



AZERBAIJAN

PARTICIPATORY AGRICULTURAL PROJECT IN AZERBAIJAN

USAID Agreement 112-A-00-00-00004-00

FINAL REPORT

March 29, 2000 – June 28, 2003

**Submitted to
USAID/Baku**

**Submitted by
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PROJECT OVERVIEW

Dates of project: March 29, 2000 – June 28, 2003
(including 3-month no-cost extension)

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The Participatory Agricultural Project in Azerbaijan (PAPA) was a three-year project funded by a \$2.4 million grant from the U.S. Agency for International Development. The objective of the project was to develop Azerbaijan's private agricultural sector by increasing the profitability of participating businesses, developing support organizations for agricultural businesses, expanding in-country added-value processing, and increasing access to domestic and regional market information in order to expand trade links between rural and urban areas, as well as between Azerbaijan and foreign countries. A combination of long- and short-term technical assistance was provided by U.S. expatriates, Azerbaijani nationals and regional professionals to accomplish the program's objectives. The implementer of the project was Land O'Lakes, Inc.

The Land O'Lakes (LOL) program directly contributed to the following USAID Strategic Objective and accompanying Intermediate Results:

Strategic Objective 1.3: Accelerated Development and Growth of Private SMEs in Targeted Areas:

- Intermediate Result 1.3.3: Increased Market Responsiveness of Enterprises (including sub-results: IR 1.3.3.1 Improved Enterprise Business, Technical and Marketing Skills, IR 1.3.3.2 Increased Adoption of Grades and Standards, and IR 1.3.3.3 Improved Access to Market Information);
- Intermediate Result 1.3.4: Private Membership Organizations Organized.

While not primary objectives of PAPA activities, the following IR's were also addressed by some program activities:

- Intermediate Result 1.3.1: Increased Access to Production Inputs;
- Intermediate Result 1.3.2: Increased Access to Credit;
- Intermediate Result: 1.3.5: Improved Policy/Legal/Regulatory Environment and Physical Infrastructure Supporting SMEs.

EXECUTIVE SUMMARY

Over the past three and one-quarter years, the Participatory Agricultural Project in Azerbaijan (PAPA) has supported the development of the country's dairy, livestock and hazelnut industries through a variety of interventions. By focusing on these agricultural subsectors, which have significant competitive advantages in Azerbaijan, Land O'Lakes has maximized the chances for long-term sustainability of its activities. Group training and individual technical assistance in production, processing, and marketing, the provision of market information, and the creation and development of three national and three regional agribusiness industry associations have helped assist these industries to achieve major increases in size, scope, and profitability. These achievements, in turn, have led to increased incomes and employment. The project's performance against performance targets are noted below.

Performance Target 1: Dairy producers will increase production by 10% by end of project.

This target was significantly exceeded, as the project's dairy producer clients increased production by 34.3%, 19.6% of which was reflected in increased milk production and 14.7% in increased meat production. On an association level, the increases were 6.9% for the Guba Livestock Association, 59.2% for the Ismailly Livestock Association, and 63% for the Zagatala Livestock Association.

Performance Target 2a: Value-added dairies will increase output by 10% by end of project.

This target was exceeded fivefold, as the actual increase in output by participating dairy processors was 55%. With assistance from the project, existing dairies have expanded rapidly in terms of volume of production of existing products, developed numerous new products, and have increased the use of raw milk in their operations versus imported dry milk (which is not

produced domestically). In addition, the project helped a number of entrepreneurs design and configure new dairy facilities and renovate and restart privatized enterprises that had not been in operation for several years.

Performance Target 2b: Hazelnut processors will increase output by 10% by end of project.

This target was not met, as hazelnut processing throughput increased only by 7.9% over the life of the project. One of the major obstacles to increasing processing volumes in Azerbaijan is the great overcapacity of processing versus current hazelnut production levels. Although the project worked closely with growers through the national association it helped to create, and this work resulted in the planting of over 14,000 new trees, hazelnut production from these newly planted trees takes four to five years to reach normal levels. Therefore, when these trees come “on line” over the next few years, it is expected that hazelnut production and processing throughput will increase more dramatically.

Performance Target 3: 300 new jobs created by the end of project

The target was met, as project clients reported an increase in employees of 2,042 overall, including 1,023 women and 1,019 men. This figure includes increased employment at processing plants that have expanded production, new jobs created by newly created processing enterprises, increases in seasonal workers hired to gather increasing harvests, and the creation of salaried jobs within the Azerbaijan Dairy Processors Association.

Performance Target 4: Profit margins of target firms will increase 20% by end of project

Although this target proved hard to measure, it is believed that this target was not met and that margins increased only by about 5% over the course of the project. Increases in profitability cannot be precisely determined due to problems in collecting realistic production cost data, especially information on variable expenses. However, measured indirectly through return on investment, the increase of profitability in the industries the project addressed is at the level of 5% over the project’s duration.

Performance Target 5: Three regional and two national agribusiness associations will be created

This target was met. In addition to the five associations that the project had initially planned to establish (Azerbaijan Dairy Processors Association, Azerbaijan Hazelnut Processors Association, Guba Regional Livestock Association, Ismailly Livestock Association, and Zagatala Livestock Association), a national Azerbaijan Hazelnut Growers Association was founded as well. The Hazelnut Growers Association (HGA) proved to be an important resource for the hazelnut industry since the lack of sufficient hazelnuts to satisfy processing capacity was an obstacle that needed to be addressed. The HGA, together with the Azerbaijan Hazelnut Processors Association, have been working to help facilitate increased production.

Performance Target 6: Three industry-led production and processing standards initiatives adopted by end of project

This target was met, as five (5) industry-led production and processing standards were adopted. Several leading dairy processors are currently undergoing ISO 2000/2001 management standard certification as a result of PAPA training in this area. Leading hazelnut processors have adopted two industry standards: HACCP processing quality assurance and purchasing quality standardization. For their part, the PAPA-supported regional livestock associations have standardized cheese making through the adoption of pasteurization in their processing as well as through regional branding of their cheese in Ismailly and Guba.

Performance Target 7: A market information system will be established and continue operation beyond the life of the project

This target has been met. The monthly Agricultural Commodity Market Report, which Land O'Lakes initiated and coordinated with three local and four international NGOs, will continue to be published by these partners and distributed nationwide. In addition, the *Azeri Milkman*, a publication focusing on the dairy industry and produced by PAPA and the Azerbaijan Dairy Processors Association (ADPA), is expected to continue to be published by the association following the end of the project.

Performance Target 8: Two associations continue industry promotion as a member service beyond life of project

It is expected that this target will be met. The Azerbaijan Dairy Processors Association, which has been self-financing its office and several paid staff members for the past six months, plans to continue its Milk Promotion and Educational Campaign in Azerbaijan. In addition, the Azerbaijan Hazelnut Processors Association will continue to promote Azeri hazelnuts – and particularly those produced by its members – through its website and through participation in international industry exhibitions, such as the fall 2003 trade show in Germany, Anuga.

Performance Target 9: Sales of target products will increase by 15% by end of project

This target has been met. Sales of the project's target products – dairy products and hazelnuts – have increased by over 30%. Dairy product sales have increased by 55%, while hazelnut sales have gone up by 9%.

Performance Target 10: At least 10 food industry firms will establish new markets by the end of project

This target has been met. At least fourteen food industry clients have established new markets, representing the introduction of at least 198 products to new markets. These figures include hazelnut processors exporting for the first time and expanding exports to new markets, such as China and Israel, regional dairy processors expanding their sales to Baku and other parts of Azerbaijan, commercial dairy processors expanding sales to neighboring countries, Baku-based

dairy processors expanding their sales to new parts of Azerbaijan, such as Ganja, and the markets captured by clients that have been assisted in establishing new businesses and products.

The project performance targets and achievements are summarized on the next page.

PROJECT PERFORMANCE TARGETS AND ACHIEVEMENTS

Performance Indicator	Performance Target	Actual Achieved by End of Project	Target Achieved ?	Target Versus Actual Variance
1) Dairy Producers Increase Production	10%	34.3%	✓	+24.3%
2a) Value-Added Dairies Increase Output	10%	55%	✓	+45%
2b) Hazelnut Processors Increase Output	10%	7.9%	–	-2.1%
3) New Jobs Created	300	2042 (1023 women, 1019 men)	✓	+1742
4) Profit margins of target firms will increase 20% by end of project	20%	5%	–	-15%
5) New Associations Created	3 Local 2 National	3 Local 3 National	✓	0
6) New Industry-led Production and Processing Standards Initiatives Adopted	3	5	✓	+1
7) Market Information System will be Established and Continue Operation Beyond the Life of the Project	Market Information System Established	Market Information System Established	✓	0
8) Associations Continue Industry Promotion as a Member Service Beyond Life of Project	2	2	✓	0
9) Increase in Sales of Target Products by End of Project	15%	30% (Dairy: 55%, Hazelnuts: 9%)	✓	+15%
10) Number of Food Industry Firms that Establish New Markets by the End of Project	10	14 (including 198 products entering new markets)	✓	+4

PROJECT ACTIVITIES

I. Association Development

The major association development impacts achieved by the project over the past three and one quarter years include the establishment of three national and three regional industry associations and significant strides toward sustainability of five of the groups. The associations include:

1. Azerbaijan Hazelnut Processors Association
2. Azerbaijan Hazelnut Growers Association
3. Azerbaijan Dairy Processors Association
4. Zagatala Livestock Association
5. Guba Livestock Association
6. Ismailly Livestock Association

The project's association-building activities started by introducing small groups of farmers and processors to the principles of successful association development. A series of workshops, conducted for beneficiaries by both overseas consultants and in-country staff, was held on what an association can do for each members, as well as for the industry as a whole. Next, working groups were formed of potential association members for each prospective association. These working groups helped to develop bylaws for the future associations, identify, educate and recruit potential association members, and to organize formal foundation meetings for each association. These foundation meetings entailed voting on the proposed bylaws and electing executive and auditing committees for the association. The project worked closely with the management of each association to prepare and submit registration documents to the Ministry of Justice. Unfortunately, some two years after some of the first associations submitted their requests, the Ministry of Justice has still not responded positively or negatively to a single application, despite the legislation requiring a response within 15 days. Although numerous efforts were made to tackle this issue, in coordination with the U.S. Embassy, USAID, other NGOs and the associations themselves, there was no progress achieved on this front. The Ministry of Justice simply ignores inquiries made to clarify the registration status of the associations. Without undergoing registration, the associations cannot open bank accounts or legally receive dues from members, and have no legal basis on which to defend themselves.

Despite the absence of legal registration, however, the associations have accomplished a great deal. Most of the groups have attracted many new members, provided valuable technical assistance to them, engaged in promotional and marketing efforts for their own industries, lobbied the national or local governments in order to support industry development, and have taken great strides toward sustainability through membership dues, grant writing and the provision of for-fee services. Each association's activities are outlined below.

a. Azerbaijan Hazelnut Processors Association

The Azerbaijan Hazelnut Processors Association is an organization of leading hazelnut processors. It was formed with support from Land O'Lakes in July 2001 by 12 processors from the northern regions of Azerbaijan. As much as 30,000 metric tons of hazelnuts are processed by

Association members each year - over half of all hazelnut production in Azerbaijan. Association members currently export their hazelnut products to Germany, Turkey, Russia, Italy, Poland, Czech Republic, Georgia, the Baltic Republics and China. A five-member Executive Committee governs the Azerbaijan Hazelnut Processors Association and is responsible for all administrative duties and financial matters.

Since its inception, Land O'Lakes together with the management of the Association has offered its processor members a comprehensive set of programs and services, all designed to address every component of the hazelnut processing industry, from technical issues to media relations, to marketing assistance, to quality improvement consultations. Some selected examples of the accomplishments are outlined below. The association in collaboration with Land O'Lakes has:

- **Conducted Trainings in Association Management and Lobbying.** Practical training in association management and lobbying were delivered to the leadership throughout the life of the project and resulted in the adoption of more efficient management techniques by Executive Committee members.
- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the association by both overseas volunteers/consultants and in-country staff. The training resulted in a successful grant application for a \$500 website development grant from IREX/IATA (Internet Access and Training Program). In addition, the association has prepared a grant proposal to German Technical Support for Private Initiatives (GTZ) to assist participation of the Azerbaijan Hazelnut Processors Association in the Food Ingredients and Food Technology Exhibition Anuga 2003, which will be held in Cologne, Germany, from October 11-15, 2003.
- **Completed Implementation of a Financial Management System,** which allowed the association to keep financial records. The reports are available for the membership at any time and allow the Executive Committee to effectively track distribution of funds.
- **Collected 8,260,000 Azeri Manats in Membership Dues** and has set the foundation for self-sustainability of the organization. All fourteen members of the Association have paid their membership dues in full and also contributed to the special seminar fund established by the General Assembly. The above funds are currently used to finance the maintenance of an association office that has been set up in Zagatala region.
- **Established Collaboration with Other Organizations.** The Azerbaijan Hazelnut Processors Association is a member of the National NGO Forum and National Confederation of Entrepreneurs. The association also collaborates with German Technical Support for Private Initiatives (GTZ)

b. The Ismailly Livestock Association

The Ismailly Livestock Association, which represents livestock farmers and processors in the Ismailly region, was founded with the support of Land O'Lakes on February 16, 2002. The organization is structured as an NGO and headed by a President, Vice-President, Executive Committee (5 members) and Auditing Committee (3 members). The Association has 52 members who own 1,036 cattle and 10,312 sheep and goats in total.

Since its inception, the association together with Land O'Lakes has offered its members a comprehensive set of programs and services, all designed to address every component of the livestock industry. The association has:

- **Provided 15 Seminars and Individual Consultations** on improvement of livestock farming practices to its membership.
- **Conducted Training on Association Management and Lobbying.** Practical training in association management and lobbying was delivered to the leadership throughout the project's duration and resulted in the adoption of more efficient management techniques by Executive Committee members.
- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the association by both overseas volunteers/consultants and in-country staff. The training resulted in the drafting and submission of a successful grant application to the U.S. Embassy Small Grants Commission Program. The project, named "Business Development and Technical Assistance for Small Enterprises in Rural Areas of Ismailly," was granted \$4,900.
- **Assisted in Market Information Collection,** including the development and regular publication of the *Agricultural Commodity Market Report*, a monthly publication devoted to the agricultural industry.
- **Completed Implementation of a Financial Management System,** which allowed the Association to keep financial records. The reports are available for the membership at any time and allow the Executive Committee to effectively track distribution of funds.
- **Collected 880,000 Azeri Manats in Membership Dues** and has set the foundation for self-sustainability of the organization. The above funds are currently used to finance the maintenance of the association office that has been set up in Ismailly region.
- **Established Collaboration with Other Organizations.** The Azerbaijan Hazelnut Processors Association is a member of the National NGO Forum and National Confederation of Entrepreneurs. The association also collaborates with Ismailly Agro Business Center, Eurasia Foundation and the U.S. Small Grants Commission Program.

c. Guba Livestock Association

The Guba Livestock Association, which represents livestock farmers and processors in the Guba region, was founded with the support of Land O'Lakes on September 21, 2001. The organization is structured as an NGO and is headed by a President, Vice-President, Executive Committee (5 members) and Auditing Committee (3 members). The association has 50 members who own 1,155 cattle and 7,056 sheep and goats in total. Since its inception, the association together with Land O'Lakes has offered its members various services, all designed to address components of the livestock industry. The association has:

- **Provided 13 Seminars and Individual Consultations** on the improvement of livestock farming practices to its membership.
- **Conducted Training on Association Management and Lobbying.** Practical training in association management and lobbying were delivered to the leadership through out the project

life and resulted in the adoption of more efficient management techniques by Executive Committee members.

- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the Association by both overseas volunteers/consultants and Land O'Lakes in-country staff.
- **Completed Implementation of a Financial Management System,** which allowed the Association to keep records of financial statements of the entity. The reports are available for the membership at any time and allow the Executive Committee to effectively track distribution of the funds.
- **Collected 1,755,000 Azeri Manats in Membership Dues** and has set the foundation for self-sustainability of the organization. The above funds are currently used to finance the maintenance of an association office that has been set up in Guba region.
- **Established Collaboration with Other Organizations.** The Executive Committee developed a relationship with a number of international and local NGOs, including IREX, IFDC, ACDI/VOCA, Guba Consulting Company, Guba Agricultural Show Association, Ismailly Livestock Association, Regional Veterinary Department and the EU Food Security Program. As a result, six members of the Association participated in a study tour to the United States through IREX's Community Connections Program. The trip, which took place in February 2003, allowed the members to observe agricultural techniques and technologies available in the U.S. and to develop potential working relationships with U.S. farmers. The Guba Livestock Association is a member of the National NGO Forum and National Confederation of Entrepreneurs.
- **Assisted in Market Information Collection** and the publishing of the monthly Agricultural Commodity Market Report. In addition, GLA produces a monthly newsletter that is distributed to all members and addresses association activities and upcoming events.

d. Azerbaijan Hazelnut Growers Association

The Azerbaijan Hazelnut Growers Association was formed with support from Land O'Lakes on October 11, 2001, by 30 founding members from the six main hazelnut-growing regions of Azerbaijan (Gabala, Oguz, Sheki, Gakh, Balakan and Zagatala). There are currently over 1,150 members of this association, with membership increasing as hazelnut growers see the benefits provided to members. Since its inception, Land O'Lakes, together with the management of the Association, has offered its producer members a comprehensive set of programs and services, all designed to address every component of the hazelnut industry. The association has:

- **Provided 10 Seminars and Individual Consultations** on improvement of hazelnut growing and post harvesting techniques. This activity covered all six regions and resulted in training of 26 hazelnut experts/trainers.
- **Conducted Training on Association Management and Lobbying.** Practical training in association management and lobbying was delivered to the leadership throughout the project and resulted in the adoption of more efficient management techniques by Executive Committee members.

- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the Association by both overseas volunteers/consultants and Land O'Lakes in-country staff.
- **Established Collaboration with the Azerbaijan Hazelnut Processors Association.** The Association has continued to work closely with the Azerbaijan Hazelnut Processors Association to improve the quality of hazelnuts delivered to the processors. In November 2002, an Open Space workshop was conducted by an overseas consultant to further the collaboration between the two associations. The workshop helped to establish sustainable business cooperation between the members and led to the strengthening of mutual cooperation and information exchange between two associations of the hazelnut industry.
- **Established Collaboration with Other Organizations.** The Azerbaijan Hazelnut Growers Association has joined National NGO Forum and National Confederation of Entrepreneurs.
- **Financial Management System.** The Executive Committee completed the implementation of a financial management system, which allowed the association to keep accurate records of its financial statements. An action plan that was prepared for collection of the membership dues failed to be realized during the reported period. No membership dues have been collected by the management of the Hazelnut Growers Association.

e. Zagatala Livestock Association.

The Zagatala Livestock Association, which represents livestock farmers and processors in the Zagatala region, was founded with the support of Land O'Lakes on July 6, 2001. The organization structured as a NGO headed by a President, Vice-President and Executive Committee (5 members) and Auditing Committees (3 members). The association unites 65 members who have 1,080 cattle and 11,000 sheep and goats in total. The main products produced and marketed by Association members are beef, mutton and dairy products.

Since its inception, the association together with Land O'Lakes has offered its members various services, all designed to address components of the livestock industry. The association, in collaboration with Land O'Lakes, has:

- **Provided 11 seminars and individual consultations** on improvement of livestock farming practices to its membership.
- **Conducted Training on Association Management and Lobbying.** Practical training in association management and lobbying were delivered to the leadership throughout the project life and resulted in the adoption of more efficient management techniques by Executive Committee members.
- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the association by Land O'Lakes in-country staff.
- **Implemented an Animal Health Program.** The program was administered in collaboration with the Zagatala Regional Veterinary Department and resulted in the vaccination of 1,100 head of cattle and 11,000 sheep and goats (see Technical Assistance section for details.)
- **Implemented Animal Identification and Farm Record Keeping Program.** The association, together with Land O'Lakes, has also implemented the animal identification

program. The program resulted in the establishment of advanced farm record keeping practices for over 60 farmers of Zagatala region (see Technical Assistance section for details.)

- **Established Financial Management System.** The Executive Committee completed the implementation of a financial management system, which allowed the association to keep accurate records of its financial statements. However, despite the efforts made by the Executive Committee, no membership dues have been collected by the management of Zagatala Livestock Association.
- **Established Collaboration with Other Organizations.** The Executive Committee developed a relationship with a number of international and local NGOs, including IFDC, ACDI/VOCA, Zagatala Information Center and Regional Veterinary Department. The Zagatala Livestock Association is a member of the National NGO Forum and National Confederation of Entrepreneurs.

f. Azerbaijan Dairy Processors Association

The Azerbaijan Dairy Processors Association was founded on November 16, 2001. Eighteen representatives from various regions of Azerbaijan (Ganja, Khanlar, Khirdalan, Beylagan, Khanlar, Goychay, Sumagait and Baku) attended. The organization is structured as an NGO headed by a President, Vice-president and Executive Committee (5 members) and Auditing Committee (3 members). Since its inception, the association together with Land O'Lakes has offered its members various services, all designed to address components of the livestock industry. The association has:

- **Organized a Conference on Milk Quality Standardization and Sanitation for Quality Processing.** On July 24, 2002, the association, with assistance from Land O'Lakes, organized its first conference on the quality of raw milk. The purpose of the conference was to address many of the problems experienced by the Azerbaijan dairy industry and to seek sustainable solutions. Conference participants included dairy processors, association members, Ministry of Agriculture officials, and other representatives of local NGOs who are concerned with product quality and marketing issues.
- **Conducted Management Training and Lobbying Activities.** Practical training on association management, lobbying and development of public relations was delivered to the Executive Committee of the association by local and international consultants. This resulted in the adoption of more efficient management techniques by Executive Committee members and helped to enhance the management and lobbying skills of the association officers. In 2002, the association lobbied the Mayor of Baku to waive the regulation that prohibited the sale of ice cream on city sidewalks. Continuous efforts and close collaboration with government authorities resulted in termination of the decree and allowed the dairy processors to reintroduce street sales of ice cream.
- **Conducted Proposal Writing Training.** Formal training in proposal writing was delivered to the Executive Committee of the association by both overseas volunteers/consultants and in country staff. The training resulted in successful grant application to the U.S. Embassy Small Grants Commission Program. The project aimed at Stimulating Grass Roots Market Economy was granted \$4,500. The idea of the project is to develop business management and marketing skills of dairy farmers and help to improve the quality of supplies.

- **Promoted Association in the Regions of Azerbaijan.** Executive Committee members traveled throughout Azerbaijan, meeting with governors and dairy processing companies and participating in regional, national and international conferences/seminars, to promote the Association and its activities. The association's specialists provided several consultations on dairy processing technologies to milk processing companies in the regions.
- **Participated in Regional, National and International Expositions and Fairs.** (See Marketing Section for details.)
- **Conducted School Milk Nutrition Campaign.** In 2003, the Association conducted a School Milk Nutrition Campaign in 11 schools of Baku. (See Marketing Section for details.)
- **Developed a Financial Management System.** The Executive Committee completed implementation of a financial management system, which allows the association to keep accurate records of its financial standing. At present, management continues to prepare monthly financial statements of the association. Reports are available to the membership at any time and allow the Executive Committee to effectively track the distribution of funds.
- **27,000,000 Azeri Manats in Membership Dues Were Collected** and have set the foundation for self-sustainability of the organization. The most proactive members of the association paid their membership dues in full and also contributed to various activities of the entity. The above funds are currently used to finance the maintenance of the association office, which is located in downtown Baku.
- **Established Collaboration with Other Organizations.** The Executive Committee developed a relationship with a number of international and local NGOs, including ACDI/VOCA, CHF, CDC, World Learning, the Israeli Embassy, SETBIR – the Turkish Dairy Association, the Israel Dairy Board, Macedonian Dairy and Meat Processors Association and Ganja Business Group. As a result, eight members of the association participated in a study tour to the Former Yugoslav Republic of Macedonia with funding from World Learning and USAID. The trip, which took place in April 2003, allowed the members to become acquainted with Macedonia's meat and dairy industries and facilitated the exchange of information between dairy processors in each country. Also, the association has joined the National NGO Forum and National Confederation of Entrepreneurs.

II. Technical Assistance in Production and Processing

The project provided a wide range of group training and individual technical assistance consultations to clients over the past three years. In all, 4,009 training opportunities were provided, and an average of 87% of clients per opportunity reported adopting techniques learned from the intervention. These new techniques and technologies led to the establishment of new enterprises, the expansion of existing enterprises, increased production, throughput, efficiency and profitability, and greater levels of employment. Specific activities and achievements by client group are detailed below.

a. Hazelnut Processors

One of the project's major focus areas vis-à-vis the hazelnut industry has been activities related to hazelnut handling, quality control issues, proper hazelnut processing techniques and marketing. To assist processors in addressing these major issues, Land O'Lakes has taken a number of steps at the association and enterprise level throughout the project

Group Technical Assistance

- **Hazelnut Processing and Exporting Seminar.** In May 2001, U.S. consultant Peter McDonald worked with hazelnut processors in order to help them better understand quality standards that are demanded by international buyers and what processors can do to achieve them.
- **Azeri Hazelnuts Tested in US.** During Anderson's visit, samples of Azeri hazelnuts were collected from processing plants in Zagatala and Baku for OSDA testing for compliance with international quality standards. Anderson also conducted on-site processing plant inspections and provided training to members of the association on standard quality inspection practices.
- **New Equipment Brought to Azerbaijan.** Based on Anderson's recommendations for quality improvement, Land O'Lakes provided black lights (which are used in warehouses and shipping containers to inspect hazelnut shipments for contaminants) to the association. Land O'Lakes also purchased a PM-400 (Kett) Portable Moisture Tester, which was used primarily by the project's hazelnut specialist in Zagatala to demonstrate the quality improvement advantages of using moisture-testing equipment.
- **Tax and Customs Seminar.** At the association's request, Land O'Lakes hired a local legal consulting firm to conduct a seminar on tax and customs laws pertaining to the hazelnut processing and exporting industry. Nine members of the association attended the one-day seminar, where all the attendees received detailed legal information about their rights as well as informational brochures for reference. Following the seminar, four members of the association received individual technical assistance pertaining to tax and customs issues directly concerning their companies. As a result of this seminar, members of the association have a better understanding of their rights and obligations concerning the payment of taxes and customs fees in line with the laws of Azerbaijan.
- **Training in Hazelnut Processing, Processing Sanitation and Processing Techniques Provided.** Land O'Lakes regional consultant, Dr. Murat Ozdemir, a Turkish citizen, conducted a seminar and provided follow-up assistance to members of the Azerbaijan Hazelnut Processors Association during July 2002. The training was commissioned for the purpose of providing association members with practical assistance in: general quality and sanitation techniques in processing hazelnuts, including the effective use of moisture meters and UV black lights, and to provide recommendations on improving processing techniques to increase efficiency. The training included: a seminar for hazelnut processors on quality and sanitation techniques in the processing of hazelnuts; individually tailored consulting visits to processors in both Baku and Zagatala, including reviewing current processing techniques, current quality and sanitation standards, product quality, and suitability for exports to Western markets. Ozdemir provided clients with recommendations for improved strategies for quality processing to international standards, including introducing the concept of HACCP and ISO 9000 and identifying the feasibility of and needs for introducing internationally recognized hazelnut testing to Azerbaijan.

- **Training in Proper Hazelnut Storage.** To produce high-quality, finished products from hazelnuts requires proper storage, since substandard storage conditions may severely reduce the quality of the hazelnuts. Therefore, upon the request from AHPA, PAPA’s Technical Team organized a series of trainings in proper hazelnut storage in January 2003 in Zagatala. The representatives of key association members participated in the training, which also included follow-up training on quality control.

Individual Assistance

- **Hazelnut Processor Participates in U.S. Study Trip.** Land O’Lakes recommended an employee of ARI Hazelnut Processing Plant for participation in a U.S. Government-sponsored study trip to the United States. The employee was able to learn of new industry practices and form new business contacts through participation in the program.

The following table outlines the individual technical assistance provided by Land O’Lakes during the project implementation:

Client	Rayon	Individual Technical Assistance	Results
ATF	Zagatala	<ul style="list-style-type: none"> • Individual customized follow-up training on hazelnut processing and sanitation control 	<ul style="list-style-type: none"> • Recommendations adopted
Azer Gida	Zagatala	<ul style="list-style-type: none"> • Individual customized follow-up training on hazelnut processing and sanitation control • Customized training in hazelnut moisture testing 	<ul style="list-style-type: none"> • Recommendations adopted
Bakfem	Baku	<ul style="list-style-type: none"> • Individual customized follow-up training on hazelnut processing and sanitation control 	<ul style="list-style-type: none"> • Recommendations adopted
Maarif	Zagatala	<ul style="list-style-type: none"> • Individual customized follow-up training on hazelnut processing and sanitation control 	<ul style="list-style-type: none"> • Recommendations adopted
Bayram	Zagatala	<ul style="list-style-type: none"> • Individual customized follow-up training in hazelnut moisture testing • Customized training in hazelnut processing and quality control 	<ul style="list-style-type: none"> • Recommendations adopted

b. Hazelnut Growers

The project worked with almost 1,000 hazelnut growers in six regions of Azerbaijan to form the Azerbaijan Hazelnut Growers Association. During project implementation technical training activities were concentrated on providing seminars relevant for production and preparations for increased acreage devoted to hazelnut production. Land O'Lakes technical staff members provided all training sessions.

- **Pruning Training.** In conjunction with Land O'Lakes, the Hazelnut Growers' Association developed a plan for improving pruning techniques and their use among growers. Through a train-the-trainers activity in late February 2002 two horticultural professionals from the Zagatala region provided technical and practical training seminars to 26 trainers in the standard techniques of hazelnut tree pruning. These trainers then provided follow-up training to all 500 members, allowing them to learn about and implement standard quality pruning techniques. The implementation of these techniques will enable them to increase their hazelnut yield and quality for the following season. This follow-up training was completed by March 15, 2002, with all members receiving technical booklets as well as training in tree pruning.
- **Training in Planting New Orchards.** In conjunction with the project, the Hazelnut Growers' Association developed a plan for increasing the number of hazelnut trees and improving the techniques used to plant new orchards. Through a train-the-trainers activity in late February, two horticultural professionals from the Zagatala region provided technical and practical training seminars to 26 trainers on standard techniques of planting hazelnut orchards. These trainers then provided follow-up training to all 500 members, allowing them to learn about and implement standard quality orchard planting techniques. The implementation of these techniques will enable them to increase their hazelnut yield and quality when these trees mature. This training also provided all association members with technical booklets to reinforce training topics.
- **Organic Certification Study.** Due to favorable growing techniques used in Azerbaijan, the Hazelnut Growers' Association, in conjunction with Land O'Lakes, investigated the possibility of having association members' orchards organically certified. International Organic certification companies such as Bureau Veritas, SGS, and Skal were contacted in this regard, but due to the major expense and time involved in achieving EU organic certification, the Hazelnut Associations decided to focus their efforts on improving production and marketing links instead.
- **Hazelnut Growing Seminars Organized.** Following the success of the train-the-trainer program that provided technical assistance to over 750 members of the association, Land O'Lakes provided two more training sessions on four additional topics for 26 trainers. PAPA's Hazelnut Specialist, in conjunction with a local specialist, conducted these trainings. The trainings covered the following topics:

1. April 2002 - *Hazelnut Tree Reproduction Techniques and Maintenance of Young Orchards.* These two topics followed on from the previous training in *New Orchard Planting.*
2. June 2002 – *Cultivation of Rows in Hazelnut Orchards and Hazelnut Tree Disease and Pest Control.*
3. August 2002 - *Hazelnut Watering Techniques.*
4. August 2002 – *Post Harvest Handling of Hazelnuts.*

5. September 2002 – *Production of Hazelnuts in Mixed Tree Type of Orchards.*
6. September 2002 – *Hazelnut Harvesting.*

Technical booklets were produced for these trainings and distributed to all members via the trainers to be used as reference material and as a means of attracting new members to join the association.

- **Credit and Grant Referrals.** Land O'Lakes provided the Hazelnut Growers' Association with a list of organizations that provide agricultural finance in the northern regions of Azerbaijan. This information was provided in response to a request by association members.

- **Improved Post Harvesting Handling, and Fall and Winter Cultivation Techniques.**

The training is a continuation of the series of training sessions implemented by the Hazelnut Growers Association and Land O'Lakes in November 2002 that was designed to provide technical assistance to over 850 members of the association. The project technical assistance personnel conducted training sessions covered the following issues:

- January 2003 – *Fall and Winter Cultivation Techniques*
- January 2003 – *Factors Affecting Hazelnut Quality*
- January 2003 - *Post Harvesting Handling Techniques*

In all, the training covered the six regions of Azerbaijan: Balakan, Zagatala, Gakh, Oguz, Sheki, and Gabala.

c. Commercial Dairy Processors

During project implementation, technical assistance was delivered to individual dairy processing companies who joined the Azerbaijan Dairy Processors Association. In addition, the technical assistance team of the Dairy Processors Association was trained to offer variety of trainings such as new product development and the establishment of quality testing and standardization laboratories.

Group Training

- **Dairy Market Research.** In April 2001, Cheryl Bann, a U.S. marketing consultant, worked with staff in the Baku office to develop a market research plan for the dairy and hazelnut industry in an effort to help producers better understand their customers.

- **Dairy Consumer Focus Group.** In April 2001, a focus group of 12 dairy consumers was held to help processors better understand what is important to consumers and how they make purchasing decisions.

- **3rd Annual Dairy Roundtable in Sofia, Bulgaria.** In May 2001, Land O'Lakes staff and three Azeri dairy processors served as delegates to this gathering of dairy processors from across southeastern Europe and the Middle East, attended the Balkans' largest annual agricultural trade show in Plovdiv, and met with several dairy and livestock suppliers in Istanbul. These activities provided participants with an opportunity to represent Azerbaijan at the roundtable, make new

business contacts in Bulgaria and Turkey, and get to know one another and begin exploring the idea of creating a dairy processors association in Azerbaijan.

- **Milk Processing and Cheese Making Workshop (August 23-24, 2001)**. Land O'Lakes consultant Dragi Mihajlov offered a two-day theoretical and hands-on training for dairy processing companies. The seminar covered the following areas: milk handling, testing, sanitation of the milk processing plant, utilization of starter cultures and coagulants, and principles and steps in the cheese-making process. The practical training included hands-on demonstrations at Samedolu Ataturk's facilities in Khanlar of feta, Bieno and kashkaval cheese production, packaging and sanitation. The following milk processing companies took part in the training: Samedolu Ataturk (Khanlar), Ganja Milk Company (Ganja), Chapay Oglu (Ganja), Goychay Sud (Goychay), Gunesh Ltd (Baku), and Yavar Binoglu (Neftchala). ACIDI/VOCA staff from Ganja, Sahibkar, and Baku also attended the training.
- **Cheese Grading Seminar (September 17, 2001)**. Land O'Lakes volunteer Leo Zehren conducted a seminar on the principles of cheese grading. The seminar covered the following topics: principles and reasons for cheese grading, cheese grading systems, cheese defects. The following milk processing companies took part in the seminar: Krom-Mak (Khirdalan), Mamed & Polad Company (Baku), Yavar Binoglu (Neftchala), Samedolu Ataturk (Khanlar), Iskender Gida (Baku), Sahibkar (Baku).
- **Milk Quality, Sanitation and Hygiene Training**. A training session was conducted for 30 farmers, who are milk suppliers of Gunesh, Ltd. Training participants received information on sanitary milking techniques and milk handling and storage.
- **White Soft Cheese Production Technology Seminar**. Representatives from three companies participated in a training session provided by Margarita Uchordjieva, a Land O'Lakes volunteer, at the facilities of Iskender Gida – Baku. The workshop covered all steps of quality cheese making, handling, and storage.
- **Shipping Containers Distribution Program for Dairy Industry Development**
The program concept was developed and proposed to Land O'Lakes by members of the Dairy Processors Association in January 2003. The purpose of the program was to support the growing capacity of dairy processors by distributing surplus USAID shipping containers for utilization as various types of facilities after renovation, such as coolers, aging rooms, raw milk collection centers and retail kiosks. The containers were distributed through a competitive process conducted by a joint committee of the association leadership and Land O'Lakes staff. Fourteen association members received a total of 20 containers and these containers are now in use in a variety of different capacities.

Individual Technical Assistance

Technical assistance offered by Land O'Lakes during the project enabled targeted processing companies to expand product lines, source quality inputs, and adopt higher production and processing standards. The technical assistance offered by Land O'Lakes encouraged expertise development in several areas of individual enterprising, including new technology development, product development, management and marketing.

The following table outlines the technical assistance provided by Land O'Lakes over the life of the project:

Client	Rayon	Technical Assistance	Results
Zahmet Ruzi	Baku	<ul style="list-style-type: none"> Recommendations issued in upgrading production of white soft cheese by using Bulgarian and Turkish starter cultures sourced by the project 	<ul style="list-style-type: none"> Cheese is being produced using the recommended cultures
Kromak – Khirdalan Milk Processing Company	Khirdalan	<ul style="list-style-type: none"> Hands-on training provided to six employees of the plant in developing new products: white soft cheese and kashkaval Follow-up recommendations on packaging and storage issued Training on pasteurizer cleaning and plant sanitation provided 	<ul style="list-style-type: none"> Twelve new products have been developed and are being produced and marketed
Iskender Gida	Baku	<ul style="list-style-type: none"> TA provided in establishing cheese aging control Training provided in establishing milk collection center, milk testing, use of milk titration method and sanitation 	<ul style="list-style-type: none"> Company increased the production of white soft cheese to 50 kg/day 2000 liters/day milk collection center established by the company in Saatli region
Samedoglu Ataturk	Khanlar	<ul style="list-style-type: none"> TA on improving milk quality, milk cooling; recommendations to install ice water machine Assistance provided in farm record keeping, feed rations balancing and AI on the farm Recommendations issued in producing pressing equipment for three types of yellow cheese 	<ul style="list-style-type: none"> Processing volume has increased to 2500 liters per day from 1000 liters when the enterprise began collaborating with the project two years ago The company installed ice water machine Cheese press produced and utilization started Milk production increased by 30% over the previous period Three new products: Barda Cheese, Sachahli Cheese (Suluguni type) and Kashkaval Cheese
M-Pro ltd	Baku	<ul style="list-style-type: none"> Training provided to employees in use of starter cultures in yogurt and sour cream production Assistance provided in developing feasibility study to 	<ul style="list-style-type: none"> Cheese-making production facility has been renovated for the production of Bulgarian cheese and an aging facility built with a capacity of 200 tons

Client	Rayon	Technical Assistance	Results
		<p>establish milk powder production plant; recommmendations on equipment and facility requirements</p> <ul style="list-style-type: none"> • Assistance provided in adopting new retail/wholesale packaging for the white soft cheese • Training in ISO 9000 certification provided 	<ul style="list-style-type: none"> • A new plate pasteurizer has been purchased and installed • ISO 9000 certification process under way in Baku plant • Use of new, improved combination of starter cultures in yogurt and sour cream production started • Development a business plan for establishment of a milk drying facility started; investment of \$300,000 sought
Ital Fromage	Baku	<ul style="list-style-type: none"> • Recommendations issued on establishing new mozzarella cheese production facility • Training in ISO 9000 certification provided 	<ul style="list-style-type: none"> • Facility constructed, equipment purchased and installed, and production initiated • Four employees sent to be trained in Italy • Now processing 1000 liters of milk per day • ISO 9000 certification process under way
Gunesh, Ltd.	Novkhane	<ul style="list-style-type: none"> • Recommendations on sanitation and reconstruction of the cooling equipment • Cost analysis provided on production of sour cream 	<ul style="list-style-type: none"> • None yet
PakHazar	Baku	<ul style="list-style-type: none"> • Recommendations issued for purchasing new equipment and supplies to increase production efficiency and improve sanitation 	<ul style="list-style-type: none"> • None yet
Yavar Binioglu	Hazer Kend	<ul style="list-style-type: none"> • Assistance provided in modification of company business plan to raise funds to reconstruct the Hazer Kend milk processing plant • Assistance in reassembling and reconstruction of plate cooling equipment 	<ul style="list-style-type: none"> • Business plan submitted to investors • Plate cooler is functioning and accounts for 20% reduction in cooling costs

Client	Rayon	Technical Assistance	Results
Sahibkar Agayev Ibrahim	Mekhtiabad	<ul style="list-style-type: none"> Recommendations issued for constructing dairy plant near Baku 	<ul style="list-style-type: none"> Construction initiated on facility in Mekhtiabad, outside Baku, for production of cheese, yogurt and sour cream Used equipment costing \$30,000 purchased
Sahibkar Shuvalan Dondurma	Mardaken	<ul style="list-style-type: none"> Recommendations issued for developing white soft cheese production, identified need for equipment modification Training provided in production of white soft cheese Training provided in use of vacuum packaging machine 	<ul style="list-style-type: none"> Recommendations adopted New product developed: white soft cheese from pasteurized milk New labels and packaging applied to the product New packaging equipment purchased for \$18,000
Zagatala Milk	Zagatala	<ul style="list-style-type: none"> Recommendations issued for plant reconstruction 	<ul style="list-style-type: none"> None yet
Elbrus	Dashkesan	<ul style="list-style-type: none"> Recommendations issued for plant reconstruction 	<ul style="list-style-type: none"> None yet
DAD	Baku	<ul style="list-style-type: none"> Assistance provided in business plan development for increased milk processing Recommendations regarding: equipment purchase, plant redesign, new product development, milk collection and packaging 	<ul style="list-style-type: none"> Now producing 8 different dairy products
ADC	Baku	<ul style="list-style-type: none"> Assistance provided in developing new product, white soft cheese. 	<ul style="list-style-type: none"> Two new cheese vats purchased and milk volume processed increased to 1,200 kg/day
Barda Butter and Cheese Company	Barda	<ul style="list-style-type: none"> Recommendations issued and technical assistance provided to establish production of white soft cheese, sour cream, <i>ayran</i> and <i>qatik</i> 	<ul style="list-style-type: none"> None yet
Ahmadabad Community Processing Plant	Ahmadabad	<ul style="list-style-type: none"> Staff training provided in new product development, equipment sanitation and maintenance, raw milk quality assurance, use of starter cultures, products storage and packaging 	<ul style="list-style-type: none"> Three new products developed: white soft cheese, sour cream and Gouda
Gala	Baku	<ul style="list-style-type: none"> TA in the production of improved white soft cheese and 	<ul style="list-style-type: none"> Two new products developed;

Client	Rayon	Technical Assistance	Results
		yellow cheese from pasteurized milk;	<ul style="list-style-type: none"> Improved quality of finished product; Improved efficiency of production of white soft cheese and yellow cheese by 16%;
TAIMEX	Baku	<ul style="list-style-type: none"> TA provided in starter culture preparation and production of white soft cheese and yellow cheese from pasteurized milk; TA conducted in raw milk testing and quality control 	<ul style="list-style-type: none"> One new product developed. Improved efficiency of the production of white soft cheese by 20% Improved the quality of raw milk collected;

d. Cottage Industry Dairy Processors

The following table outlines technical assistance provided by Land O'Lakes throughout the project's implementation:

Client	Rayon	Technical Assistance	Results
Dashdemir Farm		<ul style="list-style-type: none"> TA in establishing cheese processing plant in a modular container, following the award of a cheese vat by the Ismailly Livestock Association; TA herd health management and breeding program; 	<ul style="list-style-type: none"> In process Adopting of Artificial Insemination technique anticipated
Togrul Farm	Guba	<ul style="list-style-type: none"> TA provided in dairy processing area setting; 	<ul style="list-style-type: none"> Improved efficiency of the dairy production
Khanseid Livestock Farm	Guba	<ul style="list-style-type: none"> Recommendations issued for construction of a new 80 dairy cow barn. 	<ul style="list-style-type: none"> The new barn is constructed Improved efficiency of livestock farming
Shakir Farm	Guba	<ul style="list-style-type: none"> TA in the construction of cattle shed for 200 cows and genetics improvement and sire selection. 	<ul style="list-style-type: none"> In progress Obtained skills adoption anticipated
Hajjamalkhan Farm	Salyan	<ul style="list-style-type: none"> TA in the construction of milk pallor and genetics improvement; TA conducted in improved efficiency of livestock farming 	<ul style="list-style-type: none"> In process Increased milk production by 10%

Group Technical Assistance

- **Cheese-Making Equipment Revolving Fund.** The PAPA project developed a cheese-making equipment revolving fund in conjunction with the Guba Livestock Association. The fund was established to a) facilitate the production of cheese with improved quality and hygienic standards; b) provide equipment to be used for demonstration and training of association members; c) increase the visibility of the association to the public; d) and raise funds for future association activities. The fund was successfully launched in the beginning of February with two bidders in the tender receiving cheese-making equipment. Land O'Lakes cheese-making specialist, Margarita Uchordjieva, trained the recipients in the production of white soft cheese, semi-hard and hard yellow cheeses. In early March 2002 Margarita assisted an equipment recipient to process 7,508 liters of milk into white soft cheese, Gouda, ricotta, and sour cream. This cheese maker now produces all of these products, except Gouda, daily. Another equipment recipient processed 2,495 liters of milk into white soft cheese, cream, and ricotta.
- **Parasite Control Program Implemented.** To provide assistance in program design and to train participants for implementing a parasite control program initiated by the Zagatala Livestock Association, Land O'Lakes brought Animal Health Specialist Lochrane Gary to Azerbaijan through the Farmer-to-Farmer program. During his assignment, Gary trained local veterinarians on vaccination and deworming procedures for livestock. Gary also conducted a seminar on pasture rotation and basic parasitology for association members. Deworming medicine and ear tags for the Zagatala Parasite Control Program were financed by the PAPA project, while association members contributed money towards the costs of the syringes, swabs, veterinarian fees, and transportation costs. Another important part of the Zagatala Parasite Control Program was the identification of animals and the improvement of record-keeping procedures on local farms. For this reason, Land O'Lakes also provided a custom-designed, Azeri-language record-keeping booklet to association members together with training in its use. While the program did not prove to be sustainable from a financial perspective, it did bring association members closer together, attract new members, and improve the health of members' cattle and sheep dramatically.
- **Seminar on Procedures on Land Renting and Farmer's Land Rights in Guba.** In July, 2002, the Guba Livestock Association organized a seminar that was attended by 20 farmer-members of the association. A local legal consultant, Mr. Jabir Kerimov, made a presentation to the farmers and outlined Azerbaijani legislation. Specifically, he commented on and clarified the procedures for leasing public land and the rights of farmers regarding the land leases.
- **Artificial Insemination Collaboration.** Land O'Lakes collaborated with GTZ and International Dairy Consultants to train 7 members of the association in cattle artificial insemination techniques. Each member received equipment worth \$1,000 that allows him to provide cattle insemination services to farmers in the Zagatala district.

- **Artificial Insemination Assistance to Ismailly Livestock Association.** In August 2002 the project began to assist members of the Ismailly Livestock Association to use the artificial insemination service offered locally by the Ismailly Agribusiness Consulting Company. The association members evaluated and prioritized several projects proposed by the membership and decided that the need for continuation of the genetic improvement of their herds is the most important activity that should be conducted by the association.
- **Workshop on Cheese Vat Revolving Fund in Ismailly.** Land O'Lakes regional volunteer Margarita Uchordjieva, assisted by Land O'Lakes local staff, conducted a two-day workshop on production of white soft cheese by using standard equipment and technology procedures. The workshop was a part of the training for the Cheese Vat Revolving Fund activity to be conducted during fall 2002.
- **Workshop on Cheese Vat Revolving Fund in Zagatala.** Land O'Lakes regional volunteer Margarita Uchordjieva, assisted by Land O'Lakes local staff, conducted a two-day workshop on production of white soft cheese by utilizing standard equipment and technology procedures. The workshop was a part of the training for the Cheese Vat Revolving Fund activity to be conducted during fall 2002.
- **Guba Livestock Show.** The project assisted the Guba Livestock Association in organizing the first association livestock show and competition. The show took place during the Agricultural Fair on August 24-25, 2002. Twenty-five members of the association exhibited their livestock and entered a competition for prizes in four categories. An independent committee judged the animals competing during the two-day show. The competition categories were best dairy cow, best dairy heifer, best sheep breeding group and best ram. The winners were awarded modest prizes. The show is designed to be an annual event, and the association is presently assisting in the preparation of the 2003 show, which will take place in July.
- **Support to Regional Small-Scale Dairy Industry.** Traditional regional dairy operations received collaborative support from BP and Land O'Lakes through a small-scale cheese-making program that took place from December 2002-June 2003. The project developed four small-scale dairy processing operations in Guba and Ismailly rayons. In addition, the program was developed a) to facilitate the production of high-quality and adequately standardized dairy products in proper hygiene and sanitation conditions and b) to consolidate incomes of community members. The program covered two northern regions of Azerbaijan (Ismailly and Guba) with establishment of two processing facilities in each region. One processing unit or facility comprised of two containers that had been provided by USAID and had been rebuilt and reconstructed into adequate dairy processing and dairy products aging area. The processing facilities were provided with batch pasteurizers (processing capacity of 300 – 400 liters), cheese vats and heaters, which enable the recipient to produce all kinds of cheeses. The program was implemented for the members of Ismailly and Guba Livestock Associations and the processing units were awarded to those applicants best meeting objective criteria, including willingness to invest in constructing a foundation and roof for the facility and purchasing a standardized cheese vat, making a financial contribution to the association, and sufficient on-farm milk production to supply the facility or the drafting of a sound plan to procure the necessary milk. Land O'Lakes technical staff provided ongoing technical assistance to the recipients of dairy processing facilities. Details on each of the participants is provided in the following table:

Recipient	Association	Technical Assistance	Results
Ruslan 6 Ltd.	Ismailly Livestock Association	<ul style="list-style-type: none"> • TA in establishing cheese processing plant and aging facilities; • TA in setting up facilities, i.e., sewage system, water and power supply for proper function of dairy plant; • TA in milk quality testing, new product development, hygiene and sanitation, marketing; 	<ul style="list-style-type: none"> • The plant is fully operational and has recently expanded to two shifts to process 720 liters per day
Temp Ltd	Ismailly Livestock Association	<ul style="list-style-type: none"> • TA in establishing cheese processing plant and aging facilities; • TA in setting up facilities, i.e., sewage system, water and power supply for proper function of dairy plant; 	<ul style="list-style-type: none"> • The plant is expected to start dairy processing in the near future
Dogru Yol Ltd	Guba Livestock Association	<ul style="list-style-type: none"> • TA in establishing cheese processing plant and aging facilities; • TA in setting up facilities, i.e., sewage system, water and power supply for proper function of dairy plant; • TA in milk quality testing, new product development, hygiene and sanitation, marketing; 	<ul style="list-style-type: none"> • The plant is fully operational and processes 400 liters of milk per day
Elvin	Guba Livestock Association	<ul style="list-style-type: none"> • TA in establishing cheese processing plant and aging facilities; • TA in setting up facilities, i.e., sewage system, water and power supply for proper function of dairy plant; • TA in milk quality testing, new product development, hygiene and sanitation, marketing; 	<ul style="list-style-type: none"> • The plant is fully operational and produces 330 liters of milk per day

- **Animal Feed Supply Center in Ismailly**

This program was initiated and developed by the Ismailly Livestock Association in order to enable area farmers to procure feed with high nutritional value to their livestock at low cost. Through the joint purchase and transportation of feed to Ismailly from southern Azerbaijan, where feed crops are much less expensive, and the storage facilities provided by a donation from the project of six surplus USAID shipping containers, which the association then renovated, an Animal Feed Supply Center was created. The association then invested \$3,000 to purchase a feed mill. As a result, members of the ILA now have access to discounted feed. So far, the center has sold 25 tons of feed, including concentrates, oil cake, and processed cottonseed, to members of ILA and other livestock farmers in the region.

III. Marketing Assistance

Marketing has played an important role in the project's activities, since there is little sense in producing a product if it cannot be sold. Land O'Lakes PAPA has provided marketing assistance to project clients in areas such as new market development, product diversification, PR development, association promotion, and marketing strategy development. Consultations were provided to clients at both the individual and industry association levels. Although preliminary marketing assistance was concentrated on the hazelnut and dairy processing industries, later in the project hazelnut and livestock producers were provided with valuable marketing assistance as well. Major marketing activities provided by the project are summarized below.

Group Assistance

- **Facilitation of Participation in National and International Trade Exhibitions.** Dairy, hazelnut and livestock associations were assisted to participate in fairs and expos both in Azerbaijan and abroad. The project provided partial financing for two members of the Hazelnut Processors Association to attend the Food Ingredients Europe exhibition held in London in October 2001. In spring 2003, several hazelnut processors attended an equipment expo in Nuremberg, Germany, thanks to funding from German Technical Assistance Provider GTZ that Land O'Lakes helped the association to secure. Members of the Dairy Processors Association were assisted to exhibit their products at the AzerFood show held in Baku in spring 2002, as well as at four regional fairs held in Ganja and Imishli. In addition, the Guba Livestock Association not only participated in the Guba Agricultural Exhibition, but also effectively organized the Livestock Show during the exhibition.

- **International Market Investigation.** On behalf of the Hazelnut Processors Association, the Land O'Lakes Marketing Team contacted a number of international buyers and processors to promote the Azeri hazelnut industry and to identify the number of potential customers. Additionally, Land O'Lakes introduced several potential buyers from Slovakia, Egypt, Czech Republic, China, etc., to association members, resulting in several tentative sales agreements. As a positive outcome, several sales contracts were signed between international buyers and local processors, including Bakfem signing a deal with Chinese importers worth over \$250,000.

- **Training for HPA on Quality Improvement and HACCP standards.** The Azerbaijan Hazelnut Processors Association requested Land O'Lakes to provide assistance in hazelnut product diversification and processing plant sanitation in order to meet the quality standards of major European buyers. In response, Land O'Lakes sponsored the visit of Dr. Murat Ozdemir, a Turkish expert on hazelnut roasting and hazelnut plant sanitation, to Azerbaijan from July 9-16, 2002. Seminars were held at the Land O'Lakes office in Zagatala for 14 members of the Azerbaijan Hazelnut Processors and Growers Associations. Dr. Ozdemir introduced processors to the HACCP system and several basic processing techniques that are effectively utilized by food processors in Europe to maintain hygiene standards in the plant. (See the Technical Assistance section for additional information on this activity.)
- **Web-Site Development.** A multi-lingual (English, Azeri, Russian), comprehensive, industry web site for the Hazelnut Processors Association was launched in January 2003. The web site aims to target three key constituencies: international and domestic consumers, hazelnut processors and hazelnut growers. The goal is to promote Azeri hazelnuts in domestic and international markets, advance the interests of the industry and increase the exchange of information at all levels of the supply chain. By providing online access to agricultural extension manuals, it is hoped that the quality of Azeri hazelnuts at the grower level will improve. For the first time in the history of the Azerbaijan hazelnut industry, a local web site will represent not only individual businesses, but also the entire association. The result will be enhanced credibility and heightened competitiveness of Azeri hazelnuts on international markets. The site was made possible in part from a \$500 grant that the association received from IREX. The web site can be accessed at the following address: <http://hostel.aznet.org/azhazelnuts/>. The Dairy Processors Association also plans to develop a web site with a similar format for that association.
- **Development of the Marketing Action Plan of the Associations.** Land O'Lakes fielded hazelnut marketing consultant Jon Anderson to assist local hazelnut exporters to identify international buyers for their products and improve quality standards. During his visit from January 28 - February 8, 2002, he conducted a seminar on international marketing issues for members of the association. An association-wide action plan was developed as an outcome of the seminar and resulting discussions. The action plan was presented at a seminar at the association's new office in Zagatala in early February. The content of the action plan was well received, and the majority of those that attended supported the plan.
- **Hazelnut Sales and Marketing Assistance.** Jon Anderson, who previously served as a Land O'Lakes Marketing Consultant (January 28-February 8) earlier in 2002, returned to Azerbaijan in June at his own expense to further develop the relationships he made during his first visit. Australian hazelnut buyer and General Manager of Michael Waring Trading, Michael Waring, accompanied him. A number of meetings were held with processors in Baku and Zagatala. Based on findings from his visit, Waring approached several major Chinese buyers to assess their interest in purchasing Azeri hazelnuts and facilitated sales to China by Azeri processor Bakfem worth over \$250,000. During the 2003 hazelnut marketing season, it is expected that additional Azeri processors will be sending their products to China for the first time as well as a result of this collaboration. The projects also earlier facilitated the sale of nearly \$30,000 in hazelnuts to a buyer in Israel.
- **Marketing Assistance to Regional Livestock Associations.** Land O'Lakes assisted several cheese maker members of the Livestock Associations on marketing issues. The assistance incorporated training on the following topics: retail dairy outlets, bookkeeping requirements,

market analysis, branding, customer relationship marketing, and product differentiation strategy. Further assistance was provided on developing product specifications and label design. Domestic trade potential was explored with the Ismailly Livestock Association (ILA) by establishing a connection with the business community in the capital city of Baku.

- **School Milk Nutrition Campaign.** After thorough planning and preparations, a school nutrition campaign was initiated in mid-February in Baku school number 23. This joint Land O'Lakes-Azerbaijan Dairy Processors Association-sponsored endeavor aimed to promote the consumption of industrially pasteurized dairy products among Azeri 4th to 7th graders. The lessons were coordinated with school principals and conducted by the DPA marketing department with the assistance of 30 teachers in 11 different schools. Over 600 students have seen the presentation. The project has received major media attention by Azeri publications and television and reviews have been universally positive. With the support of the Ministry of Education and the Ministry of Health, the association plans to incorporate the dairy nutrition classes into the Azeri school curriculum.
- **Training for Associations in PR and skills.** The Marketing Department conducted Public Relations development skills training for the Executive Boards of the associations to strengthen the communication skills of the executive board. Farmer-to-Farmer volunteer V. Lynn Baucom prepared training booklets covering basic marketing, PR issues and lobbying strategies and techniques. The materials was translated into Azeri and provided along with the training sessions. The training sessions included topics as press release development, fact sheet development, and media relationship building. Basic skills taught in the training were utilized by the executive board while conducting association lobbying campaigns.
- **Cooperation on Marketing Issues between the HPA and HGA.** Price fluctuations in the domestic hazelnut market continue to complicate the timely execution of international contracts by Azerbaijan Hazelnut Processors Association members. Having benefited from meetings sponsored last year by Land O'Lakes, the HPA and the Hazelnut Growers Association continued to meet in the first quarter of 2003. The meetings held during the General Assembly of the HPA contributed to the development of re-export contracts among association members, thereby facilitating increased business between growers and processors.
- **Product Diversification.** At the recommendation of a Land O'Lakes marketing consultant to diversify its product offerings, Bakfem hazelnut processing plant introduced new packaging. Well-designed 140-gram packages of roasted hazelnuts were introduced in the domestic market. A \$15,000 USD advertising campaign was launched on various Azeri TV channels to support the new product introduction. Additionally, ARI and AzerGida companies have invested in roasting equipment in their efforts to expand their businesses. Following a seminar on hazelnut roasting and plant sanitation sponsored by Land O'Lakes in July 2002, several members of the HPA have invested in new hazelnut processing equipment. ARI Company made a major investment in hazelnut roasting and vacuum packaging machines. German equipment was purchased and delivered from Turkey at a cost to the company of \$50,000 USD. Now ARI can offer its customers new vacuum-packaged products, roasted whole hazelnuts, roasted diced hazelnuts and hazelnut flavorings.
- **Participation in Business Development Projects.** The trainings and expertise provided by Land O'Lakes to members of the HPA was essential in identifying other potential resources at the association level. The support of GTZ, the German Development Agency, will finance a group trip of several association members to Germany in the fall of 2003. The trip will involve

promotion of Azeri hazelnuts at Anuga, the world's most important trade show for the hazelnut industry, since the Germany is the world's largest importer of hazelnuts.

- **Awareness Raising Campaign.** In conjunction with dairy nutrition campaign in schools, supplemental education tools were developed. One poster, "Cow's Milk – A Miracle of Nature" can act as a stand-alone tool in delivering the message of the importance of good dairy nutrition. This poster, along with the lessons in schools, is representative of the awareness-raising projects the DPA is pursuing to improve the nutrition of young people via the promotion of increased consumption of dairy products. In addition to schools, the poster will be placed in childcare clinics, kindergartens and retail dairy outlets throughout Azerbaijan.

Individual Assistance

- **Label Development for Dairy and Livestock Associations' members.** Marketing assistance on individual basis was delivered to the associations' members for developing the product labels. PAPA provided assistance in developing labels for dairy products produced by two members of the Dairy Processors Association, Yavar Binoglu and Gunesh. Previously, these companies did not have company labels that differentiated their product from those of their competitors. This may sound surprising until one remembers that in Soviet times, since all processed food products were produced by state companies, there was little effort at branding products. Now, however, each company has developed two labels with which to market their cheese and cream spread products. Assistance on product label development was also provided to the members of the Guba Livestock Association who have small-scale milk processing facilities.

- **Training on Presentation Skills.** The success of many projects lies in clarity of the framing and effective delivery of key messages. The same logic proved to be true for the DPA in delivering the School Dairy Nutrition Marketing Campaign. To assure the quality of the campaign, Ms. Rena Mamedova, DPA marketing committee member, was consulted and trained on public presentation, PR skills and how to use the art of speech to make the effort a success.

- **Promotional Material Development.** Land O'Lakes helped to develop promotional pamphlets for the Azerbaijan Dairy Processors Association, Azerbaijan Hazelnut Processors Association, and Azerbaijan Hazelnut Growers' Association. The goal was to promote the processors' associations at the local and international exhibitions and to increase awareness of non-member hazelnut growers about the Azerbaijan Hazelnut Growers' Association's activities.

- **Training in Report Writing, Proposal Writing and Internet Resources.** Volunteer V. Lynn Baucom conducted individualized training to Land O'Lakes in-country staff in report and proposal writing and resources available on the internet. The goal was to enhance the professional development of the staff in order to increase the project's capacity to offer quality assistance in these areas to its clients.

IV. Market Information Services

Within the framework of the Participatory Agricultural Project in Azerbaijan, Land O'Lakes has provided its clients with detailed marketing, financial and technical information on a regular basis. A major result of this work is a new national market information system created by the project and which will continue service beyond the life of the project. This system provides price information on agricultural commodities for sale in 36 regions of the country, marking the first time that such extensive agricultural market information has been available since Azerbaijan gained independence. Through collaboration with both Azeri and international NGOs, a network has been created to collect and disseminate this information, and this activity will continue into the future. This information has been disseminated through the various channels outlined below:

- **PAPA Bulletin.** During the life of the project, Land O'Lakes published 12 issues of the project bulletin. Each issue focused on project activities, association-related issues, industry news, including the hazelnut and dairy industries, and information on trade shows and exhibitions for the upcoming months. With a circulation of 600, the bulletin was distributed to project clients, donors, other implementing organizations, government, and other interested organizations.
- **Azeri Milkman.** Through the joint efforts of Land O'Lakes and the Azerbaijan Dairy Processors' Association, five issues of *Azeri Milkman* – a new bi-monthly dairy industry journal – were developed. The journal contained the latest industry news, in-depth reports on timely subjects, technical information, legislative analysis, and covered the activities of the Azerbaijan Dairy Processors Association. In addition to Land O'Lakes specialists, consultants, and association members, other dairy industry representatives wrote for the journal. With a circulation of 600, this journal was published in Azeri and English and was disseminated to association members, livestock farmers, government officials, and relevant organizations.
- **Hazelnut Industry News.** Land O'Lakes, together with the Azerbaijan Hazelnut Growers Association and the Azerbaijan Hazelnut Processors' Association, jointly developed a new bi-monthly hazelnut industry publication entitled *Hazelnut Industry News*. Four issues of this journal were published in English and Azeri, with a circulation of 600. The journal included practical information on hazelnut cultivation, articles on technical subjects, statistics on world hazelnut imports and exports, marketing related issues, and hazelnut industry news. It was distributed to hazelnut processors and growers through their respective associations.
- **Quarterly Dairy Retail Market Report.** As part of its market information activities, Land O'Lakes conducted five dairy retail surveys in Baku and Sumgayit. The goal of the surveys was to provide dairy processors with information to guide them in making more informed business decisions by increasing their understanding of how their products were positioned relative to their competitors, identifying potential market opportunities, and predicting market trends. With a circulation of 100, the analyzed reports were provided to the members of the Azerbaijan Dairy Processors Association, government institutions, and other relevant organizations.
- **Guba Livestock Association Newsletter.** The members of the GLA, in conjunction with project field staff in Guba, produced a quarterly newsletter to update members and the wider Guba community on association activities and agricultural resources, and to provide articles of technical interest.

- **Agricultural Commodity Market Report.** In order to create a valuable source of agricultural commodity market information, Land O'Lakes, in collaboration with three international NGOs (CHF, IFDC, and IRC) and three local NGOs (Ganja Business Group, Social Union for Support to Economic Development and Agrarian Projects, and the Educational Center for Youth), developed and published 12 issues of the monthly *Agricultural Commodities Market Report*. These reports included price information for hazelnuts, fertilizer, animal feed, grain, vegetables, fruit, and livestock products, including raw milk and wool, from 36 rayons of Azerbaijan. The total circulation of each issue was 470, and it was distributed to the readers mainly through Land O'Lakes and other participating organizations. The price information was also distributed through some commercial Azeri publications. It is anticipated that IFDC will carry on the coordination of this activity following the completion of the PAPA project.

V. Summary of Short-Term Technical Assistance

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
August 29 – September 4, 2000	Baku	Dorel Jurcovan, Timisoara, Romania	<ul style="list-style-type: none"> Conducted Land O'Lakes field accounting training for office staff
September 4-25, 2000	Baku, Zagatala, Ismailly, Sabirabad, Massali	David Neubert, Yuba City, CA	<ul style="list-style-type: none"> Field research, writing of "Competitive Analysis of Selected Agricultural Products in Azerbaijan" study The assignment was an integral part of the Project's Assessment of Azerbaijani agriculture's competitive advantages and was designed as a tool for decision-making in preparation of the project workplan
September 15-29, 2000	Washington, D.C.	Metchel S. Paggi and Fumiko Yamazaki, Washington DC	<ul style="list-style-type: none"> Research for and writing of "Domestic Market Opportunities & Export Market Potential" study Assignment was integral part of PAPA's assessment of Azeri agriculture's competitive advantages and was designed as a tool for decision-making in preparation of the project workplan
October 13-20, 2000	Baku, Guba	Lori Anderson, Minneapolis, MN	<ul style="list-style-type: none"> Participation in preparation of the Project Work Plan
October 12-20, 2000	Baku, Guba	Alan Gross, Washington, D.C.	<ul style="list-style-type: none"> Development of Monitoring and Evaluation System for the project as related to USAID strategic objectives and specific project objectives Assistance in work plan development
December 2000	Baltimore, MD	Elwin Guild, Baltimore, MD	<ul style="list-style-type: none"> Consulting in essential steps to prepare for association development activities Preparation for in-country association-building workshops
January 24 - February 4, 2001	Baku, Zagatala, Ismailly	Elwin Guild, Baltimore, MD	<ul style="list-style-type: none"> Co-led 2-day workshop in Baku on democratic associations for Azeri hazelnut processors Co-led workshops on democratic associations for dairy farmers and cheese makers in Zagatala and Ismailly
January 24 - February 4,	Baku, Zagatala, Ismailly	Emilija Spirovska,	<ul style="list-style-type: none"> Co-led 2-day workshop in Baku on

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
2001		Skopje, Macedonia	<p>democratic associations for Azeri hazelnut processors</p> <ul style="list-style-type: none"> • Co-led workshops on democratic associations for dairy farmers and cheese makers in Zagatala and Ismailly
April 19 – May 4, 2001	Baku, Zagatala, Ismailly	Cheryl Bann, St. Paul, MN	<ul style="list-style-type: none"> • Designed strategy for project’s future dairy consumer research activities, including developing a dairy market survey • Designed and identified a local market research company to conduct a focus group of frequent purchasers of dairy products • Led workshop on bylaw development for future members of Hazelnut Processors Association and Ismailly Livestock Association
May 20 – June 1, 2001	Baku, Zagatala	Peter McDonald, Portland, Oregon	<ul style="list-style-type: none"> • Led seminars on hazelnut processing and exporting to hazelnut processors and provided individual TA to various processors • Led a workshop for future members entitled “What a Hazelnut Association Can Do For You”
August 4 – 18, 2001	Baku, Zagatala, Ismailly, Guba	Elwin Guild, Baltimore, MD USA	<ul style="list-style-type: none"> • Led workshops for Azerbaijan Hazelnut Processors Association on Basic Association Principles; Review and Prioritization of Activities; Review of Draft Budget; Meeting Management, Roles and Responsibilities of Officers, Agenda Development, Communication, Meeting Record • Livestock Association of Zagatala. Workshop in: Basic Association Principles; Review and Prioritization of 23-Point Work plan; Review of Draft Budget • Executive Committee of the Zagatala Livestock Association training: Meeting Management, Association Management, Roles and Responsibilities of Officers, Agenda Development, Communication, Record of Meeting

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
			<ul style="list-style-type: none"> Formation workshops for Zagatala Livestock, Azerbaijan Dairy Processors, Ismailly Livestock, and Guba Livestock Associations
August 14 – 28, 2001	Khanlar, Goychay	Dragi Mihajlov, Skopje, Macedonia	<ul style="list-style-type: none"> Issued and implemented general recommendations for sound milk processing practices to the client Samedolu Ataturk - Khanlar; Demonstrated production of kashkaval, feta, and Bieno cheeses to the client and trained staff in new product development; Assisted client to produce first test batch of 200 kilograms of cheeses for use in exploring marketing opportunities; Provided training to the client in cleaning, disinfection, and sanitation in order to produce high-quality milk and dairy products; Conducted a 2-day seminar in general dairy processing sanitation practices and cheese production for a group of processors and staff from LOL and other development organizations.
August 17 – 29, 2001	Baku, Zagatala, Guba, Khachmaz	Shawn Mehlenbacher, Eugene, Oregon <i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> Researched locally grown varieties of hazelnuts; Interacted with Azerbaijani Institute for Subtropical Crops to gauge its capacities and potential for collaboration with international donor community; Presented two seminars for hazelnut growers and processors on practical issues regarding hazelnut varieties in Azerbaijan, seed selection, and related topics; Presented seminar for growers on importance of, and practical ways for ensuring, hazelnut quality through post-harvest drying and handling; Provided hands-on training to individual growers on growing techniques
September 2 – 19, 2001	Baku, Goychay	Leo Zehren, Denmark, Wisconsin	<ul style="list-style-type: none"> Introduced production of cheddar cheese at Goychay Milk Processing plant Evaluated and recommended

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
		<i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> improvements for milk receiving and preventative measures for abnormal milk Conducted a one-day seminar for milk processors in cheese grading
August 28 – September 7, 2001	USA	Elwin Guild, Baltimore, MD	<ul style="list-style-type: none"> Developed two association-development training booklets: “Principles of Association” and “Managing Your Association”
October 1-10, 2001	USA	Jon Anderson, Portland, OR	<ul style="list-style-type: none"> Developed a three-volume reference guide to international sales and marketing of hazelnuts, including recommendations on participating effectively in trade shows, identifying potential buyers, establishing business relationships, tracking world hazelnut prices and other relevant market information, drafting sales agreements, product differentiation and opportunities for value-added processing
November 7-30, 2001	Baku, Zagatala	Steven Weber DVM, Fort Collins, U.S. <i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> Investigate the need for and develop a parasite control action plan for the Zagatala Livestock Association members Conducted a research on available expertise and parasite control products and practices in order to issue recommendations for treatment Issued recommendations to association members as well as follow-up recommendations to the project staff
Nov. 27- Dec. 12, 2001	Baku, Khanlar	Bill Brascugli, DVM, U.S. <i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> Offered two-day seminar on dairy herd management to farmers members of the Zagatala and Guba Livestock Associations
Nov. 23- Dec. 18, 2001	Baku, Zagatala and Guba	Elwin Guild Baltimore MD, U.S.	<ul style="list-style-type: none"> Worked with three national and two local industry associations to develop action plan and the budget; Provided management training for

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
			<p>Executive Committee members of five associations;</p> <ul style="list-style-type: none"> Assisted in the development of association activities to prove to members the value in membership and active participation in the management of the association. Provided cross-training for the project's association development specialist and recently hired association advisor and other PAPA field staff. Provided Open Space workshop to promote the discussions of workplace issues and enhance communication among LOL project staff.
January 13 – January 27, 2002	Baku, Ganja, Goychay Regions	Bruno Keller, Madison, WI	<ul style="list-style-type: none"> Conducted a seminar designed for dairy technologists and owners/managers of milk processing plants on milk quality assurance, testing, processing plant sanitation, and payment schemes Offered individual hands-on training and customized technical assistance as follow-up to seminar
January 27 – February 8, 2002	Baku, Zagatala Region	Jon Anderson, Portland, OR	<ul style="list-style-type: none"> Conducted a seminar for hazelnut processors/exports on sales, marketing, and export of hazelnuts covering the topics noted in this report's text above Led a roundtable discussion on how the Azerbaijan Hazelnut Processors' Association can help market its members as a group Conducted individually tailored consulting visits to processors in Baku and Zagatala, including reviewing product quality, suitability for exports to Western markets, and sales and marketing activities of processors Identified the feasibility of and needs for introducing internationally recognized hazelnut testing in Azerbaijan
February 25 – March 7, 2002	Baku	Marianne Carr, St. Paul, MN	<ul style="list-style-type: none"> Assisted Azerbaijan Association of Milk Processors to develop a marketing and promotional strategy for increasing the industry profile and increasing consumer

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
			<p>recognition of domestic brands and products</p> <ul style="list-style-type: none"> Assisted the association to evaluate potential public relations and advertising collaborators in Azerbaijan
February 27-February 28, 2002	Zagatala	Nargiz Abdulleyva, Zagatala, Azerbaijan	<ul style="list-style-type: none"> Provided two technical seminars on hazelnut tree pruning and planting new hazelnut orchards to 26 trainers in train-the-trainer programs Provided practical demonstration of techniques used in tree pruning and planting new orchards 26 trainers conducted training with association members in their respective rayons, with all 500 members receiving training in both areas
March 4 – April 2, 2002	Guba Region	Margarita Uchordzhieva, Haskovo, Bulgaria	<ul style="list-style-type: none"> Trained recipients of cheese-making equipment on how to produce white soft cheese, Dutch yellow cheese, kashkaval, albumin ricotta, and Bitola cheese Provided technical assistance to cheese makers which enabled them to construct a cheese processing unit Trained cheese makers on hygiene standards and cleaning and sanitation procedures
March 9 – March 21, 2002	Baku	Vladimir Kokarev, Skopje, Macedonia	<ul style="list-style-type: none"> Assisted several milk processing companies who are members of the Azerbaijan Dairy Processors Association to develop new products, establish standardized production practices, improve marketing, and develop custom codes of good manufacturing procedures
March 10 – March 23, 2002	Baku, Ismailly Region	Elwin Guild, Baltimore, MD	<ul style="list-style-type: none"> Assisted PAPA management and staff to draft a work plan for year three of the project Conducted a workshop for the Ismailly Livestock Farmers’ Association that addressed management training, operating principles of associations for the general assembly, and development of action plans and budgets Worked with PAPA staff to develop a

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
			plan for follow-up association development assistance
January 17- July 12, 2002	Baku, Zagatala	Wesley Schwalje Washington D.C., USA	<ul style="list-style-type: none"> • Provided technical assistance in marketing to the Azerbaijan Dairy Processors Association and worked on finding new markets for Azerbaijan Hazelnut Processors Association • Edited the articles for all PAPA publications
March 1– September 1, 2002	Baku, Zagatala, Ismailly, Apsheron, Imishly	Margarita Uchordzhieva, Haskovo, Bulgaria	<ul style="list-style-type: none"> • Provided technical assistance to several dairy processors on new product development, product standardization, milk testing, plant reconstruction, and starter culture preparation; recipients of TA included Taimex, ADC, Iskender Gida, Imishli Dairy Plant, Shuvalan Dondurma and Khirdalan Milk • Provided training on hygiene standards, cleaning and sanitation procedures to livestock farmers from the Ismailly Livestock Association and the Zagatala Livestock Association
July 9-16, 2002	Baku, Zagatala	Dr. Murat Ozdemir Turkey	<ul style="list-style-type: none"> • Conducted a seminar for hazelnut processors on quality processing and sanitation standards • Provided individual consultations on improved processing practices • Prepared set of recommendations and a booklet for application of HACCP and ISO 9000 standards
July 16– August 16, 2002	Baku, Zagatala	Jeffrey Silverman, Washington D.C., USA	<ul style="list-style-type: none"> • Edited the materials for PAPA publications • Assisted Azerbaijan Hazelnut Processors Association and Azerbaijan Dairy Processors with marketing related issues
September 15–28, 2002	Baku, Zagatala	LaVerne Doenier, Wisconsin, USA <i>(This assignment was</i>	<ul style="list-style-type: none"> • Conduct a series of training sessions on the topic of proper milking procedures to Samedoglu Ataturk, Chinarly Dairy Farm and Ismailly livestock farmers • Developed cattle nutrition programs for Samedoglu Ataturk, Chinarly Dairy Farm, Ismailly Livestock Farmers, Rahil Dairy

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
		<i>partially funded by the Farmer-to-Farmer project)</i>	Farm
September 23-December 24, 2002	Baku, Zagatala	V. Lynn Baucom New York, NY USA	<ul style="list-style-type: none"> • Researched and drafted Hazelnut Processors Association web site • Edited all Land O'Lakes publications, newsletters and proposals • Provided professional development training to in-country staff • Developed training seminars for lobbying and media relations for associations
November 11-December 31, 2002	Baku, Zagatala, Ismailly, Apsheron, Imishly	Margarita Uchordzhieva, Haskovo, Bulgaria	<ul style="list-style-type: none"> • Provided technical assistance to several dairy processors on new product development, product standardization, milk testing, plant reconstruction, and starter culture preparation; recipients of TA included Taimex, Zahmat Ruzi, Inkishaf Dairy Plant, Imishli Dairy Plant, Shuvalan Dondurma and Khirdalan Milk • Provided technical assistance in the reconstruction and rebuilding of containers into cheese-making mini-plants, which would be installed in Ismailly, Zagatala and Guba (funded by BP and LOL)
September 30-October 6, 2002	Ismailly, Guba	Allard Colyn, Canada	<ul style="list-style-type: none"> • Conducted a series of individual consultancies for members of Guba and Ismailly Livestock Associations on the production of feed crops • Provided individual hands-on training to potential farmers in Guba and Ismailly in the development of cattle nutrition program
October 20-November 3, 2002	Guba, Zagatala	Keith Burgett, Ohio, USA <i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> • Conducted a series of seminars for members of Guba and Zagatala Livestock Associations on the genetics improvement and cattle breeding • Provided individual consultancies to dairy and beef farmers who specially benefited from AI services on how to select breeding sires.

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
October 20- November 3, 2002	Ismailly, Zagatala,	Neal Caldwell Ohio, USA <i>(This assignment was partially funded by the Farmer- to-Farmer project)</i>	<ul style="list-style-type: none"> • Conducted a series of seminars for members of Ismailly and Zagatala Livestock Associations on the genetics improvement and cattle breeding • Provided individual consultancies to dairy and beef farmers who specially benefited from AI services on how to select breeding sires
November 4-16, 2002	Zagatala, Ismailly, Guba and Baku	Elwin Guild Baltimore, MD USA	<ul style="list-style-type: none"> • Conducted management and lobbying training for Executive Committees and membership of five associations • Conducted a practical training on Association Principles for Dairy Processors Association • Conducted an Open Space Workshop for Hazelnut Growers and Processors Associations • Provided on-the-job training for Land O'Lakes in-country staff
January 1 – January 13, 2003	Baku, Zagatala, Ismailly, Absheron and Guba	Margarita Uchordzhieva, Haskovo, Bulgaria	<ul style="list-style-type: none"> • Provided technical assistance to several dairy processors, including Taimex, Zahmat Ruzi, M-Pro Ltd. and Gala Ltd., on new product development, product standardization, plant reconstruction and planning, and starter culture preparation; recipients of TA • Conducted hands-on training on milk testing and guidelines on the use of a milk analyzer to laboratory staff of new raw milk processors • Provided TA in design and con-version of shipping containers into cheese-making plants, and assisted with installation and training in Ismailly, Zagatala and Guba

Assignment Dates	Assignment Location(s)	Consultant(s)	Brief Assignment Summary
February 16-March 31, 2003	Baku, Zagatala, Ismailly, Guba	V. Lynn Baucom New York, NY USA <i>(This assignment was partially funded by the Farmer-to-Farmer project)</i>	<ul style="list-style-type: none"> • Advised on development of Hazelnut Processors Association website • Provided training in proposal writing to associations • Provided professional development training to in-country staff • Developed training seminars and booklets on marketing and lobbying for associations

Attachment A

RESULTS REPORTS

RESULTS REPORTS LIST

1. Amirov Small Cheese Processing
2. Samedolu Ataturk
3. AzerGida Hazelnut Processor
4. DAD Dairy Processor
5. Dairy Nutrition Education Campaign
6. Gala Dairy
7. Goychay Dairy Report #1
8. Goychay Dairy Report #2
9. Guba Association of Livestock Output Producers
10. Guba Cheesemaker – Togrul Khalilov
11. Guba Livestock Farmers Mamedov and Azizov
12. Gunesh Milk Company
13. Hazelnut Industry Recovers
14. Hazelnut Exports Grow
15. Hesanov Farm
16. Interfood Exhibition
17. Kromak-Khirdalan Milk Processing Plant
18. Market Report Becomes Valued Info
19. Milk-Pro
20. Natig Dairy Farm
21. National Hazelnut Growers Association
22. Taimex
23. Turkish Trade Show
24. USAID Agricultural Assistance Yields Positive Results
25. Zagatala Agrofirma
26. Zagatala Livestock Association

Attachment B

USAID QUARTERLY IMPACT STATISTICS

USAID QUARTERLY IMPACT STATISTICS

Indicator	Previous Total	Increase This Quarter	End of Project Total
Number of New Products or Services	762	2	764
Number of Enterprises Entering New Markets	198	5	203
Number of Client Employees Trained	4913 (total) 270 (female) 4643 (male) 255 (female IDPs) 118 (male IDPs)	296 (total) 118 (female) 178 (male) 3 (female IDPs) 5 (male IDPs)	5209 (total) 388 (female) 4821 (male) 258 (female IDPs) 123 (male IDPs)
Number of Client Employees Using Skills From Training	3528 (total) 2018 (female) 1510 (male) 20 (female IDPs) 64 (male IDPs)	247 (total) 104 (female) 143 (male)	3775 (total) 2122 (female) 1653 (male) 20 (female IDPs) 64 (male IDPs)
Number of Enterprises Adopting & Complying with Accepted Standards	30 (total) 5 (employee IDPs)	1 (total) 0 (employee IDPs)	31 (total) 5 (employee IDPs)
Number of New Opportunities for Receiving Market Info	210	3	213
Number of Associations Created	6	0	6
Number of Associations that Collect Dues	5	-1	4
Number of Communities Assisted	121	0	121

Attachment C

SMALL-SCALE DAIRY PROCESSING PROJECT

FUNDED BY USAID AND BRITISH PETROLEUM



Land O'Lakes

Small-Scale Dairy Processing Project

Funded by USAID and BP

PROGRAM SUMMARY



July 3, 2003

Introduction

From November 2002 to June 2003, Land O'Lakes Participatory Agricultural Project, whose activities in Azerbaijan were funded by the United States Agency for International Development, signed an agreement with BP to initiate a public-private partnership to assist selected agricultural communities in rural Azerbaijan. This project was achieved through the combined expertise of various stakeholders. Through the contributions of Land O'Lakes' coordination and assistance, BP's funding, and matching investments from Azerbaijani beneficiaries, USAID funds and resources were leveraged to maximize impact on the targeted rural communities.

The project entailed the refurbishment of eight surplus shipping containers donated by USAID, their conversion into four modular, small-scale dairy processing units, and the award of facilities and provision of training to community leaders who had successfully applied to receive the facilities. The facilities were specially designed to facilitate the production of high-quality, standardized cheese in a modular, hygienic setting. These enterprises created jobs, provided a new market for the milk produced by local farmers' livestock, and produced safe and nutritious dairy products for the local market. As a result, this partnership helped make a tangible and lasting impact on the assisted communities.

Project Background

From March 2000 to June 2003, Land O'Lakes Participatory Project in Azerbaijan (PAPA), which was funded by USAID, assisted in the formation and development of regional livestock associations in Guba, Ismailly and Zagatala. These producer associations are industry organizations involved in addressing educational, technical training and marketing needs of their local farming communities. Membership in the organizations doubled over the course of the project and individual farmers from the associations received extensive technical assistance from Land O'Lakes over this period.

In November 2002, Land O'Lakes received a grant from BP to leverage USAID activities aimed at assisting agricultural communities in selected Azerbaijani regions. Land O'Lakes' experience in assisting dairy farmers' associations in Guba and Ismailly regions, investment from Azerbaijani beneficiaries, the donation of surplus shipping containers by USAID, and supplemental financial support from BP all served as the foundation for this collaboration.

The project entailed the establishment of four community-based dairy processing plants in Guba and Ismailly regions. This Land O'Lakes-developed technology solution for refurbishing and adapting shipping containers for use in processing entailed conversion into cheese-making, packaging and aging facilities capable of processing up to 800 liters of milk per day into various cheeses. The facilities and equipment were designed specially for use given local conditions, such as limited access to electricity and a lack of organized markets for raw milk. These facilities were produced using best production practices to meet health and environment protection requirements.

This activity addressed some of the most important needs of farming communities throughout Azerbaijan: providing a market for and adding value to raw products, increasing shelf life, facilitating safe and hygienic production of nutritious food products, and providing sustainable employment. In this manner, the project has already achieved the overreaching goals of supporting the viability of rural economies and communities.

Project Implementation

Project implementation began in late November 2002. An application process was developed, whereby interested members of the livestock associations could express their interest in and capacity for taking ownership of and successfully managing one of the dairy processing facilities. Basic training in improved cheese-making techniques was provided to prospective applicants to give them a better sense of what would be entailed by managing such a facility. Land O'Lakes project staff reviewed applications and then made site visits to evaluate local conditions and appropriateness for hosting the processing facilities. Meanwhile, containers were being weatherized, painted, and equipped with interior electrical wiring, heating and cooling, plumbing, hygienic flooring, ceilings and walls. Work also commenced on procurement of basic cheese-making equipment, such as pasteurizers, cheese vats, and milk analysis laboratory equipment.

In January 2003, beneficiaries were selected to receive the container-based processing units. Two farmers in Guba and two farmers in Ismailly were selected. Land O'Lakes collaborated with these beneficiaries to design the foundation for each facility and to arrange for the delivery and installation of the containers.

In February and March, the four facilities were delivered to the beneficiaries and installation was completed. In April, Land O'Lakes continued to provide training to the future staff of these facilities in milk purchasing and testing, hygiene and sanitation, cheese making and aging, and packaging. In May, cheese production commenced. Land O'Lakes also worked with each plant to design marketing strategies and establish sales links for each of the facilities.

Project Outcomes

As of June 28, 2003, the following impacts had been achieved:

IMPACTS ACHIEVED TO DATE

Recipient	Association	Technical Assistance	Results
Ruslan 6 Ltd.	Ismaily Livestock Association	<ul style="list-style-type: none"> TA in establishing cheese processing plant and aging facilities; TA in setting up sewage system, water and power supply for proper function of dairy plant; TA in milk quality testing, new product development, hygiene, sanitation, & marketing 	<ul style="list-style-type: none"> The plant is fully operational and has recently expanded to two shifts to process 720 liters per day
Temp Ltd	Ismaily Livestock Association	<ul style="list-style-type: none"> TA in establishing cheese processing plant and aging facilities; TA in setting up facilities; i.e. sewage system, water and power supply for proper function of dairy plant; 	<ul style="list-style-type: none"> The plant is expected to start dairy processing in July 2003
Dogru Yol Ltd	Guba Livestock Association	<ul style="list-style-type: none"> TA in establishing cheese processing plant and aging facilities; TA in setting up facilities i.e. sewage system, water and power supply for proper function of dairy plant; TA in milk quality testing, new product development, hygiene and sanitation, marketing; 	<ul style="list-style-type: none"> The plant is fully operational and processes 400 liters of milk per day
Elvin	Guba Livestock Association	<ul style="list-style-type: none"> TA in establishing cheese processing plant and aging facilities; TA in setting up facilities i.e. sewage system, water and power supply for proper function of dairy plant; TA in milk quality testing, new product development, hygiene and sanitation, marketing; 	<ul style="list-style-type: none"> The plant is fully operational and produces 330 liters of milk per day

In addition, it is expected that the eventual outcomes of the project will include the following:

1. New, direct permanent employment created by the processing facilities for at least 16 individuals in milk collection, milk processing and product marketing;
2. A sustainable milk market outlet created for at least 220 rural households in Guba and Ismailly regions;
3. At least 8 new standardized dairy products produced, which will increase demand and thus enhance profitability of dairy farming by increasing milk productivity on the community level;
4. Increased year-round rural household income of at least \$700 per year in the target communities;
5. Strengthened visibility and capacity of the regional livestock producers' associations as industry associations providing services to members;
6. Opportunities created for expanding use of processing facilities to increase production by 50% with minimal modifications or to process other agriculture commodities, such as vegetables and fruits.

Photo Gallery



Design of the container-based cheese-making facility developed for the ongoing BP-supported project



Elvin Processing Plant in Guba prior to its opening ceremony.



Discussing project implementation with the Guba Livestock Association



Training in cheese production in Ismailly



Refurbishing 20' containers



Refurbished container



Refurbishing container interior



Refurbished container interior



Discussing site selection with Ismailly applicant



Loading a container aboard a truck



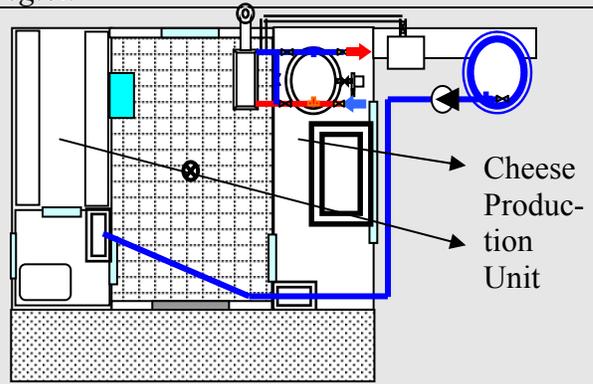
Installing containers in Bergov, Guba region



Installation in Amsarpalasa village, Guba region



Interior of the milk processing room in Tallish village, Ismailly region



Blueprint of the modular cheese facility



Completed facility in Bergov



Completed facility in Tallish village



Preparing the cheese in Guba



Packaging the cheese in Guba