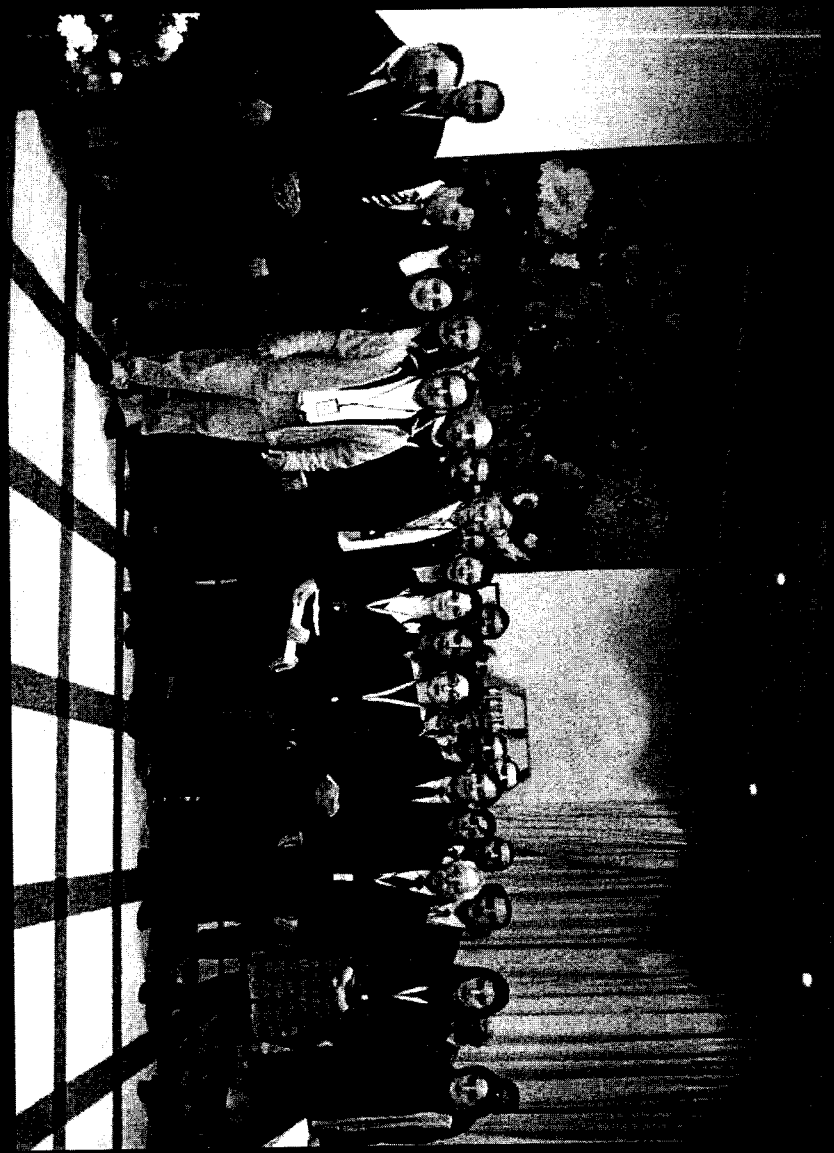

USAID
FROM THE AMERICAN PEOPLE

ARMENIA SME MARKET DEVELOPMENT PROJECT (ASME)
Final Report
December 2007

DISCLAIMER
The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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The ASME Story	3
Linking to Markets	8
Sweet Serendipity	10
Yeast Rising	12
Women Doing Business	14
Something Fishy	16
Say Cheese	18
Supply Farmers Directly	20
Self-Help Veterinary Services	22
Associating for Profit	24
Serving Marriott	26
Rural Enterprise Support	28
Ready-Steady as She Goes	29
Launching Leasing	30
Dried Tomatoes at the End of the Tunnel	32
A Fashion Statement	34
Responding to the Threat of Avian Influenza	36

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The ASME Story

Background

USAID/Armenia contracted with Development Alternatives, Inc. to implement its Armenia Agribusiness SME Market Development Project (ASME) in August of 2000. The project was aimed at improving the ability of Armenian agribusiness SMEs to compete more effectively in international and domestic markets while improving the market for the products produced by thousands of small-scale Armenian farmers. The original design, which included five operational components, served as the framework for implementation of the project through 2004. Those five project components included the following:

- Market and Demand Analysis
- SME Development and Expansion
- Financial Linkages
- Skills Development and Information Dissemination
- Association Strengthening

USAID amended the project in January of 2004 to extend the implementation period and add two new components: the garments and textile sector and non-farm rural enterprises. These additions resulted in significant changes in the way the program was implemented and the lessons learned with agribusiness development were found to generally apply in these new areas as well.

In May of 2006 USAID amended the project again to extend the implementation period through December of 2007 and add an additional component to work with the Armenian government and others to increase the capacity to identify and respond effectively to any outbreak of avian influenza. This activity required the recruitment of additional specialized staff and a much more intensive working relationship with various operational agencies of the Armenian government.

Lessons of Success – Being on Tap, not on Top

The final days of ASME is a good time to reflect on the lessons learned from such a long project. Lessons abound when we consider some of the factors that led to the success of the ASME project. Most of them are not new and none are very sophisticated. They break down to an approach based on using a rather extensive "tool kit" to respond flexibly and appropriately to the problems of real businesses: Being on "Tap" to help as help is needed rather than being on "Top" with a fixed program prepared in detail in advance and directed at a preconceived notion of enterprise success. We believe the following factors go a long way in explaining how ASME succeeded as well as it did:

1. *Begin at the Firm Level:*

The goal of all our work is, of course, to improve the way people are able to live by helping them to improve the way their

economies work. There are various ways to approach that objective. Some emphasize improvement of the environment within which enterprises must operate and thus open up the way for enterprising individuals to succeed. Others focus on adding strength to the enterprises themselves better equipping them to deal with the environment as they find it. The ASME project included components dealing with both aspects. However, our emphasis throughout has been on working from the perspective of the individual companies. First we wanted to understand the real situation of individual companies. We could only truly achieve that by working with a large number of them day in and day out, helping them to achieve their objectives.

From the experience with individual companies we could identify specific policy issues or other problems in the environment that we could address collectively through tailored training, marketing and technical assistance activities specially targeted on their real needs. We were also to draw on this experience to help them realize problems and opportunities they had in common that could best be addressed together and help design appropriate group structures (associations) through which they could address those needs.

2. *A Comprehensive Tool Kit*

If the ASME program had been limited to improving access to finance, or reinforcing food safety systems, or even product branding and marketing, our impact would have been far more limited. By being able to respond flexibly, in the first case with one-on-one consulting assistance on a wide range of topics, we helped a large number of companies with different problems achieve their objectives. Working with many clients with a wide range of needs helped us keep our staff active without pushing individual companies to move at a pace beyond their comfort level. While one client was on the sidelines, or busy doing something on its own, our team was fully engaged with others who were ready to go another step with us.

3. *Sparing Use of Subsidies*

The availability of grant funds is both a great resource and a great danger. Too often grants are used to subsidize what the donor thinks should be done rather than what the entrepreneur wants to do. This leads to an over-reliance on donor funds and a lack of commitment on the part of the entrepreneur towards an activity by reducing or eliminating his or her risk associated with that activity. It is easier to "walk away" from a failure you have not invested in personally.

ASME avoided that trap by attaching very strict cost share leverage requirements to all of its grants. As a matter of principle, the project paid no more than 25% of the cost of any capital grant. The cost-share paid by the grantee has been at least 50% of real costs even in the case of trade show participation, quality certification preparation or other such marketing and operational activities. The result has been a very high degree of seriousness among the grant recipients because they are seriously at risk for the result.

Even with these stringent cost share requirements it is still necessary to ensure that grants are not simply a way for grantees to avoid commercial borrowing. ASME made much more use of capital grants during the earlier years of the project when commercial finance was more limited. As credit became more available we placed more emphasis on helping companies qualify for commercial loans where possible and used grants more for purposes of encouraging innovation, improving management or strengthening marketing practices.

4. *Strategic Planning is Key*

Most of the companies assisted by ASME had no experience with strategic planning prior to our work with them. They made business decisions one by one on the basis of cash on hand or what could be borrowed formally or informally. Our work with every client company was initiated by the development of a simple strategic plan, asking and answering basic questions:

- What is the company aiming to do?
- What actions will be required along the way to achieve that goal?
- What technical, financial and human resources are available for taking those steps?
- How can ASME help?

In some cases this process required only a conversation of a few hours. A more formal planning process had to be undertaken in others. Numerous clients noted that the strategic planning process was the most important thing they learned from ASME.

Once we developed the strategic plan, then all of our assistance activities focused on removing specific bottlenecks. In some cases it became clear that the plan needed to be adjusted as a result of changing market circumstances or simply new information. It is not important, or even desirable, that the strategic plan be static and unchangeable. What is important is that there always be a plan with steps identified leading to an objective and that assistance (or company investment) activities be developed within that plan.

Strategic planning is also necessary at the program level. While the development of successful client companies was necessary for the achievement of ASME's objectives, those successes were also milestones along the path towards the larger goals of ASME: job creation, market development, economic growth. For example, one of the objectives of ASME was increasing the access of SMEs to appropriate credit. Our experience working with individual firms indicated that one problem was that many SMEs, and especially those in rural areas, were unable to borrow due to their lack of acceptable collateral. We identified the establishment of a leasing mechanism as one way of addressing that constraint and the work that followed eventually ended up with the establishment of the ACBA Leasing Company.

5. *Be Opportunistic*

We learned, and demonstrated, over time that it is more productive to focus on those businesses most likely to succeed than to attempt to meet the needs of those that are either less eager or able to adapt the way they work. We tried to help those most likely to succeed to achieve their objectives and then show that success to others to demonstrate what can be done.

The selection of "winners" is not a process of purposeful inclusion and exclusion. Given the chance the "winners" will select themselves by responding quickly and effectively to new opportunities. The ASME approach was to make itself broadly available to any interested company within a fairly broad set of criteria. In every case the responsibility of our advisors was to respond as expeditiously as possible to the companies' identified needs using the tools at our disposal, and then leave a responsibility with the company to take the next step, which would in turn precipitate some additional step from our side. Companies that invested their own resources and time and responded the most effectively received ample ASME support.

Companies with weaker motivation, or less confidence in the value of our assistance, could remain on the fringes if they wished and participate in group trainings and other activities while watching their more active colleagues. Gradually more and more companies came forward asking for our direct involvement. Others simply learned from those successes of others and did not require intensive direct assistance.

6. *Patience Pays*

Perhaps the most important factor of all is time. ASME's biggest asset may not have been the budget we had to spend as much as the time we had to spend it. The problems facing Armenian SMEs did not arise over night and they will not be resolved quickly. Having almost 7.5 years to address these issues with a large number of clients allowed us to witness the blooming of seeds planted several years ago – and we have been in a position to provide some "care and feeding" along the way. Spending more money faster would probably not have yielded a better result.

For example, having time (and continuity) made it possible for a core group of nine women owned or operated (WID) enterprises to grow to a dynamic group of more than 100 female entrepreneurs working together to overcome their problems, open new markets and play a much greater role in the overall economy. Focusing on this as a two year activity would almost certainly not have had the same results. A long term approach to international market development has made it possible to begin with specific market surveys, help individual companies adjust to meet the needs of those markets and become active players in them.

The availability of time also made it possible for us to develop complementary sets of services leading to specific objectives such as policy advocacy, trade association development or the strengthening of government avian influenza response capacity.

Numbers

The ASME budget for almost 7.5 years of implementation totaled $18.5 million including $2.2 million that was allocated specifically for the avian influenza project.

The core project originally included a substantial grant fund. A total of $3.1 million was expended via 508 cost share grants. The smallest cost share grants were for less than $100 to help very small enterprises' participate in training programs or local trade shows. The largest grant ($93,000) for establishment of a production operation was given to share the cost of developing a food safe fish processing plant. This plant is now qualifying for ISO/HACCP certification. A total of $1.2 million in cash and dedicated technical assistance was used to spur the development of the ACBA Leasing Company and introduce an important new financing option for Armenian agribusinesses.

ASME assisted more than 500 companies in some way. This number includes 110 companies owned or managed by female entrepreneurs. Some of the major quantifiable achievements appear below:

- 178 training events ranging from half day sessions on specific technical issues to multi-day programs on graphic design, market data management and advanced marketing techniques involving nearly 2000 SME representatives.
- 85 domestic and international trade events introducing the concept of a national pavilion to Armenian participants and facilitating their ability to penetrate new markets.
- Working agreements with 33 Armenian business service providers and 83 capacity building activities to enhance their capacity to provide valuable assistance to local SMEs.
- 72 sub-contracts for specific technical services with participating business service providers.
- 132 short term technical assistance (STTA) assignments by 78 international technical specialists in fields as diverse as queen bee breeding and fashion design.
- More than 50 training activities involving more than 2000 participants under the avian influenza project.

The most important is that ASME met its goal of increasing export and domestic sales and creating jobs. Fifty three enterprises for which data was collected each quarter increased their annual sales by more than $26 million during the time they were working with ASME. Those same enterprises created 16,000 new jobs either within their companies or, indirectly, among the farmers from whom they purchased raw materials. We are confident that these numbers will continue to grow as the companies ASME assisted develop and others learn from their experience.

Linking to Markets

Elsewhere in this report we describe what ASME accomplished in terms of export sales, new jobs and profitable Armenian enterprises. Here we present the process that the team used to turn production driven, low quality and insular businesses into companies focused on international market demand, price and quality.

Back in 2000 when ASME started, Armenia was still shaking off the Soviet heritage of planned economy approaches, a mentality of production-led entrepreneurship and isolation from international markets. The small size and economically distressed condition of the domestic market necessitated a broader perspective on growth opportunities. We began by cataloguing the types of food products

Armenia produced, the current production capacity and the prices of the raw and processed products. Then we went to see what markets around the region and the world were demanding.

Over the course of the first two years of the project, ASME teams of international and Armenia specialists conducted generalized market surveys in Russia, Ukraine, the Gulf States, the Middle East, Turkey and Georgia. More limited, product specific, market research was carried out in the United States (garments and fish products) and the European Union (fish products, flowers, and others) as well. These surveys focused on identifying market opportunities for products produced in Armenia. We were not interested in carrying out economic analyses of comparative advantage or sophisticated analyses of the competitive position of Armenia vis a vis the rest of the world.

Each survey produced a rich lode of practical information on quality and safety standards, packaging and labeling requirements, as well as consumer tastes and preferences for the types of product Armenia could produce.

In a series of national and regional workshops we shared this market information with any Armenian enterprise who expressed an interest. For those who wished to pursue a specific geographic and product opportunity, an ASME client manager and technical experts worked with the firm to make the necessary adjustments in product characteristics to meet market requirements. Now we were ready to test these products in the marketplace via international trade shows.

From the beginning ASME required all trade show participants to share the cost and provide products for display at their own expense. We worked hard with our clients to prepare them for the rapid pace of agricultural trade shows in Dubai, Frankfurt and Moscow. We found that Armenian firms exposed to the vast array of competing products quickly appreciated the challenge they faced. Some responded effectively, while others determined that the export market was not for them. Slowly and steadily more and more buyers placed orders with Armenian trade show participants, building the basis for long-term relationships.

Once these market links were established, we discovered that they often engendered a second round of product improvement. The early success of some firms spurred new companies to join in trade show efforts. Eventually, groups of firms decided to co-fund and sponsor Armenian Pavilions at international shows, demonstrating that Armenia has come of age in the competitive world of 21st century agribusiness.

Sweet Serendipity

Beekeeping has been a traditional activity of Caucasian villagers since time immemorial. Armenian honey was renowned for its purity and the wild flower flavors from its alpine meadow origins. During the Soviet era honey production was centralized on the large "kolkhosner" (collective farms) that dominated agriculture production. After the break up of the Soviet Union and all its commercial structures in 1991, villagers went back to their roots and started individual honey production mixing their traditional methods with those used in the larger operations.

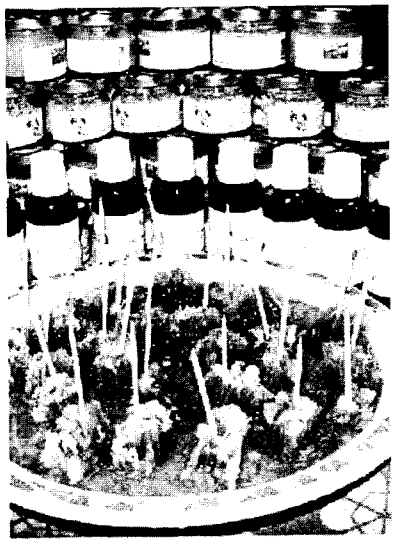
When ASME came on the scene in 2000, the sector was in disarray. Production was in decline and Armenian honey could not be found on local shop shelves. All local production was traded directly by the beekeepers to their friends and relatives in the city. Consumers felt that only honey they purchased from their own sources would be certain to be pure and healthful. The first team of ASME experts, Ed Levy and Bill Lord, from DAI partner Winrock International, who arrived to advise on developing export markets for Armenian honey soon discovered that there was simply not enough honey available to supply an export market of any significant scope. To make things even bleaker, beekeeping practices were outdated, diseases were rampant in the hives and the quality of the bee stock was in decline.

Since beekeeping is a primary income source for very poor people in the most remote regions of Armenia, ASME wanted to seize this opportunity to make an impact in rural areas. However, the decentralized nature of honey production and marketing required a unique strategy. The first step was to conduct a series of training exercises for beekeepers in the southern part of the country. New integrated pest management and production systems were presented to some of the more progressive beekeepers in Syunik marz along with better ways to process, store, package and market their honey. Once these beekeepers saw the value of the improved methods, ASME arranged for them to share their lessons with beekeepers in other regions with whom they would otherwise have no contact.

As a result of these interactions, this group of notoriously independent beekeepers began to form regional beekeepers unions. When seven local unions had been formed, they jointly approached ASME to request assistance in forming a National Federation of Beekeepers. The federation held its first national congress in 2004 with more than 400 beekeepers taking part from all around the country.

This experience was augmented by ASME support of three study tours for beekeeper representatives to participate in Apimondia World Congress events and see the beekeeping practices being used in other countries. The National Federation also participated in two BioFach international organic trades shows in Nuremburg Germany with ASME support. Armenian honey was awarded with one gold and one bronze medal in different categories at the 2007 Apimondia event.

Luba Manukyan, Founder and Chairwoman of the Vandernis Beekeepers Association, credits ASME with providing the technical background for revitalizing the Armenian honey industry saying that ASME "planted the seeds of confidence in us and what we do, hence we started to finally run a profitable and mutually beneficial business, find export markets and sell our honey." This confidence is evidently shared by many Armenian consumers who now regularly purchase their honey at local shops and supermarkets.

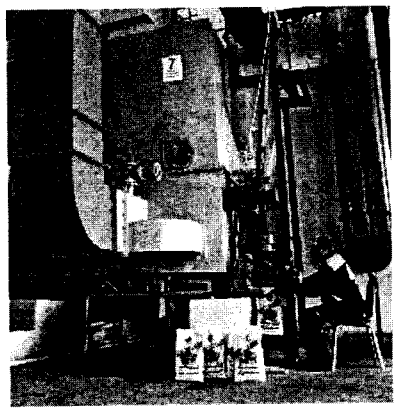


Arsen Khachatryan and three of his friends returned to Armenia from their food science studies in Kiev, Ukraine in 1990 determined to use their education to start a business that would create jobs and contribute to the economic development of their country. They mobilized the capital they had and launched the first, and only, wet yeast production company in Armenia, Elita, LLC. They quickly captured a major share of that market due to the difficulties in transporting and storing imported wet yeast. This market was limited to about 25 of the larger bakeries. Small scale operators lacked the technology required to use wet yeast and, therefore, had to rely on dry yeast imported from Turkey and Iran.

Determined to develop the company further and enter the larger dry yeast market, the partners scoured the region for appropriate and affordable equipment. They found used equipment in Russia but lacked the capital needed to acquire and install it. This is where ASME entered the picture to help Elita overcome this constraint. Mkrtich Ayvazyan, the ASME client manager, took the lead in exploring how a small cost-share grant could be used to leverage commercial finance for the purchase of the dry yeast equipment, which was accomplished. The installation of this equipment enabled Elita to produce a high quality, cost competitive product that soon was generating significant revenue.

As their business grew, Elita became an enthusiastic and effective participant in ASME programs ranging from strategic planning, financial restructuring (including the consolidation of multiple loans into a package with a single lender that was tailored to the needs of the company). In addition, ACBA Leasing, another ASME supported enterprise, provided lease financing for packaging equipment. Arsen and his colleagues have also been enthusiastic participants in many ASME supported training programs on subjects ranging from branding to quality control, food safety and financial management. The company also took part in several international trade shows and study tours with ASME support. Perhaps the most valued assistance has been the one-on-one problem solving consulting ASME has been able to provide to the company through the client manager.

Elita's new factory opened on December 10, 2004 with the US Ambassador and other dignitaries in attendance. In the ensuing years the company has taken off. Their dry yeast is taking local market share from Iranian and Turkish suppliers and export markets are also being developed. Employment in the factory has tripled and total sales have increased more than tenfold since the commencement of ASME assistance.



That partnership between Elita and the ASME team blossomed into a model of how external technical assistance and local initiative can come together to build a thriving business. In Arsen's words, "We could not imagine that an international assistance program could do that much." The ASME team is equally satisfied at having had the opportunity to be in partnership with such a responsible and forward-looking group that critically assesses all options but is then not afraid to try something new.

Women Doing Business

According to our Armenia staff, both male and female, formal authority has been wielded by men throughout the long history of the Armenian culture. Women were satisfied to "rule by silence" through their responsibility for maintaining family bonds and exerting strong moral authority in the regulation of social and domestic behavior. During the Soviet period and current transition period, women gradually emerged from the background to play a more active role in the development of the economy and the nation.

The ASME story of women in business began very modestly with a "search" for women-owned or managed agribusiness companies early in 2001. That search netted only nine companies. Their proprietors felt that their problems were no different from those of their male colleagues except that they had to do "double duty" managing their households and family matters as well as their businesses.

The ASME team began working with this small group, responding to their individual business problems, as well as bringing them together to share their experiences and success strategies. In the early years ASME assistance included such basics as company registration procedures and simple accounting systems. As their businesses grew in size and complexity, Anahit Bobikyan and her ASME colleagues provided training on product pricing strategies, food safety requirements, and branding and many other topics. The culmination of each year's activities was a three day winter retreat that became larger and more technically sophisticated every year. The retreats also provided an ideal opportunity for these business women to network among themselves.

As the news of the "WID Network" spread, it grew until by the end of the project more than 110 women-owned or managed enterprises were registered with ASME and many more eagerly took part in individual activities. These women-owned businesses now represent a cross section of the Armenian economy ranging from food service companies to garment manufacturers to traditional handicraft artisans.

Expanding the horizons and market vision of these women entrepreneurs was a primary goal of ASME. We sponsored two women-only trade shows in Yerevan that attracted over 60 companies brought these women much need publicity and recognition and stimulated markets for their products. Another "first" occurred when a group of 10 handicraft producers participated in a major international trade show in Austria with ASME support. News of this international marketing effort encouraged other women to look beyond Armenia for sales opportunities and undertake a marketing trip to Sweden with no financial support from ASME.

We believe the experience of the WID entrepreneurs was summed up nicely by Karine Khukasyan who said, "We feel like we have new, stronger wings: That is the knowledge we got from ASME helps us all fly towards success." If the next seven years resemble the growth of the past seven years, Armenian businesswomen will certainly be flying high.

Something Fishy

When Arkadi Gevorkyan first appeared in the ASME office in Yerevan back in October 2000, he looked somewhat embarrassed and unsure. On the one hand having some outside support during the early phases of his business development would be welcomed. On the other hand, earlier experience made him doubtful of the value of assistance from a donor-supported project like ASME. From that tentative beginning, the relationship developed through many stages as Akvatekh Avtomatika became one of ASME's most successful client companies.

At the time Arkadi first came to ASME he was operating one small fish farm in the Masis region producing two varieties of fish for the local market and employing a handful of workers. The business now operates a large hatchery and seven breeding and grow-out farms producing six species of trout and two of sturgeon. Akvatekh, with ASME assistance, has built a modern fish processing plant that is currently being certified in compliance with international ISO and HACCP standards. The product line now includes sturgeon and trout caviar as well as smoked and pickled fish, fresh and frozen fish

fillets and whole fish for domestic and export markets.

ASME's role in this success began with initial strategic planning and management training. As Akavatekh grew, our assistance evolved to include product branding, international trade shows and food safety quality certification. The continuous, active involvement of Grisha Shirvanyan, ASME's client manager and business advisor, his ability to listen to Arkadi's needs and bring in expert consultants to address the growing sophistication of the business was a key success factor. Perhaps no task was more challenging than finding a fish milking specialist who helped launch the trout caviar product line.

Now Arkadi plays a leading role in helping smaller fish farms become successful. He provides technical advice to smaller growers and supplies them with fry and feed. He then buys their fish to supply his marketing chain that currently extends to Ukraine, Georgia, Dubai, Russia and the United States. He has taken over many of the tasks that ASME used to provide to his own firm, an encouraging sign of sustainability.

Since Akvatekh began working with ASME his sales have increased sevenfold. However, the most significant measures of Akvatekh's success are the more than 100 jobs created since 2000. Each of these jobs means better education, health care and prospects for Armenians, the ultimate goal of the ASME project. As a charter member of the newly formed Association of Armenian Exporters, we are sure that Arkadi will continue to help Armenian businesses find new markets and create more jobs.

Photo by Ruben Mangasaryan

"There is an Armenian saying: I wish a friend for the ASME project and its staff's dedication to work with us. Vordi Armen LLC would not exist at all, it just wouldn't be here. ASME came along just in time to help companies like ours to straighten their back and go forward with steady steps."

These are the words of Lyudmila Hovhannisian, owner and manager of Vordi Armen, LLC. in the small town of Hrazdan near Lake Sevan.

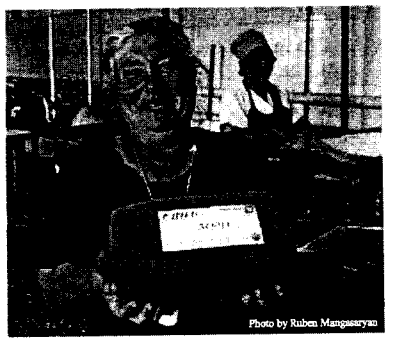


Photo by Ruben Mangasaryan

The sparkling smile of the proud and hard-working woman you see here did not come easily. She took over the small family farming operation following the tragic death of her son and has persisted through many trials to develop one of the few pedigree dairy herds in Armenia, with its own processing plant attached. Lyudmila has been an active member of the ASME WID network since the early days of the project participating in virtually all of the training programs we offered. In October of 2003 a fire burned the bulk of the hay that had been stored for winter feed and creditors were threatening to foreclose. This is the time that Lyudmila came to ASME requesting serious consulting assistance.

ASME WID specialist, Anahit Bobikyan and finance specialist, Arman Hakobyan guided her through a strategic planning process that, when put into effect along with a small grant to help replace a portion of the hay that was burned, enabled her to clear all of her debts in full by August of 2004. The company produces a full range of dairy products but now focuses on the higher value items such as Suluguni and smoked cheese that is both sold in Armenia and exported. She was one of the first ASME clients to develop

Photo by Ruben Mangasaryan

a regular marketing program in Georgia as well as with the Marriott Hotel in Armenia.

Lyudmila has made the best use she could of the one-on-one consulting assistance provided by ASME and benefited from more formal training in a variety of topics ranging from cash flow and financial management, food safety, profit center analysis, branding, marketing techniques and computerized bookkeeping.

As the demand for Vordi Armen products has grown her need for fresh milk outstripped the capacity of the family farm to provide it even though her own herd has now grown to nearly 200 milking cows. She also purchases milk regularly from seventeen other farmers in the Lake Sevan area. More than 200 direct and indirect jobs have been created both in her own operation and among the other farmers from whom she buys milk on a regular basis.

Vordi Armen continues to develop based on its own resources, no longer dependent on any donor or lender for its financial well-being. Lyudmila is a role model for aspiring young women entrepreneurs and shares her experience with them at every opportunity.

Supply Farmers Directly

In 2006, the Federation of Agricultural Associations of Vaghchin Local Cooperative is a member, opened a farm store in Armavir. That is really very convenient since now we can go there and buy what we need immediately including tools. Vachik Davtyan, 45 year old small farmer of grapes and vegetables and member of the "Aravik" Agricultural Cooperative in Armavir matz

The break up and privatization of large state farms following Armenian independence left many people in the position of being small-scale farmers trying to live off their modest holdings. During the lean years of the early to mid-90s they struggled to earn a profit in the face of enormous obstacles. With little agriculture credit, no effective agriculture extension service, limited marketing options, erratic input supplies and little farming experience, Vachik and his peers found themselves battling daily to keep their heads above the financial tide.

The Federation of Agriculture Associations (FAA), a union of 14 agriculture co-ops including 1235 farmers, assists its members through the provision of technical training, improved access to credit and reliable supplies of agriculture inputs at reasonable prices. Five more co-ops are now preparing to join the association. In 2003 the FAA initiated a bulk purchasing scheme as a first step in developing a viable and reliable agricultural inputs supply chain for small scale farmers. While farmers received better prices by purchasing in bulk, they had to pre-finance those purchases using their own very scarce funds or loan funds borrowed at very high rates from local micro-lending organizations. As a result, the benefit of the bulk purchases was limited.

FAA's next step involved the creation of community-based farm stores to ensure a permanent source of farm supplies in rural areas.Mkrtich Ayvazyan and his ASME colleagues worked closely with FAA to establish four such shops in early 2006. Very simple small structures were constructed to house a permanent stock of seasonally appropriate supplies in each

Supply Farmers Directly

location. A central warehouse in Yerevan supplies each store. Since FAA manages the bulk purchase and supply function, it is able to consult with its own members to identify priority items to be stocked in each shop. The farm store system significantly reduces the length of time that farmers have to carry input purchase loans. The savings from lower cost of credit, in turn, allows farmers to buy larger amounts of inputs.

In 2007, FAA opened two more shops and began direct importation of some of the supplies, further reducing its costs. In a recent development some shops are becoming collection centers for farm produce for bulk marketing. The farm store movement is growing both in number and in function as the shops become centers of cooperative farming activities introducing some much needed structure to what has been a chaotic agricultural production and marketing system.

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FAA

FEDERATION OF AGRICULTURAL ASSOCIATIONS
AGRICULTURAL
INPUTS

Self-Help Veterinary Services

Self-Help Veterinary Services

Marianna Khachatryan is a young woman with a mission. A qualified veterinarian by training and an organizer by nature, Marianna is the founder of the Strategic Development Agency NGO (SDA) and originator of the movement through which locally financed and controlled veterinary service organizations are spreading around Armenia. The concept is elegant in its simplicity - - - and it works!

Groups of small-farmers in a village organize themselves, with the help of Mariana and her SDA colleagues, to prioritize their animal health problems and decide how they will manage a small revolving fund that will finance the purchase of equipment, medicines and operating expenses. The group members find a room to be refitted as a veterinary office, identify a local veterinarian who they will hire and set up a monthly subscription fee for a pre-set list of services to be provided by the veterinarian. The responsibility for managing the revolving fund lies with the local groups themselves. They set their fees at a level that will cover all regular operating costs as well as the cost of replacing medical supplies.

SDA provides management training, animal health advice and facilitates the purchase of certified and appropriate veterinary medicines. One of its most crucial roles is to help the group identify a milk processor who will commit to purchasing the increasing quantity of higher quality milk produced by the group.

ASME client manager Mkrtich Ayvazyan began working with SDA on the development and refinement of the self-help vet model in early 2006. The project participated in cost-sharing the establishment of eight village veterinary groups on a pilot basis beginning late that year. Those pilot projects have had dramatic success. Reduced internal parasites in the milk cows, better sanitation and other measures resulted in decreased calf mortality and increased milk production. The pilot groups now use their equipment and medicines to treat animals on a cash payment basis. With the profit they earn selling those services and supplies, the groups are expanding their working capital fund and steadily increasing their capacity to respond to a wider array of animal health needs in their own communities.

Improved animal health and milk supply also opens the door to new initiatives. SDA is helping one of the village groups to acquire and install a milk cooling facility in partnership with their milk buyer. This arrangement includes a contractual provision for the processor to sell his ownership share in the cooler back to the group over time leaving control of the asset in the hands of the local farmers.

One participating farmer reports the following result: "We now receive regular attention from our veterinarian. I can see that the general health of my animals is improved and their productivity is increasing." The local vets also express great satisfaction with the program noting that they are now able to perform their professional duties using modern equipment and medicines, something that has been largely impossible for the past 15 years.

While ASME assistance is coming to an end, two other donor organizations are working directly with SDA to expand the pilot program. A larger international donor also is considering supporting the program on a national scale.

Associating for Profit

When we encouraged companies to organize around general concepts and objectives such as lobbying and representation, there was no interest. However we found that after providing firms with tailored technical assistance, we had the opportunity to bring them together for targeted training activities on issues of common interest, such as food safety or export marketing requirements. This gave company leaders a chance to share their experiences and problems. In several cases, this interaction led to the "spontaneous generation" of fledgling associations.

While ASME helped firms identify specific issues around which they might organize themselves, in none of these cases did ASME subsidize association formation or any of their on-going operating costs. On a case by case basis, we entered into cost share agreements for specific activities such as trade shows or study tours. The five associations that developed over the course of the project and their principal member services are:

Armenian Tanners Association (9 members) – Reliable and low-cost supply of tanning chemicals. It also provides marketing, financing and other services. The Union of Armenian Tanners and Farmers (300 members in 11 regional branches) is an offshoot.

Dried Food Producers Association (52 members) – Technical assistance and joint marketing. It focuses on improved production practices and quality control.

Armenian National Federation of Beekeepers (10 regional union members representing 400 plus beekeepers) – Technical improvement in production practices and marketing.

Armenian Fashion Council (20 designer members plus 50 associate members) - Technical training and marketing through Pret a Porter fashion weeks and other venues.

Armenian Association of Exporters – (9 members) - Joint marketing, including some trade show organizing functions previously performed by ASME.

There have been at least as many cases where associations have yet to be formed. For example, fierce competition among milk processors appears to be stronger than their recognition of any common interests. There is an active resistance in this group to coming together, though two of these companies are members of the new Exporters Association. Repeated efforts to convince the members of the WID network to form even a loose association to continue their own training and marketing activities has failed to bear fruit up to now. Lack of agreement on the identification of an appropriate and effective leader is a stumbling block. Attempts to stimulate the development of an aquaculture association have also not taken root as the larger operators prefer to operate on their own, developing their own networks of small-scale producers with whom they can collaborate.

When common interests overcome individual suspicions, we expect that these groups of companies will follow the path of the beekeepers, tanners and other associations.

Serving Marriott

A partnership between ASME and the Armenia Marriott Hotel established early in 2006 resulted in substantial benefits for about a dozen ASME clients, who found a profitable new market for their products. The hotel also benefited from a steadily increasing supply of fresher, lower cost local food products.

Marriot presented ASME with a challenge: identify your top clients who can meet our international standards for consistent quality, taste and safety and we will feature their products to our clientele.

ASME's client managers identified their top clients and talked with them about Marriott's offer. The ASME team then organized two special presentations for its clients who offered a range of products to the Marriott chef and food service manager. Some products did not make the first cut. Those that did received follow-up site visits. As a result at least a dozen ASME clients, most of them small-scale producers are selling regularly to the Marriott. The range of products is wide, including two kinds of mushrooms, honey, snack foods, sun-dried tomatoes, fish and caviar, dried fruits, salad greens, chocolates and others. An additional benefit of the ASME initiative is that

the hotel has begun working with other local suppliers of various vegetables as well, encouraging them to try some crops not traditionally produced in Armenia for sale to the Marriott.

Tatevik Grigorian, a recent graduate of the Armenian State Agrarian University is a case in point. With support from ASME and the Marriott, Tatevik was able to return to her hometown of Artashat, renovate and install an innovative low-cost heating system in the family greenhouse and begin the production of a range of salad greens for sale to the Marriott during the winter months. Following experimental production of several non-traditional salad greens and vegetables, regular supplies to the Marriott's kitchen were launched. The normal start-up difficulties of a new business were met and overcome and the relationship with the Marriott continues with year-round supplies averaging about 250 kg per month – generating significant additional family income where there was little before.

Marriott management is very pleased with these developments as well as with its role in encouraging much-needed local production activities. They see a growing role for locally produced food products of all types in the future. Food service manager, Michael Kershbaumer notes that, "As long as Armenian tourism continues to grow, the Marriott will grow. Our local suppliers will grow along with us and we will continue to look for opportunities to expand the range of products we purchase from them."

These comments by Artak Chilingaryan, director of the Artig Business Service Center (BSC) in Berd, reflect the experience of several other regional business service providers working with the ASME project. They have been able to move beyond a dependence on occasional grants from various donors to paying for their own operating expenses by providing fee-based services to businesses in their regions.

When the ASME team launched its "Non-Farm Rural Enterprise" component in 2004 we discovered both a desperate need for reliable business services in the mountainous regions and a group of so-called "Business Service Centers" that were not effective in meeting the needs of local private companies. They lacked the technical skills, the confidence in their own abilities and the trust of their potential clients. Their services were largely limited to providing photocopies and running the occasional training program at the request of, and with funding provided by, international donors.

At the same time, under the guidance of Sergey Matevosyan, we quickly determined that the only way to have an enduring impact on struggling small businesses in these regions was to work with and through these BSCs. Our program focused on capacity building based on three common components:

- We provided regular one-on-one mentoring assistance with BSCs directors and staff to help them develop their own business strategies and attract individual clients in their regions.

- We developed and conducted a series of 14 training modules in collaboration with larger, Yerevan-based consulting and training organizations, for 11 regional BSCs. This training focused on basic business and financial management skills that SME clients typically require.

- We established a mini-cost share grant program to cover part of the cost of initial assignments with individual clients. By reducing the clients' cost, we gave the BSCs the opportunity to demonstrate the value of their services. Fifty-seven grants totaling $10,000 jump-started consulting assistance to 35 regional SMEs and stimulated the start-up of 22 new enterprises.

In collaboration with the BSCs, ASME co-sponsored nine regional product expositions in four different marzes. Not only did local companies get the chance to show off their products, but the business centers were able to market their business support services to a wide range of potential clients. While it is hard to underestimate the challenges facing rural businesses in Armenia, at least half of the BSCs have made very significant progress in developing their revenue bases.

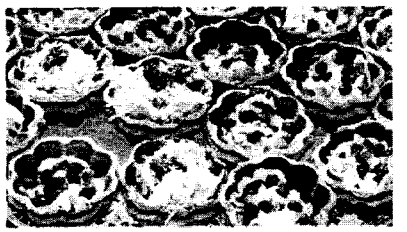
The ASME team would not take credit for all the success of the Ready-Steady enterprise but we certainly do appreciate having had the honor of making a contribution to such a venture. In many ways, Ready Steady has been a model of how small businesses develop. The company was founded in 2001 as a small operation serving a handful of clients with prepared lunches from a converted garage in Yerevan. One of the first Women in Development clients of ASME, Gayane was an enthusiastic participant in our various training programs and adapted the lessons learned to her fledgling business. It wasn't long before her husband, Bakur, left his job as marketing director of one of the larger canning companies to join her.

Gayane often refers to the day when she first walked into the ASME office in January of 2002, to request being included in the technical assistance activities of the Project.

"I always had the dream of testing my entrepreneurship skills in the field of lunch delivery and catering. When my children were old enough to give me some time, I made a very small start making salads and sandwiches in our apartment. One day Bakur, who was not so enthusiastic about my business dreams, given the unfavorable business conditions of the time, came home saying that he had heard about this new project that could help and advised me to make contact with you. That was the beginning of good things happening for Ready-Steady."

Under the tutelage of Anahit Bobikyan, ASME client manager, the company learned more about branding, food safety and packaging as well as accounting, tax preparation and general management. Benefiting from a combination of extensive training and one-on-one technical assistance, Ready-Steady grew quickly from $550 of sales and 4 staff in February 2002 to more than $12,000 in sales and 22 workers in December 2002. In 2004, aided by an ASME cost-share program, the company moved to a larger and more suitable work space, which made it possible for the continued growth and better adherence to food safety standards.

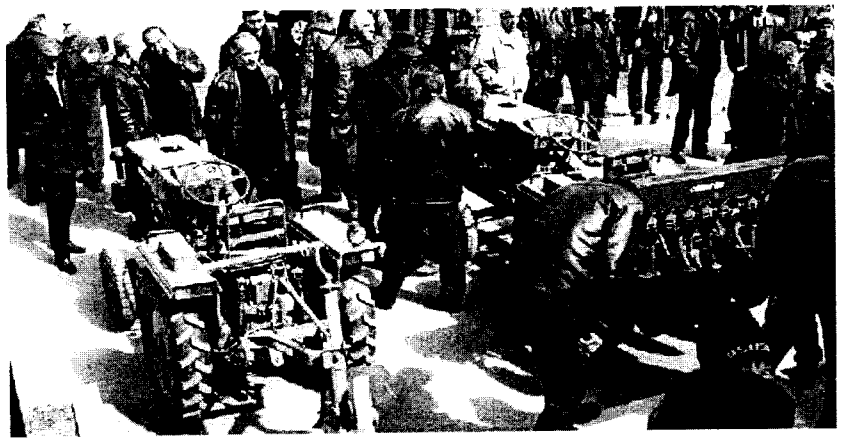
In 2005, on the advice of ASME, Ready-Steady launched their new Barekendan brand name under which they now provide wholesale distribution services for a growing number of hotels and restaurants. At the same time, the company established sound business relationships with more than 20 farming entities, from which they purchase a wide range of agricultural products – fruits, vegetables, flour, meat products – for the Barekendan services and their lunch/catering business. Ready-Steady now purchases approximately $130,000 of agricultural products a year, much of it from other ASME clients.



One of the most serious problems facing SMEs in late 2000 was the lack of term financing for companies to use for the acquisition of processing and other equipment. Very few banks were making loans longer than one year in duration. High interest rates and collateral requirements eliminated most potential borrowers from consideration at all. Leasing, which would effectively eliminate other collateral requirements, appeared to be an answer. ASME launched a study on leasing options and in the process identified ACBA Bank, Credit Agricole, the International Finance Corporation (IFC) and the Lebanese Leasing Company as potential investors as potential investors in such a venture.

The team discovered that we needed to overcome three basic problems before a leasing company could become a viable business. First, major changes had to be made in existing legislation to create a legal environment compatible with leasing activities. Second, both bank staff and potential clients had to be educated in the operations and benefits of the leasing product. Third, purchase relationships had to be established with international equipment suppliers.

ASME provided assistance in all three of these areas. The team included Mary Miller DAI finance specialist, Mr. Bernard Wendel, a leasing company executive recruited by ASME to serve



as the managing director of ACBA Leasing and in-country advisors, led by ASME Senior Finance Advisor Arman Hakobyan. ASME also provided a grant of $1.2 million (including Mr. Wendel's year-long service and start-up capital), which supplemented $4 million in equity and loan capital provided by the shareholders. The resulting leverage ratio of 3.33:1, that is $3.33 of shareholder funds every $1.00 of USAID funds granted to the new company, is exceptional.

Thanks to the dedication of both shareholders and the ASME team, ACBA Leasing began operations in April of 2003. The progress of the company has been on a steady upward path ever since. The company reported in September 2007 two consecutive profitable years. It also stated that 383 leases valued at $13.1 million have been executed since April 2003. One sign of the success of the venture is that 49% of the total leases went to companies outside of Yerevan, while 44% were executed with agriculture or industrial enterprises. The original shareholders refinanced the company in 2006 to generate the additional capital required for growth. IFC recently reported selling is shares back to other shareholders at a profit as envisioned in the original capitalization plan.

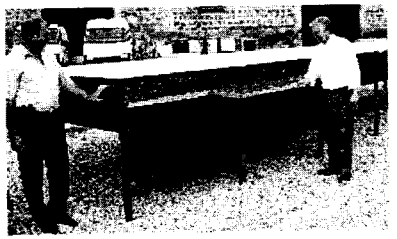
One of the most startling benefits attributable to the ACBA Leasing initiative is the establishment of a tractor assembly plan in Vanadzor to meet the demand created in the agricultural sector by ACBA Leasing. Numerous other ASME clients, including the Elita Yeast Company, used leases to acquire equipment for quality and efficiency improvements. Since imitation is the sincerest form of flattery, perhaps the clearest sign of success is that other Armenian banks now offer similar products in competition with ACBA Leasing. This is all to the benefit of developing enterprises, especially those outside of Yerevan where access to finance is a serious constraint on their development.

Dried Tomatoes at the End of the Tunnel

Dried Tomatoes at the End of the Tunnel

David Harutyunyan, the owner and director of Levon Ltd. saw dried fruits and vegetables as a logical diversification strategy for his company. The company, located in the Armavir region, an area noted for 70% of Armenian the dried fruit and vegetable production, was ideally situated. His plan included the purchase of an electric tunnel dryer from abroad. He had examined the cost effectiveness of solar dryers that other dried fruit producers used and concluded that such dryers would not meet his needs. However, the cost of importing a tunnel dryer was much too high given the financial status of the Levon Ltd. David decided to put the idea of branching into the dried fruit and vegetable market on the backburner until he could afford investing in a dryer.

Having become acquainted with Mr. Harutyunyan in various training and marketing activities ASME, in early 2006 suggested hat he consider building a pilot solar tunnel dryer in place of the imported model. If the dryer worked, our analysis showed that the investment cost would be relatively low and the dryer could significantly reduce drying time compared to competitors drying fruits directly in the sun or using the standard solar dryers.

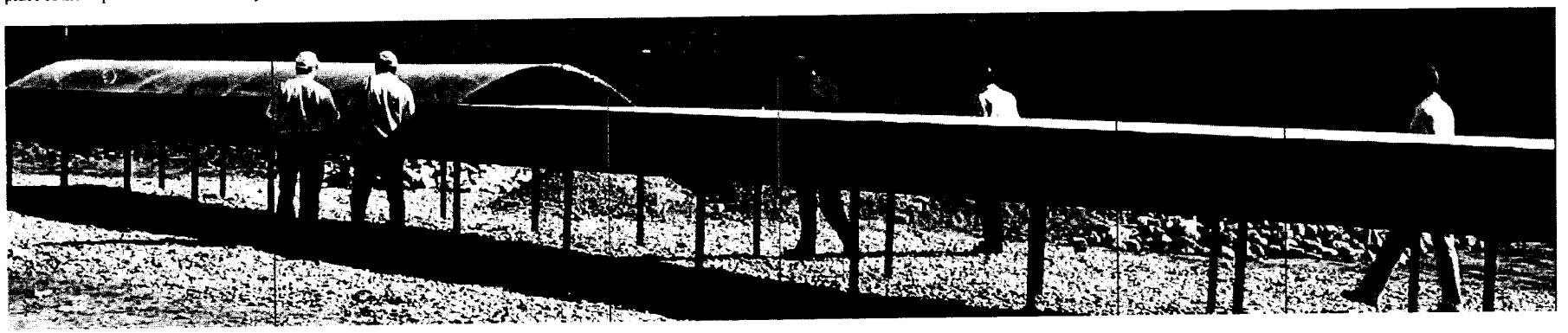


David received the idea of an innovative tunnel dryer, with great interest. An ASME-designed solar drier model (based on designs that Gary Kilmer had used in Ghana) was successfully developed and tested by Levon Ltd. A small cost share grant from ASME along with the company's own capital covered the development and construction costs. The capital cost of the drier was approximately 35% of the standard dryers being used throughout Armenia. Preliminary trials showed that drying time was reduced by about 33%, allowing significant increases in output capacity during the relatively short drying season. Other advantages of the tunnel dryer included:

- *It dries faster and produces superior quality products over other methods by using moving solar heated air rather than mechanically heated air to dry fruits and vegetables,*
- *Tunnel dried tomatoes do not require preservatives such as sulfur or salt. This opens the door to niche markets for natural food products.*
- *The tunnel system practically eliminates contamination from dust, dirt, birds, or animals, a prerequisite for high quality export markets*
- *The system uses no fuel for its operations and therefore is carbon neutral. A non-polluting and earth friendly process that may unlock new markets,*

Levon Ltd. Put the dryer into operation in late August 2006 when the season for drying fruits was almost over. However, it was the best season for drying tomatoes. Trial production started and Levon Ltd. got very good results. The company produced about 50kg of dried tomatoes in a short time with high quality and little or no spoilage. In 2007 Levon Ltd. used the tunnel dryer to its full capacity to dry more than 7 types of fruits, as well as large quantities of tomatoes. Many of Mr. Harutyunyan's fellow dried fruit producers saw the tunnel dryer in action and some of them are planning to construct their own system for next season.

To complement the production technology, ASME arranged for Mr. Hani Khalil, an international dried fruit consultant to work with Levon Ltd. to launch two new products for the Armenian market; sun-dried tomatoes in oil and a dry blend of sun-dried tomatoes. Mr. Khalil worked out the formulation of these products, organized the sensory tests and helped Levon complete its first production run.



A Fashion Statement

When USAID decided in 2004 to extend the ASME project it requested DAI to add the textiles and apparel sector to other ASME activities. Market research quickly exposed the fact that, while the sector was a major employer during Soviet times, accounting for as much as 30% of the Armenian labor force, the structure of the industry was not adaptable to the new economic circumstances. Production facilities designed to produce enormous volumes of a limited range of products for the Soviet market could not be adapted economically to the smaller volumes and diverse, higher value products of the 21st century market. At the same time, production and shipping costs were too high for Armenia to compete effectively with very low cost "cut and sew" operators in South and East Asia.

We found that many of the former factory managers who had taken over these facilities through the privatization process were knowledgeable only in production. They were used to being told what to produce, in what quantities, sent the material required and then instructed as to where to ship it. Thus their skills in product design and costing, fabric purchasing and marketing were all very limited – and many were convinced that the only help they needed from ASME was a "big order" so they could throw the switch and operate their 1000 sewing machines again. Sadly, it just didn't work like that.

In the face of these problems, the ASME team worked with the industry to move in a different direction: developing branded products for local and export markets. Several production companies (Gevorg & Vahan, Agnessa, Lentex, Kanaker, Alik and Harut, TOSP and others) received training and technical assistance in production management, quality control, branding, packaging and marketing to improve their competitiveness. Led by ASME's client manager Armine Tadevosyan the firms participated in several study tour and trade show events to broaden their understanding of international production standards and market opportunities.

ASME market studies also showed that production improvements in the absence of contemporary fashion design would be insufficient to revitalize the Armenian textile sector. It also revealed that Armenian consumers did not welcome the "Made in Armenia" brands on their ready to wear purchases, preferring to have something made in Paris or Milan. An early survey revealed that while up to 30% of the garments sold in Armenia were actually made in Armenia, only 4% were branded this way.

Armine and her team of consultants began working with a group of Armenian designers who were struggling to make ends meet doing contract design work for wealthy clients. They concluded that the first task was to show consumers that Armenian made brands could compete in terms of price and sophistication with imports.

Through a series of workshops presented by US fashion consultants Jeffrey Silberman of the New York Fashion Institute and Margaret Bishop from Abt Associates and the Fashion Consulting Group (FCG), a Moscow fashion company, the designers learned the latest techniques of technical design as well as fabric selection, product costing, sizing, construction, etc. Based on this knowledge, ASME helped designers to develop complete "lines" of product that could be stocked in local shops – and exported. Once the new dresses, coats and other products were produced, Armine and her team used cost share grants to organize three separate "Prêt-à-Porter Yerevan" fashion shows in Yerevan to create brand recognition. Each event involved more designers than the previous one and each involved a larger part of the costs to be covered by the participants. The most recent event attracted 4,500 visitors over three days to see the work of 12 designers presented in five runway shows and a showroom exhibition.

A new professional consulting firm, Fashion Marketing Solutions, now provides training and marketing assistance to established and aspiring designers. In another noteworthy event, 15 designers formed the Armenian Fashion Council in 2005 to organize fashion events and training activities. This group has now grown to include 20 full members and another 50 associate members – young designers who are still struggling to break into the business with the help of their more experienced colleagues.

Yerevan boutiques feature locally produced Ready-to-Wear fashions and institutional uniform purchasers (e.g. local court judges) look to Armenian companies for the styling and production of their uniforms. A small but growing export market in Moscow is another encouraging sign.

Responding to the Threat of Avian Influenza

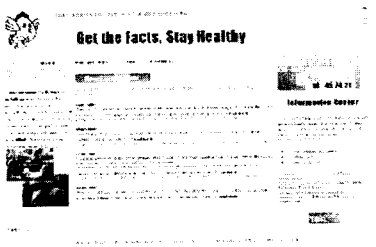
Highly Pathogenic Avian Influenza (HPAI) first appeared in the Caucasus in late 2005 and early 2006. Human deaths from the disease in Azerbaijan and eastern Turkey caused widespread concern among the Armenian population. As a result of poor and sometimes erroneous information on how HPAI spreads and how it can be prevented, the domestic market for poultry and poultry products collapsed. Commercial producers found themselves on the verge of financial failure as the demand for their products dropped precipitously. Villagers, many of whom count on their backyard poultry as a primary source of protein and income, cut their flocks by an average of 30% because they feared losing all of their birds to the disease or culling teams. In some villages the entire poultry stock was killed.

In order to assess the socio-economic impact the threat of the disease was having in the country, ASME undertook a KAP (knowledge, attitude and practice) survey in several key areas in March and June 2006. The results of these surveys were startling. We discovered:

- *A high degree of concerned among consumers and backyard producers were about the threat of the disease,*
- *Large majorities of respondents had low confidence in the sources of HPAI information and little trust that government was capable of protecting them and their families.*
- *The immediate reaction to this uncertainty by consumers was to reduce their exposure by eliminating poultry from their diets.*
- *Rumors and misinformation were rampant, including vocal statements by some professional veterinary officials and commercial producers that HPAI was nothing more than a Western plot to destroy the Armenian poultry industry to create opportunities for American and European exporters.*

Following the analysis of these survey results, USAID requested DAI, through its ongoing ASME project, to design and implement a $2.2 million comprehensive, integrated program to respond to the threat of avian influenza in Armenia. The objective was to act quickly to respond to immediate needs while a larger World Bank-funded project could be finalized and launched. The project had three major components:

- *Strengthen the capacity of the Ministry of Agriculture and its National Veterinary Service to identify, diagnose and respond to an avian influenza outbreak.*
- *Assist commercial poultry producers to improve their bio-security programs, develop contingency plans and protect their markets.*
- *Develop an effective communications strategy and materials on how to prevent avian influenza and how to respond to any outbreaks that might occur.*



The government's Inter-ministerial Task Force on Avian Influenza became our primary counterpart. One of the keys to ASME's success was a detailed Project Implementation Letter that described the actions and resources that each partner would provide in this joint AI prevention program. Under the guidance of the Task Force, ASME also coordinated our activities with other donors including UNICEF, FAO, USDA, the World Bank and others to maximize information sharing, develop common strategies and minimize any overlapping and duplicative programs.

ASME quickly assembled a team of international experts on subjects ranging from epidemiology to bio-security to outbreak response management to behavior change communications in support of a full-time team of local ASME staff. Working closely with the Ministry of Agriculture's State Food Safety and Veterinary Inspection Service and the Republican Veterinary Antiepidemic and Diagnostic Center, we rapidly ascertained that the government was poorly equipped to deal with any aspect of the threat. Surveillance systems and diagnostic capacities were inadequate at best. Reagents and other supplies necessary to deal with a potential zoonotic disease outbreak did not exist. The Armenian veterinary community had a weak understanding of the dangers of avian influenza or techniques for managing risks. No communications programs were in place to develop and convey accurate information on HPAI to the general public and the poultry sector. Armenia was starting from scratch.

Early in the program it became apparent that a key piece of diagnostic equipment, a Real Time PCR, was required to diagnose avian influenza, as well as other diseases. Based on an analysis by DAI's senior veterinarian, Dr. Ross Graham, we also identified a series of biosecurity improvements at the national laboratory required for the safe and effective use of the PCR. After approval from USAID, the ASME team arranged for the procurement, installation and training of staff in the use of Real Time PCR equipment. At the same time the Ministry of Agriculture and FAO rehabilitated the physical infrastructure of the molecular diagnostic laboratory to meet

international operational standards. These joint actions served as the cornerstone of the program.

HPAI surveillance, prevention, detection and response requires a wide range of materials including personal protection equipment (PPEs), rapid diagnostic test kits, decontamination supplies as well as simple veterinary kits and supplies for hundreds community veterinarians and veterinary inspectors. The ASME team, led by Armen Asatryan, coordinated and ensured the delivery of all these essential supplies. In one of the most innovative aspects of the program, our team designed and procured two emergency response vehicles. They were equipped with a variety of basic supplies and culling and disinfection equipment (using locally produced materials) and then turned over to the State Food Safety and Veterinary Inspection Service.

While equipment is important for combating HPAI, well trained veterinarians, laboratory specialists and poultry producers are essential for an effective campaign. Designing and delivering training programs accounted for the bulk of ASME's resources. Over the 18 months of the program we trained more than 2000 participants including community veterinarians and other local officials in all 40 regions and top level

Responding to the Threat of
Avian Influenza

agriculture, health, enforcement and veterinary officials from the central government. Specialized training activities covered topics as varied as:

- *Avian influenza epidemiology, surveillance, pathology and diagnosis*
- *PPE and rapid diagnostic test kit use and sample collection, packing and international shipping procedures,*
- *Humane and sanitary depopulation and disposal of birds in infected areas,*
- *Improved outbreak response management systems including emergency operations and quarantine procedures,*
- *Bio-security systems for small and large scale commercial producers and open market operators,*
- *Media training on avian influenza and crisis communication methods.*

Community veterinarians were especially appreciative of the training opportunities with many noting that it was the first professional training program of any type that had been offered to them in the last fifteen years.

In the area of communications, the team developed a wide array of materials with Anahit Gevorgyan coordinating the day to day activities. We adapted technical materials produced by the FAO, USDA and others for use in Armenia, including an extensive translation effort. Some of the most significant communications products include:

- *An HPAI slogan (Get the Facts, Stay Healthy) and a logo for the Avian Influenza Interministerial Task Force to denote approved communications materials.*
- *Posters and a public service clip, produced in cooperation with UNICEF, on good personal hygiene practices for children of different ages,*
- *A user-friendly web site including frequently asked questions and answers and other technical materials on HPAI,*
- *A seven-minute informational film on HPAI on how to recognize it in humans and poultry for television stations throughout the country,*
- *Bio-security posters for commercial producers to inform their workers of safe practices.*

All of this work has been done in close cooperation with appropriate government of Armenia officials and other donor organizations.

It would be nice if we could say that the battle has been fought and the victory won. The truth is somewhat less definitive. What can be said is that the work has been relevant and appreciated and that Armenia is better-prepared to respond to an avian influenza outbreak than it was in early 2006.

The effort has not been wasted. The new skills and equipment are currently proving useful as the government responds to a serious challenge from African Swine Fever that has afflicted the country. The best news is that the HPAI effort continues as the World Bank and other donors start their assistance on the ASME foundation. All of the work done, plans made, recommendations offered and materials developed have been handed over to the Task Force and the World Bank avian influenza project implementation team. We wish them well.

Gary KILMER
Tom RULLAND
Paul SOMMERS
Susan WOOD
John PALMUCCI
Fred HARRIS
Bernard WENDEL
Neal NATHANSON
Patrick BALL

Aleksandr HARUTYUNYAN
Anahit BOBIKYAN
Anahit GEVORGYAN
Ani SHAHNAZARYAN
Anna PARAVYAN
Ara KARAPETYAN
Arman HAKOBYAN
Armen ASATRYAN
Armen AYUNTS
Armen MATOSYAN
Armen KARAPETYAN
Armine GHAZARYAN
Armine TADEVOSYAN
Arsen POGHOSYAN
Arsen KHACHATRYAN
Astghik MANUKYAN
Diana BOYAKHCHYAN
Gagik HOVAKIMYAN
Gagik MKRTCHYAN
Gohar HARUTYUNYAN
Grisha SHIRVANYAN
Hasmik ASATRIAN
Lilik HAKOBYAN
Lilit HAKOBYAN
Lusine HOVHANNISYAN
Mikayel SARAFYAN
Mkrtich AYVAZYAN
Narine MATINYAN
Ruben MARGARYAN
Rudolf MARGARYAN
Ruzan MELYAN
Samvel SHAHBAZYAN
Saro TSATURYAN
Sergey MATEVOSYAN
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