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VEGETABLE MARKET STRATEGY DEVELOPMENT

REPORT

FINAL

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FINAL

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

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I. EXECUTIVE SUMMARY

BACKGROUND

Economic Prosperity Initiative (EPI) has identified the development of the vegetable market in Georgia as one of its main priorities and is in the process of developing several initiatives to stimulate further growth in this sector. Within the scope of this strategy, the vegetable market includes all vegetable market value chain actors. The competitiveness of the value chain varies significantly from actor to actor, and there are many gaps in the value chain that must be resolved to increase the competiveness of Georgian vegetables both domestically and in the international export markets.

This strategy directly addresses the gaps in the vegetable market – including the primary production, postharvest handling, and distribution stages – as outlined by the EPI Vegetable Market Assessment. Through overall increased productivity gains and by understanding, targeting, and filling these gaps, the vegetable sector can increase domestic sales and become competitive internationally.

METHODOLOGY

The objective of the scope of work for this consultancy is to create and design a strategy to make sure that the vegetable sector reaches the level of competitiveness for exportation. To accomplish this objective, the consultant conducted extensive quantitative and qualitative research to identify solutions to directly address the gaps in the value chain outlined within the United States Agency for International Development (USAID) EPI Vegetable Market Assessment that are culturally and economically relevant to vegetable market value chain actors in Georgia.

To perform this assessment, the consultant conducted interviews with industry experts to identify the barriers, gaps, and synergies within the vegetable sector value chain that represent potential opportunities to increase growth and competitiveness. Furthermore, the consultant analyzed and interpreted available statistical data on production, trade, prices, etc., to determine systematic strengths and weaknesses.

FINDINGS

The gaps and challenges to sustainable competiveness are summarized below:

- Georgian producers are not educated on proper farm management, chemical application, business and financial management, export processing, and the use of high-quality inputs and technology;
- The overall quality of Georgian vegetables is relatively low compared to international and regional competitors' quality standards;
- Production volumes are very low during offseason months, requiring imported vegetables to satisfy up to 25% of annual domestic consumption;
- There is an insufficient amount of cold storage space available in Georgia;
- The available cold storage services options for the value chain are inadequate;

- There is an insufficient number of market actors within the post-harvest handling infrastructure – including collection, sorting/grading, packaging, and distribution;
- The majority of Georgian producers have no information about export market buyers, prices, or requirements, which creates obstacles to exportation;
- Food safety standards are generally not practiced or enforced throughout the entire production and distribution value chain;
- There is no standardized system for vegetable classification or grading;
- There is no marketing or branding campaign to promote Georgian vegetable products;
- The majority of producers are unable to access credit facilities, because banks consider these projects to have excessive risk, because the banks have no reliable information about the risks related to production and many producers have limited operating experience.

RECOMMENDATIONS

To determine both short and long-term competitiveness, EPI should implement the following core strategy recommendations:

- Develop business management resources for market actors and provide targeted training programs to producers.
- Promote and facilitate appropriate, cost-efficient inputs and modern technology for primary production – including the use of new cultivars, seedlings, and drip irrigation.
- Promote and facilitate the expansion of, and new investment in, greenhouses to increase Georgia's off-season production volumes.
- Improve cold chain capacity and services:
  - Stage 1: Promote and facilitate the expansion of, and new investment in, cold storages.
  - Stage 2: Promote and facilitate the introduction of new cold chain services.
- Promote and facilitate new investment in developing new, modern post-harvest infrastructure, from collection to distribution;
- Increase market access by creating new linkages between Georgian producers and exporters with reliable international distribution channels and create an information system to distribute information on export markets;
- Develop a GlobalGAP certification program that includes the following stages:
  - Stage 1: Establish a Certification Body in Georgia
  - Stage 2: Certify large individual producers
  - Stage 3: Certify smallholder producer groups
- Develop and implement food quality standards;
- Develop a marketing campaign to promote and brand Georgian vegetables:
  - Stage 1: Develop a national branding strategy and logo, and license them to Georgian producers

  - Stage 2: Execute a marketing campaign to promote increased consumption domestically
  - Stage 3: Develop an industry marketing program to provide funding to industry groups on a cost-shared basis
  - Stage 4: Developing marketing strategy to promote Georgian vegetables to export market buyers and wholesalers;
- Promote and facilitate increased access to international and domestic capital sources:
  - Stage 1: Provide training to Georgian banks in agricultural lending practices
  - Stage 2: Promote the introduction of new financial instruments for agricultural enterprises.
  - Stage 3: Facilitate the introduction of agricultural insurance programs in Georgia.
  - Stage 4: Facilitate new sources of cheap credit through international banks, funds, and donor organizations.

II. APPENDICES

A. BACKGROUND

B. FINDINGS

C. METHODOLOGY

D. RECOMMENDATIONS

E. ADDITIONAL INFORMATION

A. BACKGROUND

EPI has identified the development of the vegetable market in Georgia as one of its main priorities and is in the process of developing several initiatives to stimulate further growth in this sector. Within the scope of this strategy, the vegetable market includes all vegetable market value chain actors. While these value chain actors are somewhat competitive within Georgia during the harvest season, there are many gaps in the value chain that must be resolved to increase the competiveness of Georgian vegetables both domestically and in the international export markets.

This strategy directly addresses the gaps in the vegetable market – including the primary production, post-harvest handling, and distribution stages – as outlined by the EPI Vegetable Market Assessment. Through overall increased productivity gains and by understanding, targeting, and filling these gaps, the vegetable sector can increase domestic sales and become competitive on a global scale.

KEY PRINCIPLES FOR IMPLEMENTATION

While implementing the following strategy, EPI and its partners should, in all stages of strategy implementation, operate according to the following principles:

- Strategies and goals must be market-driven;
- Initiatives should be private sector-led;
- Action plans should be results-oriented.

By implementing these strategy recommendations according to these principles, EPI will not only determine the short and long-term competitiveness of Georgian vegetables, but will also do so in a way that will be sustainable after project completion.

By acting as a facilitator, EPI will be simply promoting the goals that already exist within the private sector. By serving as a temporary stopgap, EPI will allow Georgian market actors to develop their own internal capacities, resources, and linkages that will survive project completion.

B. FINDINGS

CHALLENGES TO VALUE CHAIN DEVELOPMENT

This strategy directly addresses the gaps in the vegetable sector – including the primary production, post-harvest handling, and distribution stages – as outlined by the EPI Vegetable Market Assessment. The gaps and challenges to sustainable competiveness are summarized below:

- Georgian producers are not educated on proper farm management, chemical application, business and financial management, export processing, and the use of high-quality inputs and technology;
- The overall quality of Georgian vegetables is relatively low compared to international and regional competitors' quality standards;
- Production volumes are very low during off-season months, requiring imported vegetables to satisfy up to 25% of annual domestic consumption;
- There is an insufficient amount of cold storage space available in Georgia;
- The available cold storage services options for the value chain are inadequate;
- There is an insufficient number of market actors within the post-harvest handling infrastructure – including collection, sorting/grading, packaging, and distribution;
- The majority of Georgian producers have no information about export market buyers, prices, or requirements, which creates obstacles to exportation.
- Food safety standards are generally not practiced or enforced throughout the entire production and distribution value chain
- There is no standardized system for vegetable classification or grading;
- There is no marketing or branding campaign to promote Georgian vegetable products;
- The majority of producers are unable to access credit facilities, because banks consider these projects to have excessive risk, because the banks have no reliable information about the risks related to production and many producers have limited operating experience.

C. METHODOLOGY

The objective of the scope of work for this consultancy is to create and design a strategy to make sure that the vegetable sector reaches the level of competitiveness for exportation. To accomplish this objective, the consultant conducted extensive quantitative and qualitative research to identify solutions to directly address the gaps in the value chain outlined within the USAID EPI Vegetable Market Assessment that are culturally and economically relevant to vegetable market value chain actors in Georgia. To perform this assessment, the consultant conducted interviews with industry experts to identify the barriers, gaps, and synergies within the vegetable sector value chain. Furthermore, the consultant analyzed and interpreted available statistical data on production, trade, prices, etc., to determine systematic strengths and weaknesses.

While undertaking this assessment, the consultant utilized the following methods:

- Desk Review (see Appendix E – Resources Used)
  - Available industry reports
  - Published and online data
  - Government statistical information
- In-depth interviews of industry experts (see Appendix E – Interviews Conducted)
  - The consultant conducted 45 in-depth, face-to-face interviews of approximately 30-60 minutes each. Respondents included:
    - Primary vegetable and potato producers, including open field and greenhouse producers;
    - Input providers, including commercial entities that provide soil preparation services, raw materials, crop protection products, and machinery;
    - Representatives of food processors and cold storages;
    - Representatives of distribution channels, including wholesale distributors, institutional purchasers, and retail outlets;
    - Commercial banks and other nonbank financial institutions that provide services to vegetable market actors;
    - Representatives of International Financial Institutions (IFI's) or donor organizations with programs to support agricultural development and food safety policies in Georgia;
    - Industry and development experts in the agriculture sector.

D. RECOMMENDATIONS

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
Georgian producers are not educated on proper farm management, chemical application, business and financial management, export processing, and the use of high-quality inputs and technology.	Develop business management resources for market actors and provide targeted training programs to producers.	Identify partners to develop an ongoing production and post-harvest handling training program for value chain actors.	While several market actors and donor agencies offer a wide variety of training programs, there are some gaps that need to be covered by additional programs. Furthermore, while the Farm Service Center network serves more than 134,000 producers, there are approximately 500-600,000 more producers that are still not served. EPI should facilitate and promote the implementation of more training programs through expansion of the FSC network and increased cooperation with other donor programs.	August 11	2-3 new organizations committed to providing regular training programs for producers.
		Create business and financial plan template for greenhouse operators and cold storages.	As a method of expediting new investment into the vegetable industry – especially within support services in the distribution chain – EPI consultants should develop business plan templates with financial plans that small and medium entrepreneurs can utilize to begin operations quickly. By requiring EPI partners to utilize these business plan templates, EPI partners will be appropriately prepared for most effective implementation. Furthermore, EPI will make sure that its co-investment projects are operated according to modern business practices and EPI can more easily monitor the progress and most effective results of these partners.	October 11	The creation of business plans for heated and unheated greenhouses, cold storages collection centers, packagers, cold storages and processors.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Create "master calendar" of training events and provide supplementary training programs to fill the gaps.	EPI consultants will develop a publicly available Web site that informs producers about upcoming training seminars offered by FSCs, input distributors, Union AgroService, EPI consultants, and other donor organizations. This Web site should allow registered users to input upcoming trainings on a real-time basis.	December 11	Design and publication of the calendar online.
		Provide business advisory services to current market actors and new EPI partners.	In addition to the business plan templates that EPI will develop for entrepreneurs, EPI should provide limited business advisory services for EPI partners – both newly operating and those who have been previously operating. By doing so, EPI consultants will better position its partners for a successful project start-up or expansion. These services should be provided on a short-term basis and should directly address specific business challenges. Likewise, EPI consultants should constantly be looking for opportunities to create linkages for its partners with other market actors.	Ongoing throughout the life of the project.	Record of business advisory services being provided to 10-15 EPI partners annually.
The overall quality of Georgian vegetables is relatively low compared to international and regional competitors' quality standards.	Promote appropriate, cost-efficient inputs and modern technology for primary production – including the use of new cultivars, seedlings, and drip irrigation.	Promote cultivars that are appropriate and price-competitive.	While many of the largest producers are already using new cultivars that have high-yield potentials, the majority of small and medium farms still purchase low quality, low-yielding seeds from the bazaars because they cannot afford the new cultivars. EPI consultants should identify high-yielding cultivars that are appropriate to the Georgian climate, taste, and culture that can be distributed at a competitive price for small farmers. If necessary, EPI should consider providing financial assistance to farmers to purchase the new seeds or negotiate with seed distributors on bulk pricing.	Ongoing throughout the life of the project.	Identification of new cultivars and implementation of a promotional campaign to inform farmers about their yield and financial benefits.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Develop promotional campaign to encourage new technology usage.	Very few farms and greenhouses are using advanced technologies to produce higher yields. Pesticides and fertilizers are expensive for most small farmers, who cannot afford to use these regularly. While almost all medium and large farms use pesticides regularly, only about 60% regularly use chemical fertilizers. Most farmers still use flood irrigation techniques as opposed to the more efficient, though more expensive, technique of drip irrigation. The main reason for this is that the irrigation systems are broken and dilapidated, and farmers must replace these systems completely. As an alternative to replacing these capital-intensive systems, EPI should promote the use of drip irrigation systems. Unfortunately, farmers cannot afford to purchase the necessary equipment for drip irrigation. While there are a few large greenhouses and several greenhouse clusters throughout Georgia, very few are heated. EPI should promote the conversion of these greenhouses to be heated in order to capture offseason market opportunities. Therefore, EPI consultants should consider providing financial assistance to farmers to purchase new technologies or negotiate with distributors on bulk pricing. Furthermore, EPI should build on the successes of the FSC network and develop a campaign to promote the use of new technologies.	Ongoing throughout the life of the project.	Identification of specific technologies for covered and uncovered producers and the implementation of a promotional campaign to inform farmers about their yield and financial benefits.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Encourage FSCs and other input providers to establish more "demonstration plots."	The demonstration plots are an essential tool in educating and training producers in a visible manner about what crop varieties and technologies should be used for production and how to use them effectively. Despite the fact that the FSCs have had a great deal of success in the past 2-3 years, they currently only serve around 134,000 farmers. With approximately 730,000 farms in Georgia, there are still many farmers that need access to this knowledge and training. Therefore, the appropriate method for EPI to provide indirect training to producers is to assist the FSCs, Machinery Service Centers (MSCs), and other distributors in establishing more demonstration plots. Currently, 20 FSCs and MSCs have demonstration plots that are currently operating, while 19 more want to establish these plots. Through financial assistance or business advisory services, EPI should help them to establish new demonstration plots to reach more producers.	Ongoing throughout the life of the project.	An increase of five new demonstration plots per year over the life of the project.
		Identify producers willing to grow seedlings domestically in greenhouses.	EPI consultants must identify producers who are currently producing or willing to produce seedlings to sell for mass distribution. Since seedlings are grown prior to planting, they must be raised in the early spring, in greenhouses. By planting seedlings instead of seeds, producers will reap their harvest sooner and have a longer production and sales period.	Ongoing throughout the life of the project.	Identification of 5-10 greenhouse operators to grow seedlings on a commercial basis.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
Production volumes are very low during offseason months, requiring imported vegetables to satisfy up to 25% of annual domestic consumption.	Facilitate the expansion of, and new investment in, greenhouses to increase Georgia's off-season production volumes.	Conduct a domestic study tour of entrepreneurs and bankers.	To provide concrete examples of successful greenhouse operations, EPI consultants should assemble a group of potential entrepreneurs, investors, and bankers to tour the facilities of successful greenhouses. This will benefit the potential operators by seeing that this industry is capable of generating significant profits. This will also benefit the bankers because they will have a better understanding of greenhouse operations and their associated risks.	August 11	Conduct a tour of greenhouses with 5-10 investors and bankers.
		Develop a greenhouse operations information catalogue.	Currently, there is a low level of technical knowledge on commercial heated greenhouse operations. To stimulate rapid growth within this sector, EPI should develop a publicly available body of knowledge (possibly on a Web site) to educate entrepreneurs on best practices models of greenhouse management, operations, risks, financing opportunities, etc. This catalogue will also contain a database of suppliers and distributors for the greenhouse industry.	September 11	Creation of a greenhouse catalogue available to producers and investors.
		Provide technical assistance to greenhouse investors to oversee construction and provide guidance on operations.	There are currently a number of producers who want to develop greenhouse operations. To expedite this process and to determine success, EPI should provide technical assistance on engineering design, construction risks, operational models, integrated pest management, and proper usage of technology.	Ongoing throughout the life of the project.	Technical assistance provided to 5-10 greenhouse operations annually.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Facilitate expansion of existing greenhouses and new investment from Georgian entrepreneurs and international investors.	Greenhouses are the main source of production during off-season months for most vegetables produced in Georgia. Therefore, EPI should promote and facilitate new investment from both Georgian and international investors. EPI consultants should initiate a marketing campaign through media and through agricultural networks (like AgroService and the FSC network) to attract domestic investors. Likewise, EPI should first approach international investors that already have a connection to Georgia, such as Turkey, Israel, and the Netherlands. To facilitate this process, EPI must be prepared to assist in locating potential partners and facilities.	Ongoing throughout the life of the project.	Increase of 30 additional hectares of greenhouses by the end of the project, with new investment of USD 24 million.
There is an insufficient amount of cold storage space available in Georgia.	Facilitate the expansion of, and new investment in, cold storages.	Conduct a survey to estimate potential commercial demand for cold storage services.	There is currently an insufficient supply of cold storages in Georgia. In 2009, there was a total of 631,500 MT of vegetables and fruits (ex-grapes) produced in Georgia – including 387,100 MT of vegetables and 244,400 MT of fruits. As of January 2011, there was only 15,175 MT of cold storage space available (12,880 MT can be used for fruits and 12,005 MT can be used for vegetables) – only 2.4% of current production volumes. Therefore, to satisfy EPI's goals related to import substitution and exports, EPI must first facilitate dramatic increases in cold storage capacity. There is already significant demand from farmers for cold storage services that are not being met. Many farmers have the ability to produce more; however, they do not, simply because there is no financial incentive to do so. Most regions have no cold storage for fresh vegetables, and any excess produce would be liquidated at a fraction of the price at the end of the	December 11	Survey conducted and results analyzed to be used in developing a mapped network of cold storages with projected capacity estimated.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
			harvest or would simply spoil. Likewise, processors are constrained in their production because there are not enough cold storages available. Because Georgian farmers do not produce vegetables year-round, processors operate for only four months per year (June to October), which results an asset utilization rate of 33%. If cold storages were available, processors could purchase vegetables during harvest, store them until November, and process them in the off-season. Furthermore, the lack of available cold storage facilities is a barrier to the growth of many post-harvest handling facilities that collect, clean, sort, grade, and package the produce. Without cold storages, these facilities would suffer because (1) farmers that cannot store their produce will sell it in the local markets and will not use these services as much, and (2) even the produce that is collected, cleaned, sorted, graded, and packaged will have to be sold into the market immediately, which diminishes the value-added services these facilities provide, which will result in a significant decrease in customer demand. EPI consultants should conduct a survey through the assistance of the FSC network and Union AgroService to determine the total amount of current and potential demand for cold storage services. The survey should target large and commercial producers, as well as those small producers that will increase their commercial activities due to the use of high-yielding inputs and technologies.		

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Develop a targeted investment strategy for new cold storage facilities.	Investment in cold storage facilities requires a high level of initial capital investment and the payback period is, therefore, medium to long-term, depending on how well positioned the facility is near to producers or to a major market. As such, EPI consultants must identify and target potential long-term investors to invest in cold storage facilities. A key to this strategy will be to emphasize the long-term financial benefits of each investment. At the same time, EPI consultants need to also identify external and internal sources of debt capital to supplement these investors' equity investments. Simultaneously, EPI consultants must use the mapped network of cold storage facilities to prioritize the new facilities (including size and location) according to its purpose (short-term for fresh fruits and vegetables or long-term for root vegetables and several fruits) and projected business volumes and revenues. By marketing the most attractive facility locations (those with the appropriate location and a very strong market demand for storage services) for new investment first, EPI will have greater potential for success and will also realize other strategic goals (e.g., increased production) for the greatest number of producers as well.	Ongoing throughout the life of the project	Successful development of at least 5,000 MT of new or reconditioned cold storage space available

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
The available cold storage services options for the value chain are inadequate.	Expand the current offering of cold chain services.	Promote a more balanced capacity to serve the fruit and vegetable markets.	While the cold storage industry is dominated by space designed for frozen foods, there is only 15,175 MT designed to cool fruits and vegetables (about 1.5% of annual fruit and vegetable production). Because the individual storage spaces within a cold storage facility are constructed to cool specific crops, there needs to be a balance between which types of facilities are constructed with which crops will be stored. Additionally, there needs to be a proper balance between space allocated to short-term storage versus long-term storage. EPI should monitor the development of new cold storage facilities and promote the implementation of a diversified capacity to serve the various crops produced in Georgia.	Ongoing throughout the life of the project	
		Promote the use and development of cold transportation inside Georgia.	While cold storages are available only in a limited quantity, rural producers can benefit greatly through the use of refrigerated transportation, especially those involved in export activities that need to ship their produce cross-country. Currently, the most cost-efficient method of shipping produce is in refrigerated containers by railway. For rural farmers where shipping by railway is not an available option, refrigerated trucks need to be used. Unfortunately, there are no significant commercial carriers offering these services. EPI consultants should work with current shipment companies to identify the obstacles that carriers face to developing these services and provide business advisory services to develop the capacity needed to provide these services.	Ongoing throughout the life of the project	Increased use of cold transport by cold containers on Georgian Railways. Increased development of refrigerated trucking companies.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
There is an insufficient number of market actors within the post-harvest handling infrastructure – including collection, sorting/grading, packaging, and distribution.	Promote expansion and investment in new, modern post-harvest facilities.	Identify potential locations and partners for new post-harvest handling facilities.	EPI consultants already have analyzed the major production zones and have identified which markets they serve. Furthermore, EPI consultants have already conducted surveys of cold storages and other post-harvest handling facilities for vegetables. Based upon these analyses, and in coordination with the fruit strategy development, EPI consultants should identify the best possible locations and required capacities for these post-harvest facilities. Special care should be taken to make sure that there is sufficient demand for each of these services before any co-investment or business advisory services are commissioned.	Mapped network of facilities, December 2011	Design of a mapped network of post-harvest handling facilities, for which new investment must be promoted through project completion. Identification of 10-20 partners for new facilities.
		Assist collection centers to increase capacity and provide trainings on business management.	As buyers of produce, collection centers are a critical link in providing market access to small farmers. While wholesalers currently only work with large and medium farms – due to their requirements for a dependable, steady supply of vegetables – collection centers can act as an economic substitute by consolidating small farm production into single supply chains. EPI consultants should work with collection centers to identify why farmers are not utilizing their services more and provide business advisory services to make them competitive. Simultaneously, EPI should promote the use of their improved services through the FSC network.	Ongoing throughout the life of the project	Identification and implementation of solutions to make collection centers competitive. Also, a promotional campaign is established to promote their services.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Work with current packaging producer(s) to increase production and distribution nationwide.	A major concern among many consumers is whether the vegetables they purchase as Georgian are actually produced in Georgia or whether the vegetable sellers are calling imported vegetables Georgian to charge a higher price. This stems from the fact that historically Georgian produce has been more expensive during the offseason than imports. Currently, there is only one significant vegetable packaging manufacture, Georgia Plastic in Adjara. This lack of capacity makes it very difficult for producers to protect their produce during post-harvest handling processes. For example, instead of delivering tomatoes to wholesalers in single-layer boxes, farmers use large bulk banana boxes that allow the tomatoes to touch and weigh down on each other, which decreases overall shelf life and damages the middle and bottom tomatoes. When comparing the proper single-layer packaging provided by distributors of imported tomatoes, retail stores reported that they would prefer to pay extra for vegetables that are already properly sorted and packaged. Additionally, from a marketing perspective, the consumer's ability to differentiate between Georgian and imported vegetables is limited, due to the lack of packaging. For example, at Goodwill – a major grocery store chain in Georgia – there are several varieties of tomatoes for sale. The only identifiably Georgian tomatoes are those produced and packaged by Icon Group's greenhouse in Adjara. All others are simply removed from their boxes and placed on the shelves. If more Georgian producers would deliver their producer in attractive packaging, the	September 12	Development of at least one model of cheap packages for each major vegetable group.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
			consumers would be able to identify them as Georgian. Furthermore, this will automatically cause producers to begin sorting and grading their products according to quality and size for many vegetables, since the packaging will be designed for easy inspection by buyers. EPI should work with Georgia Plastic – and other cardboard/plastic manufacturers like Interplast – to develop cheap, but customizable packaging that can carry the producer's name and logo, as well as the certifications obtained for food safety practices.		
		Assist transportation companies in developing and operating regular routes from collection centers to domestic markets and export facilities.	As part of EPI's efforts to provide Georgian vegetable producers with access to leading domestic and export markets, EPI consultants must identify partners within the transportation industry to operate regular supply routes to transport Georgian produce to market. By introducing a regular consolidated supply chain throughout the regions, the cost of transportation will be lower than producers paying for transportation individually. While much of rural vegetable production is distributed locally, excess produce could be shipped and sold to wholesalers or exporters in Georgia's major markets. EPI consultants working on non-agricultural value chains have already performed an analysis of the transport and logistics market, identifying opportunities that can be leveraged and extended to provide service to agricultural and agribusiness enterprises.	Ongoing throughout the life of the project	2-3 regular supply routes are established for the 2011 harvest period with additional supply routes added each year.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Provide logistics and export execution trainings to large commercial producers.	In conjunction with increasing certifications, large producers will benefit from an increased understanding of efficient transportation and logistics processes, customs clearance processes, and exporting procedures. While there are wholesalers working in the Georgian markets, there are a limited number of qualified exporters. By training the producers to independently export, they will increase their access to international markets, which would benefit these producers, as well as any potential feeder farms they work with.	December 11	Logistics and export execution trainings are provided to 25-50 producers.
		Assist wholesale distributors to increase capacity and provide trainings on business management.	As buyers of produce, wholesale distributors are a critical link in providing market access to all farmers in Georgia. Currently, the wholesale market is still in its development stage, unable to meet high demands. While distributing produce in Georgia's major domestic markets, wholesalers' biggest challenge is not having enough capacity. Because they provide services and have low fixed asset levels, it is difficult to obtain financing for capital investment. EPI consultants should work with wholesalers and lenders to identify and facilitate lending mechanisms that will allow them to expand their capacity to meet demand. Furthermore, because wholesalers can also play the role of exporter and/or cold storage facility operators, EPI consultants should assist them in developing these capabilities and skills. Also, EPI consultants should work with wholesalers to establish forward contract mechanisms with producers and collection centers.	Ongoing throughout the life of the project	Assist 3-5 wholesalers to expand capacity and to introduce export-related services.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
The majority of Georgian producers have no information about export market buyers, prices, or requirements, which creates obstacles to exportation.	Increase market access by creating new linkages between Georgian producers and exporters with reliable international distribution channels and create an information system to distribute information on export markets.	Create linkages between domestic market actors with international wholesale vegetable distributors.	By creating direct linkages between Georgian producers, distributors, and exporters with international wholesale vegetable distributors, they will fully understand the potential profitability gains that can be realized by selling their produce to high-value markets instead of to only domestic and CIS markets, which do not pay high prices for vegetables. Furthermore, by establishing these linkages, the Georgian market actors will be more eager to satisfy the product quality and certification requirements demanded by these markets, most notably the GlobalGAP certification.	Ongoing throughout the life of the project	Providing a publicly available database of international wholesale vegetable distributors to Union AgroService to be included on their Web site, and an annual trip to "Fruit Logistica," the international fruit and vegetable conference, with 10-20 large producers.
		Conduct survey of highly demanded fresh and processed export products.	EPI consultants should regularly contact international wholesale vegetable distributors to determine what products are in high demand and what trends for future prices are developing. This information will be regularly disseminated to producers and other market actors through the AgroService's Web site and through FSC representatives. By knowing what market trends are happening in the international markets, Georgian producers and exporters can have better crop management and financial management capabilities.	Ongoing throughout the life of the project	Regular distribution of this information through Union AgroService's Web site and FSC representatives.
		Promote increased production in highly demanded export products, in high-value crops and in the most frequently imported crops.	While EPI consultants should promote general increases in productivity, there should be particular emphasis on (1) high-value crops for both domestic and export markets to increase overall farm revenues, (2) crops that are in high demand in export markets to increase price premium capture potential, and (3) crops that are most often imported to Georgia to allow Georgian producers to recapture the sales revenues that are going to international producers.	Ongoing throughout the life of the project.	Measurable decreases in imported products and increased exported vegetable values.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Create a public database of wholesalers and exporters, with contact details and terms of purchases.	By creating a public database of domestic wholesalers and exporters, small producers can access the major domestic markets instead of selling to their local bazaars at a fraction of the cost. Not only will this benefit the producers in the form of increased revenues, but it will also increase usage and demand for transportation services (and other post-harvest handling services), will increase the prevalence of the newly established product standards at the local levels, will decrease the volumes of vegetables that are wasted, and will increase the volumes of produce available for consumers, which will therefore decrease prices for consumers. While prices will decrease within production increases, overall revenues and profits will still increase, ensuring that producers still have a financial motivation to increase production volumes.	March 12	Database is created and published online.
Food safety standards are generally not practiced or enforced throughout the entire production and distribution value chain	Develop a GlobalGAP certification program that includes establishing a Certification Body in Georgia and certifies individual producers and smallholder groups.	Work with Food Safety Agency of Georgia to expand the scope of activities for "off-labeling" of pesticides for GlobalGAP-compliant producers, and develop official procedures for chemical waste disposal.	Currently, GlobalGAP requires producers to adhere to the "off-labeling" requirements of their local legislation for chemical inputs. For Georgian producers of certain vegetables (i.e., dill, parsley, other greens), the "off-labeling" regulations of the Food Safety Agency of Georgia does not offer a large enough "scope of activities" to include pesticide application for vegetables that are specifically mentioned on the product label, but for which have been confirmed as appropriate by chemical producers and distributors. Similarly, GlobalGAP regulations require producers using any chemical inputs to follow the local government's official procedure(s) for disposal of expired chemical products or empty containers and packaging. Unfortunately, the	September 11	Product labeling issue is resolved for at least two new pesticides. Procedure for disposal of expired chemical products or empty chemical packaging adopted by Georgian regulators.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
			Georgian government has not adopted an official procedure yet, so GlobalGAP-compliant producers cannot dispose of these materials and, instead, must store them until an official procedure is introduced.		
		Assist Union AgroService in becoming a GlobalGAP Certification Body.	While EPI consultants will begin working with producers eager to obtain certification immediately, EPI will also work with Union AgroService to obtain its own international certification as a GlobalGAP Certification Body. This can be done rather cheaply and in about 6-9 months. This will allow subsequent GlobalGAP applicants to work directly with a Georgian regulatory body rather than an international one. This will not only institute a sustainable model of GlobalGAP promotion, but will result in significant cost reductions for producers in obtaining certification, since the largest costs of the process are travel costs for international inspectors and auditors.	May 12	Union AgroService is established as a GlobalGAP Certification Body

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Promote GlobalGAP certifications among large producers and smallholder groups.	As production increases among small farmers, the medium and large farms will face increased competition and oversupply domestically, and will look for ways to access export markets to sell their products. To do so, these farms (and food processors as well) will need to obtain food safety certifications, such as GlobalGAP and HACCP, to satisfy export market standards. By promoting GlobalGAP among large and medium producers and HACCP among exporters, EPI will allow producers to access major export markets with high-value products and will create visible models of proper food safety and handling procedures. By promoting the Smallholder GlobalGAP designation, EPI will not only improve access to markets for numerous small producers, but will also stimulate much-needed profitability gains. The process of obtaining a certification for a single producer or a Smallholder Group requires approximately 8 months. This timeframe includes application, training, facilities preparation, creation of a Quality Management System, inspection, and final certification. The precertification inspection requires at least three prior months of operations and record keeping according to the QMS. As an extension of these quality gains, EPI should assist 5 cold storages and 3-5 processors and exporters in obtaining HACCP or ISO certification to ensure and increase product credibility in international markets.	Ongoing throughout the life of the project.	Five individual producers and two smallholder groups are certified as GlobalGAP.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
There is no standardized system for vegetable classification or grading.	Develop and implement food quality standards.	Create a system of vegetable classification and grades to standardize vegetable products with international product standards.	Currently, there is no standardized system of product categories according to varieties, classes or grades to differentiate Georgian vegetable for discriminating pricing strategies. While general market prices are available for specific vegetables, these prices do not encompass the wide range of prices that their varieties represent. Therefore, EPI should work with the FSC network and Union AgroService to create a system that can be easily implemented, monitored, and enforced to ensure compliance.	February 12	New system of product categories.
		Train producers, processors, packagers, distributors, and exporters on new product standards.	In order to determine compliance with the new standards, EPI should provide training on new product classification system to producers and post-harvest handling facilities to determine conformity and application uniformity throughout the entire value chain. This will prevent conflicting definitions of the product standards from arising, creating a bottleneck in the value chain. These standards should be institutionalized, published, and be publicly available.	February 12	Training program developed and implemented.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
There is no marketing or branding campaign to promote Georgian fruit products.	Develop a marketing campaign to promote and brand Georgian vegetables	Develop a packaging and promotional campaign for Georgian vegetable products within Georgia and export markets.	EPI's goals for this promotional campaign are to increase consumption of domestically produced fruits and vegetables, to substitute imports and to increase exports. Experts stated that Georgian consumers prefer Georgian products, but often it is not possible to differentiate between Georgian and imported fruits and vegetables, because they have no packaging to indicate their origin. Because EPI will also provide technical assistance to improve product quality, it will become increasingly more difficult to differentiate between domestic and imported produce. Therefore, EPI should work with an association, the Ministry of Agriculture or an NGO to develop a logo or symbol to identify Georgian produce as being "Made in Georgia" (possibly with additional designation by region). This program could include a requirement to have the produce tested at a laboratory to build up more trust with consumers, and will increase domestic consumption. Because EPI will be providing technical assistance on obtaining GlobalGAP certifications and creating linkages with export markets, EPI consultants should also initiate a branding campaign to promote Georgian produce among international wholesalers. This will (1) attract new buyers who have no experience with Georgian fruits and vegetables and (2) reclaim buyers who have a low opinion of Georgian produce. EPI consultants will execute this recommendation by performing the following activities: (1) Work with a current or new organization to develop a national branding strategy for fruits and vegetables; (2) License the brand and logo to Georgian producers and processors meeting the eligibility criteria and sign a	Launch in March 2012	Brand and logo established, with domestic and international campaign launched. Industry marketing program established.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
			licensing agreement; (3) Develop a consumer marketing program through media advertising (billboards, radio, print, TV); (4) Develop an industry marketing program to provide funding to industry groups on a cost-shared basis (e.g., matching funding) for industry-led marketing initiatives that are consistent with the objectives and strategies of the branding program; (5) Provide business advisory services to producers, collection centers, and packagers on how to individually brand, market, and sell their products through the campaign; (6) Develop marketing strategy to promote Georgian vegetables to export market buyers and wholesalers; and (7) Create online "information center" for producers on how to join this program to market their produce and provide documents to join at the FSCs.		
The majority of producers are unable to access credit facilities, because banks consider these projects to have excessive risk, because the banks have no reliable information about the risks related to production, and many producers have limited operating experience.	Facilitate increased access to international and domestic capital sources while educating banks on the real risks related to greenhouse farming.	Provide trainings for commercial banks in agricultural lending practices and standards.	Because the commercial banks' credit committees have a low level of understanding of general agricultural practices and management processes, EPI consultants should provide trainings in how farms work and how to implement appropriate agricultural lending practices and standards within their bank's credit approval process.	December 11	Training program developed by an international agricultural lending expert offered to all commercial banks through the Association of Banks in Georgia.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Promote new financial instruments to finance working capital expenditures for cold storage.	EPI consultants should promote widespread introduction, and availability, of customized agricultural credit products that better match the operating cash flows of agricultural producers. Currently, there are two such instruments being offered in limited scope: the installment agricultural loans offered by Credo MFI & Bank Constanta. These organizations provide credit to farmers to purchase seeds, fertilizers, irrigation systems, and other inputs for planting in the spring and do not require repayments until the fall harvest. While both of these organizations provide installment loans that are conceptually great resources for producers, each of these loans carry characteristics that limit their use. Bank Constanta's program requires producers to buy through a specific distributor and is only currently available in the Kakheti region. Credo MFI's program is available nationwide, but is very expensive. Credo's interest rates for producers begin at 30% and up, while Bank Constanta's program offers credit at interest rates of only 15% and up. Since the conceptual model has already been introduced on the Georgian market, EPI consultants should work with Georgian commercial banks to develop similar products for nationwide availability for not only large producers, but also for small and medium-sized producers.	June 12	The creation and distribution of at least one new similar agricultural credit product at affordable interest rates.
		Design and introduce a forward contract mechanism to give producers access to credit during planting.	EPI consultants should design and introduce a forward contract mechanism that can be established between producers and vegetable buyers that determine a future price for the vegetables to be purchased, a specific quantity of vegetables to be delivered, the date the	June 12	Successful introduction of the forward contract mechanism to at least 10 producers for at least two consecutive years.

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
			contract will be settled, and the date(s) of delivery. The purpose of introducing this forward contract is to give producers a sales contract that can be used as collateral for bank financing. As part of this process, EPI consultants should identify the qualifying criteria for forward contract counterparties and obtain approval from Georgian banks and National Bank of Georgia. The banks and NBG need to become owners of this project, so their participation in the forward contract's design and development is vital for them to later approve the forward contract as collateral for credit products. Therefore, EPI consultants should negotiate with the banks and NBG on what terms they would be willing and able to accept the forward contract as collateral for credit products. Not only will this product be beneficial for producers who produce large volumes with a stable, dependable track record of production, but it will also be very beneficial for offseason greenhouse producers that have to commit to monthly production volumes to pay for needed capacity increases and working capital requirements. Vegetable buyers will also benefit significantly because they are able to negotiate and determine their supply chains for future purchases several months in advance. This will give them greater operational efficiency, as well as flexibility in pricing and financial management.		

Value Chain Gap	Recommendation	Action Steps	Description	Deadline	Most Effective Parameters
		Facilitate the introduction of affordable agricultural insurance programs.	Commercial banks do not currently offer debt financing to very many farmers, except to the largest ones, due to their high level of assets that can be pledged as collateral for loans. However, banks would increase their lending if producers could obtain affordable agricultural insurance policies that would protect the lender against borrower defaults related to crop losses. EPI consultants should work with the insurance companies and commercial banks to develop a new agricultural insurance program that can be introduced by these companies and offered to producers.	Ongoing throughout the life of the project.	Introduction of a new agricultural insurance program.
		Solicit interest from international and regional development banks/funds, donor agencies, and investment funds to provide cheap credit to producers and agribusiness.	EPI consultants should work with international investors to attract new debt and/or equity capital from donor organizations, regional development funds, and investment funds to provide credit to Georgian vegetable market actors for start-up and expansion capital expenditures at international banking rates.	May 12	Identification of three new sources of debt and/or equity capital for vegetable market actors.

E. ADDITIONAL INFORMATION

RESOURCES USED

1	Caltrider Advisors	Cold Storage Industry Analysis
2	GeoStat	Gross Domestic Product of Georgia in 2010, Agriculture Census 2005, Agriculture of Georgia 2008, Agriculture of Georgia 2009
3	AgVantage SAVE Program	Final Report
4	Elizabeth Cullen Dunn	Post-Socialist Spores: Disease, Bodies, and the State in the Republic of Georgia
5	National Investment Agency of Georgia	www.investingeorgia.org
6	Ministry of Finance	www.mof.gov.ge
7	Tevzadze, Maia	Role of Food Safety Standards in "Improving Agricultural Producers' Access to Markets". IFC presentation, March 2011.
8	Ministry of Agriculture of Georgia	www.moa.gov.ge
9	Ministry of Economy & Sustainable Development	www.economy.ge
10	CNFA	FSC and MSC Survey Report, February 2011
11	Elkana	Agricultural Lending Study

INTERVIEWS CONDUCTED

1	Raibul Kilasonia	Goodwill
2	Eka Pilauri	Populi
3	Archil Abramia	Ministry of Agriculture of Georgia
4	Giorgi Gogadze	Ministry of Agriculture of Georgia
5	Tamaz Dundua	Elkana
6	Niaz Dzipshipa	Holiday Inn
7	Oren Weiman	Diplomat
8	David Tsiklauri	USAID
9	Kakha Kokhreidze	Georgian SME Association
10	David Zaalishvili	Kala Group
11	Gia Gagoshvili	GMC Group
12	Sandro Gabunia	Radisson BLU Hotel
13	Nino Shanidze	KfW
14	Levan Lebanidze	Bank Constanta
15	Alexander Ebideridze	Noblex
16	Jim McNicholas	Millennium Challenge Corporation
17	Goderdzi Goderdzishvili	CARE International
18	Dennis Zeedyk	EPI ASC Component Lead
19	Steve Wade	EPI COP
20	Zura Chekurashvili	CNFA
21	Mamuka Gachechiladze	CNFA
22	Avtandil Korakhashvili	CNFA
23	Giorgi Iakobashvili	CNFA
24	Davit Kirvalidze	CNFA
25	Lasha Dolidze	CNFA
26	Maka Noselidze	FTF
27	Giorgi Chikovani	GRDS Wholesale Distributors

28	Vano Goglidze	Gori Baby Feeding Cannery/KULA
29	Robert Revia	Garemo
30	Goga Simonishvili	Gori Farm Service Center, LLC Agro Kartli
31	Tamaz Niparishvili	Kaspi Farm Service Center, I/E Tamaz Niparishvili
32	Zviadi Abashishvili, FSC	Kareli Farm Service Center, LLC “Agroservice Kareli”
33	Vano Lazarashvili	Farmer
34	Eduard Shermardini	Farmer
35	Muradi Tielidze	Farmer
36	Maradi Martkvishvili	Farmer
37	Zakro Mazmishvili	Farmer
38	Elizbar Dzamelashvili	Farmer
39	Nikoloz Elikashvili	Farmer
40	Teimuraz Simonishvili	Farmer
41	Khvicha Tatrishvili	Farmer
42	Zura Khutsishvili	Farmer
43	Emzar Chalauri	Farmer
44	Giorgi Mchedlishvili	Farmer
45	Soso Sabanadze	Farmer

VALUE CHAIN MAPPING

1	Tamaz Niparishvili	FSC/MSC/Berries	Shida Kartli	Kaspi
2	Laurus	Bay leaf	Samegrelo Zemo Svaneti	Senaki
3	Shara-Gzamsheni Pirveli	Bay leaf	Samegrelo Zemo Svaneti	Khobi
4	LLC AromaProduct	Berries	Tbilisi	Tbilisi
5	“Ltd” "Phora"	Cold Storage	Shida Kartli	Tbilisi
6	“Ltd” "Didube Marketi"	Cold Storage	Shida Kartli	Tbilisi
7	Gudvili	Cold Storage	Shida Kartli	Tbilisi
8	“Ltd” "Agrou"	Cold Storage	Kvemo Kartli	Bolnisi
9	“Ltd”"Rustavi"	Cold Storage	Kvemo Kartli	Rustavi
10	“Ltd” "Galaqsi"	Cold Storage	Mtskheta Mtianeti	Mtsketa
11	Jsc "Delidori"	Cold Storage	Mtskheta Mtianeti	Natakhtari
12	Merab Mchedlishvili	Fruit	Shida Kartli	Gori
13	Giorgi Naochashvili	Fruit	Shida Kartli	Gori
14	Amxanagoba Kheltubani	Fruit	Shida Kartli	Gori
15	Beglar Mikeladze	Fruit	Adjara	Khelvachauri
16	Agroexport “Ltd”	Fruit	Adjara	Khelvachauri
17	Ilia Giorgadze	Fruit	Kakheti	Gurjaani
18	Shanate	Fruit	Kakheti	Sagarejo
19	Aleksandre Kitesashvili	Fruit	Kakheti	Gurjaani
20	Geoflower	Fruit	Racha Lechkhumi da Kvemo Svaneti	Tsageri
21	Rozeta Narushvili	Fruit	Samegrelo Zemo Svaneti	Zugdidi
22	Irakli Khozrevanidze	Fruit/Berries	Adjara	Khulo

23	Farkoni	Fruit/Berries	Imereti	Kutaisi
24	LLC Ango	Fruit/Berries	Adjara	Goginauri
25	Giorgi Mchedlishvili	Fruit/Cold storage	Shida Kartli	Gori
26	Gori Fruit Export Company	Fruit/Cold storage	Shida Kartli	Gori
27	I/E Nino	Fruit/Cold storage	Shida Kartli	Gori
28	I/E Irika Edilashvili	Fruit/Cold storage	Shida Kartli	Kareli
29	Association Shindisi	Fruit/Cold storage	Shida Kartli	Gori
30	I/E Ilia Giorgadze	Fruit/Cold storage	Kakheti	Gurjaani
31	Nergeta LLC	Fruit/Cold storage	Samegrelo Zemo Svaneti	Zugdidi
32	Geoconcentrate	Fruit/Processing	Shida Kartli	Gori
33	Citro	Fruit/Processing	Adjara	Batumi
34	Vagi	Fruit/Processing	Guria	Chokhatauri
35	Kampa	Fruit/Processing	Mtskheta Mtianeti	Saguramo
36	Golden Fleece	Fruit/Vegetable	Mtskheta Mtianeti	Mtskheta
37	Agroservis Kareli	FSC	Shida Kartli	Kareli
38	Nugzar Kiladze	FSC	Shida Kartli	Khashuri
39	Farmers House	FSC	Adjara	Batumi
40	Diana Kakhidze	FSC	Imereti	Tskaltubo
41	Nektari	FSC	Imereti	Chiatura
42	Agrosharmi	FSC	Imereti	Samtredia
43	Mamuka Tsikoridze	FSC	Imereti	Tskaltubo
44	Alva	FSC	Imereti	Sachkhere
45	Zurab Kartvelishvili	FSC	Imereti	Vani
46	Avtandil Guntsadze	FSC	Imereti	Zestaponi
47	Noblex	FSC	Kakheti	Kvareli
48	Giorgi Mindiashvili	FSC	Kakheti	Sagarejo
49	Bezhan Gonashvili	FSC	Kakheti	Dedoplistskaro
50	Sopkimia	FSC	Kakheti	Gurjaani
51	Tamari	FSC	Samegrelo Zemo Svaneti	Mestia
52	Gvaza	FSC	Samegrelo Zemo Svaneti	Senaki
53	Fermerta sakhli	FSC	Samegrelo Zemo Svaneti	Khobi
54	Metskhoveleobis Bazari	FSC	Samtskhe Javakheti	Akhaltsikhe
55	Sasoplo sakonsultacio samsaxuri	FSC	Samtskhe Javakheti	Aspindza
56	Agasi Ezoiani	FSC	Samtskhe Javakheti	Akhalkalaki
57	Agrotekhnocentri	FSC	Samtskhe Javakheti	Adigeni
58	Agro Kartli	FSC/MSC	Shida Kartli	Gori
59	Terjola Farmers House	FSC/MSC	Imereti	Terjola
60	Solomon Koroglishvili	FSC/MSC	Kakheti	Gurjaani

61	Ambrosi Macharashvili	FSC/MSC	Kakheti	Lagodekhi
62	Agrosfero Gurjaani	FSC/MSC	kakheti	Gurjaani
63	Kakhi Mesablishvili	FSC/MSC	Kakheti	Telavi
64	Kartlis Holding	FSC/MSC	Kvemo Kartli	Bolnisi
65	Aibolit 20 Vek	FSC/MSC	Kvemo Kartli	Marneuli
66	Gia Kordzadze	FSC/MSC	Kvemo Kartli	Gardabani
67	"Ltd" Txilis saeksporto kompania	Greenhouse	Guria	Ozurgeti
68	Valeri Mgeladze	Greenhouse	Guria	Ozurgeti
69	Givi Kvinikadze	Greenhouse	Imereti	Kutaisi
70	Revaz Chogovadze	Greenhouse	Imereti	Kutaisi
71	Agrokomi	Greenhouse	Imereti	Vani
72	Herbia	Greenhouse	Imereti	Tskaltubo
73	Mzeta	Greenhouse	Kakheti	Lagodekhi
74	Zaliko Kusiani	Greenhouse	Kakheti	Lagodekhi
75	Tamar Lazashvili	Greenhouse	Kakheti	Gurjaani
76	Laguna	Greenhouse	Kakheti	Sagaredjo
77	Zurab Didishvili	Greenhouse	Samegrelo Zemo Svaneti	Zugdidi
78	Murman Shengelia	Greenhouse	Samegrelo Zemo Svaneti	Zugdidi
79	Aikon Group	Greenhouse	Adjara	Batumi
80	Mengi LLC	Greenhouse	Samegrelo Zemo Svaneti	Senaki
81	IE Gonashvili	MSC	Kakheti	Dedoplistskaro
82	Laba +	MSC	Samtskhe Javakheti	Akhaltsikhe
83	IE Nakhutsrishvili	MSC	Shida Kartli	Kareli
84	IE Petriashvili	MSC	Kvemo Kartli	Asureti
85	DV Plus	MSC	Kvemo Kartli	Bolnisi
86	IE Tvaliashvili	MSC	Shida Kartli	Shindisi
87	Alaverdi	MSC/Vegetables	Kvemo Kartli	Marneuli
88	Zurab Lazarashvili	Nursery	Shida Kartli	Gori
89	Kvenatkoca Cooperative	Nursery	Shida Kartli	Kareli
90	Alex Kukhianidze	Nursery	Shida Kartli	Kareli
91	Shota Jgenti	Nursery	Guria	Ozurgeti
92	Kartuli Txili Sio 2000	Nuts	Guria	Ozurgeti
93	David Chaprava	Nuts	Imereti	Kutaisi
94	Nutex	Nuts	Kakheti	Kvareli
95	Dorani	Nuts	Kakheti	Akhmeta
96	Ekopeks	Nuts	Mtskheta Mtianeti	Mtskheta
97	Giorgi Bulia	Nuts	Samegrelo Zemo Svaneti	Zugdidi
98	Agro-plus	Nuts	Samegrelo Zemo Svaneti	Zugdidi

99	Westnut	Nuts	Samegrelo Zemo Svaneti	Zugdidi
100	Shengi	Nuts	Samegrelo Zemo Svaneti	Khobi
101	Sioni	Potato	Kvemo Kartli	Dmanisi
102	Nugzar Akulashvili	Potato	Kvemo Kartli	Bolnisi
103	Giorgi Devnozashvili	Potato	Kvemo Kartli	Dmanisi
104	Guram Mindiashvili	Potato	Kvemo Kartli	Bolnisi
105	Jemal Kvirikashvili	Potato	Kvemo Kartli	Marneuli
106	Gantiadi 1	Potato	Kvemo Kartli	Dmanisi
107	Gremislav Baiazov	Potato	Kvemo Kartli	Tsalka
108	Vartan Megrabiani	Potato	Kvemo Kartli	Tsalka
109	Jinisi Potato Cooperative	Potato	Kvemo Kartli	Tsalka
110	Neli Devnozashvili	Potato	Kvemo Kartli	Dmanisi
111	Aleksandre Tsikhelashvili	Potato	Kvemo Kartli	Dmanisi
112	Geolinksi	Potato	Kvemo Kartli	Tsalka
113	Teslis Mzarmoebelta Asociacia "Javakheti"	Potato	Samtskhe Javakheti	Akhalkalaki
114	Giorgi Tsalqamanidze	Potato	Samtskhe Javakheti	Akhaltsikhe
115	Martin Ezoian	Potato	Samtskhe Javakheti	Akhalkalaki
116	Giorgi Nozadze	Potato	Samtskhe Javakheti	Aspindza
117	Ioseb Tabatadze	Potato	Samtskhe Javakheti	Aspindza
118	Shalva Tabatadze	Potato	Samtskhe Javakheti	Aspindza
119	"Dovlati"	Vegetable/Cold storage	Imereti	Bagdadi
120	"Sairmis Tsklebi" JSC	Vegetable/Cold storage	Imereti	Vartsikhe
121	I/E Valodia Shindariani	Vegetable/Cold storage	Samtskhe Javakheti	Akhaltsikhe
122	Marneuli LLC	Vegetable/Processing	Kvemo Kartli	Marneuli
123	Nugbari	Vegetable/Processing	Kvemo Kartli	Marneuli
124	Bazi LLC	Vegetable/Processing	Shida Kartli	Tbilisi
125	Edena LLC	Vegetable/Processing	Imereti	Terjola
126	Agro 1959	Vegetables	Shida Kartli	Kareli
127	David Chanishvili	Vegetables	Shida Kartli	Gori
128	Elguja Giorgadze	Vegetables	Kakheti	Gurjaani
129	Isabal Sologashvili	Vegetables	Kakheti	Kvareli
130	AV-Group	Vegetables	Kakheti	Telavi
131	Gocha Machitidze	Vegetables	Kvemo Kartli	Marneuli
132	Mirian Chkhitunidze	Vegetables	Kvemo Kartli	Marneuli
133	Zakir Iusubov	Vegetables	Kvemo Kartli	Marneuli
134	Beniamin Memarnishvili	Vegetables	Kvemo Kartli	Marneuli
135	David Ebanoidze	Vegetables	Kvemo Kartli	Marneuli
136	T&T	Vegetables	Shida Kartli	kaspi
137	Geguti 2005 “Ltd”	Vegetables/Cold storage	Imereti	Tskaltubo

LIST OF FARM SERVICE CENTERS

1	“Ltd” Kartlis Holding (Zaza Avalishvili)	Kvemo Kartli	Bolnisi
2	I/E Solomon Koroglishvili	Kakheti	Gurjaani
3	I/E Ambrosi Macharashvili	Kakheti	Lagodekhi
4	“Ltd” Aibolit 20 vek (Shaik Bairamovi)	Kvemo Kartli	Marneuli
5	I/E Tamaz Niparishvili	Shida kartli	Kaspi
6	Terjola Farmers House (Ramaz Tskipurishvili)	Imereti	Terjola
7	“Ltd” Agro Kartli (Giorgi Simonishvili)	Shida Kartli	Gori
8	“Ltd” Agrosfero Gurjaani(Ioseb Dzamanashvili)	Kakheti	Gurjaani
9	“Ltd” Noblex (Aleksandre Ediberidze)	Kakheti	Kvareli
10	I/E Diana Kakhidze	Imereti	Tskaltubo
11	I/E Tamari (Nino Ratiani)	Samegrelo Zemo Svaneti	Mestia
12	Livestock Bazaar (Pavle Gelashvili)	Samtskhe-Javakheti	Akhaltsikhe
13	Nektari “Ltd”	Imereti	Chiatura
14	“Ltd” Agrosharmi	Imereti	Samtredia
15	I/E Gia Kordzadze	Kvemo Kartli	Gardabani
16	I/E Giorgi Mindiashvili	Kakheti	Sagarejo
17	I/E Mamuka Zikoridze	Imereti	Vani
18	LLC Alva	Imereti	Sachkhere
19	I/E Lasha Giorgadze	Guria	Chokhatauri
20	I/E Kakhi Mesablishvili	Kakheti	Telavi
21	LLC Farmers House	Adjara	Batumi
22	I/E Zurab Kartvelishvili	Imereti	Vani
23	LLC Gvaza	Samegrelo	Senaki
24	I/E Bezhan Gonashvili	Kakheti	Dedoplistskaro
25	“Ltd” Agroservis Kareli	Shida Kartli	Kareli
26	Farmers House LLC	Samegrelo	Khobi
27	I/E Avtandil Guntsadze	Imereti	Zestaponi
28	“LTD” Rural Advisory Service	Samtskhe-Javakheti	Aspindza
29	“Ltd” Sopkimia	Kakheti	Gurjaani
30	I/E Nato Giorgadze	Guria	Lanchkhuti
31	I/E Agasi Ezoian	Samtskhe-Javakheti	Akhalkalaki
32	LLC Agrotechnocentre	Samtskhe-Javakheti	Adigeni
33	I/E Nugzar Kiladze	Shida Kartli	Khashuri

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