



# HAZELNUT STRATEGY DEVELOPMENT

REPORT

FINAL

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USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

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DELOITTE CONSULTING LLP

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# DATA

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# I. EXECUTIVE SUMMARY

## BACKGROUND

Georgia has a wide range of microclimates suitable for the cultivation of high-value agricultural products, such as hazelnuts, that have ready markets in numerous export markets. As Georgia is the 6<sup>th</sup> largest producer of in-shell hazelnuts globally, the 5<sup>th</sup> largest exporter of in-shell hazelnuts and the 3<sup>rd</sup> largest exporter of shelled hazelnuts, EPI can work with hazelnut producers and processors to leverage these market opportunities. By introducing a strategy that includes productivity increases, product quality improvements, food safety assurances and marketing activities, EPI can establish a model of highly-productive hazelnut production and processing that satisfies the food safety requirements of high-value export markets. By doing so, EPI will directly contribute to industry growth, increased farm revenues, higher export sales and values and new job creation.

Highlights of the following strategy are represented in the diagram below:



## METHODOLOGY

The objective of this consultancy is to design and disseminate a strategy that will allow hazelnut producers to meet the competitive demands of the overseas market whereby hazelnut producers will target additional markets for export. 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 Hazelnut Value Chain Assessment that are culturally and economically relevant to hazelnut 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 hazelnut sector value chain that represent potential opportunities to increase growth and competitiveness. Furthermore, the consultant analyzed and interpreted available statistical data on production, trade flows and prices to determine systematic strengths and weaknesses.

## FINDINGS

The gaps and challenges to sustainable competitiveness are summarized below:

### Primary Production:

- Yields and product quality are lower than international figures since producers are not educated well on proper orchard and pest management or the use of modern inputs and technology;

- Potential sales prices and volumes are diminished by product losses due to improper orchard floor management and current manual harvesting methods;
- There is no official system for hazelnut classification or grading in Georgia;
- Generally, production practices are inadequate to satisfy the food safety standards required by high-value export markets;
- Producers' storage facilities are inadequate, leading to spoilage and product losses.

**Processing:**

- Processors do not share information with producers about end-user product requirements, diminishing efficiency and competitiveness within the value chain;
- There is no third-party body or regulator to test hazelnuts upon delivery to processors or to inspect processing facilities for food safety compliance;
- Few processing facilities have obtained ISO or HACCP certifications, which greatly decreases the buyers' perceived reliability of Georgian hazelnut products;
- The packaging of most processors is not hygienic and prevents cost efficiencies in transportation;
- Most processors do not test their products at third-party accredited laboratory facilities, which weakens their negotiating position dramatically in buyer disputes.

**Market Access:**

- There is no industry-based marketing or branding campaign to promote Georgian hazelnut products and create linkages between exporters and end-users;
- Most processors have no individual marketing strategy to link with high-value export markets and rely on brokers in Turkey, greatly diminishing potential profit margins.
- Market growth is impeded by illegal exports through Abkhazia, resulting in unfair competition, distorted market prices and decreased tax revenues.

**Access to Credit:**

- Producers have very limited access to affordable credit, relying almost exclusively on MFIs that charge 30-35% APR, which prevents any significant new investments in business expansion or modern technology and inputs;
- Processors are already leveraged and have insufficient working capital credit facilities established, which presupposes them to exporting through Turkish brokers that pay for finished products upfront, rather than to end-users who often require post-payment or Letter of Credit payment terms;

## RECOMMENDATIONS

To ensure both short and long-term competitiveness, EPI should implement the following core strategy recommendations. To ensure the greatest impact, EPI should select a processor (and its respective supplying producers) in both Samagrelo and Guria, the two largest hazelnut producing regions to receive technical assistance and serve as a model for the rest of the market.

**Production:**

- Develop and implement extensive training programs to producers on the use of modern orchard and pest management systems and the use of modern technologies and inputs to increase production yields;
- Facilitate access to essential mechanization to properly maintain the orchard floor and to dramatically speed up the harvesting process;
- Adopt EU hazelnut product quality standards and classification;
- 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
- Promote and facilitate new investment in developing new, modern storage facilities;

**Processing:**

- Provide technical assistance simultaneously to processors and their supplying producers to improve communications on required end-user product quality and specifications;
- Facilitate the development of a self-regulatory body for processors to inspect products and facilities; thereby providing quality assurances to end-users and to prevent delivery of low quality hazelnuts to the processors;
- Provide technical assistance to processors to obtain ISO and HACCP certifications;
- Work with packaging producer(s) to increase production and distribution nationwide
- Assist food laboratories in becoming accredited and create linkages between these laboratories with hazelnut processors.

**Market Access:**

- Develop a national marketing and branding campaign for Georgian hazelnuts:
  - Stage 1: Facilitate the development of a Hazelnut Association
  - Stage 2: Assist the Association in developing a national branding strategy (possibly with a logo licensed to producers and processors) to create new linkages with major distributors and end-users in high-value export markets;
- Provide individual consultations to processors to develop proprietary marketing and branding strategies and create linkages with export market buyers.
- Lobby the government to implement new policies and enforcement mechanisms to prevent illegal hazelnut exports through Abkhazia.

**Access to Credit:**

- 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 agriculture.

- Stage 3: Facilitate the introduction of agricultural insurance programs.
  - Stage 4: Facilitate new sources of cheap credit through international banks, funds and donor organizations.
- Provide individual consultations to processors to assist them in negotiating payment terms to receive Letters of Credit for export sales and to subsequently obtain short-term working capital loans, therefore allowing them to sell directly to end-users rather than through brokers.

## **II. APPENDICES**

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

## A. BACKGROUND

Georgia has a wide range of microclimates suitable for the cultivation of high-value agricultural products, such as hazelnuts, that have ready markets in numerous export markets. As Georgia is the 6<sup>th</sup> largest producer of in-shell hazelnuts globally, the 5<sup>th</sup> largest exporter of in-shell hazelnuts and the 3<sup>rd</sup> largest exporter of shelled hazelnuts, EPI can work with hazelnut producers and processors to leverage these market opportunities.

By introducing a strategy that includes productivity increases, product quality improvements, food safety assurances and marketing activities, EPI can establish a model of highly-productive hazelnut production and processing that satisfies the food safety requirements of high-value export markets. By doing so, EPI will directly contribute to industry growth, increased farm revenues, higher export sales and values and new job creation.

### 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 ensure the short and long-term competitiveness of Georgian hazelnuts, but will also do so in 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 enable Georgian market actors to develop their own internal capacities, resources and linkages that will survive project completion.

## B. FINDINGS

The gaps and challenges to sustainable competitiveness in high-value export markets are summarized below:

### **Primary Production:**

- Yields and product quality are lower than international figures since producers are not educated well on proper orchard and pest management or the use of modern inputs and technology.
- Potential sales prices and volumes are diminished by product losses due to improper orchard floor management and current manual harvesting methods.
- There is no official standardized system for hazelnut classification or grading.
- Generally, production practices are inadequate to satisfy the food safety standards required by high-value export markets.
- Producers' storage facilities are inadequate, leading to spoilage and product losses.

### **Processing:**

- Processors do not share information with producers about end-user product requirements, diminishing efficiency and competitiveness within the value chain;
- There is no third-party body or regulator to test hazelnuts upon delivery to processors or to inspect processing facilities for food safety compliance;
- Few processing facilities have obtained ISO or HACCP certifications, which greatly decreases the buyers' perceived reliability of Georgian hazelnut products;
- The packaging of most processors is not hygienic and prevents cost efficiencies in transportation;
- Most processors do not test their products at third-party accredited laboratory facilities, which weakens their negotiating position dramatically in buyer disputes.

### **Market Access:**

- There is no industry-based marketing or branding campaign to promote Georgian hazelnut products and create linkages between exporters and end-users.
- Most processors have no individual marketing strategy to link with high-value export markets and rely on brokers in Turkey, greatly diminishing potential profit margins.
- Market growth is impeded by illegal exports through Abkhazia, resulting in unfair competition, distorted market prices and decreased tax revenues.

### **Access to Credit:**

- Producers have very limited access to affordable credit, relying almost exclusively on MFIs that charge 30-35% APR, which prevents any significant new investments in business expansion or modern technology and inputs.
- Processors are already leveraged and have insufficient working capital credit facilities established, which presupposes them to exporting through Turkish brokers that pay for finished products upfront, rather than to end-users who often require post-payment or Letter of Credit payment terms.

## C. METHODOLOGY

The objective of this consultancy is to design and disseminate a strategy that will allow hazelnut producers to meet the competitive demands of the overseas market whereby hazelnut producers will target additional markets for export. 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 Hazelnut Value Chain Assessment that are culturally and economically relevant to hazelnut 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 hazelnut sector value chain that represent potential opportunities to increase growth and competitiveness. Furthermore, the consultant analyzed and interpreted available statistical data on production, trade flows and prices 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 in-depth, face-to-face interviews of approximately 30-60 minutes each. Respondents included:
    - Primary hazelnut producers
    - Input providers, including commercial entities that provide soil preparation services, raw materials, crop protection products and machinery;
    - Representatives of distribution channels, including wholesale distributors, institutional purchasers and retail outlets;
    - Commercial banks and other non-bank financial institutions that provide services to hazelnut market actors;
    - Representatives of IFIs 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

To ensure both short and long-term competitiveness, EPI should implement the following core strategy recommendations. To ensure the greatest impact, EPI should select a processor (and its respective supplying producers) in both Samegrelo and Guria, the two largest hazelnut producing regions to receive technical assistance and serve as a model for the rest of the market.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
<b>Production</b>	Yields and product quality are lower than international figures because producers are not educated well on proper orchard and pest management or the use of modern inputs and technology.	Develop and implement extensive training programs to producers on the use of modern orchard and pest management systems and the use of modern technologies and inputs to increase production yields.	Identify partners to develop an ongoing production training program to address knowledge gaps related to: leaf and soil analysis, land space usage, fertilization, modern technology (i.e., drip irrigation), drainage techniques, pruning methods and orchard floor management.	Since it takes up to 6 years for hazelnut trees to produce fruit, the fastest way to increase economic yield is to increase production yields and sales volumes per plant. Because most hazelnut producers are not using any kind of Integrated Pest Management (IPM) system, proper fertilization techniques, modern irrigation and drainage systems, the health of the tree and the nuts are poor compared to what they could be if these systems were implemented as a standard method. Likewise, producers have limited understanding of appropriate pruning techniques, which decreases the yield. Furthermore, producers are not well educated in proper orchard floor management techniques that eliminate competition for water resources from plants and weeds between the trees and that prevent production losses.	2-3 new organizations committed to providing regular training programs for producers.
			Identify partners to develop an ongoing harvest and post-harvest training program to address knowledge gaps related to: harvesting schedules and methods, technology utilization, product quality grading and sorting, pricing strategies and storage options.	Producers often have different varieties that have different harvesting periods. By developing a comprehensive harvesting schedule, not only can producers prevent loss from green drops, rodents and theft, but they can also better manage sales to processors. Additionally, the use of technology during harvest will be more efficient and contribute to higher profits. Furthermore, by sorting and grading the nuts prior to delivery, producers can develop better price and sales estimates. While the high-quality nuts are delivered to the processors, lower-quality nuts can be used for other purposes, such as for hazelnut butter, paste and meal. For those producers who prefer to wait several months for higher prices, EPI should provide trainings on appropriate storage methods to prevent excessive moisture accumulation, which contributes to rot, disease and worms.	2-3 new organizations committed to providing regular training programs for producers.
			Encourage FSCs and input distributors to develop more "demonstration plots".	While many producers are intrigued by modern orchard management techniques and related technologies, they are reluctant to invest until they have seen how they contribute to increased yields and sales revenues. Therefore, EPI should encourage and assist FSCs and other input distributors in establishing more demonstration plots for hazelnuts.	An increase of two new demonstration plots per year over the life of the project.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
	Potential sales prices and volumes are diminished by product losses due to improper orchard floor management and current manual harvesting methods.	Facilitate access to essential mechanization to properly maintain the orchard floor and to dramatically speed up the harvesting process.	Assist large producers in selecting and purchasing appropriate flail mowers, tree shakers and pickup machines.	Because international markets pay premiums for early production, increasing the speed of harvesting and delivery to processors will result in higher revenues for the producers. Therefore, it is important for large producers to replace time-intensive manual harvesting methods with much faster machine-based harvesting.	An increase of five producers using harvesting machinery per year over the life of the project.
			Assist FSCs and processors to purchase flail mowers, tree shakers and/or pickup machines to rent out (with operator) to hazelnut producers.	Because processors have stated that they would be interested in purchasing flail mowers and harvest machinery to offer these new services to producers who cannot purchase these on their own, EPI should assist them in developing a business strategy that will be profitable and sustainable. FSCs have offered similar support services, such as pesticide spraying for fruit orchards, so they could also be interested.	An increase of 3 programs offered by processors or FSCs.
	There is no official standardized system for hazelnut classification or grading.	Adopt EU hazelnut product quality standards and classification.	Adopt a system of hazelnut classification and grades to standardize hazelnut products based on EU product standards.	Currently, there is no standardized system of product categories according to varieties, classes or grades to differentiate Georgian hazelnuts for discriminating pricing strategies. Therefore, EPI should work with the FSC network and Union AgroService to adopt the EU classification system.	New system of product categories.
			Train producers, processors, packagers, distributors and exporters on new product standards.	In order to ensure compliance with the new standards, EPI should provide training on new product classification system to producers and post-harvest handling facilities to guarantee 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.	Training program developed and implemented.
	Generally, production practices are inadequate to satisfy the food safety standards required by high-value export markets.	Develop a GlobalGAP certification program that includes establishing a Certification Body in Georgia and certifies individual producers and smallholder groups.	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.	Union AgroService is established as a GlobalGAP Certification Body

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
			Promote GlobalGAP certifications among large producers and smallholder groups.	<p>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 will need to obtain food safety certifications, such as GlobalGAP, to satisfy export market standards. By promoting GlobalGAP among large and medium producers, EPI will enable producers to access major export markets with high-value products and create visible models of proper safety and handling procedures.</p> <p>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 8-9 months. This timeframe includes application, training, facilities preparation, creation of a QMS, inspection and final certification.</p> <p>The pre-certification inspection requires at least three prior months of operations and record keeping according to the QMS.</p>	Five individual producers and two Smallholder Groups are certified as GlobalGAP.
	Producers' storage facilities are inadequate, leading to spoilage and product losses.	Promote and facilitate new investment in developing new, modern storage facilities in hazelnut production zones.	Develop a targeted investment strategy for new commercial hazelnut storage facilities.	<p>Because producers use inadequate storages, the quality of the nuts cannot be maintained and are at increased risk of becoming too moist, which is an ideal breeding ground for rotting, diseases and insect infections. The high rates of loss represent significant lost revenues because these nuts cannot be sold to processors.</p> <p>Therefore, this represents an opportunity for investors to target large production zones for producers or speculators who would like to postpone sales by storing the nuts.</p>	New investment in 3 new storage facilities.
<b>Processing</b>	There is an absence of information sharing between processors with supplying producers about end-user product requirements, which diminishes efficiency levels in production and processing.	Promote long-term producer-processor relationships by providing targeted technical assistance to both simultaneously on how to modify the product quality and specifications to satisfy end-user requirements.	Provide technical assistance to processors and their supplying producers to create better information sharing practices and to streamline and improve market sales, deliveries and product qualities.	By increasing communication between processors and their supply producers, end-user requirements can be better communicated to producers. By promoting long-term relationships between processors and producers, EPI can directly increase market efficiency through improved production and guaranteed distribution/supply channels for products/raw materials. This will also result in improved hazelnut quality, grown to satisfy required end-user specifications.	Technical assistance provided to 4 processors per year.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
	There is no third-party body or regulator to test hazelnuts upon delivery to processors or to inspect processing facilities for food safety compliance.	Facilitate the development of a self-regulatory body for processors to inspect products and facilities, thereby providing quality assurances to end-users and to prevent delivery of low quality hazelnuts to the processors.	Provide technical assistance to processors to develop a industry-based self-regulatory inspection body.	EPI should facilitate the development of an independent self-regulatory body that will ensure compliance with hazelnut quality standards and food safety standards within the various processing facility.  By publicizing the existence of this body, processors increase their credibility on the world market and will be able to attract buyers with stricter requirements while increasing volumes with current buyers.	New self-regulatory body is established.
	Few processing facilities have obtained ISO or HACCP certifications, which greatly decreases the buyers' perceived reliability of Georgian hazelnut products.	Provide technical assistance to processors to obtain ISO and HACCP certifications.	Provide technical assistance to processors to obtain ISO and HACCP certifications.	By improving facilities infrastructure and procedures, processors will significantly improve the quality and credibility of their hazelnut products, leading to increased sales and higher sales prices.	ISO or HACCP certifications obtained by 3 processors per year.
	The packaging of most processors is not hygienic and prevents cost efficiencies in transportation.	Facilitate new resources for affordable high-quality packaging that conforms to international food safety standards.	Facilitate increased usage of appropriate packaging among processors.	EPI should facilitate the increased usage of cardboard boxes, lined with plastic bags, as the standard form of packaging, replacing the common jute bag. EPI consultants can do this in coordination with the development of individual marketing campaigns for processors.	5 new processors per year using appropriate packaging.
	Most processors do not test their products at third-party accredited laboratory facilities, which weakens their negotiating position dramatically in buyer disputes.	Assist food laboratories in becoming accredited and create linkages between these laboratories with hazelnut processors.	Provide technical assistance to food laboratories to obtain international accreditation while also creating market linkages with processors to ensure sustainable revenues to support new investment.	There are no food laboratories in Georgia that have the proper elements to test agricultural products for food safety issues and have ISO 17025, which is required for a food laboratories tests to be accepted internationally.  Therefore, EPI should work with public and private food laboratories to help them obtain the elements necessary to conduct relevant food testing and to obtain the ISO 17025 certification.	Fully functional food laboratory set up to support all GlobalGAP certified producers.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
<b>Market Access</b>	There is no industry-based marketing or branding campaign to promote Georgian hazelnut products and create linkages between exporters and end-users.	Develop a national marketing and branding campaign for Georgian hazelnuts:	Develop a packaging and promotional campaign for Georgian hazelnuts products within Georgia and export markets.	<p>EPI's goals for this promotional campaign are to increase hazelnut exports. Because EPI will be providing technical assistance on obtaining the GlobalGAP certification and creating linkages with export markets, EPI consultants should assist processors and large producers in developing a branding campaign to promote Georgian hazelnut products among international wholesalers and end-users. This will (1) attract new buyers who have no experience with Georgian hazelnuts and (2) reclaim buyers who have a low opinion of Georgian hazelnuts.</p> <p>EPI consultants will execute this recommendation by performing the following activities:</p> <p>(1) Facilitate the development of a new Hazelnut Association;  (2) Assist the Association in developing a national branding strategy (possibly with a logo licensed to producers and processors) to create new linkages between its members and major distributors and end-users in high-value export markets;  (3) 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;  (4) Create online "information center" for producers on how to join this program to market their hazelnuts and provide documents to join at the FSCs.</p>	New Hazelnut Association established and international marketing campaign launched.
	Most processors have no individual marketing strategy to link with high-value export markets and rely on brokers in Turkey, greatly diminishing potential profit margins.	Provide individual consultations to processors to develop proprietary marketing and branding strategies and create linkages with export market buyers.	Provide business advisory services to producers, and processors on how to individually brand, market and sell their products independently and through the Hazelnut Association's campaign.	With the introduction of the Association, acting to promote Georgian hazelnuts, processors and large producers must be ready with a corporate marketing strategy that will leverage the efforts of the Association while also identifying opportunities that lie outside the scope of the Association's activities.	Technical assistance provided to 4 processors per year.
	Market growth is impeded by illegal exports through Abkhazia, resulting in unfair competition, distorted market prices and decreased tax revenues.	Lobby the government to implement new policies and enforcement mechanisms to prevent illegal hazelnut exports through Abkhazia.	Lobby the government to implement new policies and enforcement mechanisms to prevent illegal hazelnut exports through Abkhazia.	Processors have reported that illegal exports through Abkhazia are as large as 20% of all production. Because private and public sector motivations are aligned to prevent illegal hazelnut exports that distort competition and circumvent tax payments, EPI should lobby the government and cooperate with its agencies and ministries to identify solutions to this illegal exporting.	Commitment by the Georgian government to develop mechanisms to halt illegal exports.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
<b>Access to Capital</b>	Producers have very limited access to affordable credit, relying almost exclusively on MFIs that charge 30-35% APR, preventing new investments in business expansion or modern technology and inputs.	Promote and facilitate increased access to international and domestic capital sources.	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.	Training program developed by an international agricultural lending expert offered to all commercial banks through the Association of Banks in Georgia.
			Promote new financial instruments to finance working capital expenditures during product 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 have limited practical applications.  However, 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.	The creation and distribution of at least one new similar agricultural credit product at affordable interest rates.

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
			<p>Design and introduce a forward contract mechanism to give producers access to credit during the growing season.</p>	<p>EPI consultants should design and introduce a forward contract mechanism that can be established between producers and processors that guarantees a future price for the nuts to be purchased, a specific quantity of nuts to be delivered, the date the 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.</p> <p>As part of this process, EPI consultants should identify the qualifying criteria for forward contract counterparties and obtain approval from Georgian banks and NBG. This will also be beneficial for processors, who will 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.</p>	<p>Introduction of the forward contract mechanism to at least 10 producers for at least two consecutive years.</p>
			<p>Facilitate the introduction of affordable agricultural insurance programs.</p>	<p>Commercial banks do not currently offer debt financing to very many producers 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.</p> <p>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.</p>	<p>Introduction of a new agricultural insurance program.</p>
			<p>Solicit interest from international and regional development banks/funds, donor agencies and investment funds to provide cheap credit to producers and agribusiness.</p>	<p>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 hazelnut market actors for start-up and expansion capital expenditures.</p>	<p>Identification of three new sources of debt and/or equity capital for hazelnut market actors.</p>

Area	Value Chain Gap	Recommendation	Action Steps	Description	Success Parameters
	<p>Processors are already leveraged and have insufficient working capital credit facilities established, which presupposes them to exporting through Turkish brokers that pay for finished products upfront, rather than to end-users who often require post-payment or Letter of Credit payment terms.</p>	<p>Provide individual consultations to processors to assist them in negotiating payment terms to receive Letters of Credit for export sales and to subsequently obtain short-term working capital loans, therefore allowing them to sell directly to end-users rather than through brokers.</p>	<p>Assist processors in negotiating terms of payment for export sales and to secure short-term working capital loans using Letters of Credit as collateral.</p>	<p>Many processors are unable to accept Letter of Credit as payment, which is the usual form of payment from end-users, because they do not have enough working capital to ship more than 2-3 containers at a time. Since the larger processors ship 4-6 containers per month, this presupposes them to work with Turkish brokers who pay upfront (at discounted rates).</p> <p>Although several Georgian commercial banks offer short-term working capital loans (as Purchase Order Financing), these are not standard products, are not advertised and are available only to select clients. EPI should work with the processors to not only negotiate terms of payment from end-users to receive Letters of Credit and to negotiate with the banks to obtain these loans. By doing so, processors will be free to sell larger volumes to end-users rather than through brokers.</p>	<p>Negotiation of financing using Letters of Credit to obtain short-term working capital loans for 3 new processors per year.</p>

## E. ADDITIONAL INFORMATION

### RESOURCES USED

1	GeoStat	Gross Domestic Product of Georgia in 2010, Agriculture Census 2005, Agriculture of Georgia 2008, Agriculture of Georgia 2009
2	AgVantage SAVE Program	Final Reports and Special Hazelnut Market Reports
3	National Investment Agency of Georgia	<a href="http://www.investinggeorgia.org">www.investinggeorgia.org</a>
4	Ministry of Finance	<a href="http://www.mof.gov.ge">www.mof.gov.ge</a>
5	Tevzadze, Maia	Role of Food Safety Standards in Improving Agricultural Producers' Access to Markets". IFC presentation, March 2011.
6	Ministry of Agriculture of Georgia	<a href="http://www.moa.gov.ge">www.moa.gov.ge</a>
7	Ministry of Economy & Sustainable Development	<a href="http://www.economy.ge">www.economy.ge</a>
8	CNFA	FSC and MSC Survey Report, February 2011
9	Elkana	Agricultural Lending Study
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### INTERVIEWS CONDUCTED

1	Archil Abramia	Ministry of Agriculture of Georgia
2	Giorgi Gogadze	Ministry of Agriculture of Georgia
3	Tamaz Dundua	Elkana
4	David Tsiklauri	USAID
5	Kakha Kokhreidze	Georgian SME Association
6	Nino Shanidze	KfW
7	Levan Lebanidze	Bank Constanta
8	Alexander Ebideridze	Noblex
9	Jim McNicholas	Millennium Challenge Corporation
10	Goderdzi Goderdzishvili	CARE International
11	Dennis Zeedyk	EPI ASC Component Lead
12	Steve Wade	EPI COP
13	Zura Chekurashvili	CNFA
14	Mamuka Gachechiladze	CNFA
15	Avtandil Korakhashvili	CNFA
16	Giorgi Iakobashvili	CNFA
17	Davit Kirvalidze	CNFA
18	Lasha Dolidze	CNFA
19	Maka Noselidze	FTF
20	Giorgi Chikovani	GRDS Wholesale Distributors
21	Goga Simonishvili	Gori Farm Service Center, LLC Agro Kartli
22	Tamaz Niparishvili	Kaspi Farm Service Center, I/E Tamaz Niparishvili
23	Zviadi Abashishvili, FSC	Kareli Farm Service Center, LLC "Agroservice Kareli"
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