

Figure 10 illustrates the principal maritime transit routes from the port of Poti.

Figure 10: Shipping Routes from Poti

Source: *Poti Sea Port*. Web. 20 November 2010

Batumi Sea Port: Under the port concession agreement, BSP must turnover six million tons of cargo each year. It is currently turning over five million, but this number will increase to 13-14 million because of an increase in the production of Caspian oil.[17] BSP is investing USD 15 million in three berths,[18] and plans to invest USD 85 million between 2010 and 2020. While the port of Poti has room to expand, BSP does not. Last year (2009) Batumi port handled 12 cruise ships (20,000 passengers).[19]

Batumi Container Terminal: Currently the Batumi Container Terminal is only operating at 20 percent of its capacity.

Free Industrial Zones:

Investment at the Poti FIZ was expected to be USD 400 million, but the FIZ has only attracted USD 40 million. Twenty-six companies have reached agreements to invest in the FIZ, but have not yet made that investment.

There are currently two large companies that have invested in the Kutaisi Free Zone. FRESH Georgia, an Egyptian consumer electronics company that ships to CIS countries, and a Chinese company that is processing wood and plans to process furniture.

Collection, Cold Storage and Warehousing:

In Gori in 2010, a new cold storage facility was built with a capacity of 150 tons. It will mainly be used to store apples. The owner of the cold storage facility owns an apple orchard, but will rent space to his neighbors for apples and other fruits. The demand for space at the cold storage facility has exceeded availability.

Skills & Capacities – Limited

Road, Maritime, Air, and Logistics: Businesses in each of these three subsectors wanted their employees to obtain further training and education. Details of skills and capacities for each mode of transport, the free zones and the agricultural transportation component will be explored during the value chain analysis.

Resources/Inputs – High

The main resources are described in the introduction to this sector assessment.

Market Constraints – Few Constraints

Modes of Transportation:

Road: Trucking companies need to upgrade their truck tracking systems to digital systems, and some of the roads in remote areas need to be improved. However,

[17] Interview with BSP
[18] *Ibid*
[19] *Ibid*

there are few serious regional road constraints. One constraint that causes an increase in transportation costs is a lack of a standardized road system throughout the region on both the Armenian and Azerbaijan borders. One example of the lack of a harmonized road system between Georgia, Armenia, and Azerbaijan is that Georgia has different container height restrictions than does Azerbaijan. This means that a truck with containers that are permitted in Georgia will be charged a fine once it crosses the border into Azerbaijan.

Road passenger transportation is also an important link to the tourism sector. It is currently difficult to access Svaneti and other mountainous tourist attractions. The road infrastructure in some of the more remote areas needs improvement. Another important constraint is a lack of signage in a language that international tourists would understand, such as English.

Maritime: The draft (depth) and length restrictions for vessels also pose significant constraints. Instead of transporting one large vessel to Poti at a cost of USD 40,000, a shipping company will transport three ships at a cost of about USD 20,000 each (USD 60,000 total; 50 percent more). The charting costs are also more expensive. For example, it costs USD 20,000 to charter three small ships instead of USD 10,000 for one large ship. The total cost savings that would result from being able to use large vessels could reach USD 3 million per shipping line per annum. Furthermore, the prices at the port of Poti are not competitive when compared with other regional ports. In fact, 70 percent of imports for Azerbaijan are imported through the port of Bandara Abbas in Iran because costs are lower. [20]

More cold storage at the ports is also needed. While it is possible to connect refrigerated containers to electrical sources at warehouses, renting containers is expensive and does not provide a long-term solution. Maersk mentioned that recently there was a delay with imports of cold produce because the cold storage facility was full.

Batumi Sea Port: The BSP cannot handle more than 1.5 million tons of bulk goods because of a lack of sufficient storage facilities. The climate in Batumi also poses a problem; Batumi's high level of precipitation affects the offloading of goods such as sugar and grain.

Air: Air freight transportation only forms a small percentage of the sector (in 2007 the value of export services by air freight was only USD 1.6 million) and it is mainly dominated by foreign companies.

Collection, Cold Storage and Warehousing:

The cold storage and warehousing demands for Georgian produce are being underserved. In Gori, (one of the main agricultural areas) there are currently four cold storage facilities with capacities ranging from 150 tons to 350 tons, but the

[20] Interview with Maersk

demand for cold storage in Gori is estimated to be about 10,000 tons.[21] Every year the existing cold storage and warehousing facilities are full.

Farmers who cannot put their produce in cold storage (because there is no space or because the price is too high) store their produce in the basement of their homes, which is neither an effective nor long-term solution.

SME Linkages – High

There are numerous opportunities for SME linkages in this sector. The main opportunities for linkages will be working with SMEs in other sectors, such as those in tourism and agriculture.

Potential Roles for EPI

Transport and logistics are backbone elements of the Georgia economy, crucial to the growth and competitiveness of numerous value chains and to the ability of Georgia to take advantage of its location to develop its capacity to serve the region as a hub. This should be a priority sector for EPI, and EPI should examine the sector much more thoroughly to identify priorities with which the project can assist, in terms of developing the sector. EPI could, for example, work with the sector to:

- Support market linkage, particularly from rural production areas within Georgia, through improvements to rural road transport services.
- Improve storage, warehousing and cold chain capacities.
- Attract improved air connectivity for Georgia through increased numbers of companies and flights serving Georgia, and supporting the development of air transport services at Batumi and Poti.
- Help Georgia to develop and realize elements of a regional transport and logistics strategy.

[21] Interview with CNFA

Interviews Conducted

Name	Company
Irakli Bokuchava	Maersk Georgia
Viacheslav khartian, Ilia Tsivadza	Batumi sea port
Denise Oztirpan	Turkish airlines Batumi branch
Mert	Batumi TAV airport
Lia Jincharadze	Randi
Robert Gvazava	Kavtrex-Poti
Rony Saab	Poti sea port
Barish Dilek	MSC shipping line
Eduard Surmanidze	Assa-trans Caucasus
Keti Oragvelidze	Batumi International Container Terminal
Irakli	Georgia TransExpress

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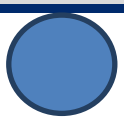
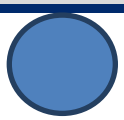
Maps from Georgia TransExpress

Number of Vessels – Georgia". *Poti Sea Port*. Web. 20 November 2010

Pegasus Served More than 5,000 Passengers in First Month in Georgia. *Financial*. 22 Nov 2010. pp. 1 & 4

"Value of Exports for Maritime Transportation – Georgia". *International Trade Center Data*. Web. 20 November 2010

Packaging – Sector Assessment

Sector	Market Growth	Market Growth Potential	Skills & Capacities	Resources & Inputs	Market Constraints	SME Linkages
Packaging						

Criteria	Packaging
Market Growth (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth, Stability & Trends	5
International Market Growth, Stability & Trends	3
Market Growth Potential (imports, exports, consumption, production) – *Total points: Negative (1-2), Modest (3-4), Some (5-7), High (8-10)*	High (8)
Domestic Market Growth Potential, Stability & Trends	5
International Market Growth Potential, Stability & Trends	3
Skills & Capacities – *Total points: Very Limited (1-4), Limited (5-8), Substantial (9-12), High (12-15)*	Substantial (9)
Workforce Skills & Capacity, and Trends	3
Business Sophistication & Acumen, and Trends	3
Business Service Provider Professionalism & Availability	3
Resources & Inputs – *Total Points: Very Limited (1-2), Limited (3-4), Substantial (5-7), High (8-10)*	Substantial (6)
Resource Availability & Accessibility	3
Inputs Availability & Accessibility	3
Constraints – *Total points: Constrained (1-2), Limited (3-4), Few Constraints (5-7), Highly Supportive (8-10)*\	Few Constraints (7)
Lack of Domestic and/or International Competition	4
Transportation & Logistics	3
SME Linkages (horizontal & vertical) – *Total points: None (1-2), Modest (3-4), Some (5-7), High (8-10)*	Some (7)
Potential SME creation	3
Linkages to existing SME suppliers	4
Total:	**45**

Indicator	Packaging
Industry Size	Exports: USD 718,461[1]
Export Performance	Exports have grown 136% since 2000 Major markets: Armenia and Azerbaijan
Application of International Standards	Standards, if applied, are typically enforced by individual clients, such as Coca Cola (in the case of plastic bottles)
Major Competitors	Turkey, Armenia and Azerbaijan

[1] UN Comtrade

Overview

The majority of goods that require packaging typically utilize bulky, low-value packaging (cardboard boxes, plastic bottles, glass jars or bottles). Given its bulk and limited value, one can expect that such packaging would be highly localized, produced close to the customers in each market who require it, and would use bulk raw materials (plastic pellets, paper pulp, waster paper, etc.). However, this is not necessarily the case in Georgia. A large number of enterprises in the packaging, agriculture, wine and transport/logistics sectors are in fact importing significant quantities of plastic and paper packaging from as far away as Belgium (but more commonly Turkey), citing supply constraints and quality issues in Georgia as the reasons why they are not using local supplies.

Not only is Georgia clearly not able to satisfy local demand sufficiently, it is also unable to keep up with the fast growing regional demands in Armenia and Azerbaijan. The packaging sector does not offer a big export opportunity beyond immediate neighboring countries, as the product is too bulky and low margin to be transported over long distances.

Generally, packaging can be considered to be a competitive, low-margin sector. However, given the local supply gap and high import costs, producers within the region may have an opportunity to earn high margins from import substitution in the short term. A strong and more cost efficient packaging sector may also reduce the cost of inputs into other value chains (pharmaceuticals, agriculture, wine, apparel, etc.) thereby helping to make them more competitive on an international level. The quality of packaging and labeling is also an important element of other value chain strategies.

The sector therefore demonstrates significant promise and is recommended for further and deeper analysis within the following specific VCs:

- Cardboard and Industrial Paper
- Plastic Bottles & Crates
- Glass Jars & Bottles
- Wooden Boxes/Crates

Market Growth – High

Rapid economic growth in Georgia, Armenia and Azerbaijan in recent years has led to a significant increase in the demand for packaging materials, much of which is imported. Georgia has seen significant increases in its imports (up until 2008) of plastics, wood and articles of wood, cork, wood pulp, paper and paperboard, printed materials and glass. In the Caucasus region, aside from local production, most paper and plastic packaging is currently imported from Turkey, Ukraine, Russia and China. Higher-end packaging (e.g. labels and cartons for exported wines) comes mainly from the EU, predominantly from Italy and Germany. With the growth of

domestic consumption and exports, demand for plastic and paper packaging in Georgia, Armenia and Azerbaijan is booming. Combined imports of plastic and paper products rose from less than $200 million to more than $600 million in the last 5 years.

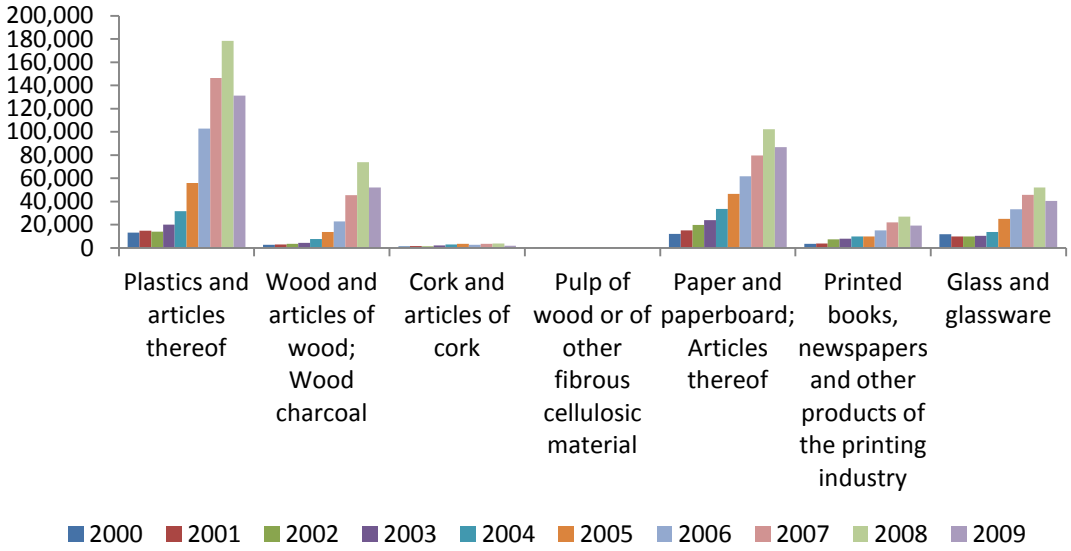
Table 1: Packaging Imports (USD, thousand), 2000 – 2009

Name of Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Plastics and articles thereof	13259.6	14898.3	14034.3	20173.4	31677.4	56055.4	102753.9	146320.4	178337.6	131335.0
Wood and articles of wood; Wood charcoal	2718.2	2863.3	3444.3	4370.4	7610.9	13724.5	22872.8	45355.2	73869.1	52049.9
Cork and articles of cork	1201.0	1507.6	1401.9	2149.7	2857.2	3602.9	2633.4	3609.1	3703.1	1906.1
Pulp of wood or of other fibrous cellulosic material	65.9	86.2	22.7	60.3	57.0	90.6	93.3	94.0	113.3	150.2
Paper and paperboard; Articles thereof	11992.0	15125.0	19926.1	23809.8	33616.0	46469.8	61732.6	79727.5	102113.2	86740.9
Printed books, newspapers and other products of the printing industry	3504.6	3911.0	7477.7	7921.1	9940.5	9798.7	14978.3	22071.9	26900.7	19224.9
Glass and glassware	11848.9	9748.9	9778.9	10539.2	13667.5	24910.1	33217.3	45777.1	52000.4	40597.7

Source: GeoStat Website

As the chart below indicates, the import of plastics, paper and paperboard, and wood and wood products has been both substantial and is rising.

Figure 1: Packaging Imports (USD, thousand)



Source: GeoStat Website

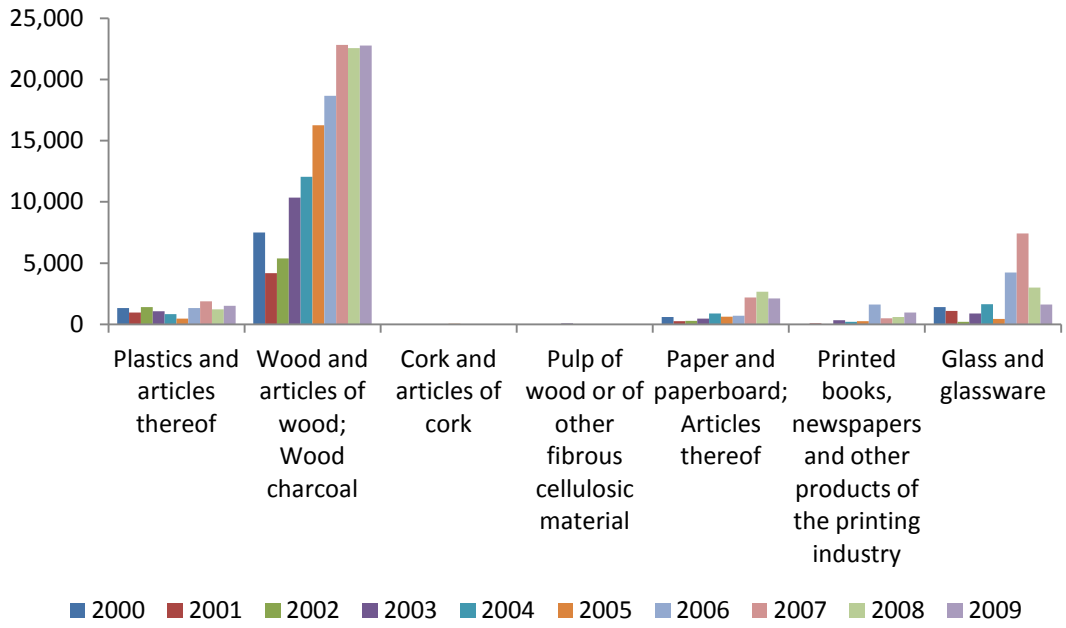
However, aside from wood/wood products and paper/paperboard, Georgia has not been able to significantly increase its exports (in absolute terms) in any of these other packaging sectors, despite the regional growth in demand. The most significant exports are seen in the wood and wood products sub-sector.

Table 2: Packaging Exports (USD, thousand), 2000-2009

Name of Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Plastics and articles thereof	1334.5	962.0	1400.1	1060.6	829.9	472.5	1338.3	1871.7	1219.8	1508.6
Wood and articles of wood; Wood charcoal	7491.7	4177.8	5380.3	10352.2	12052.1	16261.5	18669.0	22807.2	22563.6	22758.5
Cork and articles of cork	0.0	30.9	21.2	28.2	11.1	43.5	38.7	25.5	29.3	31.2
Pulp of wood or of other fibrous cellulosic material	3.6	-	9.0	87.1	-	-	0.0	0.8	2.4	2.2
Paper and paperboard; Articles thereof	611.1	252.5	279.4	459.8	895.4	625.4	701.0	2183.7	2657.6	2108.2
Printed books, newspapers and other products of the printing industry	38.1	76.2	37.9	337.4	210.2	263.3	1617.3	504.1	589.4	969.4
Glass and glassware	1409.3	1088.7	214.7	886.1	1646.0	452.5	4248.2	7431.7	2998.5	1621.8

Source: GeoStat Website

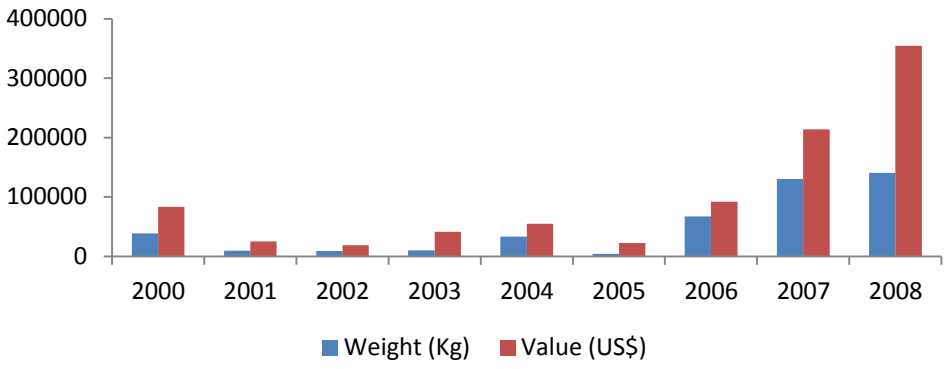
Figure 2: Packaging Exports (USD, thousand)



Source: GeoStat Website

Although relatively small when compared to wood and wood products, paper/paperboard exports from Georgia have grown in value, weight, and unit value, suggesting some added higher value has been obtained.

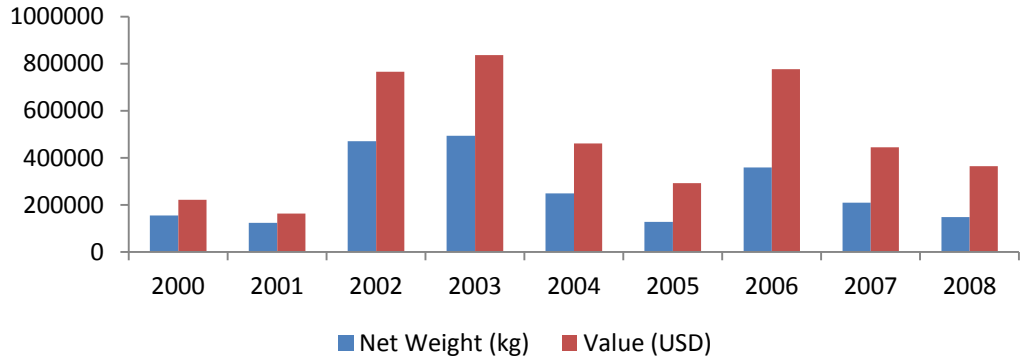
Figure 3: Export of Paper Packaging from Georgia (USD, thousand)



Source: GeoStat Website

The export of plastic packaging has not been so dynamic or promising. The value in 2008 of plastic exports was the lowest since 2002, apart from a particularly poor year in 2005.

Figure 4: Export of Plastic Packaging from Georgia (USD, thousand)



Source: GeoStat Website

Table 3: Export of Plastic and Paper Packaging Items from Georgia

Year	Export of containers, bobbins and packages, and plastic from Georgia		Export of paper, board containers, packing items, box files from Georgia	
	Net weight (kg)	Value (USD, thousand)	Net weight (kg)	Value (USD, thousand)
2000	155218	221103	38916	83440
2001	124190	163368	9784	25041
2002	470750	765961	9017	18564
2003	493787	836717	9941	41149
2004	249331	460298	33528	54671
2005	128039	292075	4052	22338
2006	358415	775912	66958	91848
2007	208823	444323	130498	213690
2008	147965	363986	140358	354475

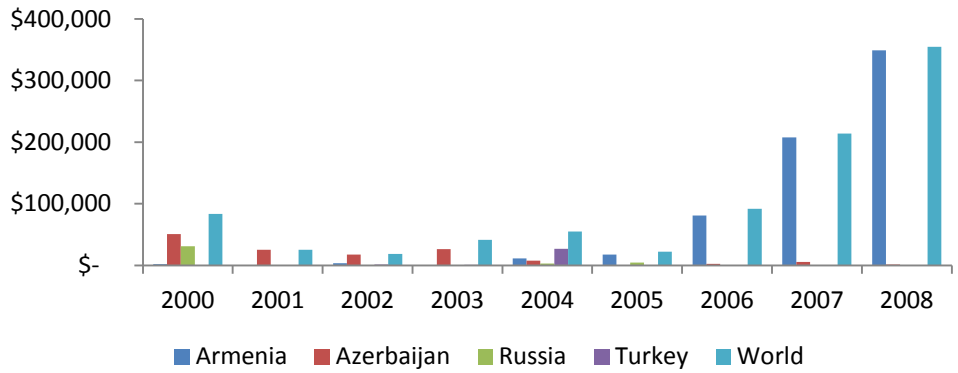
Source: GeoStat Website

The majority of Georgia's paperboard and paper exports are to Armenia, and these formed at least 95 percent of the total in 2009. This fact could indicate that:

- Armenia has a preference for Georgian products
- Armenia has a competitive disadvantage in producing its own paper
- Armenia has a huge demand for paper products that it cannot meet through domestic supply.

Further research will be needed to answer this point more fully.

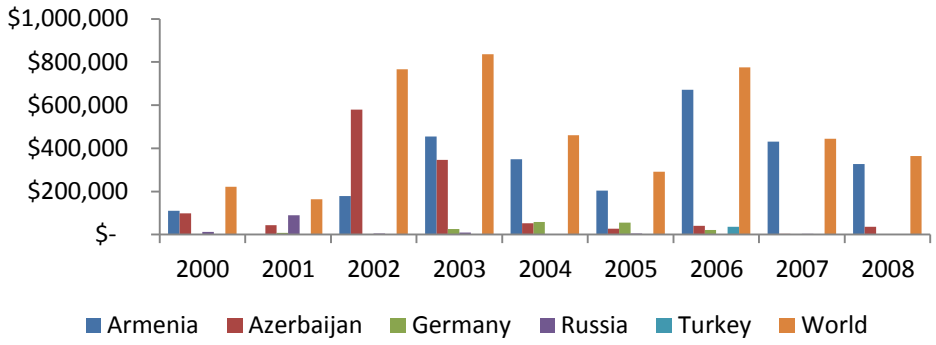
Figure 5: Export of Paper Packaging from Georgia to Specific Countries (USD, thousand)



Source: GeoStat Website

At the same time, exports to Armenia for plastic packaging are also significant. Similar questions to those posed above will need to be answered in order to better understand industry dynamics.

Figure 6: Export of Plastic Packaging from Georgia to Specific Countries



Source: GeoStat Website

Skills & Capacities – Substantial

The packaging sector does not appear to require very advanced technical skills (either in paper, plastic or glass), and some skill-sets were learnt in the days of former Soviet paper mills and production lines. Companies with foreign investment are able to train their staff overseas if required, and the providers/manufacturers of modern equipment will typically train staff, if requested or required, so that they may run and maintain equipment. Local investors have had to import key production engineers from Turkey.

The greatest area of skills in which there is a gap appears to be in the areas of business management and marketing, as evidenced by the fact that many cardboard manufacturers are clearly unaware of potential buyers, suppliers of raw materials, etc.

Resources/Inputs – Substantial

The resources/inputs required for plastics, glass and paper are obviously different, although Georgian producers currently have no raw material advantage (they use imported plastic pellets and local waste paper). In the longer term there may be the opportunity to source key raw materials locally at a lower cost: e.g. paper pulp from local forestry/pulp mills and plastic from local petrochemical producers linked to the oil and gas pipelines.

Polyethylene (PET), used for plastic bottles, plastic bags, trays, cartons and containers, is imported. The best PET (used by AlfaPET, which makes Coca Cola bottles) is imported from South Korea or UAE; cheaper plastic packaging may use the raw PET pellets from other sources.

One PET company is able to recycle plastic, but this is largely primary recycled plastic (waste plastic from their own manufacturing processes), rather than plastic that they have obtained through secondary sources.

Glass packaging uses sand from Georgia, and Soda Ash is currently imported from Turkey. Mina Company, the primary manufacture of glass bottles, is able to use up to 70 percent recycled glass in the production process, however, the actual amounts used are dependent upon the availability of cullet to be used in recycling.

All cardboard manufacturing uses recycled paper/cardboard. Recycled paper and cardboard is collected on an ad hoc basis from those people organizations that have been identified or have come forward stating their interest in providing recyclable materials; cardboard manufacturers have not been proactively seeking inputs to recycle.

A recent study by CENN (Caucasus Environmental NGO Network) suggested that while Georgia possesses the necessary base resources for developing a strong and economically viable recycling sector – Tbilisi produces about 0.6-0.7 kg of trash per capita per day (around 60 percent of the EU27 average), while regional municipalities are responsible for about 0.4-0.5 kg – this sphere remains underdeveloped.

There are a number of reasons for this:

- Lack of appreciation of the fact that waste materials have value, and furthermore that separated waste materials (white paper, newspaper, cardboard, etc.) have an even greater value.
- Lack of support from the Tbilisi Municipality to support the development of industry or a public municipal-wide recycling collection system.

- Poor levels of public awareness regarding opportunities for waste reduction, reuse, reclaim, or recycle.

Labor costs and energy costs are very competitive when compared with Turkey and the Ukraine, and raw material costs are similar. There are no tariffs on the importation of machinery and/or equipment.

After factoring in transportation costs, the cost of producing packaging in Georgia may be as much as 20 percent cheaper than anywhere else.

Constraints – Few Constraints

Given transportation costs and competitive local factor costs (wages, energy, real-estate, taxes), local production makes more sense than importing paper and plastic packaging. Several local and foreign firms have invested in plastic bottle-making and paper packaging lines. These include captive lines operated by food processors and beverage companies and independent suppliers (e.g. Caucasian PET company, Kagaldi, Tara, etc.)

Georgian producers have duty-free access to Armenia and Azerbaijan, and significant transport cost advantages over imports from outside of the region. Currently, there is limited production of plastic and paper packaging in Armenia and Azerbaijan. A major paper packaging plant is under construction in Azerbaijan, but this is not expected to be cost competitive in comparison to Georgian producers.

Some constraints include:

- High bank interest rates and the absence of economic/environment incentives, therefore making it difficult to get into the recycling business.
- Lack of support from Tbilisi Municipality to establish collection systems/facilities.
- Lack of supportive waste management law (draft developed) and strategy (to be devised with EU support in 2011).
- Waste disposal is inexpensive and not taxed, making recycling unattractive in economic terms.
- Limited understanding by producers of paper and plastic products on potential markets – many of them are producing toilet paper and napkins, products that are already heavily imported and may not be competitive when compared with imports.
- Poor market linkages: the producers of waste glass, paper and plastic are not in contact with those who may be interested in buying such waste materials. In fact, a Tbilisi-based freight forwarder admitted to throwing away significant quantities of waste cardboard at cost, despite the fact there were cardboard manufacturers willing to pay for waste cardboard!
- Limited storage capacity and quality of storage capacity for waste cardboard and other recyclable materials.

- Water and power cuts slow down the production process.
- High energy costs in the center of Tbilisi.

SME Linkages – Some

There are significant opportunities for SMEs to become involved in the collection of waste materials, namely the inputs for the production/manufacturing of paper/cardboard, glass and plastic products.

Potential Roles for EPI

Given the rate of growth of imports of plastic, paper, wood, and to a lesser extent glass packaging materials, plus the rate of growth in wood exports, there is value in conducting further analysis of these specific value chains. This value is exemplified given that EPI is also analysing the potential that exists in the transport and logistics, construction materials, apparel, wine and a variety of agricultural sectors.

The significant number of enterprises involved in the paper and cardboard value chain, combined with the clear need for increased market information on suppliers and buyers suggests that it should be a priority for further research. This area is followed by plastic bottles, since local production is only meeting 60 percent of demand.

Interviews Conducted

Name	Company
Teimuraz Janjalia	Ruloni
Levan Demetrashvili	Legi
Tamaz Chincharauli	Mina Glass
Mamuka Chaladze	AlfaPET
Shalva Mamaladze	Georgian Plastic

Bibliography

„Converting Trash into Cash – Caveats of the Recycling Business in Georgia', The Financial Online Newspaper, 5th July 2010, Lizaveta Zhahanina http://www.finchannel.com/Main_News/Business/66633_Converting_Trash_into_Cash%3A_Caveats_of_the_Recycling_Business_in_Georgia/

Eurostat Website - http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Waste_statistics_-_Waste_generated_by_households

GeoStat Website

List of Paper Recycling Factories supplied by Caucasus Environmental NGO Network

OTHER SECTORS

The EPI team considered several sectors in addition to those for which sector reports have been prepared. Some of these sectors have emerged as possibilities during the course of the last several weeks, while others are of low likelihood for EPI involvement. Moreover, some have been difficult to assess in the time available, primarily due to the difficulty of obtaining the necessary information.

EPI will continue to obtain information for these sectors, and is open to including additional value chains in its work plan if they prove to be interesting. This is part of EPI's dynamic programming progress – to remain interested and open to new and emerging opportunities.

The Sectors concerned include:

Consumer Electronics

Georgia manufactures and exports some consumer electronics, although the numbers (and available data) are limited. „Fresh Georgia', located in the Kutaisi Free Industrial Zone, produces a variety of household appliances. Fresh Georgia manufactures some parts in Georgia, but imports most of them from Egypt, initiating exports to CIS countries.

Home Furnishings

Includes products such as basket-ware and pottery, both on industrial and artisanal bases.

Marine/Auto/Rail/Aircraft Engineering

Evolved from industries that were well established during Soviet times. Such businesses may become very important as elements of Georgia's regional hub strategy.

Professional Services (medical, financial, engineering, etc.)

The availability and quality of Georgia's professional services is limited and unsupported by a significant number of world-recognized certifications and standards: nevertheless, Georgia offers some top-notch professionals and services. EPI will work deeply with many of these service providers in the course of its value chain and other work. Such services can provide essential elements of a regional service strategy, and many countries have succeeded in exporting professional services (e.g. various ICT-based and BPO services) or developing them into a destination for services (e.g. medical or dental services). EPI, in particular, will continue to investigate opportunities for medical tourism and linkages between financial services and other value chains.

Ceramics

Georgia possesses a ceramics industry, which EPI will investigate in particular in the context of the construction materials sector, and will consider for partnering opportunities.

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