



# EPI WORKFORCE DEVELOPMENT STRATEGY

REPORT

FINAL

Wednesday, September 07, 2011

This publication was produced for review by the U.S. Agency for International Development. It was prepared by Deloitte Consulting LLP.

# **EPI WORKFORCE DEVELOPMENT STRATEGY**

REPORT

FINAL

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

CONTRACT NUMBER: AID-114-C-10-00004

DELOITTE CONSULTING LLP

USAID/CAUCASUS

WEDNESDAY, SEPTEMBER 07, 2011

DISCLAIMER:

The author's views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. government.

# DATA

Author(s): Ardith Maney, PhD

Name of Component: Cross-cutting

Practice Area: Workforce Development

**Key Words:** accreditation, adventure tourism, agronomy, agro-tourism, apparel teaching factories, basalt, best practice(s), bio-agriculture, blueberries, business advisory committees, certification, community colleges, construction materials, crop production, customer service, degustation, energy efficiency, entrepreneurship, hazelnuts, Global Gap, good governance, green construction, guesthouse, HACCP, hotel/hospitality and special events management, human resources, innovation center, internships, irrigation, labor market, mechanization, MICE tourism, organizational development, perlite, practice programs, professional education, rural tourism, skills gap, social partners, software development, supply chains, technical skills, tourism guides, value chains, supply chains, winemaking, wine education, and workforce development

Reviewed by:

Natia Vepkhvadze, Human and Institutional Capacity Development Manager

Irine Salukvadze, Cross-cutting Lead

# ABSTRACT

This report identifies a battery of workforce interventions supported by best international practices that can be deployed across priority agricultural and nonagricultural sectors of Georgia's economy during EPI's first year. The sectors targeted for workforce enhancement in 2011 are apparel, construction materials, transportation and logistics, wine tourism, blueberries, and agronomy. Additional recommendations continue these initiatives in year two and introduce others to Information and Communications Technologies (ICT) and other agricultural sectors. To realize these recommendations, CCID draws on a report by the director of the organization's Georgian office that assesses the capacity of Georgian higher-education and private training organizations to deliver needed education and training across the priority EPI sectors. The results of that report showed all of the PE and bachelor's degree programs currently working in the EPI priority sectors and assessed the expertise, infrastructure, and other factors that affect the activities of specific PE centers, universities, and private training providers and suggest how they can be upgraded and supported by EPI to deliver new workforce programs and services.

Workforce initiatives in year one will include the following: CCID will start up new-worker and incumbent-worker trainings to serve Georgia's growing apparel industry in Tbilisi and western Georgia. Sustainability of these initiatives is supported via the launch of teaching factories to be organized and managed by PE colleges in those regions. Learning materials adapted from these trainings will form the core of apparel specialties (programs) to be created for PE centers around Georgia. The other big initiative comprises three levels of training in wine education to be targeted on frontline hospitality staff working in Georgia's international hotel and restaurant venues and in winery tasting rooms. Smaller initiatives, involving program consultation with U.S. workforce experts in the fields of transportation and logistics, construction materials, blueberries, and agronomy will result in the creation of additional PE programs and courses (subjects). Private training providers will also benefit from upgraded agricultural education training methods and training materials jointly created by Georgian and U.S. educational experts.

# ABBREVIATIONS

AA	Associate of Arts
CATE	Career and technical education
CCID	Community Colleges for International Development, Inc.
CNFA	Citizens Network for Foreign Affairs
CSF	Cold storage facility
CTC	Centre for Training and Consultancy
EICCD	Eastern Iowa Community College District
ETF	European Training Foundation
EPI	Economic Prosperity Initiative
EU	European Union
FIATA	International Federation of Freight Forwarders Associations
FLCC	Finger Lakes Community College
GED	General Education Development
GDCI	Growth, Development and Continual Control of Business
Geostat	National Statistics Service of Georgia
GlobalGAP	The Global Partnership for Good Agricultural Practice
GOG	Government of Georgia
GTU	Georgian Technical University
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HACCP	Hazard Analysis and Critical Control Points
ICT	Information and Communications Technologies
IESC	International Executive Service Corps
IOM	International Organization for Migration
ISU	Iowa State University
KMS	Key Management Solutions Georgia
MICE	Meetings, incentives, conferences, and exhibitions
MES	Ministry of Education and Science of Georgia

MVCC	Moraine Valley Community College
MWS	Midwest
NCEQE	National Center for Educational Quality Enhancement
NGO	Nongovernmental organization
NPA	National Professional Agency
OD	Organizational development
OECD	Organisation of Economic Co-operation and Development
OJT	On-the-job training
OSU	Oregon State University
PE	Professional education
PHT	Post-harvest technology
PSP	Private training service provider
SME	Small and medium enterprise
UNDP	United Nations Development Programme
USAID	U.S. Agency for International Development
VEP	Vocational Education Project
VET	Vocational education and training
WSET	Wine & Spirit Education Trust

# CONTENTS

I.	EXECUTIVE SUMMARY .....	1
II.	APPENDICES .....	3
	A.    METHODOLOGY .....	4
	B.    FINDINGS.....	5
	C.    RECOMMENDATIONS .....	41
	D.    ADDITIONAL INFORMATION.....	51

# I. EXECUTIVE SUMMARY

Work began for this workforce development strategy report by synthesizing reports on workforce development capacity building and international best practices. This research focused on U.S., Canadian, and European studies published during the past five years.<sup>1</sup> Examples included studies by the Organisation of Economic Co-operation and Development (OECD), which compared workforce development capacity building in member countries<sup>2</sup> and studies by and about the government of Georgia's (GOG) workforce development capacity. Examples of such Georgian studies include the Ministry of Education and Science (MES) of Georgia's National Professional Agency (NPA) and National Center for Educational Quality Enhancement (NCEQE). Reports by European and American organizations working in Georgia on its workforce development-related capacity building, especially in the period since 2005, were also consulted and evaluated.<sup>3</sup> In addition, American workforce development experience in EPI subject areas was extensively mapped for its application and adaptation to Georgia.

Best-practice literature for the United States, Canada, and Europe reaches broadly similar conclusions when analyzing workforce development in those countries. These studies, whether by international organizations, national or regional governmental agencies, or private study commissions within an individual country, all point to an increasing skills gap in North America and Europe. New ways have to be found for industry to access workers with a common set of technical skills, especially math, for their workforce needs now and in the coming decade. Usually these studies also strongly recommend methods designed to achieve stronger collaboration between educational providers and industry. The European variant focuses on participation among business, trade unions, and other social partners in the setting-up and governance of public-private partnerships, strengthening of career education programs in high school, and continuing with apprenticeships in industry.<sup>4</sup> The North American and UK approach is more focused on forging strong workforce partnerships after high school between business and educational institutions to strengthen career education and recommends methods to do so that involve community and technical colleges.

This report then examines the work of Georgian vocational education program providers through the same best-practice lens. Specifically, Community Colleges for International Development, Inc.'s (CCID) report applies this framework to the educational and training organizations serving industries in the agricultural and nonagricultural sectors chosen as priorities by EPI. After summarizing the involvement of Georgian higher-education and private training service providers, the report proceeds to analyze gaps in workforce development activities and suggests ways that these gaps may be addressed by (1) facilitating partnerships among educational service providers and sector businesses and (2) proposing education and training interventions for EPI to sponsor.

---

<sup>1</sup> See, for example, McPherson, Malcolm and Clare Ignatowski. 2007. Workforce Assessment in Georgia. USAID. March. Ministry of Education of Government of Quebec. 2002. Teacher Training in Vocational Education: Orientations, Professional Competencies.

<sup>2</sup> See the OECD reports on the United Kingdom and South Carolina contained in the bibliography.

<sup>3</sup> See the IOM, UNDP, and NPA (MES) situation analysis reports.

<sup>4</sup> See Gogeliani's Georgia Academia Mapping Report, which discusses work that had already been done in Georgia, especially in the development of the National Qualifications Framework for professional education (PE), creation of a modern legal base for PE in Georgia, and adaptation of methods used in Europe whereby industry experts actively participate in the accreditation process.

Specific recommendations for capacity-building actions are laid out for implementing workforce activities during the remainder of the first year of EPI's work in these sectors — apparel, wine tourism, construction materials, transportation and logistics, agronomy, and blueberries. For apparel, the main activity in 2011 will be a training program for teachers from Georgian professional educational schools in Tbilisi and western Georgia to be conducted by a North Carolinian apparel industry training company with experience assisting U.S. Agency for International Development (USAID) to set up similar apparel training programs. After that is completed, teaching factories will be launched to assist professional education (PE) centers in offering modern apparel practice programs in collaboration with Georgian apparel companies. In addition, three new PE programs will be created, along with new textbooks.

Attention to the wine tourism sector will also focus on a training-of-trainers (TOT) program, this time for trainers working for private training service providers (PSPs) and nongovernmental organizations (NGOs). The program will also be open to people wishing to do wine education tourism from academia, the hospitality industry, etc. For the construction materials sector, the main intervention in 2011 will be the development and delivery of short (one- or two-day) trainings for architects, building companies, and academics on new construction materials. These trainings will be accredited and the curriculum materials added to existing PE courses on construction materials. In 2012, trainings of teachers will be held by CCID college experts on energy-efficient building practices and new programs will be created by Georgian experts in collaboration with these U.S. partner colleges. For transportation and logistics, the CCID action plan for 2011 also includes a TOT by CCID college experts, to be followed by course upgrades and/or development of new programs, as jointly decided by the participating U.S. and Georgian experts.

For the blueberry sector, CCID Georgian experts will assist in the development of a blueberry production guide, and accreditation by NCEQE will be facilitated by CCID's Georgia-based staff. How to institutionalize and sustain that new subject matter will be informed by the work of a CCID agronomy expert who will do a TOT with PE agricultural teachers and collaborate in curriculum development with Georgian agronomy experts. It is expected that two new PE programs will result from this curriculum development work.

At each point, this CCID workforce report strongly endorses the notion that best-practice workforce development capacity building in Georgia has two faces: (1) development and delivery of short courses and training for industry on the one hand, including by private training service providers (especially in the tourism and agriculture sectors), and (2) upgrading the methodological and subject matter knowledge and skills of instructors in Georgia's PE centers on the other hand. Attention is also paid throughout this report to the need to assist PE centers to develop and strengthen partnerships with industry because such partnerships enable the delivery of knowledge and skills needed in industry and afford the development of internship and practice programs that model jobs and careers that exist.

## **II. APPENDICES**

- A. METHODOLOGY**
- B. FINDINGS**
- C. RECOMMENDATIONS**
- D. ADDITIONAL INFORMATION**

## A. METHODOLOGY

This workforce development strategy report incorporates work done for the Georgia Academia Mapping Report prepared for Community Colleges for International Development, Inc. (CCID), by Dr. Lali Gogeliani, director of CCID's Representative Office in Georgia, during March and April 2011. This report was originally supposed to be supplemented by an additional mapping exercise that covered U.S. academia and service providers, which was canceled. Accordingly, in the interests of time, some — but not all — of that material has been added as available and pertinent. Additional mapping information will be delivered as part of the TOT and curriculum development activities planned for the rest of 2011.

The material included in the Georgia Academia Mapping Report was collected through analysis of documents prepared by MES, the Georgian accrediting body for higher education and PE, NCEQE. These included all accreditation materials for programs and courses in EPI specialty areas, copies of pertinent laws, etc. The national standards for programs in the EPI priority fields were also assessed for all five steps that are offered by PE colleges and universities.

This research was also supplemented by follow-up phone calls during March and April 2011 to universities and PE programs by the author of the Georgia Academia Mapping Report. The purpose was to ascertain additional needed information, especially about available equipment and infrastructure, as well as about each college's degree of employer engagement. The report author also accessed additional information from the Web sites for these educational institutions and from the Web sites of private training service providers.

In addition, the authors of both CCID reports conducted more than 30 interviews with directors of PE programs inside colleges and universities in three regions of Georgia. The CCID team appreciates the time and information given to us by colleagues in these organizations in Tbilisi, Telavi, Batumi, Kutaisi, and Ozurgeti, including senior officials at MES, NCEQE, training service companies, experts in EPI priority sectors from industry and academia, and international donor agencies working in Georgia.

Additional information needed for this report came from a burgeoning literature on best practices for workforce development. Special attention was paid to studies by foundations, governmental bodies, international donors, and contractors whose reports detail methods used in the United States, Europe, and, wherever possible, in Georgia. Examples included in the bibliography include the OECD, the European Union's (EU) European Training Foundation (ETF), USAID, Massachusetts Institute of Technology, Canadian and American provincial and regional workforce development bodies, and the World Bank.

The authors of both reports also thank those in the office of USAID's Economic Prosperity Initiative (EPI) for sharing documents produced by the EPI value chain sector managers. For more information about the accreditation documents for the EPI program specialties and/or about teaching materials, e.g., textbooks, syllabi, and the human resources that educational institutions offer as part of the self-study materials that they supply, please see the Georgia Academia Mapping Report.

# B. FINDINGS

## INTRODUCTION

This report makes workforce development recommendations and spells out complementary roles for PSPs, PE providers, firms active in EPI value chain sectors, and other stakeholders that can take place during the remainder of 2011 and will be followed up by similar activities in these and additional sectors over the next 18 months. Examination of benchmark international best practices allows the presentation of a quick snapshot of workforce needs and points the way to more specific recommendations that are organized by EPI value chain sectors. Wherever possible, attention is drawn to the capacities of Georgian public and private training partners whose policies were analyzed during the consultancy; and comments are made about their staff training, management experience, regional scope, and available infrastructure. All of the Georgian organizations discussed have significant strengths that EPI can call on. However, considerable attention needs to be spent to: (1) develop partnerships among PEs, universities, and private training service organizations and (2) connect them with new subject matter information needed by business and industry inside the EPI value chain sectors. Currently, all of these education and training organizations offer patchy coverage of the subjects and geographical scope needed for delivering high-quality workforce development interventions to support EPI priority sectors. Another pressing need is to assist these education and training institutions to upgrade customer service throughout the EPI priority sectors.

## BEST INTERNATIONAL PRACTICE IN WORKFORCE DEVELOPMENT

### WORKFORCE DEVELOPMENT BEST PRACTICES IN THE UNITED STATES AND EUROPE

CCID has analyzed workforce development best-practice literature in the United States and Europe; reports by organizations such as OECD, which compare workforce development capacity building in member countries; and reports evaluating previous workforce development-related capacity in Georgia. Best-practice literature for both the United States and Europe are similar. These studies, whether by international organizations or by study commissions within an individual country, all point to the need that business and industry have for skilled technical workers. The European variant focuses on participation by business and other social partners in the setting-up and governance of public-private partnerships involving governments, industry professional associations, and educational institutions, starting in high school and continuing with programs in private or public technical colleges and apprenticeships in industry.<sup>5</sup> The most important stakeholders are government officials who have responsibilities for providing labor market assistance and regulating job qualifications frameworks. There are also government economic development initiatives that target additional funds to regions and sectors in which government has a particular interest.

---

<sup>5</sup> Most of these studies mention private business and technical colleges that offer some of the same specialties as do the public sector community and technical colleges only glancingly. For more information, see the Association of Private Sector Colleges and Universities ([www.career.org](http://www.career.org)), which claims membership by more than 1,600 colleges. Clearly, in areas such as information technology, these colleges play important roles. However, the colleges in this sector are sometimes criticized for overselling their programs by aggressively marketing student loans to marginal students.

In the United States, there have been high-level commissions, sometimes commissioned by private foundations, e.g., Brookings Institution and The Aspen Institute, who have input from the U.S. Department of Education. Not surprisingly, the main actors are at the state level, and skills-development initiatives vary. But the usual result is that states that have a particular interest in the topic can access additional funds to develop their state-level policies and programs through foundation and grant funding from the national government. Many of these initiatives during the past decade have focused on “bridge” programs designed to open pathways between high school (and/or local community colleges) and the labor market. Bridge and many other regional strategies build on already-established relationships among (1) business and industry; (2) regional economic development and governmental bodies; and (3) education institutions, including schools and community colleges. Best-practice case studies note the importance of public-private partnerships as an important vehicle for supporting these initiatives.

This kind of partnership around industry clusters was described in an MIT study in 2008 urging the start-up of such a “workforce intermediary” to assist in the restart of North Central Massachusetts’ manufacturing base.

Community and technical colleges have become the focus of workforce development capacity building through (1) upgrading the qualifications of high school leavers by providing General Education Development<sup>6</sup> diplomas; (2) offering remedial programs for high school graduates, e.g., ESL and math, before they start Associate of Arts and Associate of Applied Science degree programs<sup>7</sup> and shorter certificate programs; and, (3) offering corporate training, i.e., continuing education programs, for business and industry in the regions in which they serve. Community and technical colleges also serve as members of teams set up by state and regional economic development agencies to administer retraining programs when key businesses cut back on their workforce, off-shore their activities, move to other regions, etc.

CCID’s workforce capacity building strategy applies the same general principles for the interventions recommended for each of EPI’s priority sectors. But the results will look different from one another in practice because they will be tailored for the needs of business and industry and economic growth goals in each sector as follows:

- Needs and opportunities in each sector for accessing export and domestic markets
- Technology improvements needed in the different sectors to support these needs and opportunities
- Capacities of leading businesses and workforce education providers to move toward international best practices

The case for paying attention to current export opportunities seems especially evident in such agricultural sectors as hazelnuts, blueberries, fruit-/vegetable-processing industries, ICT, and transportation and logistics, as well as in Georgia’s quickly growing apparel sector. The ICT sector is a high priority since it gives Georgia the possibility to compete for international investment in its software application subsector and because it can enable needed IT improvements in other EPI sectors. The transportation and logistics sector also

---

<sup>6</sup> GED tests taken after someone leaves American or Canadian high schools before graduation allow these students to get an equivalent to a high school diploma.

<sup>7</sup> Associate of Arts, Associate of Science, and Associate of Applied Science degrees are typically offered in technical and community colleges in the United States. The Associate of Arts and Associate of Science degrees are typically pursued by students intending to transfer to bachelor’s programs. The Associate of Applied Science degree is more often a terminal degree used for labor market entry.

plays an enabling role for Georgia's role in transportation and logistics links from Georgia through Poti's port to Central Asia, i.e., the new Silk Road.

## WHAT'S IN A NAME?

Numerous definitions of what donors and/or governmental and private sector stakeholders mean by workforce development and its strategies can be found. Starting with the United States, most states have established a department or agency with "Workforce Development" in its official name and eponymous responsibilities. Some states co-locate this agency's regional offices on or nearby technical and community college campuses in order to offer "one-stop shopping" for job seekers and employers, i.e., provide coordinated training services for employers, as well as for those job seekers who may be eligible for special training and retraining programs accessed from these institutions' campuses.

The work of these state agencies differ according to state and regional economic development priorities but are all underpinned by national legislation, such as the Workforce Investment Act of 1998, which draws bipartisan commitment from the nation's governors through their association. Indeed, many workforce development initiatives have been supported by administrations of both political parties because of a common commitment to increasing national competitiveness in world markets.<sup>8</sup> Later in this report, some of the linkages forged between and among government, private sector organizations, foundations, and think tanks in the United States that have led to broad acceptance of best practices will be discussed.

## ELEMENTS OF A WORKFORCE DEVELOPMENT ACTION PLAN FOR EPI SPECIALTIES IN GEORGIA

With this introduction completed, a workforce development model for the EPI project can be presented and discussed. It incorporates best practices recommended for USAID international development projects.

### EPI Workforce Development Strategy Applied to Priority Nonagricultural Sectors

	Apparel	Transportation and Logistics	ICT	Wine tourism	Construction Materials
<b>1. Program goals</b>	<ul style="list-style-type: none"> <li>Strengthen competitiveness of a key export-oriented industry</li> <li>Improve productivity</li> </ul>	<ul style="list-style-type: none"> <li>Provide support for economic development backbone for Georgian industry</li> </ul>	<ul style="list-style-type: none"> <li>Establish competitive software development industry</li> <li>Upgrade capacity of existing</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen competitiveness of a key export-oriented industry</li> </ul>	<ul style="list-style-type: none"> <li>Substitute GE products in construction</li> <li>Expand use of new energy-efficient construction</li> </ul>

<sup>8</sup> See, for example, an online *Wall Street Journal* article in 2009 reporting on President Barack Obama's community-college initiative and its special focus on retraining workers from regions where factories closed during the current financial crisis (<http://online.wsj.com/article/SB124753606193236373.html>). Workforce development is not considered solely an American issue; it can be seen in coverage of the topic by the Quebec provincial government in Canada (Ministry of Education of, Government of Quebec. 2002. Teacher Training in Vocational Education: Orientations, Professional Competencies) and an article about workforce skills priorities from Ontario (<http://www.canadianlabour.ca/ontario/news/labour-business-and-government-tackle-workforce-skills-priorities>).

	<b>Apparel</b>	<b>Transportation and Logistics</b>	<b>ICT</b>	<b>Wine tourism</b>	<b>Construction Materials</b>
			companies		<ul style="list-style-type: none"> <li>• Strengthen building and related industries</li> </ul>
<b>2. Identify target workforce</b>	<ul style="list-style-type: none"> <li>• Retrain current workforce</li> <li>• Train new workforce</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrade current workforce</li> <li>• Spread workforce skills needed for industries to cooperate</li> </ul>	<ul style="list-style-type: none"> <li>• Train new workforce</li> <li>• Retrain current workforce</li> <li>• Train new workforce</li> <li>• Enable managers to master needed managerial and technical skills</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrade workforce skills of guides and front-level wine tourism professions</li> <li>• Provide retraining for workforce in customer service and other cross-cutting specialties</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information to key stakeholders, e.g., architects and construction businesses</li> <li>• Incorporate information on new materials and energy-efficient building practices in education and training institutions' curricula</li> </ul>
<b>3. Identify workforce education and training objectives</b>	<ul style="list-style-type: none"> <li>• Master new technical workforce skills</li> <li>• Gain career-related employment</li> </ul>	<ul style="list-style-type: none"> <li>• Master new technical workforce skills</li> </ul>	<ul style="list-style-type: none"> <li>• Gain career-related employment</li> <li>• Master new technical workforce skills</li> </ul>	<ul style="list-style-type: none"> <li>• Master new technical workforce skills</li> <li>• Focus on customer service and entrepreneurial skills</li> </ul>	<ul style="list-style-type: none"> <li>• Master new technical workforce skills</li> <li>• Expand career-related employment</li> </ul>
<b>4. Possible linkages for industry with public and private sector and stakeholders<sup>9</sup></b>	<ul style="list-style-type: none"> <li>• Organize business-training provider practice programs</li> <li>• Develop business clusters</li> </ul>	<ul style="list-style-type: none"> <li>• Organize business-training provider practice partnerships</li> <li>• Develop business stakeholder clusters</li> <li>• Strengthen job placements and career services</li> </ul>	<ul style="list-style-type: none"> <li>• Develop business stakeholder clusters</li> <li>• Strengthen practice programs and career services</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen business-training provider partnerships, including practice program, job placement, and career services</li> <li>• Support business clusters coming together around wine tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Construct partnership between manufacturers and experts on green building technology, including architects, academia, and building</li> </ul>

<sup>9</sup> Finding reliable government or other partners to do labor market assessments needed by industry and educational providers applies to all sectors.

	<b>Apparel</b>	<b>Transportation and Logistics</b>	<b>ICT</b>	<b>Wine tourism</b>	<b>Construction Materials</b>
					companies
<b>5.a. Design strategy with input from counterpart U.S. experts and best practices</b>	<ul style="list-style-type: none"> <li>• TC2, NC apparel solutions company</li> </ul>	<ul style="list-style-type: none"> <li>• CCID partner colleges Savannah Technical College (GA), Central Piedmont Community College and Davidson County Community College (NC), Eastern Iowa Community College District (EICCD) (IA) and Black Hawk College and Moraine Valley Community College (MVCC) (IL)</li> </ul>	<ul style="list-style-type: none"> <li>• CCID partner college (TBD)</li> </ul>	<ul style="list-style-type: none"> <li>• CCID member Finger Lakes Community College (FLCC) (NY)</li> <li>• Midwest MWS (MWS)</li> </ul>	<ul style="list-style-type: none"> <li>• CCID partner colleges Savannah Technical College (GA), Central Piedmont Community College (NC), and others (TBD)</li> </ul>
<b>5.b. Design effective and sustainable instructional delivery system</b>	<ul style="list-style-type: none"> <li>• TOT approach to subject matter knowledge and skills and assessment skills</li> <li>• Launch and sustain of PE-led teaching factories</li> <li>• Curriculum materials created as needed with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• New specialties and learning materials created with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• Curriculum materials created as needed with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• New curriculum materials created as needed with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• Curriculum materials created as needed with industry input</li> </ul>
<b>5.c. Strengthen capacity of education and training service providers</b>	<ul style="list-style-type: none"> <li>• Focus on PE programs and universities in Tkibuli, Kutaisi, Batumi, and Tbilisi</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on PE programs and universities in Tbilisi and Batumi</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on universities and PE programs, especially in Tbilisi</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on service providers for hospitality industry training in year one</li> <li>• Focus on upgrading PE programs for strengthened capacity in subsequent years</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on professional associations' role in accreditation process and on universities and PE programs with construction specialties</li> <li>• Add focus on energy-efficient technologies and practices</li> </ul>

## EPI WORKFORCE DEVELOPMENT STRATEGY APPLIED TO SELECTED AGRICULTURAL SECTORS

These sectors have been chosen to serve as examples at this point in the report using the seven steps discussed above. Later in the report, distinctions will be made among the fresh fruit and fresh vegetable sectors, as well as the processed fruit and processed vegetable sectors.

	<b>Blueberries</b>	<b>Fresh fruit and vegetables</b>	<b>Wine</b>	<b>Hazelnuts</b>	<b>Fruit and vegetable processing</b>	<b>Agronomy<sup>10</sup></b>
<b>1. Program goals<sup>11</sup></b>	<ul style="list-style-type: none"> <li>Strengthen export capability of agricultural blueberry sector</li> <li>Increase productivity with new technologies</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen domestic and export capability – fruits</li> <li>Strengthen domestic capability – vegetables sector</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen export capability of key agricultural sector</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen capacity of agricultural export sector</li> <li>Increase productivity with new technologies</li> </ul>	<ul style="list-style-type: none"> <li>Serve domestic market with international best-practice technology and increase export</li> <li>Increase productivity with new technologies</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen capability of import and export across all agricultural sectors</li> <li>Increase productivity with new technologies</li> </ul>
<b>2. Identify target workforce</b>	<ul style="list-style-type: none"> <li>Identify blueberry (and bio-blueberry) producers, processors, and exporters, mostly in western Georgia</li> <li>Identify TOT for PE teachers in western Georgia</li> </ul>	<ul style="list-style-type: none"> <li>Identify fresh fruit and vegetables (including organic producers) and exporters throughout Georgia</li> <li>Identify TOT for PE teachers</li> </ul>	<ul style="list-style-type: none"> <li>Identify grape-growers and winemakers (including organic producers) in Kakheti, Shida Kartli, and western Georgia</li> <li>Identify TOT for PE teachers</li> </ul>	<ul style="list-style-type: none"> <li>Identify hazelnut producers, processors, and exporters, mostly in western Georgia</li> <li>Identify TOT for PE teachers</li> </ul>	<ul style="list-style-type: none"> <li>Identify fruit and vegetable processors (including for organic products) throughout Georgia</li> <li>Identify TOT for PE teachers</li> </ul>	<ul style="list-style-type: none"> <li>Retrain producers across all agricultural sectors supported by EPI</li> <li>Enable farmers to update their knowledge of sustainable practices</li> <li>Identify TOT for PE teachers</li> </ul>
<b>3. Identify WET</b>	<ul style="list-style-type: none"> <li>Producers and processors</li> </ul>	<ul style="list-style-type: none"> <li>Producers and processors</li> </ul>	<ul style="list-style-type: none"> <li>Producers and processors</li> </ul>	<ul style="list-style-type: none"> <li>Increase producers' and</li> </ul>	<ul style="list-style-type: none"> <li>Increase producers' and</li> </ul>	<ul style="list-style-type: none"> <li>Farmers master new technical</li> </ul>

<sup>10</sup> Agronomy is an example of a cross-cutting sector of interest to EPI. Start-up activities are shown here in a similar format to those for other sectors. Whether mechanization should be included — or considered another separate cross-cutting sector — will be investigated further later in year one.

<sup>11</sup> The stage/step model used here draws on the [USAID Workforce Development Program Guide](#) submitted to USAID's Global Workforce in Transition (GWT) project by Economic Development Center, a USAID IQC holder. The report authored by Ron Israel, was in response to #GDG - 1 - 00 - 02 - 0003 - 00.

	<b>Blueberries</b>	<b>Fresh fruit and vegetables</b>	<b>Wine</b>	<b>Hazelnuts</b>	<b>Fruit and vegetable processing</b>	<b>Agronomy<sup>10</sup></b>
<b>objectives</b>	<p>get entrepreneurial and marketing skills</p> <ul style="list-style-type: none"> <li>• Farmers get new technical skills</li> </ul>	<p>get new management and entrepreneurial skills</p> <ul style="list-style-type: none"> <li>• Farmers get new technical skills</li> </ul>	<p>get marketing and entrepreneurial skills</p> <ul style="list-style-type: none"> <li>• Winemakers and farmers get new technical skills</li> </ul>	<p>processors' entrepreneurial skills</p> <ul style="list-style-type: none"> <li>• Farmers master new technical skills</li> </ul>	<p>processors entrepreneurial skills</p> <ul style="list-style-type: none"> <li>• Processors gain new technical skills</li> </ul>	<p>skills about cultural practices, agricultural chemical use, machinery, etc.</p> <ul style="list-style-type: none"> <li>• Producers get results from doing their own tests and benefit from electronic learning resources</li> </ul>
<b>4. Construct linkages for private sector and stakeholders</b>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs for agriculture emphasize practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs for agriculture emphasize practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs for agriculture emphasizing practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs for agriculture emphasize practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs needed emphasize practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>	<ul style="list-style-type: none"> <li>• PE-to-work transition programs needed emphasize practice</li> <li>• Producer-PE partnerships are strengthened</li> </ul>
<b>5.a. Design strategy with input from counterpart U.S. experts and best practices</b>	<ul style="list-style-type: none"> <li>• Oregon State University (OSU)</li> <li>• Oregon consortium</li> </ul>	<ul style="list-style-type: none"> <li>• Reedley College (CA) and its CA partners</li> <li>• Oregon consortium, as needed</li> </ul>	<ul style="list-style-type: none"> <li>• FLCC NY and Oregon consortium members, as needed</li> </ul>	<ul style="list-style-type: none"> <li>• OSU (Oregon consortium)</li> </ul>	<ul style="list-style-type: none"> <li>• Reedley College (CA) and CA consortium</li> <li>• Oregon consortium, as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Iowa CCID college – university partnership</li> </ul>
<b>5.b. Design effective instructional system</b>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• New curriculum materials created, as needed, with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• New curriculum materials created, as needed, with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• Curriculum materials created with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• Curriculum materials created with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• New curriculum materials created, as needed, with industry input</li> </ul>	<ul style="list-style-type: none"> <li>• TOT approach to pedagogical and assessment skills</li> <li>• Curriculum materials created with industry input</li> </ul>

	<b>Blueberries</b>	<b>Fresh fruit and vegetables</b>	<b>Wine</b>	<b>Hazelnuts</b>	<b>Fruit and vegetable processing</b>	<b>Agronomy<sup>10</sup></b>
<b>5.c. Strengthen capacity of education and training service providers</b>	<ul style="list-style-type: none"> <li>Focus on private providers, PE and universities, as appropriate</li> <li>Focus on western Georgia</li> </ul>	<ul style="list-style-type: none"> <li>Focus on PSPs, PE, and universities, where appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Focus on private providers, PE, and Georgian State Agrarian University, as appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Focus on private providers, PE, and Georgian State Agrarian University, as appropriate, in western Georgia</li> </ul>	<ul style="list-style-type: none"> <li>Focus on private providers, PE, and universities, as appropriate, in all Georgia</li> </ul>	<ul style="list-style-type: none"> <li>Focus on private providers, PE, and Georgian State Agrarian University, as appropriate</li> </ul>

## BEST INTERNATIONAL PRACTICES IDENTIFIED AND APPLIED TO EPI PRIORITIES

Now the report turns its attention to the point of view of companies and brings to bear information gleaned from best-practice literature. It is intended to assist the reader to understand what problems have been prioritized and what solutions are most often offered. Thus, the 11 main topics listed in the first column of this table are based on common private sector needs. The gaps listed apply to Georgia, as well as other countries. Best-practice recommendations are noted and general attention to EPI concerns and priorities are noted when available. Additional gaps and interventions will be added when the EPI value chain sectors are discussed separately.

<b>Company/producer needs</b>	<b>Gap identified</b>	<b>Best international practices and recommendations</b>	<b>Some opportunities for EPI intervention mentioned in best-practice literature</b>
<b>1. Companies need institutionalized mechanisms for upgrading skills for incumbent employees</b>	<ul style="list-style-type: none"> <li>Technology is updated, and on-the-job training (OJT) takes time and money</li> <li>Companies do not know what workforce skills are needed for new machinery</li> <li>There are no facilities or inadequate ICT systems for companies to update their technical information*</li> </ul>	<ul style="list-style-type: none"> <li>OJT supplemented by training at vocational centers furnished with new equipment, where needed</li> <li>*Strong working partnerships established, including companies and education and training providers</li> </ul>	<ul style="list-style-type: none"> <li>Contracts with educational institutions, i.e., corporate and community training</li> <li>Contracts with private companies</li> </ul>

Company/producer needs	Gap identified	Best international practices and recommendations	Some opportunities for EPI intervention mentioned in best-practice literature
<b>2. Companies need to offer OJT before new employees begin work</b>	<ul style="list-style-type: none"> <li>Dissatisfaction with skills of new hires</li> </ul>	<ul style="list-style-type: none"> <li>In-house training from companies, technical colleges, and/or other VET providers</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of apparel –teaching factories”</li> </ul>
<b>3. Companies need continuing connections with new technology in their industry</b>	<ul style="list-style-type: none"> <li>Institutionalized assistance is needed to introduce new equipment and technology, e.g., cultivation and management practices in agricultural sectors</li> </ul>	<ul style="list-style-type: none"> <li>Continuing contract with colleges and private companies to deliver trainings when they install new equipment and update needed IT technology</li> </ul>	<ul style="list-style-type: none"> <li>EPI interventions can assist companies, e.g., apparel</li> <li>Technology upgrades and purchase of new equipment more likely to happen when company has international partners</li> </ul>
<b>4. Problems for PE schools arising from weak financing model and lack of entrepreneurial culture</b>	<ul style="list-style-type: none"> <li>PE system financing is not dependable or sustainable, i.e., too dependent on government funding</li> <li>A cost-sharing and cofinancing model incorporating international best practices are needed</li> </ul>	<ul style="list-style-type: none"> <li>Situation improves in theory, but best-practice literature suggests that PE needs additional financing from MES and stability for its accreditation system</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise- or sector-specific continuing training</li> <li>Institutions or training partnerships develop robust income-generating activities and are able to find their own resources to make up for stagnant or declining line-item government budget support</li> <li>Benefits accrue to customers, i.e., students and industry</li> </ul>
<b>5. Problems for companies in accessing training</b>	<ul style="list-style-type: none"> <li>Many PSPs do not have updated information and rely on grant funding</li> <li>PSPs and PE institutions do not collaborate within</li> </ul>	<ul style="list-style-type: none"> <li>Best-practice literature suggests that companies, as well as education and training organizations need additional information about what training is</li> </ul>	<ul style="list-style-type: none"> <li>EPI-developed curricula shared among PE institutions inside specific value chains</li> <li>EPI TOT training for private training</li> </ul>

Company/producer needs	Gap identified	Best international practices and recommendations	Some opportunities for EPI intervention mentioned in best-practice literature
	value chains <ul style="list-style-type: none"> <li>• Regional institutions improve performance</li> </ul>	needed	service providers, as appropriate <ul style="list-style-type: none"> <li>• Special staff and teacher training for EPI value chain industries</li> <li>• Value chain experts used/strengthened</li> <li>• Enhance reality of a PE system that is shared among institutions serving the same industry in different regions</li> </ul>
<b>6. Accessing education and training programs from training providers</b>	<ul style="list-style-type: none"> <li>• Training providers' market links are weak and underdeveloped</li> <li>• Learner based and market oriented</li> <li>• Curriculum reflects needed skills</li> </ul>	<ul style="list-style-type: none"> <li>• U.S. curriculum and workforce experts assist institutions and business</li> </ul>	<ul style="list-style-type: none"> <li>• Start up a curriculum project in each value chain</li> <li>• Curricula shared with value chains with priority on institutions seeking accreditation and certification</li> </ul>
<b>7. Companies and training providers benefit with close working relations</b>	<ul style="list-style-type: none"> <li>• Information about labor market needs to be expanded and shared</li> </ul>	<ul style="list-style-type: none"> <li>• Workforce partnerships modeled on best-practice literature</li> </ul>	<ul style="list-style-type: none"> <li>• Very few examples currently exist</li> </ul>
<b>8. PE, university, and training providers need to focus on missing technical specialties</b>	<ul style="list-style-type: none"> <li>• Focus on job-specific (entry level) and transferable skills) for white- and blue-collar jobs</li> <li>• Particular problems exist in priority areas such as tourism and agriculture, where low-skilled work predominate</li> </ul>	<ul style="list-style-type: none"> <li>• Best-practice literature suggests that companies, as well as education and training organizations, need additional information about what training is needed</li> </ul>	<ul style="list-style-type: none"> <li>• TOT programs bring information about job classifications served by U.S. partners</li> </ul>

Company/producer needs	Gap identified	Best international practices and recommendations	Some opportunities for EPI intervention mentioned in best-practice literature
<p><b>9. Nearly all training public and private education and training providers' capacity is underused by businesses in Georgia</b></p>	<ul style="list-style-type: none"> <li>• PE and university Internet connectivity and labs seriously underfunded</li> <li>• Most private training providers depend on grants and contracts for their budgets and partner with donor organizations to use other organizations' space and resources</li> <li>• Out-of-date negative reputation of PE held by business and students</li> </ul>	<ul style="list-style-type: none"> <li>• Georgian government should facilitate connections between business and PE programs</li> <li>• PE programs should align closely with regional economic development</li> <li>• Fee-paying services to business should be offered</li> </ul>	<ul style="list-style-type: none"> <li>• Some important technical resources made available for educational institutions serving each value chain</li> </ul>
<p><b>10. Industry in Tbilisi has greater capacity for acquiring staff and updating their skills compared with industry in the regions.</b></p>	<ul style="list-style-type: none"> <li>• Problem of self-employment in agriculture</li> <li>• Strong agricultural producers and processors limited by transport, logistics, and IT challenges</li> <li>• Cluster approach works in regional hubs like Batumi, Kutaisi, Zugdidi, Telavi, and Samske-Javakheti, etc. where there are PE schools and universities but no PSPs</li> <li>• Weak links between business and other workforce stakeholders are problems in real problems for industry in other regions, e.g., Tkbuli</li> </ul>	<ul style="list-style-type: none"> <li>• Rural labor market needs for rural areas not well-represented in donor and GOG studies</li> <li>• Some donor studies recommend changes in the National Statistics Service of Georgia (Geostat) data collection and analysis</li> <li>• Donors are experimenting with job counseling and referral centers since no GOG agencies do this</li> </ul>	<ul style="list-style-type: none"> <li>• EPI sectoral interventions can be introduced in business-workforce training provider</li> <li>• These innovations later expanded to all regional industry and PE schools</li> </ul>

Company/producer needs	Gap identified	Best international practices and recommendations	Some opportunities for EPI intervention mentioned in best-practice literature
	<p>and Rustavi</p> <ul style="list-style-type: none"> <li>• PEs have excess physical capacity, i.e., space but no money to rehab the space</li> <li>• Little labor market information available</li> </ul>		
<p><b>11. Companies selling machinery and inputs to agricultural enterprises give start-up information on usage and cultivation practices</b></p>	<ul style="list-style-type: none"> <li>• Agricultural producers and related companies need continuing technical assistance</li> <li>• Farm service centers and machinery service centers offer opportunity to organize education and training seminars and programs</li> <li>• PE schools use outmoded curricula, and many EPI priority sectors are missing, e.g., hazelnuts and blueberries</li> </ul>	<ul style="list-style-type: none"> <li>• Workforce needs and skills uncovered for technical professions in three important cross-cutting agricultural sectors, e.g., irrigation, agronomy, and mechanization (EPI)</li> <li>• international donor reports results are spotty in their regional coverage, e.g., Shida Kartli is a particular focus for USAID and United Nations Development Programme (UNDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Partnerships forged between farm service center/machinery service center, industry and local PE schools for demonstration areas strengthen practice and get information from a network of specialists, e.g., irrigation, farm business, agronomy, and mechanization</li> </ul>

## INTERNATIONAL BEST PRACTICES FOR PROFESSIONAL EDUCATION

In this section, we evaluate how Georgia PE programs match up with best practices identified by law or administered by accreditation agencies in Europe and North America.<sup>12</sup> American and European best practices is the term of reference that Georgian education officials have used since reforms started in earnest in 2005.<sup>13</sup> The result of their efforts since

<sup>12</sup> There is no comparable way to evaluate the regulations guiding PSPs in Georgia except for those that have some kind of international training certification.

<sup>13</sup> Like the CCID Georgia Academia Mapping Report, this one did not look in depth at the effects of the educational reforms for schools (K–12) or the introduction of a national entrance exam for admission to bachelor’s programs. We are aware, however, of some of the spillovers

2005 — and especially since the new accreditation system came into effect in 2010 — is a mix of the U.S. and European systems. The main features of the workforce education and development systems used in Europe and the United States are presented below, which contains information taken from a common OECD set of studies of career and technical education (CATE) in the United Kingdom, European OECD member countries, the same OECD study of South Carolina’s system, donor reports about Georgia, and materials contained in Georgia Academia Mapping Report done by CCID for EPI.

Recommendations from the OECD study applying to the United States call for more work experience in high school<sup>14</sup> The South Carolina study also noted that required and robust work experience, whether at the high school or vocational education level, also serves the purpose of benefitting employers by allowing them to assess the skills of prospective employees.<sup>15</sup>

<b>Best Practices for Accreditation and Governance</b>	<b>United Kingdom</b>	<b>Other EU</b>	<b>United States (South Carolina)</b>	<b>Georgia</b>	<b>Comments</b>
Qualifications framework exists for vocational education accreditation process	X	X		X	U.S. states benchmark against best-practice commissions and studies put forth by foundations, educational experts, corporations, and U.S. government. U.S. states have common features for recognition of associate degrees offered by community and technical colleges, licensing for technical trades, and union input at the state level, etc.

---

of those changes into the PE arena that have been noted by international donors from Europe. Most important to international donors evaluating Georgia’s PE system is the confluence of two changes. When the number of university places was decreased in 2005 without sufficient financing for the reformed PE sector, tens of thousands of high school graduates and those leaving before graduation from high school were left without any viable education and training options.

<sup>14</sup> See the OECD study of South Carolina, p. 30.

<sup>15</sup> The OECD study of CATE in South Carolina also notes that there are different approaches to preparing young people for the labor market in OECD countries. For example, the United States lags on some measures but has useful features, e.g., the high proportion of high school students in the United States getting informal workplace skills from working in part-time jobs. Also important are differences in how the labor market is regulated in each country, p. 34.

<b>Best Practices for Accreditation and Governance</b>	<b>United Kingdom</b>	<b>Other EU</b>	<b>United States (South Carolina)</b>	<b>Georgia</b>	<b>Comments</b>
Real and continuing employer input and engagement exists	X	X	X	X	Employer engagement in the United Kingdom is more fluid than the EU approach. Community and technical colleges in the United States use business advisory committees, donation of equipment, and internships and apprenticeships. Georgia incorporates business, professional associations, and expert input in MES's accreditation process. The operational challenge in Georgia is a weakness in business and industry and PE centers, especially in the regions.
Skills matching exists through labor market information about jobs and employers' needs	X	X	X		There are multiple ways to do this, but all countries except Georgia use either national- or regional-level labor/workforce agency input for skills matching. Georgia so far relies on donor organizations that occasionally commission such studies as part of workforce projects. All the best-practice literature about Georgia agrees that the lack of labor market capacity studies is a major impediment to industry, potential employees, PE, academia, and other stakeholders. <sup>16</sup>
CATE begins in high school and continues in vocational education programs	X	X			U.S. high school programs are weaker than in the United Kingdom or EU. The United States depends on remedial courses offered before students start formal training programs at community colleges and technical schools
Pathways exist to attract teachers with experience in business and industry	X	X	X		South Carolina, the U.S. state recently studied by OECD, shows what relatively poor states (or countries) can do to upgrade their CATE systems. Experiments are being done in Georgia in some donor programs to hire

<sup>16</sup> See for example, the GTZ, ETF, and IOM reports listed in the bibliography. Another frequently cited impediment is how Geostat collects and collates its job data.

<b>Best Practices for Accreditation and Governance</b>	<b>United Kingdom</b>	<b>Other EU</b>	<b>United States (South Carolina)</b>	<b>Georgia</b>	<b>Comments</b>
					representatives from local firms as practice instructors. <sup>17</sup>
High-quality career guidance is available	X	X	X		Georgian PE programs accredited from 2010 require career services be implemented.
Strong technical college sector flexibly meets employers' needs	X	X	X		Georgia's PE system does not have needed labs, new textbooks, retrained teachers, and other needed resources.
Stable financial support for CATE exists	X	X			U.S. financial support for vocational education depends on a tax base of local school districts or technical colleges. Georgia's PE and school systems are seriously underfunded in this area.
Basic skills like literacy and numeracy exists as a foundation for technical skills industry requires	X	X			Deficits exist in the United States, and students try to catch up by taking remedial technical college courses. Anecdotal evidence shows that Georgian students need remedial courses in math to pursue PE courses in technical subjects.
Retraining and adult up-skilling exist	X	X	X		The United States and Georgia are closer to one another than to the either is to U.K. and EU models. The United States depends on short courses at technical colleges, especially for people changing jobs as industries close. Georgia depends on government funding for priority sectors, backed up by donor assistance. Retraining and in-house training for companies can be a profit center for Georgia's PE sector.

## WHAT DONOR REPORTS SAY ABOUT GEORGIA'S PE REFORMS

European and U.S. donor organizations working in Georgia have also published assessments of Georgia's PE system as part of the reports of their projects' implementation results. As each cites the previous reports, it is possible to chart Georgia's experience during the period of 2005–present. The most recent of these, Black Sea Labour Market Reviews:

---

<sup>17</sup> USAID-funded (through IOM) practices and internship programs, introduced in 2010–2011 in Gori University's levels 4 and 5 professional programs in SME, agricultural business, construction business administration, and hotel, restaurant, and special events management have these features. Firm representatives also assess students' work at practices held in firms.

Georgia Country Report,<sup>18</sup> includes information up to September 2009. These European reports are especially useful when they track progress through multiple reports from the same agency, e.g., ETF and GTZ.

All reference the same milestones, e.g., reform spurred by the Rose Revolution and the new government that came into office shortly thereafter. Also getting good notice was Georgia's high rate of economic growth from 2006–2008. Both contributed to new energy and innovation in PE. However, most reports also reference negative effects on Georgia's economic growth following the August 2008 conflict with Russia and the global economic downturn, which has negatively affected workforce interventions in Georgia and all other countries. All also note the high level of self-employment in Georgia and the weakness of many industries, especially in the regions outside of the capital, Tbilisi.

For example, the ETF's 2010 report assessed the capacity of Georgia's PE system's capacity to ensure quality and quantity of skilled workers according to that country's workforce needs.<sup>19</sup> The main points are as follows:

- Georgia's PE system has much more demand than the supply it can provide.
- The system has not been the pathway for economic development that the GOG envisioned when reform began in 2005.
- Approximately 30% of youth graduating from school (or leaving school before graduation) have no access to formal training after high school.
- This problem has been exacerbated by the cutback in places in higher education starting in 2005.
- The share of the education budget for PE peaked at 3% in 2007 and declined to 1% in 2009.
- Few statistics exist on Georgia's "hidden" economy of self-employment.
- Poverty is more and more concentrated in rural areas, and underemployment increased to 76% in 2006.
- Educational reforms have brought up the quality of private higher-educational institutions, which had multiplied in Georgia.
- The GOG opted for deregulation of labor market policy informed by liberal economic principles.
- Most labor market programs since 2005 have been underfunded and poorly monitored.
- PE is a low-priority area in education policy.
- Georgia's PE enrollment is significantly lower than the European norms, leaving a "large and growing proportion" of young people outside of further education and training programs after high school.

---

<sup>18</sup> ETF followed up in spring 2010 with stakeholder meetings and focus group sessions in Georgia. The resulting "Education and Business Study" emphasized the need to educate Georgia's employers about the strategic importance of human capital investments through the PE system, demonstrating again the importance of this system in European best practices. Although it is done differently there, reliance on community and technical colleges for enhancing the human capital that business needs is undeniable.

<sup>19</sup> Many of the same concerns can be seen in the GTZ report, *Matching Vocational Education in Georgia with Labour Market Needs*. This "Mismatch Study" also references the United Kingdom as a model for Georgia to increase employer engagement, as well as Estonia, because of the government of Estonia's practice of reform of PE.

PE system provision of specialties shows that many industry sectors are seriously underrepresented compared to labor market demands.<sup>20</sup> Reinstatement of modern public employment services is strongly recommended. What is needed in the PE system includes the following:

- A smooth transition between secondary, vocational, and higher-education systems
- More investment in and modernization of the PE system
- Expansion and deepening of cooperation with business and stakeholder groups
- Strengthening of management practices at PE schools
- Special attention to PE schools in rural areas
- Public-private partnerships are needed to accomplish the strengthening of PE offerings and expanding the number of students participating in the system.

There is consistency about these points in most donor reports. It is also what the agencies implementing donor programs say in interviews.

## **GEORGIAN ACADEMIC AND SERVICE PROVIDERS MAPPING RESULTS**

This report also makes use of the results of CCID's consultancy submitted in mid-April 2011. That study<sup>21</sup> reports on the very real capacity for PE programs and training provided by PSPs to contribute to EPI's goal of supporting development of key sectors of Georgian business and industry. At the same time, it graphically shows some limitations of these providers. Georgia has made great advances toward upgrading the PE specialties offered by those colleges and universities by updating legislation to make possible modern and more accountable and transparent accreditation processes. And there is also a vibrant and developing private training sector that is not codified under the law on vocational education administered by NCEQE, a law that needs to be modified to one that EPI managers can also draw on for assistance.

There are also good results to report about the regional coverage of PE schools and universities in EPI priority areas. In addition, the coverage provided by PE schools and universities can be supplemented by EPI's regional network of farm service centers and machinery service centers. On the other hand, while private training service providers have trainers who can assist in work, they do not have continuing bases for activities outside of Tbilisi. The results of the investigations into the educational institutions show good coverage in such agricultural and nonagricultural program sectors as fruit and vegetable production and processing, root vegetables, wine-growing and viticulture, apparel, tourism, and some ICT specialties. Not covered by academic educational and PE providers are agricultural products such as blueberries and hazelnuts. Mechanization programs exist but agronomy is covered only under the guise of other program specialties.

On the non-agriculture side, perlite and basalt are not presently covered, nor is paper or packaging industries, and tourism programs are not broken down into wine, meetings,

---

<sup>20</sup> Among the examples given are in the transportation and logistics area: seaport services, logistics, railway and air transport services, driver-distributors, and dock workers.

<sup>21</sup> That study was written by Dr. Lali Gogeliani, director of CCID's Representative Office in Georgia.

incentives, conferences, and exhibitions (MICE), and adventure. Guide specialties also exist but not for wine guides. Customer service work will also mean looking into the programs that exist under multiple specialties. Background information gathered is presented in the Georgian Academic Mapping Report about the organization and governance of the educational institutions offering PE and how specialties/programs and courses/subjects are now approved. Important information is also presented about the public goals and priorities that Georgian government officials say that they have for this sector. Additional detailed information about specific vocational education and trainings (VETs) and university programs is included in the mapping report's annex materials, along with information about training programs offered by training service providers.

Numerous examples show the involvement of international donors such as USAID, GTZ, the European Union, UNDP, and others in assisting PE schools and PSPs to develop and deliver modern education and training materials. Recommendations from the work completed in the Georgian Academic Mapping Report are also incorporated into this workforce development strategy report. Some PE schools have new textbooks and teaching materials, and some PE teachers have learned modern methodology. The study also presents information about the important area of practices for students in firms, especially models where strong employer engagement with educational institutions has been forged.

## **WORKFORCE DEVELOPMENT GAPS UNCOVERED IN EPI PRIORITY SECTORS**

The next step is to get a better idea about the gaps uncovered in the EPI sector reports completed in April 2011 and start thinking about them from a workforce development perspective, i.e., how can these problems be solved by upgrading the capacity of industry and/or their workforces. Information presented below about donor assistance, and in particular about the U.S. organizations involved, comes from reports and from interviews with PE schools, PSPs, and businesses involved. Information presented below points to advantages of continuing donor-assisted work under EPI, where it has had good results. The agricultural value chains show more involvement by U.S. organizations than the nonagricultural value chains do (except for activities in the tourism value chains) and also a more experienced set of training providers.

But a lack of donor assistance to sectors such as transportation and logistics and ITC, which rely on job candidates who have technical skills, replicates many of the same problems that have been identified in studies of the U.S. workforce, i.e., an emerging lack of people with training in science technology engineering and math or so-called Science, Technology, Engineering, and Mathematics (STEM) fields.<sup>22</sup> This skills gap also applies to the educational system in Georgia, whose industry is beginning to suffer from weak skill-building in high school, as well as the need for an under-resourced PE system to do more and more remedial work to prepare students for an expanding number of jobs requiring technical skills.

---

<sup>22</sup> These are jobs requiring science, technology, engineering, and math backgrounds. See for example the STEM Education Coalition (<http://www.stemedcoalition.org/>), which is backed by the National Science Foundation; professional associations, such as the American Chemical Society, the National Council of Teachers of Mathematics, as well as Microsoft; and other companies that rely on a technological workforce.

## WORKFORCE GAPS IN AGRICULTURAL VALUE CHAINS

	<b><i>Agricultural value chain gaps</i></b>	<b><i>Gaps from assessment reports</i></b>	<b><i>Donor assistance</i></b>	<b><i>Additional info collected from interviews about U.S. organizations involved</i></b>
1	Blueberries	New technologies needed Machinery repair services Post-harvest technology (PHT) Bad conditions of tea lands Georgians sell to middlemen	<ul style="list-style-type: none"> <li>Some producers got grants from CNFA for machinery</li> <li>AgVantage said to have supported a blueberry production course at Senaki VET, which is not now listed in Senaki VET's curriculum.</li> </ul>	www.mainemunchies.com, Craig Gladstone, organic blueberry producer and processor who has worked with a blueberry producer in Ozurgeti
2	Hazelnuts	Low yield Little similarity and small size of production among producers Georgians sell to middlemen Training needed on harvesting and PHT Connect hazelnut producers to international yields, Need The Global Partnership for Good Agricultural Practice (GlobalGap) and HAACP		<ul style="list-style-type: none"> <li>Dried Fruit and Tree Nuts Association of California</li> <li>Hazelnut production guide (by farmer-to-farmer volunteer).</li> </ul>
3	Fresh fruits	Orchard productivity low Need access to cold chain technology <ul style="list-style-type: none"> <li>Packaging and promotion</li> <li>Diversity sales outside of Commonwealth of Independent States market countries</li> <li>New varieties needed</li> <li>GlobalGap needed</li> </ul> Access to finance		CCID worked with agricultural experts on fruit and vegetable courses for Gori VET supported by UNDP funding.
4	Fruit processing	<ul style="list-style-type: none"> <li>Access to cold storage</li> <li>Expand number of suppliers,</li> <li>Production guides needed for nurseries and orchards,</li> </ul> Investment for juice-making equipment and technology, Expand number of nurseries	Many companies had grants from AgVantage (VCAR); Processing plant est. at Kachreti VET(UNDP).	CCID worked with agricultural experts on fruit and vegetable processing courses for Gori VET, supported by UNDP funding.
5	Fresh vegetables	<ul style="list-style-type: none"> <li>Reduce reliance of imported vegetables through increased production</li> <li>Provide access to new cultivars</li> <li>Create investment opportunities in greenhouses and cold storage</li> <li>Create greater awareness about Georgia's vegetables</li> </ul>		
6	Processed vegetables	<ul style="list-style-type: none"> <li>Hazard Analysis and Critical Control Points (HACCP) and GlobalGap</li> </ul>	Processing plant established at Kachreti VET (UNDP)	

	<b><i>Agricultural value chain gaps</i></b>	<b><i>Gaps from assessment reports</i></b>	<b><i>Donor assistance</i></b>	<b><i>Additional info collected from interviews about U.S. organizations involved</i></b>
		<ul style="list-style-type: none"> <li>needed along with training</li> <li>• Access to new equipment and technology</li> <li>• Increase cold storage facilities (CSFs),</li> <li>• Use forward contracts to connect producers to processors</li> <li>• Testing labs needed</li> </ul>		
7	Root vegetables	<ul style="list-style-type: none"> <li>• Increase potato crop yields</li> <li>• Root vegetables' CSFs needed</li> <li>• GlobalGap</li> <li>• Increase number of processing companies in Georgia</li> <li>• Access to new information and production processes</li> <li>• Increase warehouse capacity</li> </ul>		
8	Wine	<ul style="list-style-type: none"> <li>• Marketing and branding needed for world market penetration</li> <li>• Better quality and consistency needed</li> <li>• Assist employees to learn from international winemaking techniques, and train wine operators to host tourists</li> <li>• IVOH needs financing to take on responsibilities for research in viticulture and oenology</li> <li>• Improve wine quality labs</li> <li>• Take advantage of low production costs compared to those of the United States, Italy, and France,</li> <li>• New propagation methods needed</li> <li>• See also gaps listed in the wine tourism report</li> </ul>	Refurbished cellar created for wine bottling (UNDP)	
	Other agriculture topics	No systematic report-writing on mechanization, agronomy, irrigation, or agricultural business	<ul style="list-style-type: none"> <li>• Milk and beekeeping labs and center for artificial insemination established at Ambrolauri</li> <li>• VET center, milk-processing laboratory, agrolaboratory, and equipment for milk processing for Gori, Telavi, Akhmeta, and Akhaltsikhe VETs (UNDP)</li> <li>• Information consulting center for farmers</li> </ul>	

	<b><i>Agricultural value chain gaps</i></b>	<b><i>Gaps from assessment reports</i></b>	<b><i>Donor assistance</i></b>	<b><i>Additional info collected from interviews about U.S. organizations involved</i></b>
			<p>established, along with tools for construction professions in agriculture at Kachreti and Telavi VET (UNDP)</p> <ul style="list-style-type: none"> <li>Nursery industry started in Kachreti VET</li> </ul>	

Examination of comparable information about EPI's nonagriculture sectors also shows evidence of past successes and underutilized resources that can be tapped.

## **WORKFORCE GAPS FOR NONAGRICULTURAL VALUE CHAINS**

	<b><i>Non-agricultural value chain gaps</i></b>	<b><i>Gaps from assessment reports</i></b>	<b><i>Donor assistance cited in value chain assessment reports</i></b>	<b><i>Additional information about donor assistance from CCID interviews with VETs, international donors, and experts</i></b>
9	Apparel	<ul style="list-style-type: none"> <li>Reduce apparel imports and increase export of Georgia products</li> <li>Reduce dependence on Ukraine for market linkages</li> <li>Upgrade workers' skills for increased industry productivity, promote investment in Tbilisi, Adjara, and Kutaisi</li> <li>Improve market links through information sharing</li> <li>Develop an association</li> <li>Focus on mass-market brands</li> </ul>	<ul style="list-style-type: none"> <li>International Organization for Migration (IOM) retraining program in Adjara and purchase of 17 sewing machines for a Batumi PE school</li> </ul>	<ul style="list-style-type: none"> <li>Norwegian Refugee Council worked with PE schools, which housed internally displaced persons or had populations of them in their regions</li> <li>U.S. apparel expert provides advice about training needs and possible U.S. partners</li> </ul>
10	Basalt	<ul style="list-style-type: none"> <li>Substitute Georgia product in construction industry</li> <li>Increase collaboration and linkages with architects, construction industry, and builders' organization</li> <li>Information sharing with these consumers</li> <li>Small number of new jobs in basalt will have big spillover in construction jobs</li> </ul>		
12	Perlite	<ul style="list-style-type: none"> <li>More investment needed, same list of organizations as for basalt</li> </ul>		
14	Paper	<ul style="list-style-type: none"> <li>Companies need market-oriented mentality</li> <li>Promote recycling</li> <li>Offer seminars on packaging as a marketing</li> </ul>		

		tool		
15	Plastic	<ul style="list-style-type: none"> <li>Seminars for farmers about plastic crates</li> </ul>		
16	Adventure tourism	<ul style="list-style-type: none"> <li>Need more info about size of adventure tourism workforce</li> <li>GE ski resort operators need international certification for instructors</li> </ul>		
17	MICE tourism	<ul style="list-style-type: none"> <li>Inadequate workforce capacity</li> <li>Common facility training centers needed</li> <li>Certification in hotel industry need</li> <li>Guides need training in English</li> <li>Increase attraction of service as a career</li> <li>Upgrade customer service,</li> </ul>	<ul style="list-style-type: none"> <li>Donor assistance by Vocation Education Project and International Executive Service Corps (IESC) in Tbilisi and Kobuleti; GIZ in Tblisi</li> </ul>	
18	Wine tourism	<ul style="list-style-type: none"> <li>Upgrade Web sites for Georgian National Tourism Agency</li> <li>Wine producers need upgrading</li> <li>Small and medium enterprise (SME) participation needed in wine tourism</li> <li>Wine routes needed and public relations materials prepared</li> <li>Better signage needed and upgraded tourism information centers</li> <li>Wine tasting and training for sommeliers</li> <li>Qvevri-making school opened</li> <li>Better cooperation between tour operators and wineries</li> <li>Better quality wine grape varieties needed</li> <li>Improvements needed also on many subjects across all tourism subjects</li> </ul>		
19	ICT	<ul style="list-style-type: none"> <li>Need better statistics about ICT value chain</li> <li>Workforce information is needed about companies and number of employees</li> <li>Prepare workforce for GOG initiative with HP and Intel,</li> <li>Many small companies lack qualified staff</li> <li>Quality of teaching and materials low at Georgia universities in ICT</li> <li>Internships needed in companies</li> <li>Gaps in regulatory infrastructure</li> </ul>		Cisco regional academy created (UNDP)

		<ul style="list-style-type: none"> <li>• Lack of qualified ICT managers and professionals</li> <li>• Problems supplying software developers</li> <li>• Small companies do not see potential for expansion</li> <li>• TOT sessions needed to increase number of qualified people</li> </ul>		
20	Transportation and logistics	<ul style="list-style-type: none"> <li>• Trade corridor plans across GE face a gap in Armenia</li> <li>• Recognize transportation and logistics as a key enabler for bringing agricultural produce to markets</li> <li>• CSF needs to be addressed</li> <li>• Improve Poti's port facilities and feeder services to provide competitive pricing rates</li> <li>• Need facilities in Poti listed</li> <li>• Corridor management and information sharing needed with ICT</li> </ul>		
	Other nonagriculture			<ul style="list-style-type: none"> <li>• Construction tools, courses, and other activities established by UNDP in Batumi, Telavi, Kutaisi, Akhaltikhe PE schools, and Zugdidi Teaching</li> <li>• Tourism programs by UNDP in Zugdidi Teaching and in Batumi and Kutaisi VET centers</li> </ul>

## THE REGIONAL SCOPE NEEDED FOR EPI WORKFORCE INTERVENTIONS

The value chain sector reports also can be mined to find out if proposed workforce development interventions need to focus on particular regions and also how many people are employed in that sector. Unfortunately, there is much more about the former than about the latter in these reports. So, it is difficult to know how much impact a particular intervention is likely to have. When put side by side with the conclusions of the international donor agencies, it shows a powerful need for better labor market data. This is the case especially in the various tourism sectors, for which the same estimates of tourist visits are used.

Analysis of the agricultural value chains shows the wide regional scope of EPI implementation activities. It also suggests the use of the service centers, machinery service centers, and PE schools as possible partners in giving training and technical assistance. Good candidates for PE assistance are the PE schools offering so-called farmers' programs and the network that have benefited from participation in the recent UNDP programs. It also suggests that trainings by Agro-Service and its network of experts will have a lot of territory

to cover. At the same time, analysis of cross-cutting issues suggest the regions that should receive GlobalGap and HACCP training, as well as the places for possible location of CSFs whose operators will also need training and technical assistance.

## AGRICULTURAL WORKFORCE INTERVENTIONS ORGANIZED BY REGION<sup>23</sup>

<b>Sectors</b>	<b>Estimated employment</b>	<b>Regions involved/targeted</b>	<b>Cross-cutting issues and sector recommendations (besides financing or new varieties)</b>	<b>Workforce development interventions mentioned</b>
<b><u>Agricultural value chains</u></b>				
<b>1. Blueberries</b>	1,000–2,000	Adjara	PHT	Blueberry production management course at Senaki VET Training to rootstock buyers
<b>2. Hazelnuts</b>	40–180/each processing plant	Samegrelo, Guria, Imereti, and some in eastern Georgia	PHT, GlobalGap, and HACCP	Training on harvesting, PHT, inspection, GlobalGap, and HACCP, etc., production guide
<b>3. Fresh fruit – apples, citrus</b>	20,000 apple farmers and 40,000 citrus farmers	Shida Kartli, Adjara	Cold chain technology, GlobalGap	
<b>4. Fruit juice</b>	---	Adjara, Samegrelo-Zemo Svaneti, and Guria, Shida Kartli for apples	Cold storage	Training, create an orchard mgt guide
<b>5. Vegetables</b>	Higher than other agricultural chains	Adjara, Racha-Lechkumi and Kvemo Svaneti, Kvemo Kartli, and others	GlobalGap, greenhouses	Training
<b>6. Processed vegetables</b>	----	Imereti, Guria, Kvemo Kartli, Marneuli, Bolnisi, Shida Kartli, i.e., most in Shida Kartli, Kvemo Kartli, and Kakheti	Forward contracts HACCP, GlobalGap	Train in GlobalGap and HACCP Train farmers in technology and plant production topics
<b>7. Root vegetables – leeks, potatoes, onions, carrots, beets</b>	345,000 farmers	Racha, Svaneti, and southeast Georgia	GlobalGap, cold storage	
<b>8. Wine</b>	5,000+	Kakheti	Machinery service centers, farm service centers, technology needed	Modern winemaking, managerial, and marketing skills needed, build SME capacity, and train wine operators to host tourists

<sup>23</sup> The importance of seeing EPI priority sectors in their regional scope was brought home to the CCID experts preparing the Georgian Academic Mapping Report and this one by a trip to Western Georgia, which was taken to look at PE schools offering apparel education. In discussions with academic staff in Ozurgeti, it became apparent that the view from a PE college looks quite different, as the discussion quickly expanded beyond apparel topics to comparing the respective merits of growing hazelnuts versus blueberries.

Similar analysis for nonagricultural value chains shows more regional concentration on Tblisi-based industries, e.g., ICT, wine tourism, and customer service. Apparel and transportation and logistics are more regionally diversified, the former in western Georgia and Kutaisi/Tkibuli. VETs are active also in these regions. It seems that decisions have not been made about wine tourism in Kakheti. While the agricultural sector had small-producer associations, there are many mentions of professional associations in the nonagricultural sectors, e.g., the Tblisi-based professions for architects and builders in regard to perlite and basalt. Experts have been identified in some sectors, e.g., transportation and logistics.

## NONAGRICULTURAL WORKFORCE INTERVENTIONS ORGANIZED BY REGION

<b>Sector</b>	<b>Estimated employment</b>	<b>Regions involved/targeted</b>	<b>Cross-cutting issues and sector recommendations (besides financing or new varieties)</b>	<b>Workforce development interventions mentioned</b>
<b>9. Apparel</b>	<ul style="list-style-type: none"> <li>200+ manufacturers; 5% are not microenterprises</li> </ul>	Adjara, Guria, Kutaisi, TBILISI	<ul style="list-style-type: none"> <li>Develop a growth strategy with the association to do information sharing</li> </ul>	<ul style="list-style-type: none"> <li>Turkish firms have younger workers; older workers have lower productivity</li> <li>Firms need marketing information</li> </ul>
<b>10. Basalt</b>	<ul style="list-style-type: none"> <li>60 quarrying companies employ 1,220</li> <li>Two processing companies employ 20 people</li> </ul>		International Codes Council, Constructors Association, Architects Association, and Builders Association (BA)	Construction jobs increase
<b>11. Clay</b>	Discontinued			
<b>12. Perlite</b>	Two companies with licenses	Paravan Lake	<ul style="list-style-type: none"> <li>International Codes Council, CA, BA, Architects Association, *building codes</li> </ul>	<ul style="list-style-type: none"> <li>Estimate of 10 companies with 50 employees each</li> <li>Low labor costs are an advantage</li> </ul>
<b>13. Wood</b>	Eight timber processors +2 3,500 employees (50x70)		<ul style="list-style-type: none"> <li>International Codes Council, BA, CA, AA</li> <li>Building codes</li> <li>Marketing and technical knowledge</li> </ul>	
<b>14. Paper/Packaging</b>	3 or 7 companies  250 in corrugated paper producing companies? What about paper companies?		<ul style="list-style-type: none"> <li>Institute of Packaging</li> <li>No cross-cutting with wood mentioned</li> </ul>	<ul style="list-style-type: none"> <li>Sponsored seminars</li> <li>Information for private-sector recycling of paper</li> <li>Offer seminars on packaging as a marketing tool</li> </ul>

<b>Sector</b>	<b>Estimated employment</b>	<b>Regions involved/targeted</b>	<b>Cross-cutting issues and sector recommendations (besides financing or new varieties)</b>	<b>Workforce development interventions mentioned</b>
<b>15. Plastic</b>	4 full-time people in each plant  6 companies		<ul style="list-style-type: none"> <li>• Cross-cutting with agriculture</li> <li>• Manufacture pet bottles in Georgia</li> </ul>	Seminars for farmers to use plastic instead of wood crates (heavy)
<b>16. Adventure tourism</b>	Employment number is not clear; 35,000 for all tourism in 2008 is used	Bakuriani and Gudauri; sometimes Svaneti is mentioned, too	<ul style="list-style-type: none"> <li>• Cross-cutting with other tourism sectors, but little about customer service</li> <li>• Some numbers about human resources and tour operators</li> </ul>	<ul style="list-style-type: none"> <li>• Training programs and certification for ski instructors</li> <li>• No training listed for SME sector</li> </ul>
<b>17. MICE tourism</b>	<ul style="list-style-type: none"> <li>• 50 tour operators in Georgia; estimates on number of beds in Adjara</li> <li>• See also table for value chain participants in Adjara</li> </ul>	Adjara and Tbilisi	<ul style="list-style-type: none"> <li>• SMEs a priority – rooms rented in Batumi</li> <li>• No leadership,</li> <li>• Weak associations,</li> <li>• No common vision.</li> <li>• Big companies poach employees</li> <li>• Common Facility Training Facilities suggested</li> </ul>	<ul style="list-style-type: none"> <li>• Problem is that young people don't want to do service.</li> <li>• Upgrade CS</li> <li>• Kobuleti, Batumi, and TBILISI VET schools mentioned</li> <li>• Inadequate workforce capacity</li> </ul>
<b>18. Wine tourism</b>	<ul style="list-style-type: none"> <li>• 50 tour operators,</li> <li>• 36 wineries, wine producers; also uses 35,000 as the tourism sector's employment figure</li> </ul>	Kakheti is the most important region — two-thirds of vineyards and 32 out of 36 wine producers	<ul style="list-style-type: none"> <li>• Workforce is cross-cutting with women/youth and with other tourism sectors.</li> <li>• American Chamber of Commerce (AmCham) trip to the United States</li> </ul>	<ul style="list-style-type: none"> <li>• PE school needed for Kakheti</li> <li>• Telavi VET visited and can fill this gap</li> <li>• Ikalto as a location for a wine tourism center</li> </ul>
<b>19. ICT</b>	Breakdown of companies by subsector focus by little about employment	Most information is from Tbilisi, but cellular and Internet service provider companies serve regions, too	<ul style="list-style-type: none"> <li>• Lack of qualified personnel, especially for smaller companies</li> <li>• Managers and professionals needed</li> </ul>	<ul style="list-style-type: none"> <li>• Trainers needed – TOT</li> <li>• Universities and other educational institutions should cooperate</li> <li>• Innovation Center is not front-and-center in this report</li> </ul>

<b>Sector</b>	<b>Estimated employment</b>	<b>Regions involved/targeted</b>	<b>Cross-cutting issues and sector recommendations (besides financing or new varieties)</b>	<b>Workforce development interventions mentioned</b>
<b>20. Transportation and logistics</b>	No estimate given	<ul style="list-style-type: none"> <li>• Poti-Tbilisi-Central Asia corridor,</li> <li>• Transportation supports agriculture and other value chains through a regional network</li> </ul>	<ul style="list-style-type: none"> <li>• CSFs to be connected through feeder services</li> <li>• Information sharing via ICT</li> <li>• Poti's port facilities and more Free Trade Zones</li> </ul>	Training needed for all parts of the transportation and logistics supply chain

## CAPACITY OF WORKFORCE EDUCATION INSTITUTIONS AND TRAINING SERVICE PROVIDERS

Two other pieces must be put into place before we can proceed to consider recommendations for interventions. In this section, we note the centers, universities, and PSPs working in the EPI priority sectors. More information about these institutions and organizations can be found in CCID's Georgia Academia Mapping Report submitted earlier in April.

## PROFESSIONAL COLLEGES' (VET) PROGRAMS IN EPI PRIORITY SECTORS

For this report, the consultant started with a complete list of vocational educational programs made available by MES. This list is only part of the full list of college and university PE offerings. For an American reader to understand the distribution of EPI-related content, please consider *specialties* or *programs* to be roughly the same as a *majors* or *professions*. A *subject* is as a *course* would be in the United States. PE centers and universities can offer courses at all five vocational educational (i.e., PE) levels under the rules established by NCEQE following Georgia's new law on PE passed in 2010.

### EPI PRIORITY AGRICULTURAL SECTORS

You will see that there are few *programs*, but some subjects at the following PE centers.

Blueberries – no separate programs for specialties or subjects in some programs

Hazelnuts – no separate programs for specialties or subjects in some programs

Fresh fruit – Khidistavi PE Center

Fruit processing – no programs; it is a subject/course in the following PE centers' farmer's specialty programs: Akhaltsikhe, Chkhorotsku, Didi Jikhaisi Niko Nikoladze, Kachreti, Khidistavi, Khobi, Ozurgeti, and Tsinamdzgvrantkari's Tsinamdzgvrishvili

Fresh vegetables – no programs; subject in farmer's specialty program

Processed vegetables – no programs; subject in farmer's specialty program

Root vegetables – no programs; subject in farmer's specialty program

Winemaker and/or viticulturist – PE centers: Gori, Kachreti, Telavi

Two cross-cutting topics were also considered:

Agronomy (includes “Farmer” programs, which are general two-year programs including common agricultural topics, such as agronomy, mechanization, plant growing) – Akhaltsikhe, Chkhorotsku, Didi Jikhaisi Niko Nikoladze, Kachreti, Khidistavi, Khobi, Ozurgeti, Tsinamdzgvriankari’s Tsinamdzgrvishvili

Mechanization – PE centers: Akhaltsikhe, Akhalkalaki High, Chkhorotsku, Didi Jikhaisi Niko Nikoladze, Gobrazhouli, Khidistavi, Khobi, and Tsageri

## EPI PRIORITY NONAGRICULTURAL SECTORS

Here, the distribution of specialties is wide for apparel and ICT. In addition, a few programs were found in transportation and logistics.

Apparel – Akhaltsikhe, Batumi, Chkhorotsku, Didi Jikhaisi Niko Nikoladze, Georgian multiple-discipline Center “Goni” Jvari, Khidistavi, Kutaisi 1, Mestia, Ozurgeti, Poti, Rustavi, Rustavi Imedi, Senaki, Tata Vardanashvili, Tbilisi M.Toidze, State Art Tbilisi Multiprofile, Tbilisi Multi Field, Tbilisi VET Center, Tbilisi VET Center “Margi,” and Tbilisi VET Center “Spectri”

Basalt – no separate programs for specialties or subjects in some programs

Perlite – no separate programs for specialties or subjects in some programs

Paper/packaging – no separate programs for specialties or subjects in some programs

Plastic containers – no separate programs for specialties or subjects in some programs

Adventure tourism – no separate programs for specialties or subjects in some programs

MICE tourism – no separate programs for specialties or subjects in some programs

Wine tourism – no separate programs for specialties or subjects in some programs

ICT – Batumi, Borjomi, Chkhorotsku, Didi Jikhaisi Niko Nikoladze, Gobrazhouli, Kachreti, Kareli, Khidistavi, Khobi, Kobuleti, Tsageri, Tsinamdzgvriankari, Zestaponi, Telavi, Kutaisi, Mestia, Tbilisi Multi Field, Ozurgeti, Poti, Rustavi VET Center “Modusi”, Rustavi „Imedi”, Senaki, Tbilisi VET Center of Information Technologies, Tbilisi VET Center, Tbilisi “Margi”, and Tbilisi Center “Spectri”

Transport/Logistics – Georgian Higher Professional Education College of Railway Transport, Georgian Technical University (GTU), Maritime Training Center “Anri,” Batumi Navigation Teaching University

One cross-cutting topic was also researched, Customer Service, but no separate programs were found, only subjects in some hotel/hospitality and tourism specialty programs

### Tbilisi universities offering I–V levels of professional education programs

Among the universities that have taken up the opportunity to offer all five levels of PE, it is more likely to be ones in Tbilisi. Widest coverage comes from Georgian State Agrarian University on the agricultural side and GTU on the nonagricultural side.

## AGRICULTURE SECTORS

Blueberries – no separate programs for specialties or subjects in some programs

Hazelnuts – no separate programs for specialties or subjects in some programs

Fresh fruit – Georgian State Agricultural University

Fruit processing – Georgian State Agricultural University – subject only

Fresh vegetable – Georgian State Agricultural University

Processed vegetables – Georgian State Agricultural University – subject only

Root vegetables – Georgian State Agricultural University – subject only

Winemaker, viticulturist – Georgian State Agricultural University – subject only

Agronomy – no programs

Mechanization – no programs

## NONAGRICULTURAL SECTORS

Apparel – Ivane Javakhishvili Tbilisi State University, GTU, Tbilisi A.Kutateladze Academy of Art, Ilia State University

Basalt – no separate programs for specialties or subjects in some programs

Perlite – no separate programs for specialties or subjects in some programs

Paper/packaging – no separate programs for specialties or subjects in some programs

Plastic containers – no separate programs for specialties or subjects in some programs

Adventure tourism – no separate programs for specialties or subjects in some programs

MICE tourism – no separate programs for specialties or subjects in some programs

Wine tourism – no separate programs for specialties or subjects in some programs

ICT – GTU, Georgian Aviation University

Transport/Logistics – GTU

Customer service – cross-cutting – no separate programs, only subjects in some specialty programs

Regional universities offering I–V levels of PE programs

See Georgia Academia Mapping Report annexes for more information about which levels are offered for each specialty

## AGRICULTURE SECTORS

Blueberries – no separate programs or subjects in some specialty programs

Hazelnuts – no programs or subjects in some specialty

Fresh fruit – Gori University; Shota Meskhia Zugdidi State Education University (subject in Plant Grower specialty)

Fruit processes – no separate programs; Gori University (subject in Agriculture Business Administration program)

Fresh vegetables – no separate programs; Shota Meskhia Zugdidi State Education University, subject in Farmer’s program, subject only in Gori University’s PE center

Processed vegetables – no separate programs, Gori University, subject in Agriculture Business Administration program

Root vegetables – no separate programs; Shota Meskhia Zugdidi State Education University, subject in Farmer’s program, subject only in Gori University PE center

Winemaker, viticulturist – no separate programs;

Agronomy – no separate programs, Gori University, subject in Agriculture Business Administration Program, Farmer’s specialty programs include subject in Agronomy

Mechanization – no separate programs

## NONAGRICULTURAL SECTORS

Apparel – Akaki Tsereteli University, Akhaltsikhe State Educational University, Iakob Gogebashvili Telavi State University

Basalt – no separate programs or subjects in some specialty programs

Perlite – no separate programs or subjects in some specialty programs

Paper/packaging – no separate programs or subjects in some specialty programs

Plastic containers – no separate programs or subjects in some specialty programs

Adventure tourism – no separate programs or subjects in some specialty programs

MICE tourism – no separate programs or subjects in some specialty programs

Wine tourism – no separate programs or subjects in some specialty programs

ICT – Akhaltsikhe State Educational University, Shota Meskhia Zugdidi State Education University, Shota Rustaveli State University

Transport/Logistics – Batumi Navigation Teaching University, Maritime Training Center –Anri”

Customer service – cross-cutting – no separate programs; only subjects in some specialty programs;

## UNIVERSITY’S BACHELOR’S AND MASTER’S PROGRAMS IN EPI SPECIALTIES

Bachelor’s and master’s programs may be important for PE in fields like transportation and logistics, ICT, etc. because they provide managerial, technical, and/or deep knowledge of these fields and help build up the complete workforce education chain for EPI specialties.

## AGRICULTURAL SECTORS

Not surprisingly, the Georgian State Agrarian University was most prominent here.

Blueberries – no separate programs or subjects in some specialty programs

Hazelnuts – no separate programs or subjects in some specialty programs

Fresh fruit – no separate programs; Georgian State Agrarian University, subject in Agronomy specialty

Fruit processing – no separate programs, Georgian State Agrarian University, subject in Food Technology specialty

Fresh vegetable – no separate programs, Georgian State Agrarian University, subject in Agronomy specialty

Processed vegetables – no separate programs, Georgian State Agrarian University, subject in Food Technology specialty

Root vegetables – no separate programs, Georgian State Agrarian University, subject in Agronomy specialty

Winemaker, viticulturist – no separate programs, Georgian State Agrarian University, subject in Agronomy specialty

Agronomy – Georgian State Agrarian University, Agronomy specialty;

Mechanization – Georgian State Agrarian University, Agro-Engineering specialty;

## NONAGRICULTURAL SECTORS

The Tbilisi Universities are most represented in the ICT field.

Apparel – GTU, Georgian Academy of Art, Tbilisi State University, Ilia State University

Basalt – no separate programs or subjects in some specialty programs

Perlite – no separate programs or subjects in some specialty programs

Paper/packaging – no separate programs or subjects in some specialty programs

Plastic containers – no separate programs or subjects in some specialty programs

Adventure tourism – no separate programs or subjects in some specialty programs

MICE tourism – no separate programs or subjects in some specialty programs

Wine tourism – no separate programs or subjects in some specialty programs

ICT – GTU, Black Sea International University, Free University, Georgian Aviation University, Ilia State University, Tbilisi State University, University of Georgia, Georgian State Agrarian University

Transport/Logistics – GTU, Batumi Navigation Teaching University

Customer service – no separate programs, only subjects in some specialty programs

## SERVICE PROVIDERS' PROGRAMS OF INTEREST TO EPI

Information given here came from interviews with approximately 10 private training service providers with a wide range of experience. Where possible, the consultant reviewed training materials and took additional information from the organizations' Web sites. Because they are not included in information collected during the accreditation process, there is no central place to examine the needed information. Many of these training service providers have done work in other regions, but no private providers based outside of Tbilisi were identified.

## AGRICULTURAL SECTORS

Blueberries – Agro-service and farm service centers and machinery service centers for training, Elkana for bio-agriculture

Hazelnuts – no private training providers identified

Fresh fruit – GDCI for food safety and quality, Elkana for crop production

Fruit juice – GDCI for food safety and quality, Elkana for processing

Fresh vegetables – Agro-service and farm service centers for training, Elkana for crop protection

Processed vegetables – GDCI for food safety and quality, Elkana for processing

Root vegetables – Agro-service and farm service centers and machinery service centers for training, Elkana for bio-agriculture

Wine – Agro-service, farm service centers, and machinery service centers for training in grape growing, GDCI for food safety and quality, Elkana for bio-wine

Agronomy – Agro-service, farm service centers, and machinery service centers for training; Elkana for bio-agronomy

Mechanization – Agro-service for training, farm service centers, and machinery service centers; Elkana for extension services

## NONAGRICULTURAL SECTORS

Apparel – no service providers identified

Basalt – no service providers identified

Perlite – no service providers identified

Paper/packaging – no service providers identified

Plastic containers – no service providers identified

Adventure tourism – New Kaz and Georgian Association for Guides

MICE tourism – Key Management Solutions Georgia (KMS)

Wine tourism – New Kaz, Georgian Association of Guides, Centre for Training and Consultancy (CTC), Elkana, Wine Club, KMS, MWS

ICT – no service providers identified;

Transport/Logistics – International Federation of Freight Forwarders Associations (FIATA) – trainings for members and translations of curriculum materials into English, TransCare AG (see also GTU for Logistics Academy)

In addition, the following information was put together to show the main directions and interests of the service providers we contacted. The challenge for EPI managers will be to mold several groups together to work as a training team in agriculture, customer service, wine tourism, and other sectors.

<b><i>Service Providers working in EPI priority sectors</i></b>	<b><i>Main directions</i></b>	<b><i>Organizational information</i></b>	<b><i>Training courses</i></b>	<b><i>International and other partners</i></b>	<b><i>Regional penetration</i></b>
<b><u>Agriculture</u></b>					
<b>Elkana<sup>24</sup></b>	*Bio-agriculture, extension, public affairs and advocacy, policy, and rural tourism  *Includes blueberries and pomegranate	Mariam Jorjadze  Established 1994  Farmer-based membership organization with International Organization for Standardization certification	*Extensive training program list provided  Five extension workers *Subjects include winemaking, viticulture, crop production, animal husbandry, beekeeping, and fruit growing	Eurasia  Slow Food Network member  Agro-ecology in Georgian State Agrarian University	Adjara, Svaneti, and other Georgian rural areas  Training in Tajikistan, Belarus, Ukraine, and Azerbaijan in agricultural and rural topics
<b>GCDI</b>	Food safety and quality	Ekaterine Kimeridze		AgVantage	
<b>Agro-service</b>	Farmer training	Inga Laboshvili  Est. 2004  No continuing funding	Training for FSC members and farmers  Depends on what is asked for. Examples are study tours, e.g., Holland	USAID – CNFA	
<b><u>Tourism sectors</u></b>					
<b>New Kaz and Georgian</b>	Guides and tourism	Kety Miladze  Established in	Preparation of city	USAID and IOM funding	Good

<sup>24</sup> Elkana's pioneering position in the subset of nongovernmental training service providers in the agriculture domain can be seen in the report by Temel and Maru for the Food and Agriculture Organization of the United Nations prepared in 2003 (17–18).

<b>Service Providers working in EPI priority sectors</b>	<b>Main directions</b>	<b>Organizational information</b>	<b>Training courses</b>	<b>International and other partners</b>	<b>Regional penetration</b>
<b>Association of Guides</b>		2000	and rural guides	for western Georgia guides training  WIGA member	regional focus
<b>CTC</b>			<ul style="list-style-type: none"> <li>• Service standards in companies, customer relations, hospitality skills,</li> <li>• Guesthouse capacity building, stress management</li> </ul>		Tourism information people in regions – Mtskheta, Borjomi, Upper Svaneti, Telavi, Signaghi, Batumi, Kobuleti
<b>Elkana</b>	Rural tourism (for others, see agriculture)	See above	See above for viticulture and winemaking		See above
<b>Wine Club</b>	<ul style="list-style-type: none"> <li>• Wine tasting for members and visitors</li> <li>• Two- to three-day exhibitions at festivals</li> <li>• Small events, e.g., focus on Kvanchkara</li> </ul>		No formal training courses		Can organize wine tours
<b>KMS</b>	See Customer Service (CS) plus intensive work with hotel and hospitality industry	See CS	<ul style="list-style-type: none"> <li>• Short-term courses in hospitality and English</li> <li>• Employer engagement manual for tourism and construction</li> </ul>	See CS  Also British Council IOM	Tbilisi, Batumi

<b><i>Service Providers working in EPI priority sectors</i></b>	<b><i>Main directions</i></b>	<b><i>Organizational information</i></b>	<b><i>Training courses</i></b>	<b><i>International and other partners</i></b>	<b><i>Regional penetration</i></b>
			<ul style="list-style-type: none"> <li>One-day programs on curricula vitae, presentation skills</li> </ul>		
<b>MWS</b>		Anna Godabrelidze	<ul style="list-style-type: none"> <li>Two-month (two-week) degustation courses (480 lari of Georgia)</li> <li>Two trainers</li> </ul>		
<b><u>Customer service</u></b>					
<b>KMS</b>	Human resources work for companies – 10 years	Maia Tsereteli Five persons plus 10 trainers plus 75 consultants (Web site under reconstruction)		\$10 million – USAID Switzerland	Tbilisi and Batumi,
<b>CTC</b>	<a href="http://www.ctc.ge">www.ctc.ge</a>		See Tourism plus customer relations skills and management, management practices		
<b><u>Logistics</u></b>					
<b>FIATA</b>	Established in 1997		Translation of international training materials	FIATA, Eurasia	
<b>TransCare AG</b>	See GTU				
<b><u>ICT – none</u></b>					
<b><u>Other</u></b>					

<b><i>Service Providers working in EPI priority sectors</i></b>	<b><i>Main directions</i></b>	<b><i>Organizational information</i></b>	<b><i>Training courses</i></b>	<b><i>International and other partners</i></b>	<b><i>Regional penetration</i></b>
<b>CTC</b>	Organizational development		One- to two-day training programs for managers, SMEs	USAID (for internally displaced persons), Eurasia, BP, Soros Foundation	Sighnagi, Telavi, Batumi, Kobuleti
<b>CSRDC</b>	<ul style="list-style-type: none"> <li>• Civil society organization</li> <li>• Organization development, including regional areas, community development, and good governance</li> </ul>	20 employees, five in-house trainers and consultants		Oxfam, Eurasia, BP, Soros Foundation, EU	Kakheti, Guria,
<b>Association of Educators</b>	Teachers' training and retraining, director serves as an expert in accreditation process at MES	Russa Kishalashvili NGO established in 2007  Nearly 500 members	Contracts from MES for training with teachers and directors, also includes VETs		Organization works throughout Georgia

## C. RECOMMENDATIONS

In this section, a comprehensive set of workforce development interventions is recommended for five EPI value chains: apparel, wine tourism, transportation and logistics, construction materials, and agronomy. Preliminary information is also provided for the blueberry sector. These activities will be pursued by CCID partners in the United States supported by CCID's office in Georgia, under the direction of Lali Gogliani. Training partners include PE centers, which are members of MES's network, covering most major areas of the country. Where appropriate, CCID also proposes to work with several Georgian nongovernmental training providers, e.g., Agro-Service, GCDI, Elkhana, New Kaz Georgian Association of Guides, Wine Association, Wine Club, MWS, and KMS. These recommendations are made based on the gaps identified in the earlier sections. Separately, CCID will submit action plan documents estimating specific short-term technical assistance, grants, procurements, and events to support these initiatives.

### AGRICULTURAL SECTOR

More concrete actions are listed for the blueberry sector as an example of what CCID can do in agriculture and is based on continuing conversations with the head of the EPI agriculture sectors. Based on experience gained in managing the work of Agro-Service and other agricultural-based training service providers during fiscal year 2012, the approach can be broadened to include the hazelnut, fresh fruit, fresh vegetables, and wine sectors. We recommend working separately in the sectors of fruit and vegetable processing, supporting some of the same interventions, e.g., GlobalGap training and HACCP. Finally, we recommend some areas of activity on agronomy and mechanization with U.S. CCID colleges and their university partners.

Earlier in this report, tables were presented showing EPI's workforce development strategy in agriculture sectors, including blueberries; fresh fruits and vegetables; wine; hazelnuts; and fruit and vegetable processing. Here, the direction that CCID will take in its first-year action plan for agriculture sector is laid out. The focus will be on identifying innovative methods for teaching and learning about agronomy and blueberries. First, recommendations for agronomy contained in the CCID action plan are presented. Then, workforce education and training for the blueberry sector are discussed.

### AGRONOMY

The protosector of agronomy offers EPI the opportunity to offer to integrate education and training on a broad variety of subjects about plant growing and the process of growing farm crops. These topics may include soil, weed and pest control, irrigation, machinery,<sup>25</sup> cultivation processes, etc.<sup>26</sup> Enhanced education and training (Step 1) will be designed with the goal of strengthening the capability of producers in the various agriculture sectors to

---

<sup>25</sup> See, for example, the program of courses in this subject for agricultural engineering technician at Treasure Valley Community College in Ontario, Oregon, which includes general (agricultural safety and management) and technical (hydraulic and pneumatic systems) courses.

<sup>26</sup> Deciding what is the workforce for agriculture in Georgia, as in most countries, is complex. Usually the main focus is on the owners, managers, technical people, and supervisors in farms, processing companies, and other agricultural enterprises. Of course, for small and medium-sized farm corporations, this target workforce audience may be one and the same person. Other workforce categories, including people who work for cash at harvest time and in share cropping arrangements, should also be the targets of workforce interventions in agriculture as necessary.

better serve both export and domestic markets. The target workforce (Step 2) is identified as producers seeking frequent additional training (or retraining) across all the agricultural sectors, with a special emphasis on enabling farmers to update practices that contribute to sustainability. Additional target audiences include PE instructors and their students.<sup>27</sup>

Part of this need focuses on a significant gap in service provision by trained agronomists across Georgia. During the collection of data for this CCID workforce strategy report, numerous experts in agricultural education and science noted problems accessing services from the current cohort of agronomists in Georgia. It is a much-needed profession in the regions, but one with an aging — and declining — workforce. Accordingly, providing training in agronomy is very important as an entry point into providing up-to-date knowledge and skills for agricultural producers across Georgia (Step 3). It is also an area where producer-PE-private sector linkages may be fruitfully pursued (Step 4). Agronomy education can be built into the PE curriculum now being used by many regional colleges. US community colleges and their agricultural university counterparts can advise on how to tailor curricula for short-course and PE/university upgrades (Step 5).

CCID's action plan for agriculture allows for piloting specific activities in the broad field of agronomy as follows:

Stage – 1 – TOT for private training providers – October 2011

Stage – 2 – TOT for agricultural instruction in PE schools and academia – October 2011

Stage – 3 – Joint curriculum development on agronomy education and training – October 2011–January 2012

Stage – 4 – Recommendations prepared for Georgian Development Alliances in agronomy and related agricultural fields<sup>28</sup> – November 2011

The upgrading of agronomy education at PE schools will continue in 2012 via a partnership to be developed with Muscatine Community College, other Iowa-based CCID colleges, Iowa State University (ISU), and their Georgian counterpart institutions, and, hopefully, business partners on both sides.

## BLUEBERRIES

The blueberry sector allows EPI to encourage agricultural producers to expand blueberry production in Georgia and develop domestic and export markets. CCID's workforce goal for the blueberry sector (Step 1) focuses on education and training activities that will deliver new knowledge and skills needed to enable increasing export of fresh blueberries into European markets. The workforce (Step 2) comprises blueberry and bio-blueberry producers, processors, and exporters, especially in western Georgia, e.g., Adjara, Guria, and nearby

---

<sup>27</sup> In the United States, community college curricula usually offer options for going immediately into the agricultural workforce or for transferring to a local university to complete a bachelor's program. Currently, most of the focus at PE schools in Georgia is on production, not agricultural business careers. The Web site for one of the Iowa colleges suggests jobs for students in a wide variety of agricultural business fields, including as purchasing agents and buyers of farm products, runners of greenhouses and nurseries, deliverers of extension services, commodity brokers, market analysts, sales representatives, farm management consultants, credit analysts, and as crop insurance agents ([http://www.iavalley.edu/ecc/careers\\_degrees/programs/agriculture.html](http://www.iavalley.edu/ecc/careers_degrees/programs/agriculture.html)).

<sup>28</sup> CCID has invited Dr. Jeff Armstrong, president of Muscatine Community College, and Dr. Wade Miller, head of ISU's Agricultural Education and Studies Department, to co-chair developing a potential GDA in agronomy. Both have previous experience working in Georgia since 2006, and both know the people teaching in university and community colleges across Iowa: Armstrong, because of his college's agronomy-related courses; and Miller, because he supervises the graduate courses that community college agronomy instructors take at ISU for professional development.

areas; and those taking PE programs. All of these target groups need education and training in production practices, as well as entrepreneurial and marketing skills. Short courses will be delivered to producers, and PE schools and universities offering fruit-growing and agronomy programs are targets for program upgrades.<sup>29</sup>

The approach described above for agronomy will assist in updating the producer trainings to be provided for this sector as well (Step 5). In addition, Georgian PE programs will benefit from curriculum and textbook development to be provided by CCID partner college, Chemeketa Community College, assisted by OSU. Also, as with the EPI winemaking sector, workforce development activities for blueberry producers can benefit from how new information is provided to Oregon blueberry producers by the state's extension service.<sup>30</sup>

The following activities are described in CCID's action plan to be conducted in fall 2011 and winter 2012.

Stage 1 – Trainers selected by EPI's agricultural sector chief will offer an introductory one-day blueberry course at several locations during August 2011.<sup>31</sup>

Stage 2 – CCID curriculum specialists organize PE and university program and subject upgrades on blueberry production during fall 2011.<sup>32</sup>

Stage 3 – New textbooks will be prepared and teacher training held to introduce new subjects into PE schools and Universities beginning in 2012, as needed.

## NONAGRICULTURAL SECTORS

This work is concentrated on the apparel, wine tourism, transportation and logistics, and construction materials. Activities will be added for ICT in 2002. CCID is starting by recommending actions concerning wine tourism after discussing priority activities planned for the remainder of fiscal year 2012. Some of the wine tourism work will also bring benefits to the adventure and MICE tourism sectors, as well as to customer service across multiple sectors. Specific recommendations can be added in the paper, plastics, wood, and clay sectors later, if needed.

### APPAREL

The main program goal (Step 1) is strengthening competitiveness of apparel as a key Georgian industry. Two parts of Georgia's apparel workforce, spread across three regions of Georgia, are targeted for intervention (Step 2). CCID's work will deliver needed knowledge and skills (Step 3) for new workers and retraining for incumbent workers focusing first on training PE teachers of sewing machine operators and machinery repairers. In the next year, we will turn attention to quality control, constructors, and textile design.

---

<sup>29</sup> Much blueberry production in Georgia now focuses on medicinals, and some of the most active producers prepare bio-blueberries, which can be a significant part of the expanding export market because of the interest in Europe in blueberries' health-enhancing properties.

<sup>30</sup> See <http://berrygrape.org>. In 2012, CCID will make recommendations for electronic resource materials such as OSU's Northwest Berry & Grape Information Network, which producers can use to increase their knowledge and skills using lifelong learning methodologies and self-study.

<sup>31</sup> Additional trainings will be added as/when new cultivars and practices are introduced to farmers.

<sup>32</sup> CCID recommends strengthening the marketing and entrepreneurship materials for these programs as well.

All of CCID's workforce activities will assist in the construction and strengthening of permanent linkages between apparel businesses and educational institutions offering PE programs (Step 4). Methods to achieve this goal will expand in year two and may include industry-PE program joint work using best practices and focusing on subjects such as (1) school-to-work transition, (2) business-provider training partnerships, and (3) job placement and career services. For year one, attention is given to launching two or three teaching factories, each of which will need continuing industry attention and input to deliver the kinds of practice programs needed by the Georgian apparel industry. The teaching factories will serve the three distinct regions where apparel companies are currently expanding and upgrading their workforce: Tbilisi; the Batumi region (including Poti and Ozurgeti), where Turkish companies have started setting up shop; and Kutaisi, a center for apparel manufacture in Soviet times, to which portions of Georgia's apparel industry is returning.

The accompanying CCID action plan focuses in more detail on (1) a TOT programs to be conducted through input from leading U.S. apparel experts; (2) an upgrading of the programs, subjects, and teachers' skills approved by NCEQE; and (3) strengthening the capacity of PE program providers and universities in Tbilisi, Kutaisi, Ozurgeti, Poti, and Batumi.<sup>33</sup> CCID's Georgia Academia Mapping Report identified needs involved in upgrading PE and bachelor's apparel training capacity, such as the following: PE programs need modern equipment and other infrastructure; courses and programs need updating for all five specialties; quality control, technical designer, and constructor specialty programs are needed; instructors need updated skills; modern textbooks are needed; linkages with industry need strengthening; established factories need frequent training for new workers because of big turnover; new businesses also need training for their workers; safety programs and procedures are needed, and people already working in apparel factories need retraining.<sup>34</sup>

The following main activities will be conducted before the end of January 2012:

Stage 1 – CCID is soliciting proposals for training of PE and apparel company instructors for sewing machine operator jobs, machine repair, and quality control. This includes a TOT by CCID's main apparel partner, TC2. Up to 15 participants can be included and will come from apparel PE instructors. Training can also be included for quality control and machine repair from September–November 2011.

Stage 2 – New industrial sewing machine equipment are to be purchased and placed in the designated teaching factories to be run by PE institutions and in other qualifying PE institutions by September 2011.

Stage 3 – Curriculum materials and programs using materials adapted from the TOT trainings are to be completed during winter 2012.

---

<sup>33</sup> The Tbilisi PE program providers targeted for participation in a Tbilisi-based teaching factory and whose apparel teachers will be included in the TC2 industrial sewing machine operator and repair training programs, include the Tbilisi Vet Center, Tbilisi Multiprofile, Tbilisi Multifield, Spekri, and GTU, which offers a PE program as well as its bachelor's and higher programs in apparel. In Western Georgia, the PE center most impacted by growth in apparel manufacturing is in Batumi, which currently serves most of the Turkish apparel factories located nearby in nearby Bobokvati (along with PE programs in Poti and Ozurgeti). Kutaisi's PE center is the other leader in western Georgia and may also serve a new apparel factory scheduled to open in Tkibuli in the near future.

<sup>34</sup> CCID consultants also frequently heard the estimate of an immediate training needed for a total of 1,000–1,200 apparel workers for factories operating in Bobokvati (Batumi), Tbilisi, and Kutaisi. This total represents delivering sewing machine operator training for a mix of recent hires and students entering the workforce but does not include training the workforce needed by the factory to be started up in Tkibuli by the owner of the factories in Kutaisi and Tbilisi.

Stage 4 – Additional programs for other specialties to be selected with industry input, e.g., textile design and constructor specialties, are to be started as needed in January 2012.

## WINE TOURISM

Recommendations for this sector also follow the format shown in the introductory part of this report, i.e., starting with a TOT program conducted by a U.S. expert. The main program goal (Step 1) is to develop wine tourism in Georgia by drawing on expertise from the United States and others active in this sector, e.g., Canada, France, Italy, and Australia.<sup>35</sup> Strengthening wine tourism, it is believed, will assist Georgia's tourism sectors to enhance the competitiveness of Georgia's wine industry in world markets. The target audiences of front-level wine tourism professions, e.g., wait staff and barmen, working in restaurants, hotels, wineries, and other venues in Georgia will gain needed workforce skill upgrades to be able to recommend compare and contrast Georgian wines for tourists who are familiar with wines from Europe, North America, etc. (Step 2). Also included in this step can be short retraining for the same workforce in selected customer service and entrepreneurial skills needed in running a wine education business.

CCID and its partners will also focus on strengthening linkages between wine-related businesses, PSPs working in this field, and educational institutions offering PE programs in hotel/hospitality, winemaking, and tourism fields in Georgia's main wine-growing and wine tourism regions. The preferred method is creating stakeholder groups prepared to implement workforce best practices focusing on (1) school-to-work transition,<sup>36</sup> (2) business-provider training partnerships, (3) innovative practice and internship programs<sup>37</sup> tailored for Georgian wine tourism partners, and (4) career and job placement services tailored for the jobs which wine-related industries offer in Georgia.

There appear to be significant resources to launch the stakeholder model just described. Potential members of the stakeholder group, in addition to the organizations identified to be active in school-to-work transition, might include CCID's FLCC's tourism, winemaking, and hotel/hospitality partners, plus additional resources at the nearby Rochester Institute of Technology (which has a partner campus in Dubrovnik, Croatia) and Cornell University. Interest is also being assessed on the campuses of Oregon's Chemeketa Community College and at that state's main agricultural university, OSU to expand wine tourism and viticulture workforce activities in 2012. It is hoped that EPI will give a go-ahead later this year to making these New York and Oregon partners the core of an innovative GDA to support the wine and wine tourism sectors, along with Georgian organizations such as the Wine Association, the Wine Club, the MWS, Elkana, the Georgian Association of Guides, and representatives of the wineries and PE schools working in this field in Georgia.

---

<sup>35</sup> The CCID wine tourism partner, FLCC ([www.flcc.edu](http://www.flcc.edu)), located in central New York state's wine region, drew on experience from a similar, highly successful program organized at Niagara College's Niagara-on-the-Lake Xampus (<http://www.nctwinery.ca/>). FLCC is sharing its experience developing viticulture, destination tourism, and hospitality programs focusing on wine tourism in its region with the delegation being organized by the Department of Commerce, EPI, and AmCham in May/June 2011.

<sup>36</sup> A particular need that was identified in previous EPI reports about wine and wine tourism focused on nurturing and supporting high school graduates from the Kakheti region to attend PE programs offered in the Kakheti region. With the support of all public and private stakeholders, this cohort, especially those people who will be the next generation of grape-growers and will operate the restaurants, hotel, wineries, and other retail outlets on which Georgia's future wine tourism industry will depend, can be assisted by carefully tailored school-to-work policies giving them preference in PE programs at the Telavi and Kachreti PE programs.

<sup>37</sup> During spring 2011, CCID is finishing up a pilot practice and internship program for its program at Gori University, which adapts best international practices to the practice requirements required by MES and the Georgian educational accreditation body, NCEQE.

Other U.S. GDA members might include the Northwest Wine & Berry Information Network, whose Oregon office is housed on the OSU campus (<http://berrygrape.org/oregon-state-wine-facts/>), and that network's regional affiliates in other parts of the northwest corner of the United States. Of special interest to EPI's programs in wine tourism and customer service may be some of the Willamette Valley and Finger Lakes wine tourism business partner institutions.<sup>38</sup>

If successful, this model of stakeholder governance supported by a GDA to guide development of a sustainable public-private partnership can be disseminated in the second and third EPI years by CCID into Shida Kartli and western Georgia's wine-growing regions.

Step 5 activities are designed around involvement by CCID partner college, FLCC ([www.flcc.edu](http://www.flcc.edu)), especially its winemaking, tourism, and hotel/restaurant management programs, which can be supplemented as explained above, by the comparable college located handy to Oregon's top wine tourism region, the Willamette Valley ([www.chemeketa.edu](http://www.chemeketa.edu)). In the case of wine tourism, the activities proposed in CCID's action plan for the rest of 2011 also support the development and strengthening of business clusters<sup>39</sup> in Georgia. CCID's continuing interest will be in the workforce development and training aspects of these business clusters, but such public-private partnerships will be important to all aspects of EPI's work in wine tourism. That businesses who also compete with one another may want to collaborate as well is a new concept for many industries in Georgia. Benefits from collaboration by high-technology ICT companies in Silicon Valley in California are among the best examples of their successful use in the United States.

Important for the wine tourism sector are resources and needs jointly identified by CCID's consultants for this and the Georgia Academia Mapping Report concerning private training service providers, e.g., the MWS, Wine Club, Georgian Association of Guides, and Elkana. All should be invited to participate in the TOT program to be offered by CCID's WSET affiliate. The goal of this training is to set up a modern wine education program which will reach frontline staff in hotels, restaurants, on tour, and in wineries and wine shops to assist international wine tourists while they are in Georgia.<sup>40</sup> The design of the TOT courses has been done to assure that international certification for a Georgian affiliate of WSET can be started up as soon as two months after the training is completed, provided that the application for approved provider status to WSET is granted. More details about what exactly is needed for this application are included in CCID's action plan.

---

<sup>38</sup> Those in New York state located near FLCC include Constellation Brands, a major financial contributor to the college's viticulture program, plus the New York Culinary Institute, the New York State Wine & Grape Foundation, and other sites, some of which are, along with FLCC, assisting the wine tourism study tour mentioned earlier. Similar partners can be found in the Willamette Valley region where Chemeketa Community College is building a new home for its hospitality program in the Valley's main wine tourism region. The close working relations that Chemeketa Community College has with the local wine industry in its region can be seen from the programs offered in its winemaking, wine marketing, and vineyard management education programs ([www.chemeketa.edu/programs/winemaking](http://www.chemeketa.edu/programs/winemaking)), as well as in the backgrounds of its instructional staff, which include proprietors and staff of regional wineries ([www.chemeketa.edu/programs/winemaking/contact.html](http://www.chemeketa.edu/programs/winemaking/contact.html)).

<sup>39</sup> Frequent discussion of concepts like business clusters can be found throughout the international best-practice literature cited elsewhere in this workforce development report. The closest to be in use in Georgia is the concept of professional associations, which refers to organizations among competitors in a given industrial sector, e.g., apparel and wine. It is a concept that CCID adapted in its PE programs for Gori University, especially the higher professional programs in agricultural business, construction business administration, hotel/hospitality and special events management, and SME introduced with funding by USAID via IESC and IOM, to "establish the first community college in Georgia." Georgia's accreditation agency also uses experts from professional associations to evaluate PE programs and subjects.

<sup>40</sup> CCID can also assist with additional initiatives aimed at retraining of guides in wine tourism, retraining of guesthouse owners, retraining of eco guides, informal presentations and events in degustation, and promotion of Georgian wines can be added during 2012.

At a minimum, CCID's contractor will deliver curriculum materials and workforce-related trainings at WSET's foundation, intermediate, and advanced levels.

The following main activities will be conducted before the end of January 2012 and are further described in CCID's workforce action plan for wine tourism:

Stage 1 – CCID's college partner, FFLC, will assist in the wine education study tour to visit that region during May–June 2011.

Stage 2 – Wine education curriculum will be translated and disseminated to participants for home study – July and August 2011.

Stage 3 – TOT and individual certification of wine education trainers will be given by a U.S. expert, Jessica Bell, proprietor of MWS and holder of WSET diploma-level status – September and November 2011.

Stage 4 – WSET application and site visit for institutional certification and certification of the WSET curricula will be pursued with NCEQE – November–January 2012.

Stage 5 – Other wine tourism curriculum materials produced and disseminated through TOT to private training service providers and PE schools during 2012.

## CONSTRUCTION MATERIALS

For this sector, the main workforce goal (Step 1) is to assist the process by which new energy-efficient building materials produced in Georgia are used in construction inside Georgia. In the first year, the main workforce targeted (Step 2) will be owners, managers, and employees of architectural, building, and construction companies. In the process, it is expected that use of these new materials, which have significant insulation properties, will strengthen the industries involved and contribute toward greater energy efficiency and thus present benefits to buyers, building owners, and renters. In the second year, activity will expand to target PE and bachelors' construction teachers and their students through introduction of new programs modeled on energy-efficient building practices at comparable educational institutions in the United States.

The main workforce education and training objectives (Step 3) at first are mastering new technical workforce skills and expanding career-related employment in the construction trades. Because of the expected involvement of associations representing constructors, architects, and builders, this sector also has big potential for strengthening involvement of industry and professional associations in PE<sup>41</sup> and academic program and subject upgrading along the best-practice lines referred to earlier in this report (Step 4).

In the first phase of the action plan (Step 5), industry, GTU, EPI construction materials experts, and professional associations cited above will develop and deliver pilot short-course materials on uses of perlite and basalt to construction and building companies. Starting in fall 2011, CCID experts from Savannah Technical College and one other CCID member college (TBD) will jointly develop PE and university curricula about energy-efficient construction materials to use to make program and subject upgrades, develop new textbooks, and retrain PE colleges and university instructors.

---

<sup>41</sup> There is also potential for workforce partnerships among industry, professional associations, and PE education providers modeled on examples like a similar partnership created at Renton Technical College in the U.S. state of Washington, which has been designated as a Construction Center of Excellence. One role of being such a center is to serve as a focal point and resource hub for industry and academia ([www.coewa.com/OurCenters/Construction.aspx](http://www.coewa.com/OurCenters/Construction.aspx)).

Stage 1 – Develop and pilot perlite and basalt construction materials short-course training for industry and its business and professional partners – June 2012.

Stage 2 – Accredite this certificate course via NCEQE – July 2012.

Stage 3 – TOT by CCID’s U.S. college partner, Savannah Technical College or Central Piedmont Community College on energy-efficient building materials and practices – December 2012 or winter 2012

Stage 4 – Develop new PE and university programs and subjects, as needed – 2012

Depending on interest from EPI and the U.S. and Georgian workforce partners, it is possible to pursue additional energy-efficient building and construction materials activities through the use of the GDA mechanism starting in 2012.

## TRANSPORTATION AND LOGISTICS

To be effective in supporting agricultural and nonagricultural value chain industries, EPI’s focus should include both (1) transportation and logistics workforce activities that are increasingly intermodal, i.e., connecting rail, road, ports, and air transport;<sup>42</sup> and (2) assistance to Georgian industry to take advantage of ICT and software widely used in other countries.<sup>43</sup> Educational options offered by U.S. colleges and universities are equally varied, in order to prepare employees for transportation and logistics jobs for a variety of connected industries.

U.S. programs that CCID will draw on include the following:

- A joint logistics program by Black Hawk College, Illinois, and EICCD focused on truck, rail, and Mississippi River barge traffic.
- Moraine Valley Community College’s short-course training for logistics companies in the Chicago metropolitan region.
- North Carolina’s new virtual logistics campus.
- Savannah Technical College’s location and partners in the port of Savannah.
- These institutions can partner with Georgia through a GDA mechanism and individual U.S. colleges can collaborate on a TOT in Georgia and follow-up curriculum development with EPI’s support, as shown below.

CCID’s main program goal (Step 1) in this field is to provide workforce development support for this key economic development backbone for all Georgia’s industry sectors. Target workforce interventions (Step 2) include retraining current workforce to craft transportation solutions for business customers who are becoming more connected to world economic trends. Key (Step 3) also are training in managerial and technical skills and partnering with

---

<sup>42</sup> In North Carolina, CCID member colleges participate in a regional Center for Global Logistics, which coordinates industry, workforce development, education, and economic development activities in an innovative way. The center’s “virtual regional campus” combines numerous courses offered by participating educational institutions open to one another’s students and to people working in the logistics field who want to add to their knowledge and expand/deepen their career options ([www.piedmontriadnc.com](http://www.piedmontriadnc.com)) and has applications to EPI’s work in Georgia.

<sup>43</sup> Getting and dependably sustaining the movement of goods from various points inside Georgia to other points domestically and internationally is as important as moving and distributing goods in Georgia that originate outside Georgia’s borders. In addition, transportation logistics is important in trans-shipment of goods from the country’s main ports in Western Georgia through the country toward Central Asian destinations. See [www.gaports.com](http://www.gaports.com), the Web site of the Georgia Ports Authority in Savannah, Georgia, USA.

educational institutions preparing new employees for the logistics field. To do these tasks well, it will be necessary to rely on assessments by EPI experts about logistics needs that are not currently being met. The transportation and logistics chapter in EPI's value chain report confirms that training is needed for all parts of the transportation and logistics supply chain.

CCID's experience conducting some of its programs with multiple colleges, e.g., the design of so-called "trioika" programs where three U.S. partner colleges work with an international partner organization, can inform an innovative GDA in year two, which will operate as a partnership with multiple educational, business, and other partners (Step 4). In the action plan for this sector (Step 5), CCID draws on U.S. member colleges, such as the ones profiled above, and their university partners to put together curricula for education and further training for Georgian education partners, including the Georgian Higher PE College for Railway Transport, GTU in Tbilisi, Maritime College "Anri" in Batumi, and the Batumi Navigation Teaching University. Because of the increasing importance of logistics in Georgia's economy, it is likely that more Georgian PE schools and universities will enter this field during the next several years.

Reference to Tbilisi and Batumi above introduces an important characteristic of CCID's workforce education programs for EPI, i.e., their regional character. Both Batumi and Tbilisi promise to play important roles. In addition, Georgia's other main seaport, Poti, will be involved. The country's main rail and road corridor links Tbilisi with these two cities, and the twin routes carry trans-shipped goods onward into Azerbaijan and thence to Central Asia. Poti port and the feeder rail lines that connect the port to Georgia's main rail and road lines make that city increasingly important for Georgia's transportation grid. In addition, Batumi is growing into a second air travel hub, especially for leisure and tourism travel.<sup>44</sup>

With this information in hand, the following stages of work are included in the workforce action plan for transportation and logistics:

Stage 1 – TOT jointly offered by one or more U.S. college experts in collaboration with the Georgian PE and bachelors' education partners – July 2012

Stage 2 – Joint curriculum development of new programs and subjects reflecting emerging logistics jobs in Georgia's economy – September–December 2012

Stage 3 – Preparing textbooks and other course materials for PE and university programs and subjects, according to best international practices – September–December 2012

Stage 4 – Disseminating the new programs and upgrading teachers' knowledge and teaching skills to use them – 2012

Stage 5 – Development of the transportation and logistics GDA and its activities – 2012

Transportation and logistics shows a high likelihood for generating an important GDA connecting Georgian, U.S., and European workforce partners.<sup>45</sup> Starting in 2012, CCID

---

<sup>44</sup> There are several references in the EPI value chain study to agriculture's needs for dependable transportation connections, especially for warehouses keeping agricultural products. More detailed information about needed transportation links for internal distribution of goods will show more clearly what the priority areas are for other industries to use feeder roads to and from this main corridor.

<sup>45</sup> Important to furthering that goal is the involvement of CCID's main Georgian expert, Giorgi Doborjginidze, who will bring European contacts to his new position at GTU, including from the German logistics organization, TransCare AG. Also useful may be colleges in the network of CCID members in Europe.

experts will work with Georgian partners to identify common ICT platforms for Georgia's expanded logistics sector and its customers.

## CONCLUDING THOUGHTS

The recommendations presented can be implemented in a format that will strengthen connections between and among the educational and training institutions as described in this report and result in innovative and sustainable workforce partnerships on the Georgian side and between partners in both the United States and Georgia. That goal is referenced in several places in this report, e.g., where connections (or “bridges”) among U.S. community and technical colleges, high schools, and universities are noted. An additional kind of partnership usually exists between American colleges and their business partners, e.g., in the development and operation of internship and practice programs, joint career services, and the involvement of college business partners in the establishment of new programs and curricula via business advisory committees.<sup>46</sup>

Finally, CCID's work will model public-private partnerships that extend beyond connections limited to education providers and the industries where their graduates will seek jobs. These are workforce partnerships with a regional focus, like the one described earlier, which is designed around the goal of updating and strengthening the manufacturing sector in the north central region of Massachusetts, involving business, government, educational, and nongovernmental partners.

All of these types of partnerships can be furthered by the development, where appropriate, of GDAs bringing together educational, business, community, and other partners in the United States and Georgia around topics of mutual interest in key EPI sectors such as ports, rail, air, and road transportation for Georgia's transportation and logistics sector, as well as comparable partners for high-priority agriculture and tourism sectors. We look forward to shaping GDAs as part of CCID's work for EPI in 2011 and beyond.

---

<sup>46</sup> An excellent example is the connections that CCID partner, FLCC, has with local wineries, businesses, and other donors, which has brought big benefits for their winemaking, tourism management, and hotel and resort management programs. See, for example, the discussion of FLCC's business partner, Constellation Brands, on the company's Web site (<http://www.cbrands.com/about-us>).

# D. ADDITIONAL INFORMATION

## CCID INTERVIEWS

Abramishvili, Nino, EPI, Tourism Sector Manager
Akhalaia, George , EPI ICT Sector Manager
Alparidze, Mamuka, Director, Falconi, Ltd.
Bishop, Margaret, EPI Apparel Expert
Bolotashvili, Temur, EPI Construction Sector Manager
Chachkhiani, Nika, USAID Vocational Education Project
Ckuchua, Giorgi, Blueberry producer, Ozurgeti
Dartsimelia, Giorgi, Executive Director, Georgian Guides Association
Diasamidze, Anzor, Director, Maritime Training Center –Anri”
Doborjginidze, Giorgi, TransCare AG
Dolidze, Kote, Telavi VET Director
Ebanoidze, Lali, Manager of Professional Education, Ministry of Education and Science
Godabrelidze, Ann, Director, Wine Education School
Japaridze, Tamaz, Georgian Trans-Container Company
Jolia, Nana, Osurgeti VET Director
Jorjadze, Mariam, Director, Elkana
Kereselidze, David, National Center for Educational Quality Enhancement
Khantadze, Irina, Centre for Training and Consultancy
Kharbedia, Malkhaze, President, Wine Club
Khurodze, David, Hazelnut Producer
Kimerize, Ekaterina, Director, GDCl
Klidiashvili, Tinatin, Textile Design Bachelor Programs Manager
Kvilivadze, Zviad, EPI Apparel & Tourism Sector Manager
Kvitsiani, Natia, International Organization for Migration
Losaberidze, Tina, Kutaisi VET Director
Marsagishvili, Vakhtang, EPI Transport & Logistics Sector Manager
Meladze, Kety, President, Georgian Association of Guides
Modebadze, Zviad, Center for Strategic Research & Development of Georgia
Salukvadze, Irine, EPI Deputy Chief of Party
Saffery, Alan, EPI Nonagricultural Team Leader
Shengelia, Zurab, International Federation of Freight Forwarders Associations
Tsereteli, Maia, Director, Key Management Solutions Georgia
Vasadze, Nino, Center for Strategic Research & Development of Georgia
Wade, Steve, EPI Chief of Party
Zeedyk, Dennis, EPI Ag Team Leader

## LIST OF ORGANIZATIONS

### SECTOR/VALUE CHAIN: APPAREL

#### **Akhaltshikhe Professional Education Center**

CONTACT PERSON: Bela Avalishvili

EMAIL/TEL: belaavalishvili@gmail.com; / 899 172 005, 826 521 103

FACILITIES/EQUIPMENT: Total area - 7098,403 sq. metre, sewing workshop - 100 sq. metre. Sewing machines: EMQ 1082 - 5 (1977), Veritas - 3 (2008), Bernet 82E - 2 (2008), Cutting machine (old) – 1

PROGRAMS OFFERED: Garment designer – 1 year

NUMBERS OF STUDENTS PER YEAR: 20

#### **Batumi Professional Education Center**

CONTACT PERSON: Maia Toidze

EMAIL/TEL: maia-toidze@mail.ru/ 877177920

FACILITIES/EQUIPMENT: Total area - 3083,69 sq. metre, sewing workshop - 240 sq. metre. Sewing machines: “Juki” type - 5 (1998), Overlock - 1 (1998), Old fashion machine – 1, Veritas - 1 (1998), Will obtain from USAID in 2011: “Universal” – 17, thread machine – 1, Overlock – 2, Boiler type irons, with tables - 1

PROGRAMS OFFERED: Garment designer - 1 year, 2 year, 3 month, I – 3 month, II – 4 month

NUMBERS OF STUDENTS PER YEAR: 20

#### **Jvari Professional Education Center**

CONTACT PERSON: Darejan Pipia

EMAIL/TEL: ssipjvari@posta.ge; / 895 730 325, 893 279 852

FACILITIES/EQUIPMENT: Total area - 1262 sq. metre, sewing workshop - 55+25 sq. metre. Sewing machines: Bernina – 15 (2003), 1022 C class – 5 (1992), Overlock – 1 (2001)

PROGRAMS OFFERED: Garment designer I – 3 month, II – 4 month, III – 5 month

NUMBERS OF STUDENTS PER YEAR: 15

#### **Khidistavi Professional Education Center**

CONTACT PERSON: Giorgi Manvelishvili

EMAIL/TEL: gmanvelishvili@gmail.com; / 877 177 997

FACILITIES/EQUIPMENT: Total area - 2082 sq. metre, sewing workshop - 36+70 sq. metre. Sewing machines: Singer – 2 (2000), Overlock – 1 (2001), Sewing machine (Russia) -1 (1992)

PROGRAMS OFFERED: Garment designer - 1 year

NUMBERS OF STUDENTS PER YEAR: 18

#### **Kutaisi 1 Professional Education Center**

CONTACT PERSON: Tinatin Losaberidze

EMAIL/TEL: qutprofcentri@mail.ru; / 893 103 323, 877 788 303

FACILITIES/EQUIPMENT: Total area - 3000 sq. metre, sewing workshop - 216 sq. metre. Sewing machines: Universal machines - 5 (2007), Sewing machines - 10 (2007), Knitting machines - 2 (2007)

PROGRAMS OFFERED: Garment designer - 1 year, 2 year, I – 3 month, II – 4 month, III – 5 month; Sewing - 5 month

NUMBERS OF STUDENTS PER YEAR: 125

#### **Mestia Professional Education Center**

CONTACT PERSON: Irma Japaridze

EMAIL/TEL: svaneti-psc@rambler.ru; / 899 256 865, 877 582 424

FACILITIES/EQUIPMENT: Total area - 3000 sq. metre, sewing workshop – 55+100 sq. metre. Sewing machines: “Juki” - 1 (2007), “Chaika” (Russia) -1 (1974),

PROGRAMS OFFERED: Garment designer - 1 year

NUMBERS OF STUDENTS PER YEAR: no students

#### **Ozurgeti Professional Education Center**

CONTACT PERSON: Nana Jolia

EMAIL/TEL: nanajolia@mail.ru; / 898 512 520

FACILITIES/EQUIPMENT: Total area - 2154 sq. metre, sewing workshop - 60 sq. metre, Sewing machines -8 (russian) (1978),

PROGRAMS OFFERED: Garment designer - 1 year, 2 year

NUMBERS OF STUDENTS PER YEAR: 20

#### **Poti Professional Education Center**

CONTACT PERSON: Nino Bakuradze

EMAIL/TEL: nino\_bakuraze@yahoo.com; / 895 515 515; 877 761 776

FACILITIES/EQUIPMENT: Total area -1338 sq. metre, sewing workshop – 138 sq. metre. Sewing machines will be bought by MES

PROGRAMS OFFERED: Garment designer - 1 year

NUMBERS OF STUDENTS PER YEAR: no students

**Tata Vardanashvili Professional Education Center (Tbilisi)**

CONTACT PERSON: Nana Berianidze

EMAIL/TEL: berianidzenana@yahoo.com; / 879567555

FACILITIES/EQUIPMENT: Total area - 1000 sq. metre, sewing workshop - 750 sq. metre, shoe workshop - 250 sq. metre. Sewing machines: Garments machine "garudani" – 10 (2010), "Juki" – 10 (20010)

PROGRAMS OFFERED: Garment designer -1 year

NUMBERS OF STUDENTS PER YEAR: 60

**Tbilisi Multiprofile Professional Education Center**

CONTACT PERSON: Giorgi Maxaradze

EMAIL/TEL: g-makharadze@mail.ru; prof\_centre@yahoo.com; / 877 507 779

FACILITIES/EQUIPMENT: Total area - 8000 sq. metre, sewing workshop - 400 sq. metre. Sewing machines: 1022 M – 5 (Russian – 1985), EBM - 1 (1985), Button machine 827 - 1 (1990), 1022 – 6 (Russian – 1985 - rented), Overlock - 1 (1985 – rented), Overlock - 1 (1985).

PROGRAMS OFFERED:

Garment designer -1 year; 2 year, I – 3 month, II – 4 month, III – 5 month; Knitter (textile, etc.) - 1 year, 4 month, Sewing - 5 month

NUMBERS OF STUDENTS PER YEAR: 30

**Tbilisi Multi Field Professional Education Center**

CONTACT PERSON: Varlam Avalishvili

EMAIL/TEL: v\_avalishvili@inbox.ru; / 899 948793

FACILITIES/EQUIPMENT: Total area - 5120 sq. metre, sewing workshop - 71 sq. metre, shoe workshop 68 sq. metre. Sewing machines: 1022 Class – 8 (Russian-1975), 1022 A Class – 1 (Russian – 1980), Overlock -51A - 1 (Russian - 1995), Veritas – 1 (2000), Two-needle overlock – 1 (Russian - 1975)

PROGRAMS OFFERED: Garment designer, 1 year

NUMBERS OF STUDENTS PER YEAR: 40

**Tbilisi Professional Education Center**

CONTACT PERSON: Nona Gudushauri

EMAIL/TEL: nonagudushauri@mail.ru; / 877 959594

FACILITIES/EQUIPMENT: Total area - 4492 sq. metre, sewing workshop - 234 sq. metre. Sewing machines: 1022 Class – 25 (Russian-1975), "Juki" type - 3 (1993), Button machine - 2 (1985)

PROGRAMS OFFERED: Sewing - 1 year, 5 month; Knitter (textile, etc.) - 5 month

NUMBERS OF STUDENTS PER YEAR: 70

**Tbilisi Professional Education Center “Margi”**

CONTACT PERSON: Davit Ugulava

EMAIL/TEL: margi@mail333.com; / 899 145 067, 877 577 800

FACILITIES/EQUIPMENT: Total area - 1101 sq. metre, sewing workshop - 100 sq. metre. Sewing machines -10 (Russian) (1981)

PROGRAMS OFFERED: Garment designer, 1 year

NUMBERS OF STUDENTS PER YEAR: 18

**Tbilisi Professional Education Center “Spectri”**

CONTACT PERSON: Tamar Kakutia

EMAIL/TEL: tkakutia@yahoo.com; /

FACILITIES/EQUIPMENT: Total area - 6380 sq. metre, sewing workshop - 44+28 sq. metre. Sewing machines: “Chaika” – 10, (Russia - 1960)

PROGRAMS OFFERED: Garment designer I – 3 month, II – 4 month

NUMBERS OF STUDENTS PER YEAR: 15

**Ivane Javaxishvili Tbilisi State University**

CONTACT PERSON: No information available

EMAIL/TEL: rector@tsu.ge; / 221102

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Fashion designer IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Georgian Technical University**

CONTACT PERSON: Lali Gogeliani

EMAIL/TEL: lali\_gtu@gtu.ge; / 899 704499

FACILITIES/EQUIPMENT: sewing workshop – 50+75 sq. metre. Sewing machines: 1022 C Class – 8 (Russian-1981), 1022 M Class – 8 (Russian-1983), Overlock -1 (1987)

PROGRAMS OFFERED: Garment art designer III 1 year, IV – 1 year, V – 1 year; bachelor

NUMBERS OF STUDENTS PER YEAR: 15

**Tbilisi A.Kutateladze Academy of Art**

CONTACT PERSON: No information available

EMAIL/TEL: No information available

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Fashion designer IV – 1 year, V – 1 year, Textile designer IV – 1 year, V – 1 year, Garment designer I - 3 month, II - 4 month, III – 5 month, IV – 1 year, V – 1 year, Bachelor;

NUMBERS OF STUDENTS PER YEAR: No information available

### **Ilia State University**

CONTACT PERSON: No information available

EMAIL/TEL: uni@iliauni.edu.ge

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Garment art designer IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Akaki Tsereteli University**

CONTACT PERSON: No information available

EMAIL/TEL: atsu@atsu.edu.ge; / (+995 331) 4 21 73

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Garment designer IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Akhaltshikhe State Educational University**

CONTACT PERSON: No information available

EMAIL/TEL: contact@akhaltshikhe.edu.ge; / 8(265) 2 19 90

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Garment designer IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Iakob Gogebashvili Telavi State University**

CONTACT PERSON: No information available

EMAIL/TEL: rectoratesau@gmail.com / 995 250 7 24 01

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Fashion design I – 3 month, II – 4 month, III – 5 month, IV – 1 year, V – 1 year, Textile design I – 3 month, II – 4 month, III – 5 month, IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

## SECTOR/VALUE CHAIN: CONSTRUCTION

### **Akhaltshikhe Professional Education Center**

CONTACT PERSON: Bela Avalishvili

EMAIL/TEL: belaavalishvili@gmail.com; / 899 172 005, 826 521 103

FACILITIES/EQUIPMENT: Total area - 7098,403 sq. metre

PROGRAMS OFFERED: Wood carver - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Borjomi Professional Education Center**

CONTACT PERSON: No information available

EMAIL/TEL: / 899 24 93 24

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Carpenter - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Chkhorotsku Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: 858 25 90 08

FACILITIES/EQUIPMENT:

PROGRAMS OFFERED: Carpenter - 9 Month.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Jvari Professional Education Center**

CONTACT PERSON: Darejan Pipia

EMAIL/TEL: ssipjvari@posta.ge; / 895 730 325, 893 279 852

FACILITIES/EQUIPMENT: Total area – 1262 sq. metre

PROGRAMS OFFERED: Carpenter - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Kachreti Professional Education Center**

CONTACT PERSON: Natela Papunashvili

EMAIL/TEL: kachreti@gmail.com; / 895 380 233

FACILITIES/EQUIPMENT: Total area - 1609 sq. metre

PROGRAMS OFFERED: Wood processing - 1 year; Furniture designer (carpenter) - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Khidistavi Professional Education Center**

CONTACT PERSON: Giorgi Manvelishvili

EMAIL/TEL: gmanvelishvili@gmail.com; / 877 177 997

FACILITIES/EQUIPMENT: Total area - 2082 sq. metre

PROGRAMS OFFERED: Tile-setter - 5 Month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Kutaisi 1 Professional Education Center**

CONTACT PERSON: Tinatin Losaberidze

EMAIL/TEL: qutprofcentri@mail.ru; / 893 103 323, 877 788 303

FACILITIES/EQUIPMENT: Total area - 3000 sq. metre

PROGRAMS OFFERED: Carpenter - 1 year, 6 Month

NUMBERS OF STUDENTS PER YEAR: 125

#### **Rustavi Professional Education Center**

CONTACT PERSON: Teimuraz Peradze

EMAIL/TEL: teimurazperadze@mail.ru; / 899 35 73 22

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Carpenter - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Multiprofile Professional Education Center**

CONTACT PERSON: Giorgi Maxaradze

EMAIL/TEL: g-makharadze@mail.ru; prof\_centre@yahoo.com; / 877 507 779

FACILITIES/EQUIPMENT: Total area - 8000 sq. metre

PROGRAMS OFFERED: Furniture designer (carpenter) - 1 year and 5 Month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center «Spectri»**

CONTACT PERSON: Tamar Kakutia

EMAIL/TEL: tkakutia@yahoo.com; /

FACILITIES/EQUIPMENT: Total area - 6380 sq. metre

PROGRAMS OFFERED: Carpenter - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Telavi Professional Education Center**

CONTACT PERSON: Konstantine Dolidze

EMAIL/TEL: kotedolidze@gmail.com; / 899 509 889, 877 177 979

FACILITIES/EQUIPMENT: Total area - 1458 sq. metre

PROGRAMS OFFERED: Carpenter - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tkibuli Professional Education Center**

CONTACT PERSON: Rezo Tsnobiladze

EMAIL/TEL: tkprofcentri@rambler.ru; / 895 988 927

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Brick-layer - I – 3 month, II – 4 month, Painter - I – 3 month, II – 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Akhaltikhe State Educational University**

CONTACT PERSON: No information available

EMAIL/TEL: contact@akhaltikhe.edu.ge; / 8(265) 2 19 90

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Stone and other material carver - IV – 1 year, V – 1 year;

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Gori University**

CONTACT PERSON: Ekaterine Gigashvili

EMAIL/TEL: ekaterine62@mail.ru; / 899 140 124

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Carpenter - 3 month; Brick-layer - I – 3 month, II – 4 month; Plasterer - I – 3 month, II – 4 month; Painter - I – 3 month, II – 4 month; Insulator - I – 3 month, II – 4 month; Metal and soft roof tile layer - I – 3 month, II – 4 month; Reinforced concreter (fitter, molder, concreter) - I – 3 month, II – 4 month; Carpenteer - I – 3 month, II – 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Georgian Technical University**

CONTACT PERSON: Lali Gogeliani

EMAIL/TEL: lali\_gtu@gtu.ge; / 899 704499

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Brick-layer - I – 3 month, II – 4 month; Plasterer - I – 3 month, II – 4 month; Painter - I – 3 month, II – 4 month; Insulator - I – 3 month, II – 4 month; Manufacturer and fitter of plastic-metal and aluminum doors and windows - I – 3 month, II – 4 month; Metal and soft roof tile layer - I – 3 month, II – 4 month; Reinforced concretor (fitter, molder, concretor) - I – 3 month, II – 4 month; Gypsum plasterboard specialist – III – 5 month; Carpenter - I – 3 month, II – 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

SERVICE PROVIDERS: No service providers identified.

SECTOR/VALUE CHAIN: Tourism/Hotel/Hospitality

**Ambrolauri Professional Education Center**

CONTACT PERSON: Pridon Buadze

EMAIL/TEL: fridoni\_buadze@mail.ru; / 893 239 537

FACILITIES/EQUIPMENT: Total area - 5850,63 sq. metre

PROGRAMS OFFERED: Cook -1 year, 6 Month.

NUMBERS OF STUDENTS PER YEAR: No information available

**Batumi #2 Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: No information available

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Guide (Geotourism, etc.) - 1 year; Guide - 1 year; Mountain Guide - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Chkhorotsku Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: 858 25 90 08

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Waiter - 1 year, 9 Month.

NUMBERS OF STUDENTS PER YEAR: No information available

**Didi Jikhaisi Niko Nikoladze Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 23 77 79

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Pastry-cook - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Gobrazhouli Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 293 654

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Guide (For the west Georgia region) - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Kachreti Professional Education Center**

CONTACT PERSON: Natela Papunashvili

EMAIL/TEL: kachreti@gmail.com; / 895 380 233

FACILITIES/EQUIPMENT: Total area - 9918,6 sq. metre

PROGRAMS OFFERED: Agroturism operator - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Kobuleti Professional Education Center**

CONTACT PERSON: Davit Mchedlishvili

EMAIL/TEL: kobcollege@gmail.com; / 899 170 614, 877 507 979

FACILITIES/EQUIPMENT: Total area - 6453,2 sq. metre

PROGRAMS OFFERED: Bartender - 1 year/3 Month; Cook - 2 year, 1 year/5 Month /3 Month; Pastry-cook - 2 year, 1 year/3 Month; Waiter - 1 year/3 Month; Guide - 2 year, 1 year, 3 Month; Hotel service personnel - 1 year/3 Month; Hotel Manager - 2 year, 1 year, 5 Month

NUMBERS OF STUDENTS PER YEAR: No information available

**Kutaisi 1 Professional Education Center**

CONTACT PERSON: Tinatin Losaberidze

EMAIL/TEL: qutprofcentri@mail.ru; / 893 103 323, 877 788 303

FACILITIES/EQUIPMENT: Total area - 9201,8 sq. metre

PROGRAMS OFFERED: Pastry-cook - 1 year, II - 4 Month; Cook - 5 Month, 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Mestia Professional Education Center**

CONTACT PERSON: Irma Japaridze

EMAIL/TEL: svaneti-psc@rambler.ru; / 899 256 865, 877 582 424

FACILITIES/EQUIPMENT: Total area - 1518 sq. metre

PROGRAMS OFFERED: Guide - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Multi Field Professional Education Center**

CONTACT PERSON: Varlam Avalishvili

EMAIL/TEL: v\_avalishvili@inbox.ru; / 899 948793

FACILITIES/EQUIPMENT: Total area - 5156 sq. metre

PROGRAMS OFFERED: Cook - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Ozurgeti Professional Education Center**

CONTACT PERSON: Nana Jolia

EMAIL/TEL: nanajolia@mail.ru; / 898 512 520

FACILITIES/EQUIPMENT: Total area - 13232 sq. metre

PROGRAMS OFFERED: Cook - 1 year, I - 3 Month, II - 4 Month, III - 5 month; Guide - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Rustavi Professional Education Center**

CONTACT PERSON: Teimuraz Peradze

EMAIL/TEL: teimurazperadze@mail.ru; / 899 35 73 22

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Cook - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Rustavi Professional Education Center "Imedi"**

CONTACT PERSON: Director

EMAIL/TEL: rusudan.me@gmail.com / 895 64 16 10

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Pastry-cook - 6 Month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Multiprofile Professional Education Center**

CONTACT PERSON: Giorgi Maxaradze

EMAIL/TEL: g-makharadze@mail.ru; prof\_centre@yahoo.com; / 877 507 779

FACILITIES/EQUIPMENT: Total area - 60498 sq. metre

PROGRAMS OFFERED: Cook - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center “Ikarus”**

CONTACT PERSON: Mate Takidze

EMAIL/TEL: takidze@rambler.ru; / 877 768 866

FACILITIES/EQUIPMENT: Total area - 23884 sq. metre

PROGRAMS OFFERED: Cook, Specialist in Cooking Art - 2 year

Restaurant Manager - 2 year/4 Month, 25 week, 1 year, 2 year; Cook - 1 year or 4 Month/4 Month, 1 year, 2 year; Bartender - 1 year or 4 Month; Waiter - 1 year or 4 Month; Receptionist - 1 year, 4 Month, 25 week; Cook - 1 year or 3 Month; Bartender - 1 year or 3 Month; Waiter - 1 year or 3 Month; Receptionist - 1 year or 3 Month; Pastry-cook - 1 year; Tour operator - 1 year; Guide - 1 or 2 year; Pastry-cook - 2 year; Food and Drink Service/Restaurant Manager-Bartender - 1 year, 4 Month, 25 week; Pastry-cook - 4 Month, 1 year, 2 year; Bartender – III - 5 month; Service/Restaurant Manager – III - 5 month; Food and Drink Service/Restaurant Manager - I - 3 Month, II - 4 Month; Service/Restaurant Manager - II - 4 Month;

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center “Margi”**

CONTACT PERSON: Davit Ugulava

EMAIL/TEL: margi@mail333.com; / 899 145 067, 877 577 800

FACILITIES/EQUIPMENT: Total area - 1875 sq. metre

PROGRAMS OFFERED: Guide - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Telavi Professional Education Center**

CONTACT PERSON: Konstantine Dolidze

EMAIL/TEL: kotedolidze@gmail.com; / 899 509 889, 877 177 979

FACILITIES/EQUIPMENT: Total area - 2320 sq. metre

PROGRAMS OFFERED: Guide - 1 year; Cook - 1 year; Waiter - 1 year; Reception - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Georgian Technical University**

CONTACT PERSON: Lali Gogeliani

EMAIL/TEL: lali\_gtu@gtu.ge; / 899 704499

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Tourism and hospitality management – Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

### **Gori University**

CONTACT PERSON: Levan Tsikaridze

EMAIL/TEL: levan.tsikaridze@gmail.com; / 898 371 811

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Hotel, restaurant and special events business administration - 2 year; Tourism and hospitality management - 2 year.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Guram Tavartkiladze Education University**

CONTACT PERSON: No information available

EMAIL/TEL: info@gtteusu.edu.ge; / (995 32) 660 291, 660 292, 661 512

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Tourism and hospitality management.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Ilia State University**

CONTACT PERSON: No information available

EMAIL/TEL: uni@iliauni.edu.ge

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Tourism and hospitality management.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Akhaltshikhe State Educational University**

CONTACT PERSON: No information available

EMAIL/TEL: contact@akhaltsikhe.edu.ge; / 8(265) 2 19 90

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Hotel manager – III - 5 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Iakob Gogebashvili Telavi State University**

CONTACT PERSON: No information available

EMAIL/TEL: rectortesau@gmail.com / 995 250 7 24 01

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Guide – III - 5 month; Hotel manager - III - 5 month, IV - 1 year, V - 1 year; Tour operator – III - 5 month; Tourism and hospitality management.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Batumi Shota Rustaveli State University**

CONTACT PERSON: No information available

EMAIL/TEL: info@bsu.edu.ge; / 995(88222) 7–17–80

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Tourism and hospitality management.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Tbilisi Education University “Gorgasali”**

CONTACT PERSON: No information available

EMAIL/TEL: info@bsu.edu.ge; / 995(88222) 7–17–80

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Tourism and hospitality management.

NUMBERS OF STUDENTS PER YEAR: No information available

## **SERVICE PROVIDERS**

**No service providers identified.**

## **SECTOR/VALUE CHAIN: AGRICULTURE**

### **Akhalkalaki Professional Education Center**

CONTACT PERSON: Roin Kavrelishvili

EMAIL/TEL: roinka@rambler.ru / 899 588 461

FACILITIES/EQUIPMENT: Total area - 2100 sq. metre

PROGRAMS OFFERED: Mechanisator (wide profile) - 1 year, Mechanisator-electrician - 1 year.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Akhaltshikhe Professional Education Center**

CONTACT PERSON: Bela Avalishvili

EMAIL/TEL: belaavalishvili@gmail.com; / 899 172 005, 826 521 103

FACILITIES/EQUIPMENT: Total area - 7098,403 sq. metre

PROGRAMS OFFERED: Agricultural machinery - 1 year; tractor and motor-vehicle mechanics - 1 year; tractor operator - 2 month, Farmer - 2 year.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Chkhorotsku Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: 858 25 90 08

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Farmer - 2 year; Tractor and motor-vehicle mechanicist (with granting of the rights of driving) - 1 year; Farmer (wide profile) - 2 year; Farmer, plant-grower - 9 month.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Didi Jikhaisi Niko Nikoladze Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 23 77 79

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Farmer - 2 year; Agricultural machinery - 1 year; Tractor operator - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Kutaisi Georgian Multiple-Discipline Professional Education Centre "Goni"**

CONTACT PERSON: Director

EMAIL/TEL: goni.ecologi@mail.ru

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Agricultural manufacturing - 9 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Gobrazhouli Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 293 654

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Agricultural machinery - 1 year.

NUMBERS OF STUDENTS PER YEAR: No information available

**Kachreti Professional Education Center**

CONTACT PERSON: Natela Papunashvili

EMAIL/TEL: kachreti@gmail.com; / 895 380 233

FACILITIES/EQUIPMENT: Total area - 1609 sq. metre

PROGRAMS OFFERED: Farmer - 2 year; winemaker, viticulturist - 2 year, I – 3 month, II – 4 month, III – 5 month, Crop processor - 1 year.

NUMBERS OF STUDENTS PER YEAR: No information available

**Khidistavi Professional Education Center**

CONTACT PERSON: Giorgi Manvelishvili

EMAIL/TEL: gmanvelishvili@gmail.com; / 877 177 997

FACILITIES/EQUIPMENT: Total area - 2082 sq. metre

PROGRAMS OFFERED: Farmer - 2 year; Tractor operator (wide profile) - 3 month; Fruit-grower – 5 month.

NUMBERS OF STUDENTS PER YEAR: No information available

**Khobi Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 855 52 07 65

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Farmer - 2 year; tractor operator - 3 month.

NUMBERS OF STUDENTS PER YEAR: No information available

**Ozurgeti Professional Education Center**

CONTACT PERSON: Nana Jolia

EMAIL/TEL: nanajolia@mail.ru; / 898 512 520

FACILITIES/EQUIPMENT: Total area - 2154 sq. metre

PROGRAMS OFFERED: Farmer - 2 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Telavi Professional Education Center**

CONTACT PERSON: Konstantine Dolidze

EMAIL/TEL: kotedolidze@gmail.com; / 899 509 889, 877 177 979

FACILITIES/EQUIPMENT: Total area - 1458 sq. metre

PROGRAMS OFFERED: Winemaker - I – 3 month, II – 4 month, III – 5 month,  
Viticulturist - I – 3 month, II – 4 month, III – 5 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Tsageri Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 893 27 62 21

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Agriculture machinery - 9 month.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Tsinamdzgvriantkari Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: prof\_centre@yahoo.com; / 899 50 36 02

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Farmer - 2 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Zestaponi Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 893 74 99 72

FACILITIES/EQUIPMENT:

PROGRAMS OFFERED: Farmer -2 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Gori University**

CONTACT PERSON: Levan Tsikaridze

EMAIL/TEL: levan.tsikaridze@gmail.com; / 898 371 811

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Agricultural business manager - 2 year; Viticulturist - 4 month; Plant grower - 3 month; Fruit grower - 4 month.

NUMBERS OF STUDENTS PER YEAR: No information available

### **Georgian State Agricultural University**

CONTACT PERSON: I. Tabuashvili

EMAIL/TEL: Itabuashvili@yahoo.fr / 53 38 06

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Gardener - II – 4 month, III – 5 month, Viticulturist -, II – 4 month, III – 5 month IV – 1 year, Plant grower - II – 4 month, III – 5 month, Fruit grower – II – 4 month, II – 5 month, IV – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

### **Shota Meskhia Zugdidi State Education University**

CONTACT PERSON: No information available

EMAIL/TEL: zssuedu@gmail.com; / (+995 215) 5 61 26

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Plant grower – II - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Batumi Shota Rustaveli State University**

CONTACT PERSON: No information available

EMAIL/TEL: No information available

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Plant grower – III- 5 month; Plant protection – IV – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

## **SERVICE PROVIDERS**

### **NGO “Union Agro-Service” –**

Plant growing; Processing of soil and increasing crop capacity

### **Biological Farming Association “Elkana” –**

General Course in Organic Farming - 7 days;

PLA Methodologies (Participatory Learning and Action) - 5 days;

Production of Royal Jelly and Female Bee - 4 days;

Organic Cattle-breeding (General Course) - 5 days;

Organic Poultry Farming (General Course) - 3 days;  
 Clever Seedbed (Vegetable garden on personal plot, rich and sound harvest without spading and ploughing) - 2 days;  
 Organic Vegetable Gardening - 1 day;  
 Organic Fruit Farming - 1 day;  
 Juridical Consulting of Farmers - 1 day;  
 Organic Farming (Introduction) - 1 day;  
 Organic Production - 1 day;  
 Organic Poultry Farming - 1 day;  
 Organic Viticulture and Winemaking - 1 day;  
 Modern Agriculture Capacity Building-2days;  
 Vegetable Growing and Field Crops Cultivation; Fruit-Growing; Viticulture; Bee-keeping;

## SECTOR/VALUE CHAIN: INFORMATION TECHNOLOGIES

### **Akhaltshikhe Professional Education Center**

CONTACT PERSON: Bela Avalishvili  
 EMAIL/TEL: belaavalishvili@gmail.com; / 899 172 005, 826 521 103  
 FACILITIES/EQUIPMENT: Total area - 2473,9 sq. metre  
 PROGRAMS OFFERED: PC Operator - 4 month; 9 week  
 NUMBERS OF STUDENTS PER YEAR: No information available

### **Ambrolauri Professional Education Center**

CONTACT PERSON: Pridon Buadze  
 EMAIL/TEL: fridoni\_buadze@mail.ru; / 893 239 537  
 FACILITIES/EQUIPMENT: Total area - 5850,63 sq. metre  
 PROGRAMS OFFERED: PC Operator - 4 month  
 NUMBERS OF STUDENTS PER YEAR: No information available

### **Batumi M2 Professional Education Center**

CONTACT PERSON: Director  
 EMAIL/TEL: 893 95 43 48  
 FACILITIES/EQUIPMENT: No information available  
 PROGRAMS OFFERED: Information Technologies -1 month, 3 month, 10 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Batumi Professional Education Center**

CONTACT PERSON: Maia Toidze

EMAIL/TEL: maia-toidze@mail.ru/ 877177920

FACILITIES/EQUIPMENT: Total area - 3083,69 sq. metre

PROGRAMS OFFERED: PC Operator - 9 week, 3 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Borjomi Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 24 93 24

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 4 month; 9 week

NUMBERS OF STUDENTS PER YEAR: No information available

**Chkhorotsku Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: 858 25 90 08

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 3 month; Web-technologies - 5 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Didi Jikhaisi Niko Nikoladze Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 23 77 79

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Information Technologies - 1 year; PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Gobrazhouli Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 293 654

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Kachreti Professional Education Center**

CONTACT PERSON: Natela Papunashvili

EMAIL/TEL: kachreti@gmail.com; / 895 380 233

FACILITIES/EQUIPMENT: Total area - 9918,6 sq. metre

PROGRAMS OFFERED: Information Technologies - 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Kareli Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: qpsc-edu@mail.ru; / 899 78 79 35

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 1 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Khidistavi Professional Education Center**

CONTACT PERSON: Giorgi Manvelishvili

EMAIL/TEL: gmanvelishvili@gmail.com; / 877 177 997

FACILITIES/EQUIPMENT: Total area - 7916,8 sq. metre

PROGRAMS OFFERED: PC Operator - 3 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Khobi Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: /855 52 07 65

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 3 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Kobuleti Professional Education Center**

CONTACT PERSON: Davit Mchedlishvili

EMAIL/TEL: kobcollege@gmail.com; / 899 170 614, 877 507 979

FACILITIES/EQUIPMENT: Total area - 6453,2 sq. metre

PROGRAMS OFFERED: PC Operator - 2 year, 3 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Kutaisi 1 Professional Education Center**

CONTACT PERSON: Tinatin Losaberidze

EMAIL/TEL: qutprofcentri@mail.ru; / 893 103 323, 877 788 303

FACILITIES/EQUIPMENT: Total area - 9201,8 sq. metre

PROGRAMS OFFERED: Information Technologies - 1 year, 5 month; PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Mestia Professional Education Center**

CONTACT PERSON: Irma Japaridze

EMAIL/TEL: svaneti-psc@rambler.ru; / 899 256 865, 877 582 424

FACILITIES/EQUIPMENT: Total area - 1518 sq. metre

PROGRAMS OFFERED: PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: no students

### **Tbilisi Multi Field Professional Education Center**

CONTACT PERSON: Varlam Avalishvili

EMAIL/TEL: v\_avalishvili@inbox.ru; / 899 948793

FACILITIES/EQUIPMENT: Total area - 5156 sq. metre

PROGRAMS OFFERED: Personnel System's Operator - 4 month; Web-technologies - 1 year; Computer System's Operator - 5 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Ozurgeti Professional Education Center**

CONTACT PERSON: Nana Jolia

EMAIL/TEL: nanajolia@mail.ru; / 898 512 520

FACILITIES/EQUIPMENT: Total area - 13232 sq. metre

PROGRAMS OFFERED: PC Operator - 1 year, 4 month, 9 week

NUMBERS OF STUDENTS PER YEAR: No information available

### **Poti Professional Education Center**

CONTACT PERSON: Nino Bakuradze

EMAIL/TEL: nino\_bakuraze@yahoo.com; / 895 515 515; 877 761 776

FACILITIES/EQUIPMENT: Total area -1338 sq. metre

PROGRAMS OFFERED: PC Operator - 4 month; Information Technologies (retraining program) - 9 week.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Rustavi Professional Education Center “Modusi”**

CONTACT PERSON: Ramaz Gagoshashvili

EMAIL/TEL: modusimodusi@yahoo.com; / 891 259 659, 877 177 900

FACILITIES/EQUIPMENT: Total area - 17399,94 sq. metre

PROGRAMS OFFERED: PC Operator - 1 year; PC repair technician - 13 month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Rustavi Professional Education Center “Imedi”**

CONTACT PERSON: Director

EMAIL/TEL: rusudan.me@gmail.com / 895 64 16 10

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Information Technologies - 1 year; PC Operator - 4 month.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Senaki Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 899 97 90 88

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 9 week

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center of Information Technologies**

CONTACT PERSON: Mamuka Janjalia

EMAIL/TEL: m.janjalia@itvet.ge; / 877 131 222

FACILITIES/EQUIPMENT: Total area - 4883,5 sq. metre

PROGRAMS OFFERED: Information Technologies - 1 year; Electronic and Telecommunication networks - 1 year; Computer network and system engineer - 2 year; Multimedia Technologies - 2 year; Electronic and Info-communication networks - 1 year; Web-Technologies - 1 year/2 year

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center**

CONTACT PERSON: Nona Gudushauri

EMAIL/TEL: nonagudushauri@mail.ru; / 877 959594

FACILITIES/EQUIPMENT: Total area - 13893,35 sq. metre

PROGRAMS OFFERED: Computer Systems Technician - 1 year, 3 month, 5 month;  
Computer Systems - 4 month; Computer System's Service - 1 year, 5 month.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center "Margi"**

CONTACT PERSON: Davit Ugulava

EMAIL/TEL: margi@mail333.com; / 899 145 067, 877 577 800

FACILITIES/EQUIPMENT: Total area - 1875 sq. metre

PROGRAMS OFFERED: PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tbilisi Professional Education Center "Spectri"**

CONTACT PERSON: Tamar Kakutia

EMAIL/TEL: tkakutia@yahoo.com; /

FACILITIES/EQUIPMENT: Total area - 24935,07 sq. metre

PROGRAMS OFFERED: PC Operator - 4 month; PC service and repair - 4 month;  
Information Technologies - 1 year.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Telavi Professional Education Center**

CONTACT PERSON: Konstantine Dolidze

EMAIL/TEL: kotedolidze@gmail.com; / 899 509 889, 877 177 979

FACILITIES/EQUIPMENT: Total area - 2320 sq. metre

PROGRAMS OFFERED: PC Operator - 3 month.

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Tsageri Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 893 27 62 21

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Tsinamdzgvriantkari Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: prof\_centre@yahoo.com; / 899 50 36 02

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 9 week.

NUMBERS OF STUDENTS PER YEAR: No information available

**Zestaponi Professional Education Center**

CONTACT PERSON: Director

EMAIL/TEL: / 893 74 99 72

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: PC Operator - 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

**Akhaltsikhe State Educational University**

CONTACT PERSON: No information available

EMAIL/TEL: contact@akhaltsikhe.edu.ge; / 8(265) 2 19 90

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Computer network and system engineer – IV – 1 year, V – 1 year; Computer engineering (AutoCad) operator - IV – 1 year, V – 1 year

NUMBERS OF STUDENTS PER YEAR: No information available

**Black Sea International University**

CONTACT PERSON: No information available

EMAIL/TEL: / 995 32 595005

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

**Free University**

CONTACT PERSON: No information available

EMAIL/TEL: info@freeuni.edu.ge; / 20 09 01

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

### **Georgian Aviation University**

CONTACT PERSON: No information available

EMAIL/TEL: No information available

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor; Electron Commerce - Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

### **Georgian Technical University**

CONTACT PERSON: Lali Gogeliani

EMAIL/TEL: lali\_gtu@gtu.ge; / 899 704499

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor; Electron Commerce - Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

### **Ilia State University**

CONTACT PERSON: No information available

EMAIL/TEL: uni@iliauni.edu.ge

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

### **Shota Meskhia Zugdidi State Education University**

CONTACT PERSON: No information available

EMAIL/TEL: zssuedu@gmail.com; / (+995 215) 5 61 26

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: IT engineer (Office software engineer) – III – 5 month; Computer network and system engineer – II – 4 month, III – 5 month; Internet engineer (web-specialist) – II – 4 month

NUMBERS OF STUDENTS PER YEAR: No information available

### **Batumi Shota Rustaveli State University**

CONTACT PERSON: No information available

EMAIL/TEL: info@bsu.edu.ge; / 995(88222) 7-17-80

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: IT engineer (Office software engineer) – II - 4 month, III – 5 month, IV – 1 year, V – 1 year; Computer network and system engineer – II – 4 month;

NUMBERS OF STUDENTS PER YEAR: No information available

#### **Ivane Javaxishvili Tbilisi State University**

CONTACT PERSON: No information available

EMAIL/TEL: rector@tsu.ge; / 221102

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering - Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

#### **University of Georgia**

CONTACT PERSON: No information available

EMAIL/TEL: ug@ug.edu.ge; / (+995 32) 24 11 44, 24 11 45

FACILITIES/EQUIPMENT: No information available

PROGRAMS OFFERED: Software engineering – Bachelor

NUMBERS OF STUDENTS PER YEAR: No information available

#### **SERVICE PROVIDERS:**

**See separate list of service providers.**

## PROFESSIONAL EDUCATION PROGRAMS OFFERED BY PE CENTERS AND UNIVERSITIES

### AGRICULTURE

<b>Akhalkalaki High VET College</b>	Mechanisator (wide profile)	1 year
<b>Akhalkalaki High VET College</b>	Mechanisator-electrician	1 year
<b>Akhaltzikhe VET Center</b>	Agricultural machinery	1 year
<b>Akhaltzikhe VET Center</b>	Tractor and motor-vehicle mechanicist	1 year
<b>Akhaltzikhe VET Center</b>	Tractor operator	2 Month
<b>Akhaltzikhe VET Center</b>	Farmer	2 year
<b>Kachreti VET Center</b>	Farmer	2 year
<b>Kachreti VET Center</b>	Winemaker, viticulturist	2 year, I, II, III
<b>Kachreti VET Center</b>	Crop processor	1 year
<b>Khidistavi VET Center</b>	Farmer	2 year
<b>Khidistavi VET Center</b>	Tractor operator (wide profile)	3 Month
<b>Khidistavi VET Center</b>	Fruit grower	III
<b>Ozurgeti VET Center</b>	Farmer	2 year
<b>Telavi VET Center</b>	Winemaker	I, II, III
<b>Telavi VET Center</b>	Viticulturist	I, II, III

<b>Georgian State Agricultural University</b>	Gardener	II, III
<b>Georgian State Agricultural University</b>	Viticulturist	II, III, IV,
<b>Georgian State Agricultural University</b>	Plant grower	II, III
<b>Georgian State Agricultural University</b>	Fruit grower	II, III, IV
<b>Gori University</b>	Agricultural business manager	2 year
<b>Gori University</b>	Viticulturist's PE program	4 month
<b>Gori University</b>	Plant grower's PE program	3 month
<b>Gori University</b>	Fruit grower's PEprogram	3 month
<b>Gori University</b>	Fruit grower's PEprogram	4 month
<b>Shota Meskhia Zugdidi State Education University</b>	Plant grower	II

<b>Batumi Shota Rustaveli State University</b>	Plant grower	III
<b>Batumi Shota Rustaveli State University</b>	Plant protection engineer	IV

### APPAREL

<b>Akhaltshikhe VET Center</b>	Garment designer	1 year
<b>Batumi VET Center</b>	Garment designer	1 year, 2 year, 3 Month, I, II
<b>Jvari VET Center</b>	Garment designer, I,II,III	1 year
<b>Khidistavi VET Center</b>	Garment designer	1 year
<b>Kutaisi 1 VET Center</b>	Garment designer	1 year, 2 year, I, II, III
<b>Kutaisi 1 VET Center</b>	Sewing	5 Month
<b>Mestia VET Center</b>	Garment designer	1 year
<b>Ozurgeti VET Center</b>	Garment designer	1 year
<b>Poti VET Center</b>	Garment designer	I, II, III
<b>Tata Vardanashvili Vet Centre</b>	Garment designer	1 year
<b>Tbilisi Multiprofile VET Center</b>	Garment designer	1 year; 2 year, I, II, III
<b>Tbilisi Multiprofile VET Center</b>	Knitter (textile, etc.)	1 year, 4 Month
<b>Tbilisi Multiprofile VET Center</b>	Sewing	5 Month
<b>Tbilisi Multi Field VET Center</b>	Garment designer	1 year
<b>Tbilisi VET Center</b>	Sewing	1 year 5 Month
<b>Tbilisi VET Center</b>	Knitter (textile, etc.)	5 Month
<b>Tbilisi VET Center “Margi”</b>	Garment designer	1 year
<b>Tbilisi VET Center “Spectri”</b>	Garment designer	I, II

<b>Akaki Tsereteli University</b>	Garment art designer	IV
<b>Akaki Tsereteli University</b>	Garment art designer	V
<b>Akhaltshikhe State Educational University</b>	Garment art designer	IV
<b>Akhaltshikhe State Educational University</b>	Garment art designer	V

<b>Georgian Technical University</b>	Garment designer	III, IV, V
<b>Iakob Gogebashvili Telavi State University</b>	Fashion design	II, III, IV, V
<b>Iakob Gogebashvili Telavi State University</b>	Textile design	I, II, III, IV, V
<b>Ilia State University</b>	Garment art designer	IV, V
<b>Ivane Javaxishvili Tbilisi State University</b>	Fashion design	IV
<b>Tbilisi A.Kutateladze Academy of Art</b>	Fashion design	IV, V
<b>Tbilisi A.Kutateladze Academy of Art</b>	Textile design	IV, V

## INFORMATION TECHNOLOGIES

<b>Akhaltshikhe VET Center</b>	PC operator	4 Month; 9 week
<b>Ambrolauri VET Center</b>	PC operator	4 Month
<b>Batumi VET Center</b>	PC operator	9 week, 3 Month
<b>Kachreti VET Center</b>	Information technologies	1 year
<b>Kutaisi 1 VET Center</b>	Information technologies	1 year, 5 Month
<b>Kutaisi 1 VET Center</b>	PC operator	4 Month
<b>Mestia VET Center</b>	PC operator	4 Month
<b>Tbilisi Multi Field VET Center</b>	Personnel system's operator	4 Month
<b>Tbilisi Multi Field VET Center</b>	Web-technologies	1 year
<b>Tbilisi Multi Field VET Center</b>	Computer system's operator	5 Month
<b>Ozurgeti VET Center</b>	PC operator	1 year, 4 Month, 9 week
<b>Poti VET Center</b>	PC operator	4 Month
<b>Poti VET Center</b>	Information technologies (retraining program)	9 week
<b>Rustavi VET Center "Modusi"</b>	PC operator	1 year
<b>Rustavi VET Center "Modusi"</b>	PC repair technician	13 Month
<b>Tbilisi VET Center of Information Technologies</b>	Information technologies	1 year
<b>Tbilisi VET Center of Information Technologies</b>	Electronic and telecommunication networks	1 year

<b>Tbilisi VET Center of Information Technologies</b>	Web technologies	2 year
<b>Tbilisi VET Center of Information Technologies</b>	Computer network and system engineer	2 year
<b>Tbilisi VET Center of Information Technologies</b>	Multimedia technologies	2 year
<b>Tbilisi VET Center of Information Technologies</b>	Information technologies	1 year
<b>Tbilisi VET Center of Information Technologies</b>	Electronic and info-communication networks	1 year
<b>Tbilisi VET Center of Information Technologies</b>	Web technologies	1 year/2 year
<b>Tbilisi VET Center of Information Technologies</b>	Computer network and system engineer	1 year/2 year
<b>Tbilisi VET Center of Information Technologies</b>	Multimedia technologies	1 year/2 year
<b>Tbilisi VET Center</b>	Computer systems technician	1 year, 3 Month, 5 Month
<b>Tbilisi VET Center</b>	Computer systems	4 Month
<b>Tbilisi VET Center</b>	Computer system's service	1 year, 5 Month
<b>Tbilisi VET Center «Spectri»</b>	PC operator	4 Month
<b>Tbilisi VET Center «Spectri»</b>	PC service and repair	4 Month
<b>Tbilisi VET Center «Spectri»</b>	Information technologies	1 year
<b>Telavi VET Center</b>	PC operator	3 Month

<b>Akhaltshikhe State Educational University</b>	Computer network and system engineer	IV
<b>Akhaltshikhe State Educational University</b>	Computer network and system engineer	V
<b>Akhaltshikhe State Educational University</b>	Computer engineering (AutoCad) operator	IV
<b>Akhaltshikhe State Educational University</b>	Computer engineering (AutoCad) operator	V
<b>Black Sea International University</b>	Software engineering	Bachelor
<b>Free University</b>	Software engineering	Bachelor
<b>Georgian Aviation University</b>	Software engineering	Bachelor
<b>Georgian Aviation University</b>	Electron eommerce	Bachelor
<b>Georgian Technical University</b>	Software engineering	Bachelor

<b>Georgian Technical University</b>	Electron commerce	Bachelor
<b>Ilia State University</b>	Software engineering	Bachelor
<b>Shota Meskhia Zugdidi State Education University</b>	IT engineer (office software engineer)	III
<b>Shota Meskhia Zugdidi State Education University</b>	Computer network and system engineer	II, III
<b>Shota Meskhia Zugdidi State Education University</b>	Internet engineer (Web specialist)	II
<b>Batumi Shota Rustaveli State University</b>	IT engineer (office software engineer)	I, II
<b>Batumi Shota Rustaveli State University</b>	Computer network and system engineer	II
<b>Batumi Shota Rustaveli State University</b>	IT engineer (office software engineer)	II, III, IV, V
<b>Tbilisi State University</b>	Software engineering	Bachelor
<b>University of Georgia</b>	Software engineering	Bachelor

## TOURISM

<b>Kachreti VET Center</b>	Agroturism operator	1 year
<b>Kobuleti VET center</b>	Bartender	1 year/3 Month
<b>Kobuleti VET center</b>	Cook	2 year, 1 year/5 Month /3 Month
<b>Kobuleti VET center</b>	Pastry cook	2 year, 1 year/3 Month
<b>Kobuleti VET center</b>	Waiter	1 year/3 Month
<b>Kobuleti VET center</b>	Guide	2 year ,1 year, 3 Month
<b>Kobuleti VET center</b>	Hotel service personnel	1 year/3 Month
<b>Kobuleti VET center</b>	Hotel manager	2 year, 1 year, 5 Month
<b>Kutaisi 1 VET Center</b>	Pastry cook	1 year, II
<b>Kutaisi 1 VET Center</b>	Cook	5 Month, 1 year,
<b>Mestia VET Center</b>	Guide	1 year
<b>Ozurgeti VET Center</b>	Cook	1 year
<b>Ozurgeti VET Center</b>	Cook	I, II, III
<b>Ozurgeti VET Center</b>	Guide	1 year
<b>Tbilisi Multiprofile VET Center</b>	Cook	1 year
<b>Tbilisi VET Center “Ikaros”</b>	Cook, specialist in cooking arts	2 year
<b>Tbilisi VET Center “Ikaros”</b>	Restaurant manager	2 year/4 Month, 25 week, 1 year, 2 year

<b>Tbilisi VET Center “Ikaros”</b>	Cook	1 year or 4 Month/4 Month, 1 year, 2 year
<b>Tbilisi VET Center “Ikaros”</b>	Bartender	1 year or 4 Month
<b>Tbilisi VET Center “Ikaros”</b>	Waiter	1 year or 4 Month
<b>Tbilisi VET Center “Ikaros”</b>	Receptionist	1 year, 4 Month, 25 week
<b>Tbilisi VET Center “Ikaros”</b>	Cook	1 year or 3 Month
<b>Tbilisi VET Center “Ikaros”</b>	Bartender	1 year or 3 Month
<b>Tbilisi VET Center “Ikaros”</b>	Waiter	1 year or 3 Month
<b>Tbilisi VET Center “Ikaros”</b>	Receptionist	1 year or 3 Month
<b>Tbilisi VET Center “Ikaros”</b>	Pastry cook	1 year
<b>Tbilisi VET Center “Ikaros”</b>	Tour operator	1 year
<b>Tbilisi VET Center “Ikaros”</b>	Guide	1 or 2 year
<b>Tbilisi VET Center “Ikaros”</b>	Pastry cook	2 year
<b>Tbilisi VET Center “Ikaros”</b>	Food and drink service/restaurant manager-bartender	1 year, 4 Month, 25 week
<b>Tbilisi VET Center “Ikaros”</b>	Pastry cook	4 Month, 1 year, 2 year
<b>Tbilisi VET Center “Ikaros”</b>	Bartender	III
<b>Tbilisi VET Center “Ikaros”</b>	Service/Restaurant manager	III
<b>Tbilisi VET Center “Ikaros”</b>	Food and drink service/Restaurant manager	I,II
<b>Tbilisi VET Center “Ikaros”</b>	Service/Restaurant manager	II
<b>Tbilisi VET Center “Margi”</b>	Guide	1 year
<b>Telavi VET Center</b>	Guide	1 year
<b>Telavi VET Center</b>	Cook	1 year
<b>Telavi VET Center</b>	Waiter	1 year
<b>Telavi VET Center</b>	Reception	1 year

<b>Akhalsikhe State Educational University</b>	Hotel manager	III
<b>Batumi Shota Rustaveli State University</b>	Tourism and hospitality management	Bachelor

<b>Georgian Technical University</b>	Tourism and hospitality management	Bachelor
<b>Gori University</b>	Hotel, restaurant and special events business administration	2 year
<b>Gori University</b>	Tourism and hospitality management	2 year
<b>Guram Tavartkiladze Education University</b>	Tourism and hospitality management	Bachelor
<b>Iakob Gogebashvili Telavi State University</b>	Guide	III
<b>Iakob Gogebashvili Telavi State University</b>	Hotel manager	III, IV, V
<b>Iakob Gogebashvili Telavi State University</b>	Tour operator	III
<b>Iakob Gogebashvili Telavi State University</b>	Tourism and hospitality management	Bachelor
<b>Ilia Chavchavadze Georgian National University</b>	Tourism and hospitality management	Bachelor

## TRANSPORTATION AND LOGISTICS

<b>Batumi Navigation Teaching University</b>	Management of international transportation	IV, V, Bachelor
<b>Georgian Technical University</b>	Logistics operator at carrier companies	III, IV
<b>Georgian Technical University</b>	Railway forwarder	IV
<b>Batumi Maritime Professional College "Anri"</b>	Maritime logistics operator	IV, V

## CONSTRUCTION

<b>Akhaltshikhe VET Center</b>	Wood carver	1 year
<b>Jvari VET Center</b>	Carpenter	1 year
<b>Kachreti VET Center</b>	Wood processing	1 year
<b>Kachreti VET Center</b>	Furniture designer (carpenter)	1 year

<b>Khidistavi VET Center</b>	Tile-setter	5 Month
<b>Kutaisi 1 VET Center</b>	Carpenter	1 year, 6 Month
<b>Tbilisi Multiprofile VET Center</b>	Furniture designer (carpenter)	1 year and 5 Month
<b>Tbilisi VET Center «Spectri»</b>	Carpenter	1 year
<b>Telavi VET Center</b>	Carpenter	1 year
<b>Tkibuli VET Center</b>	Bricklayer	II, III
<b>Tkibuli VET Center</b>	Painter	II, III

<b>Akhalsikhe State Educational University</b>	Stone and other material carver	IV
<b>Akhalsikhe State Educational University</b>	Stone and other material carver	V
<b>Georgian Technical University</b>	Bricklayer	II, III
<b>Georgian Technical University</b>	Plasterer	II, III
<b>Georgian Technical University</b>	Painter	II, III
<b>Georgian Technical University</b>	Insulator	
<b>Georgian Technical University</b>	Manufacturer and fitter of plastic-metal and aluminum doors and windows	II, III
<b>Georgian Technical University</b>	Metal and soft roof tile layer	II, III
<b>Georgian Technical University</b>	Reinforced concreter (fitter, molder, concreter)	II, III
<b>Georgian Technical University</b>	Gypsum plasterboard specialist	III
<b>Georgian Technical University</b>	Carpenteer	II, III
<b>Gori University</b>	Carpenter	3 month
<b>Gori University</b>	Bricklayer	II, III
<b>Gori University</b>	Plasterer	II, III
<b>Gori University</b>	Painter	II, III
<b>Gori University</b>	Insulator	
<b>Gori University</b>	Metal and soft roof tile layer	II, III
<b>Gori University</b>	Reinforced concreter (fitter, molder, concreter)	II, III
<b>Gori University</b>	Carpenteer	II, III

## SHOE DESIGNER

<b>Tbilisi Multi Field VET Center</b>	Shoemaker	1 year
<b>Tata Vardanashvili Vet Centre</b>	Shoe designer (shoemaker)	1year, 6 month
<b>Tata Vardanashvili Vet Centre</b>	Individual shoe designer	
<b>Tata Vardanashvili Vet Centre</b>	Shoe sewing machine specialist	6 month

## BIBLIOGRAPHY

Adult Education Association of Georgia (AEAG). 2006. Vocational Education and Training in Georgia: Problems and Prospects.

Building Alliances Series: Agriculture. 2009. October. [www.ag-guideusaid.pdf](http://www.ag-guideusaid.pdf).

Cackler, Mark. 2009. "Roundtable: Improving Responsible International Investment in Agriculture." New York, NY. September. [www.WBag7principles](http://www.WBag7principles).

Castel-Branco, Eduarda and Lika Glonti. 2007. Update Report Study of Labor Market and VET Challenges and Perspective for Countries Participating in the European Neighborhood Policy S. Caucasus – Georgia. European Training Foundation. March. October.

Council on Adult and Experiential Learning. 2008. Innovative Strategies for a New System of Workforce Development and Lifelong Learning. November.

DfES. 2003, 21st Century Skills. Realizing our Potential. The National Skills Strategy, HM Government, Norwich.

DVV International – Project Office/ Tbilisi. 2008. Adult Education and Lifelong Learning in the South Caucasus: Status Quo and Development Prospects.

Economic Prosperity Initiative. Sector Assessment Report. 2010. USAID. December.

Value Chain Assessment Report. 2011. USAID. April.

Flexible Learning Toolboxes. 2008. A Guide to Creating Learning Design for VET. August.

Georgia Law on Professional Education. 2010. May

Gogeliani, Lali. 2011. Georgia Academia Mapping Report. Economic Prosperity Initiative. April.

GTZ 2010. *Matching Vocational Education in Georgia with Labour Market Needs* (mismatch report).

International Organization for Migration. 2008. Regulating the Labor Market in Adjara. September/October.

Kuszera, Margaret. 2011. Learning for Jobs – US – South Carolina. OECD. January.

Levesque, K., et al. 2008. Career/Technical Education in the United States: 1990 to 2005. NCES. Institute of Education Sciences. U.S. Department of Education. Washington.

Massachusetts Institute of Technology. 2008. North Central Massachusetts Workforce Development Strategies Plan. Spring.

McPherson, Malcolm and Claire Ignatowski. 2007. Workforce Assessment in Georgia. USAID. March. Ministry of Education of Government of Quebec. 2002. Teacher Training in Vocational Education: Orientations, Professional Competencies.

Nathan Associates. 2007. Factory-level Value Chain Analysis of Cambodia's Apparel Industry. USAID. September.

National Professional Agency. 2009. VET Situational Analysis. Ministry of Education and Science of Georgia. October.

New Commission on the Skills of the American Workforce. 2007. Tough Choices, Tough Times.

Organization for Economic Cooperation and Development. 2009. Learning for Jobs – Initial Report. October.

2009. Learning for Jobs – England and Wales. 2009. October.

Temel, Tugrul and Ajit Maru. 2003. Georgia: ICT Infrastructure and Use in Agriculture. Food and Agriculture Organization of the United Nations. International Service for National Agricultural Research.

USAID Agriculture Strategy. Linking Farmers to Markets. 2004. July.

Van Roekel, Jan et al. 2002. The Agri-Supply Chain Management. World Bank Paper Cross-Border Agri Supply Chain Management. August.

VET. Baseline Analysis of the Sector Development – Georgia. 2008. European Training Foundation.

VET Situation Analysis. 2009. Ministry of Education and Science of Georgia.

Workforce Strategy Center. 2002. Building a career pathways system: promising practices in community college centered workforce development.

**USAID Economic Prosperity Initiative (EPI)**

**6 Samgebros St.  
Tbilisi, Georgia**

**Phone: +995 32 43 89 24/25/26**

**Fax: +995 32 43 89 27**