

**Farmer-to-Farmer
Agribusiness Management Program**

**Final Program Report
to USAID**

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Section 1 Overview

I. EXECUTIVE SUMMARY

The Farmer-to-Farmer Agribusiness Management project (hereafter referred to as FTF) is a USAID-funded project to promote the development of private agriculture in the NIS by providing highly skilled short-term volunteer technical assistance to the emerging private farmers and agribusinesses. Launched in 1992 after the collapse of the Soviet Union, the program was one of USAID's initial efforts to begin providing technical assistance to the fledging economies. Because of this, ACDI/VOCA was often the first USAID grantee or contractor to have a presence in the NIS countries and ACDI/VOCA volunteers were viewed as the first "ambassadors" to the rural communities, offering insight into American customs and principles while providing technical advice and training to the emerging private farmers and entrepreneurs. Moreover, ACDI/VOCA itself often became the primary source of information and advice for US companies and USAID grantees (and other foreign donors) interested in initiating programs in these countries as a direct result of implementing the FTF program. Significantly, ACDI/VOCA and ACDI/VOCA volunteers were able to influence legislation supportive of agricultural reform and help develop agricultural strategies in a few of the NIS countries.

From 1992 through 1999, ACDI/VOCA provided 1,246 FTF volunteers who completed 1,451 volunteer projects and directly benefited 293,287 people in the countries of Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova, Russia and Ukraine and. While individual country strategies varied depending upon the conditions in each country, the FTF program targeted technical assistance to agricultural producers, processors and, as economies developed, associations of these groups. As the privatization process took hold to varying degrees in each country, the technical assistance provided by the FTF program evolved and changed to address the changing operating environment within each country. By virtue of its demand-driven nature, the FTF program also reflected the changing needs of the technical assistance recipients. This flexibility within the overall program resulted in country programs that successfully provided technical assistance to areas of need and areas where volunteer technical assistance proved the most successful over time.

As the economies in the NIS developed, the overall nature of the FTF program itself also changed over time from a strictly demand-driven technical assistance program to a program that became increasingly result-oriented. In response, ACDI/VOCA developed increasingly sophisticated methods of tracking impact, more focused volunteer assignments, and pursued a stricter adherence to a coherent country strategy. Significantly, the project management capacity of ACDI/VOCA improved with the development of these new tools as well as the ability to field highly skilled and experienced volunteers.

In the course of implementing the FTF program, ACDI/VOCA continually adapted its implementation strategy to incorporate changing conditions and proven successful implementation techniques. Several of these "lessons learned" became core operating principles for ACDI/VOCA's volunteer assistance programs. First, volunteer technical assistance is a proven mechanism for delivering effective technical assistance in the NIS, particularly in meeting the needs of small- and medium-sized enterprises and private farmers. This assistance is most effective when focused in priority sectors and regions, though a balance is needed between maintaining a program focus and retaining a flexible program that can respond to unforeseen needs. Secondly, long-term partnerships between the foreign technical assistance provider and host organizations increase the impact of volunteer technical assistance. Multiple volunteer assignments with the same host create a deeper relationship and a broader range of impact. Finally, building the capacity of support organizations, such as associations, cooperatives or business service

centers, multiplies the spread of information and knowledge gained from a volunteer assignment while building a sustainable source of continued technical assistance for hosts.

During the early phase of the FTF program, ACDI/VOCA recognized the necessity of supporting local organizations and developing their capacity to provide technical assistance to farmers and agribusinesses beyond the life of the FTF program. However, very few of these types of organizations existed in the early 1990s. Accordingly, ACDI/VOCA established local NGOs with the capacity to conduct these types of activities in Armenia, Azerbaijan, Moldova and Russia. After working with ACDI/VOCA staff and volunteers, these organizations are now the leading organizations in their respective countries in providing local consultants and training. Linked to this strategy of creating local consulting firms, ACDI/VOCA also increased the program focus on building the capacity of associations and other types of support organizations. This led to the creation of 11 extension offices through the NIS, the creation of 14 producers and processors associations, and improved capacity at an additional 56 existing associations.

While continuing to provide assistance to producers, processors and other individual enterprises, ACDI/VOCA volunteers were also able to help develop legislation in Moldova and Russia that specifically addressed obstacles to private agriculture reform. Specifically, volunteers in Russia helped formulate two government resolutions on farm debt reconstruction, both of which were approved, and advised on a bankruptcy law that is currently pending approval in the Russian government. In Moldova, ACDI/VOCA volunteers were instrumental in advising on amendments to the Moldovan Land Code and the law on Savings and Credit Associations. In Armenia, ACDI/VOCA volunteers worked to initiate a major reforestation project with the full support of the Armenian government. Ultimately, the project is expected to satisfy a large proportion of Armenia's demand for lumber and fuel. Additional volunteers in Armenia introduced gravity irrigation systems into 3 regions, providing water for 15,000 inhabitants and increasing agricultural productivity by 90%.

A key component of the FTF program is increasing public awareness and understanding in the US of the economic, social and political situation in the NIS, especially as the region undergoes the transition to a market economy and democratic government. ACDI/VOCA volunteers have proven themselves to be more than willing to share their experiences with their communities through presentations, newspaper articles, radio and television interviews and even their own web pages. Although it is difficult to estimate the number of people reached through the media, ACDI/VOCA volunteers have conducted approximately 2,804 oral presentations to an estimated 70,447 people. Additionally, ACDI/VOCA has brought 57 volunteers to Washington, DC for group debriefing sessions that allow the volunteers to exchange experiences and brief ACDI/VOCA staff and the volunteers' Congressional representatives on the results of their volunteer assignment. ACDI/VOCA volunteers have made 171 visits with Congressional representatives.

Throughout the duration of the FTF program, ACDI/VOCA sought to leverage the training from volunteers received by hosts with additional training and improved access to financial sources. Over the life of the FTF program, ACDI/VOCA placed 232 recipients of FTF technical assistance in training programs in the U.S. and, to a lesser degree, in Europe. Moreover, ACDI/VOCA volunteers helped hosts gain a total of \$1,231,000 in loan, grant or investment funding.

After providing volunteer technical assistance to the NIS for 7 years, it is clear that the FTF program played a significant role in helping creating the foundation for privatization. From serving as the initial "ambassadors" to rural communities to supporting the emerging private farmers and entrepreneurs to keeping US political leaders more informed on events in the NIS, ACDI/VOCA volunteers demonstrated a clear ability to produce impact. Ultimately, it was the Farmer-to-Farmer program's level of success in addressing the ongoing needs of the NIS countries during the early phases of transition that led to the continued support for the overall program.

II. PROGRAM OVERVIEW

A. PROGRAM SUMMARY

The Farmer-to-Farmer Agribusiness Management project (hereafter referred to as FTF) was initiated in 1992 through a cooperative agreement with Volunteers in Overseas Cooperative Assistance (VOCA). In January 1997, VOCA merged with Agriculture Cooperatives in Development International (ACDI) to form ACDI/VOCA and the organization continued to manage the project until its close in September 1999.

Per the original cooperative agreement, the goal of the FTF program was to “support the development of private farming enterprises and private agribusiness systems, through the provision of short-term technical assistance at the local enterprise level to emerging private agricultural enterprises. This will result in the development of models of viable free market-oriented enterprises which will be available for other cities, regions and republics to emulate.” In support of this objective, the early focus of the FTF program was on providing direct assistance to private farmers and agribusinesses. In recent years, the focus of the FTF program evolved to address the changing environment within the NIS and ACDI/VOCA began emphasizing work with local associations, support organizations and cooperatives who provide services to farmers and agribusinesses. Throughout the life of the project, ACDI/VOCA provided 1,246 volunteers who completed 1,451 volunteer projects in support of the FTF program’s overall objective and directly benefited 293,287 people (see Table 3 next page). A detailed description of these volunteer assignments is provided below in Table 2.

Table 1 Volunteers by Gender

	No. of Volunteers	% of Volunteers
Female	179	14.3%
Male	1,067	85.7%
TOTAL	1,246	100%

Table 2 Total Volunteers and Volunteer Assignments

By Type of Client	Total Volunteers	% Total Volunteers	Total Assignments	% Total Assignments
Private Farmers	328	26.3	390	26.9
Agricultural Enterprises *	206	16.5	283	19.5
Associations, NGOs, support organizations	263	21.2	286	19.8
Cooperatives	166	13.3	185	12.7
Credit Institutions	32	2.6	33	2.3
Educational Institutions	86	6.9	99	6.8
Government Institutions **	85	6.8	89	6.1
Other	80	6.4	86	5.9
TOTAL	1246	100	1451	100
By Sector				
Dairy	122	9.8	154	10.6
Grains	199	16	230	15.9
Meat	140	11.2	167	11.5
Fruits & Vegetables	278	22.3	316	21.8
Credit	43	3.5	43	3
General ***	464	37.2	541	37.2
TOTAL	1246	100	1451	100

* Agricultural Enterprises include processors, input suppliers, elevators, etc.

** Government institutions also include things such as extension services, policy work, etc.

*** General Sector covers miscellaneous assignments in areas such as extension. policy work. curriculum development. etc.

B. PROGRAM HISTORY

In early 1992, ACDI/VOCA began implementing the FTF program and became the first USAID grantee to have a presence in Armenia, Kazakhstan, the Russian Federation and Ukraine. Later that year, ACDI/VOCA received additional funds to expand volunteer activities into Belarus and Moldova and to begin exploring the feasibility of volunteer programs in Georgia and Azerbaijan. After receiving additional funding in late 1995, ACDI/VOCA expanded FTF Agribusiness Management project activities into Azerbaijan, though elected not to initiate a volunteer program in Georgia.

The FTF program was initially intended to spur the development of private agriculture in the NIS by providing technical assistance to those farmers and enterprises willing to implement western practices. Accordingly, most technical assistance in the early phase of the program targeted individual farmers and organizations and focused on addressing either

improving production as a means of generating income or promoting democratic practices. As the privatization process took hold to varying degrees in each country, the technical assistance provided by the FTF program evolved and changed to address the changing operating environment within each country. By virtue of its demand-driven nature, the FTF program also reflected the changing needs of the technical assistance recipients. This flexibility within the overall program resulted in country programs that successfully provided technical assistance to areas of need and areas where volunteer technical assistance proved the most successful over time.

Table 3 ACDI/VOCA Total Beneficiaries

	Female	Male	TOTAL
Direct	135,685	157,602	293,287
Indirect	398,455	514,149	912,604
TOTAL	534,140	671,751	1,205,891

Individual country strategies varied depending upon the conditions facing private farmers and private agriculture within each country. As the operating environment changed and private agriculture became more developed, the needs for technical assistance also changed. Accordingly, ACDI/VOCA country strategies evolved from working with individual farmers to working with support organizations such as associations and cooperatives. In most countries, FTF volunteers also worked to organize extension services and helped develop curriculums for use at agricultural institutes. Technical assistance to enterprises and farmers assumed a greater emphasis on post-production activities with the intent of providing higher revenue for products. Additionally, the programs in several countries (Azerbaijan, Kazakhstan, Russia and Ukraine) also assumed a sectoral and/or regional focus to further increase the impact of the technical assistance. Significantly, the programs in Moldova and Russia were able to further promote the development of private agriculture by influencing the development of legislation supportive of agricultural reforms. A detailed discussion of the strategy implemented in each country and their evolution based on lessons learned within each country is presented in Section 2 of this report.

As with the strategy changes within each country, the overall nature of the FTF program itself (including ACDI/VOCA and the other implementers) also changed over time from a strictly demand-driven technical assistance program to a program that became increasingly results-oriented. This evolution in program nature became possible due to USAID's recognition of the initial successes of the program in generating real impact as well as the gradual changes in the economic development of the NIS. In response, ACDI/VOCA developed increasingly sophisticated methods of tracking impact, more focused volunteer assignments, and pursued a stricter adherence to a country strategy that targeted specific objectives as the outcome of volunteer activities. Significantly, the project management capacity of ACDI/VOCA improved with the development of these new tools as well as the ability to field highly skilled and experienced volunteers.

C. PROGRAMMATIC LESSONS LEARNED

As the FTF program developed into a result-oriented program, several key broad programmatic modifications and needs became apparent. These “lessons learned” evolved as ACDI/VOCA increased its capacity to implement the FTF program and the program itself shifted to meet the changing needs of the new private farmers and enterprises in the NIS.

- Volunteer technical assistance is an effective mechanism to deliver technical assistance in the NIS.
- Volunteer technical assistance is limited in terms of the impact that can be accomplished. Accordingly, volunteer assignments should be narrowly defined with clear outputs for maximum effect as host organizations expect volunteer assignments to produce results.
- The initial volunteer assignment with a host should be limited in scope to establish relations and achieve greater impact. More in-depth impact can be accomplished with successive volunteers.
- The flexibility of the FTF program to fill specific needs of host organizations is a strength of the program to be retained. Program impact is maximized by focusing volunteer assistance in priority sectors and regions. Balance is needed between maintaining a program focus while retaining a flexible program that can respond to unforeseen needs.
- Long-term partnerships between FTF implementors and host organizations increase the impact of volunteer technical assistance. Multiple volunteer assignments with the same host creates a deeper relationship and a broader range of impact.
- At the grassroots level, there is a greater willingness and capacity to share information with associates than is commonly believed. This forms the basis for local associations as a means of replicating successful FTF activities.
- Monitoring systems that uniformly capture data provide implementers and USAID with the analytical tools to evaluate project results and impacts are a missing link in program planning.
- Volunteers who have completed multiple assignments in one country or throughout the NIS are more effective in providing assistance to hosts as they are already familiar with the basic operating conditions and challenges faced by hosts. Moreover, they often accumulate their own “lessons learned” from previous volunteer assignments and incorporate them into the current assignment.
- Volunteer technical assistance requires an enabling environment to be the most effective. In addition to working at the grassroots level, foreign technical assistance (keeping in mind the limitations of volunteer technical assistance) should also address, among others, legislative obstacles to reform and poor access to credit and markets.
- Volunteer technical assistance is most effective when the host is linked to an existing source of funding (loan or grant) and inputs.
- Building the capacity of support organizations, such as associations, cooperatives or business service centers, multiplies the spread of information and knowledge gained from a volunteer assignment while building a sustainable source of continued technical assistance for hosts.

D. RESOURCES LEVERAGED SUMMARY

ACDI/VOCA sought to leverage the training received by hosts with additional training and improved access to financial sources. Over the life of the FTF program, ACDI/VOCA placed 232 recipients of FTF technical assistance in training programs in the U.S. and, to a lesser degree, in Europe. Moreover, ACDI/VOCA volunteers helped hosts gain a total of \$1,231,000 in loan, grant or investment funding. In addition, ACDI/VOCA volunteers during their assignments provided an estimated total of \$13,819,626 worth of time.¹

¹ Value of volunteer in-kind contribution is based on the total number of person days from 1992 through 1999. 1992-1997 person days are valued at \$433.52 per day while 1998-1999 person days are valued at \$455.36 per day.

E. SUSTAINABILITY

ACDI/VOCA recognized during the early part of the FTF program that farmers and entrepreneurs required assistance beyond the scope and duration of the program. Accordingly, and in the interests of providing sustained support to farmers and entrepreneurs, the programs in Armenia, Azerbaijan, Moldova and Russia established local self-sustainable NGOs to promote privatization and provide local consultants to farmers and entrepreneurs. Each organization was created with the intent of replacing the ACDI/VOCA office with a local organization. These organizations continue the efforts of the FTF program by providing local consultants to organizations and often work in close tandem with ACDI/VOCA's volunteers and programs. These types of organizations leverage local knowledge with foreign expertise resulting in more effective technical assistance. Moreover, the local NGOs are able to provide ongoing assistance to the farmers and entrepreneurs after the volunteer assignment is completed, thereby extending the duration and level of assistance and improving the skill transfer. Significantly, each organization is already a recognized leader in their respective countries in providing highly-skilled assistance to enterprises, farmers and donor organizations. As a result of this, the organizations in Armenia and Moldova have independently attracted foreign donor grants and contracts. A more detailed description of each of these organizations is presented in Section 2 of this report.

In conjunction with creating successor organizations, ACDI/VOCA also began increasing the emphasis in several countries on building the capacity of or creating associations and other types of support organizations that were capable of providing assistance to farmers and entrepreneurs. Providing volunteer technical assistance to the members of associations or clients of support organizations had the dual effect of addressing the needs of an individual while building the credibility of the association or support organization providing member services. This increased emphasis took place in most countries as privatization began to take hold and in response to the increased demand for information and technical assistance received from the continually higher numbers of private farmers and agribusinesses. With this new focus, ACDI/VOCA established 11 extension service offices throughout the NIS, created 14 producers and processors associations and built the capacity of an additional 56 pre-existing associations.

By focusing on developing local organizations capable of providing technical assistance, ACDI/VOCA was able to multiply the spread of and access to the types of information and training necessary for the increasing numbers of farmers and agribusinesses to become more competitive in the market economy. Providing this type of assistance to agricultural producers and small- and medium-sized enterprises (SME) is crucial to promoting continued economic development in the NIS. Throughout the world, SMEs are widely recognized as the engines for economic development. In the NIS, SMEs have proven that they outperform the larger joint stock and privatized companies.² However, SMEs and agricultural producers agribusinesses in the NIS lack current technical knowledge, equipment, financing, and marketing skills to modernize production and processing practices and effectively market their products. Operating under these conditions, the new private farmers and SMEs find it increasingly difficult to compete against well-financed and efficient western firms. By developing support organizations and associations capable of providing training and information, ACDI/VOCA was both increasing the potential number of recipients of training and creating organizations capable of providing training similar to that provided by FTF volunteers long after the FTF program ends.

² See "Evaluation of Private Enterprise Development in the ENI Region," submitted to USAID by Louis Berger International and Checchi & Company Consulting, September 1998

F. PUBLIC OUTREACH

Changing American attitudes about the NIS and the US International Assistance programs has been a key component of the FTF Program since it started 1992. The role of the FTF program was not only to provide technical assistance to transitional economies, but also to increase the US public awareness of the of different cultures, economic situations, and characteristics peoples of the NIS. ACDI/VOCA continues to encourage volunteers in the FTF program to carry out public outreach activities in their hometown communities. From slide presentations to articles published on the World Wide Web, volunteer outreach expands over many mediums both locally and internationally. Over the life of the FTF project, 649 volunteers provided some type of public outreach in their communities. A majority of these volunteers discussed their assignments with local clubs, churches and professional/personal affiliation groups. To date, 428 volunteers have written or have been feature stories in their hometown newspapers, professional newsletters, and journals. At the university level, over 24,000 students have heard talks presented by FTF volunteers both as professors and guest speakers. Notably, public outreach has proven an effective tool to motivate other individuals to become involved with volunteering. Through attending volunteer presentations, articles and recommendations, approximately fifteen percent of the FTF volunteers (192 individuals) chose to become volunteers in the FTF program. This type of recruiting has helped increased the number of qualified technical experts for future projects with the FTF program.

The impact of the FTF public outreach had significant accomplishments on many levels of the program. First, outreach helped volunteers continue working with their host organizations through follow-up communications and establishing US relationships. In some cases, those volunteers who performed outreach in their communities received donations for the host organization or association. Continual follow-up with these assignments allowed volunteers to maintain good contact with their host organizations. This has led to time donated by a follow-on volunteer assignment with the same host (encouraging long-term impact) as well as absorbed costs on informational and technical materials. Additionally, some volunteers have invited and provided lodging for their hosts in the US for further training and future partnerships.

Additionally, educating the US public about the FTF program and US foreign assistance programs expands the awareness of global issues by local US communities. An estimated 2,804 presentations have been presented to audiences totaling 70,447 people. While these numbers themselves demonstrate a broad spread of knowledge resulting from participation in a FTF volunteer assignment, they also reflect a changed attitude towards the NIS on behalf of the volunteer.³ The change of volunteer attitudes towards US foreign assistance programs has been best exhibited during the volunteer debriefings in Washington, DC. In the early nineties, ACDI/VOCA arranged a Washington, DC debriefing for each volunteer assignment. However, as the program expanded, the debriefing schedule could not handle the dramatic increase of volunteers. ACDI/VOCA revised limited the Washington portion of the debriefing to key representatives of the FTF program. As a result, the group volunteer debriefings were established and designed to accomplish the following:

- Allow ACDI/VOCA staff in Washington, DC to have direct communication with the volunteers about the focus, strengths, and weaknesses of our programs;
- Provide updates to representatives from US international development organizations (USDA, USAID and Peace Corps) as well as Congress, that are responsible for funding of ACDI/VOCA activities;

³ Although ACDI/VOCA does not formally track changes in attitude in volunteers, informal surveys and discussions with volunteers supports this conclusion. This conclusion was formally supported in the "Impact Evaluation of the NIS Farmer-to-Farmer Program," submitted to USAID by Agridec, July

- Allow volunteers to share ideas and experiences with other volunteers to enhance the effectiveness of volunteer assignments.

Since the start of the volunteer debriefings, 57 FTF volunteers have participated in these group debriefings in Washington, DC to share their experience with fellow volunteers, ACDI/VOCA Staff, and Congressional Representatives. These volunteers have given 171 assignment debriefings to US members of Congress and their staff providing specific information on the assignment goals and impact. The meetings with Representatives are crucial as volunteers provide a special insight into the difficult political and economical conditions of the NIS and often provide a better understanding about the NIS through their debriefing sessions. Volunteers are frequently requested to provide the Congress members with follow up reports and letters on the progress of their assignments.

Programmatically, meeting and visiting with the volunteers helped ACDI/VOCA staff better understand the work behind each assignment. The debriefings help the project coordinators work out the problems and strengthen the effectiveness of the project through volunteer feedback. Additionally, the volunteer debriefings further the goal of volunteer outreach by generating the interest of the US public while recognizing the volunteer behind the assignment – a key component to US foreign assistance programs.

As the FTF project moves into the next phase, ACDI/VOCA will continue to encourage volunteer outreach at all community levels. Currently, a joint web page linking ACDI/VOCA, Land O'Lakes and Winrock International will serve as an information source for potential volunteers to view current stories about volunteer assignments. This web page will further the goals of the FTF program while drawing upon a larger interest of the combined organizations. Collectively, the FTF Consortium will carry on its mission to help volunteers inform US audiences about the FTF program through this web page and help connect volunteers with future assignments.

G. EXPANDING ACDI/VOCA'S CAPACITY TO IMPLEMENT VOLUNTEER PROGRAMS

In 1990, ACDI/VOCA implemented 144 volunteer assignments. With the addition of the FTF program in 1992, this number increased to 453 and increased incrementally as volunteer activities expanded into new countries, finally peaking in 1994 with a total of 1,006 volunteers in the various volunteer programs around the world. ACDI/VOCA now provides an average of 800 volunteers annually. FTF played a significant role in developing ACDI/VOCA's organizational capacity to provide these levels of volunteer assistance.

Beginning in 1994, ACDI/VOCA began to intensively develop a computerized monitoring and evaluation system (MIS) capable of tracking the logistics and results of individual volunteer assignments. The MIS proved crucial in meeting the increased needs of management in overseeing the volunteer programs and, most importantly, monitoring and reporting on the results of the programs. Continued revisions to the system over time allowed ACDI/VOCA to develop the system into an effective management tool and incorporate the increased emphasis on results orientation in the FTF program.

Concurrent with the development of an effective MIS, ACDI/VOCA also expanded and refined its recruiting systems to meet the increased demand for volunteers. In 1992, with the launching of FTF, ACDI/VOCA moved away from a centralized recruiting system based in Washington, DC to a decentralized system based in 5 states around the U.S. Operating out of the regional offices, ACDI/VOCA recruiters were able to more easily establish networks and develop potential contacts. Additionally, the office locations were chosen so that climatic conditions were similar to the conditions in the country receiving the volunteers (the offices located in northern states recruited for the NIS) so that agricultural crops and growing conditions would be similar. The effect was immediate. Within 2 years of decentralizing recruiting operations, the database of potential volunteers had increased from 1,000 to

5,000 people. The decentralized recruiting system became especially effective as the needs of the NIS countries changed from production agriculture assignments to specific industry or specialized assignments. In addition to recruiting volunteers, the recruiting offices also benefit reverse training participants by hosting or even leading the group of participants. Currently, ACDI/VOCA maintains 3 recruiting offices; the other 2 were eventually closed due to budget constraints and lower volunteer numbers.

H. SIGNIFICANT ACCOMPLISHMENTS

ACDI/VOCA volunteers were able to significantly impact the development of private agriculture in the NIS. As mentioned previously, ACDI/VOCA volunteers were also able to help develop legislation in Moldova and Russia that specifically addressed obstacles to private agriculture reform. Specifically, volunteers in Russia helped formulate two government resolutions on farm debt reconstruction, both of which were approved, and advised on a bankruptcy law that is currently pending approval in the Russian government. In Moldova, ACDI/VOCA volunteers were instrumental in advising on amendments to the Moldovan Land Code and the law on Savings and Credit Associations. They also took the lead on promoting environmental conservation by advising on the law on ecological expertise and evaluation of environmental impacts and the law on re-gauge of products and toxic substances. In both countries, these legislative acts resulted in immediate impact at the national level and, in the case of Moldova, an acceleration of the entire land privatization process.

ACDI/VOCA volunteers were also instrumental in launching nationwide programs. In Armenia, FTF volunteers worked to initiate a major reforestation project with the full support of the Armenian government. Ultimately, the project is expected to satisfy a large proportion of Armenia's demand for lumber and fuel. Additional volunteers in Armenia introduced gravity irrigation systems into 3 regions, providing water for 15,000 inhabitants and increasing agricultural productivity by 90%. In Kazakhstan, ACDI/VOCA volunteers played key roles in developing the *Ile-Alatau Natural National Park* and getting it listed with the National Heritage.

In several countries, ACDI/VOCA created local organizations to provide ongoing technical assistance to farmers and agribusinesses. In Armenia, ACDI/VOCA created VISTAA, the country's first local consulting service group. Organized as a non-governmental organization, VISTAA used the model of ACDI/VOCA to develop itself a local consulting company. Started in 1994 with \$20,000 in financial support from ACDI/VOCA and a database of 3 local experts, VISTAA has grown into a leading consulting agency for agriculture with over 150 experts and a \$500,000 cash flow per year. With assistance from several FTF volunteers, VISTAA today is a major player in Armenia providing technical services to a large number of local and international organizations, farms and companies.

In Azerbaijan, ACDI/VOCA helped create the local agricultural consultancy group, Agro-Meslehet (or "Agro-Advice") in 1998. Agro-Meslehet recruits local consultants and matches them with local agribusiness clients. Since March 1998, Agro-Meslehet has developed a database containing 90 local consultants and has completed 43 consultancies: 30 with local companies and 13 for an international agency. Additionally, UMCOR, World Vision and IRC are contracting additional paid consultancies through Agro-Meslehet.

In Moldova, ACDI/VOCA helped register a Moldovan NGO called "ADSISTO" (or "assistance") in 1995. ADSISTO was created to create a professional, competent group of Moldovans capable of fulfilling task orders and who are capable of providing on-going advice to ACDI/VOCA clients. Since 1995, ADSISTO has established a solid reputation by providing consultants to support projects funded by USAID, EU TACIS, the Council of Europe, and the World Bank.

Finally, ACDI/VOCA created the NGO “Agro-Inform” in Russia in 1996 as a local provider of technical assistance to farmers and enterprises. Agro-Inform arranges seminars, provides local consultants and conducts market and product research.

In addition to creating local organizations capable of providing local consultants, ACDI/VOCA also worked with associations and other support organizations to expand the distribution of information to farmers and agribusinesses. Under the FTF program, ACDI/VOCA established 11 extension service offices throughout the NIS, created 14 producers and processors associations and built the capacity of an additional 56 pre-existing associations. Significantly, of the 173 associations and NGOs that implemented ACDI/VOCA volunteer recommendations, 90% developed new or improved existing services for members, 78% developed new policies, and 46% increased their membership/subscribership.

ACDI/VOCA’s work with agricultural producers also led to significant results. Of the 522 producers who implemented volunteer recommendations, 78% increased their production by an average of 156% (more than double pre-assignment production levels) and 84% increased their production efficiency.

Table 4 below provides a general overview of the impact under ACDI/VOCA’s FTF program. A more detailed discussion of impact within each country is presented in Section 2.

Table 4 **Summary of Program Impact**
Production-related Assignments

Type of host	Total # of hosts	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average% increase production	Hosts who developed business-plans
Private farmers	410	204	232	164	205	153
Agricultural Enterprises	255	149	157	153	466	86
Associations	167	64	96	75	64	42
Government Institutions	27	11	24	7	27	7
Educational Institutions	22	8	13	7	15	10
TOTAL	881	436	522	406	156%	298

Organizational Development Assignments

Type of host	Total # of hosts	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	283	173	79	156	135	53
Educational Institutions	28	18	2	12	11	4
Credit Institutions	25	13	10	11	12	8
Government	20	10	2	11	9	9
Agricultural Enterprise	48	32	8	35	20	17
Private Farmers	64	46	0	32	7	9
TOTAL	468	292	101	257	194	100

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	37	28	10	23	20	5
Government Institutions	10	8	3	2	1	4
TOTAL	47	36	13	25	21	9

Training Assignments

Type of host	Total # of hosts	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/improved materials	Hosts who mobilized resources
Educational Institutions	32	22	17	22	14
Government	8	4	3	4	1
TOTAL	40	26	20	26	15

Section 2 Country Programs

I. OVERVIEW

The strength of the FTF program was its ability to adjust to the varying political and economic climates within each of the NIS countries as well as to the type of volunteer technical assistance provided as countries privatized their economies and developed increasingly more market-oriented economies. In fairly restrictive countries with economies that continue to stagnate or are privatizing very slowly, such as Belarus and Azerbaijan, the FTF program continued to focus primarily on providing assistance to individual private farmers. However, in more reform-oriented countries, such as Moldova, the FTF program evolved along with the changing economic conditions, providing more specialized technical assistance to the increasingly sophisticated enterprises and promoting the development of support organizations (associations, local NGOs, etc.) to expand the spread of information to the increasing numbers of private farmers and enterprises.

ACDI/VOCA utilized this flexibility within the FTF program to implement country strategies that adapted to the conditions present in each country while continuing the program's focus on supporting the development of private agriculture. Each country strategy and the results achieved within each country are discussed below.

II. COUNTRY INFORMATION

Table 5 Caucasus and Central Asia Regions Program Activity

By Type of Client	Armenia		Azerbaijan		Kazakhstan		Total Vols	Total Assignments
	Vols	Assignments	Vols	Assignments	Vols	Assignments		
Private Farmers	70	70	30	32	26	30	126	132
Agricultural Enterprises *	25	25	19	20	17	21	61	66
Associations, NGOs, support organizations	31	31	3	3	67	72	101	106
Cooperatives	0	0	0	0	0	0	0	0
Credit Institutions	3	3	1	1	15	15	19	19
Educational Institutions	0	0	7	9	16	17	23	26
Government Institutions **	25	25	0	0	5	7	30	32
Other	0	0	0	0	0	0	0	0
TOTAL	154	154	60	65	146	162	360	381
By Sector								
Dairy	40	40	5	5	5	5	50	50
Grains	23	23	13	14	15	17	51	54
Meat	18	18	4	4	18	20	40	42
Fruits & Vegetables	42	42	28	30	15	17	85	89
Credit	0	0	0	0	16	16	16	16
General ***	31	31	10	12	77	87	118	130
TOTAL	154	154	60	65	146	162	360	381

* Agricultural Enterprises include processors, input suppliers, elevators, etc.

** Government institutions also include things such as extension services, policy work, etc.

*** General Sector covers miscellaneous assignments in areas such as extension, policy work, curriculum development, etc.

A. CAUCASUS

1. ARMENIA

Program Strategy and Evolution

After the collapse of communism, Armenia was one of the first countries to quickly initiate macro level reforms. The USAID Armenia strategy formulated around Strategic objective # 1 – Growth of competitive private sector, support SME development by improving business skills, strengthen the business climate, and improve access to broader markets. The USAID Mission placed special emphasis on the implementation of local pilot development activities that demonstrated immediate employment generation opportunities effecting the potential impact of macro-level reform.

The rapid implementation of land privatization created a new interest in farming and agriculture all over Armenia. New processing and servicing industries brought in new groups of entrepreneurs that lacked the expertise and technology necessary to increase production. In October 1992, ACDI/VOCA opened their office with an initial focus on helping develop the most appropriate strategy for the program's development in Armenia. Over the next 7 years, ACDI/VOCA provided 154 volunteers completing 154 assignments and committed 62% of the program resources to working private farmers and enterprises and 20% to developing and building the capacity of associations, NGOs and other support organizations.

In the first year of the program, many government organizations received volunteer technical expertise that helped establish economical development plans for agricultural sector. When the political and economical situation progressed in Armenia, the FTF strategy changed accordingly to meet with the needs of the host organizations. As the agribusiness industries developed, it became evident that a majority of the host organizations needed to adopt modern technologies, new production techniques, and innovative approaches to farming. These changes dictated a shift from the initial strategy of production-oriented assignments to complex production processing and marketing chains. Recognizing this, ACDI/VOCA saw the opportunity to establish local expertise to facilitate the changing needs of the program. In 1995, ACDI/VOCA volunteers helped write a strategic plan for the creation of a local agricultural consultant agency called Volunteers in Service to Armenian Agriculture (VISTAA). VISTAA, funded by the USAID mission, provided technical work for many unemployed, underutilized Armenian agricultural experts. These experts helped the FTF program identify key projects that further developed Armenian agribusinesses. One of the key components of the VISTAA program has been the utilization of demonstration funds. These demonstration funds (demo funds) have helped over 125,000 Armenian communities develop crop production, incorporate innovative efficient farming techniques and help individuals secure funding for the sustainability through loans and grants. One of the main goals of the demo funds is to support the Armenian farmer fiscally while empowering him to initiate most of the efforts to further agribusinesses.

With the establishment of VISTAA in 1995, FTF volunteer assignments took on a specific approach that addressed small-scale processing needs for crop and livestock commodities. Given the constraints of the country's climate, resources and terrain, the FTF program and VISTAA had to incorporate unconventional farming methods into their assignments. Through many technical assignments, several new technologies were introduced to Armenian producers and processors. Among them solar fruit dryers, solar water pump systems, gravity irrigation, and bio-gas digesters. New technologies were tested and other farmers quickly replicated those technologies. As a result of those assignments, local product development expanded in local and external markets becoming the Armenia FTF Program priority.

The results of the FTF assignments showed an increase in income locally, created more jobs in agribusiness activities and established best practices helping host organizations succeed in production, processing and marketing at local levels. Through the creation of a successor organization, the strategy of the FTF program will continue to work after USAID has discontinued their activities. The flexible character of the program has adapted continuously in helping Armenia enter into competitive markets both locally and internationally. Over the last 7 years, the FTF program has provided assistance to local farms and processing enterprises creating more than 60,000 temporary and permanent jobs for local population. The results of the Armenia program prove it to be one of the most innovative programs of the FTF program.

Significant Accomplishments

1. Creation of VISTAA

Perhaps one of the most significant achievements of ACDI/VOCA's operation in Armenia is the creation of the country's first local consulting service group – VISTAA. Organized as a non-governmental organization, VISTAA used the model of ACDI/VOCA to develop itself into a local consulting company. Started in 1994 with \$20,000 in financial support from ACDI/VOCA and a database of 3 local experts, VISTAA has grown into a leading consulting agency for agriculture with over 150 experts and \$500,000 cash flow per year. Since its beginning, VISTAA has assisted 36 volunteer assignments leverage \$113,500 in demonstration funds, improving host's profits and production. Some examples include: new bee keeping methods tested in ten (10) farms resulting in a 30% production increase and (75%) increase in resistance to diseases, one veterinarian association turned into a profitable veterinary service (15 members, \$15,000 annual revenue) and one consumer livestock cooperative was established (150 members). Today VISTAA is a major player in Armenia providing technical services to a large number of local and international organizations, farms and companies.

2. Gravity irrigation introduced

With the break up of collective farms and the creation of small land plots, Armenian farmers were directly faced the high cost of energy and limited water resources. Because of Armenia's mountainous terrain and arid climate, ACDI/VOCA volunteers introduced and designed 12 gravity irrigation systems in 3 regions to demonstrate the technology and worked with local organizations on alternative methods of resolving their problems. Construction costs were co-shared with Save the Children and UNHCR. Approximately 15,000 people benefited from these systems. Irrigation brought to the villages resulted in a 90% increase in productivity of grains, vegetables and fruits. Additionally, the availability of water allowed the villages to cultivate an additional 2,000 hectares of land.

3. Introduced alternative agriculture products

Alternative energy concepts and projects were developed (solar, hydropower) were tested in the areas of production, irrigation and processing by 80 farmers and organizations. The first solar fruit dryer was designed and constructed in 1994 by ACDI/VOCA volunteers. There are now more than 150 similar dryers operating in Armenia with a total capacity of 100 tons per shift per dryer. This activity created many job opportunities for the rural population. Based around these dryers, two (2) farmer association were created to jointly produce and market dry fruits. The average productivity of individual farms involved in this activity increased by 50%. As a result, more than 15,000 people have implemented the solar dryers of various sizes and design, solar water pumps, and other new products.

4. Large-scale reforestation program initiated

Working in conjunction with Armenian Engineers and Scientists of America (AESA), an Armenian Diaspora group based in California, ACDI/VOCA volunteers Areg Gharabegian, Vachek Chervinka, and Jake Eaton helped launch a strong effort to implement a reforestation program in Armenia. The group imported 46,000 fast growing poplar trees from the US and used to establish three nurseries in three regions. Poplar trees can successfully grow in Armenia's saline soil. To date, 28 hectares of poplars have been planted. The Government strongly supports the program and plans to plant 2,000 hectares of poplars. Not only would this solve the deforestation problem, but would produce 500 cubic meters of wood per hectare annually, thereby greatly contributing towards satisfying Armenia's lumber and fuel needs.

5. New cheese varieties introduced

In collaboration with USDA, ACDI/VOCA volunteer Jim Morse helped introduce 5 new varieties of cheese (Swiss, Roquefort, Gouda, Smoked and Buried) to 5 factories in Armenia. Although the production costs of these cheeses are higher than the costs associated with producing local cheeses, the profit margin is higher. Four new cheese varieties have been developed. Successful, new technologies were tested and implement. As a result, a cheese factory received a \$150,000 loan from USDA. Morse recommended that the factories produce large quantities of local cheese and limited quantities of the more exotic cheeses, thereby minimizing the risk and increasing profits. The exotic cheeses have a strong market in Armenia and were recently exported, furthering increasing the profit margins.

Program Impact

Over the life of the program, eighteen (18) new technologies/products were successfully introduced and massively replicated in Armenia. This resulted in the establishment of over 1,500 hectares of new crop fields, plantations and nurseries, and the adoption of two new services for more than 70,000 people. 140 clients were assisted with crop production management and through introduction of new crops and varieties, new production techniques and pest control methods increased general productivity of participating farmers by 25%.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average % increase production	Hosts who developed business-plans
Private farmers	95	54	68	95	75	20	45
Agricultural Enterprises	38	21	30	38	36	15	35
Associations	15	12	8	15	11	25	12
Government Institutions	19	19	6	19	4	5	6
Educational Institutions	0	0	0	0	0	0	0
TOTAL	167	106	112	167	126	17	98

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved Policies	Hosts who drafted Laws or mobilized resources
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Associations, NGO, SO	17	17	15	15	13	0	2
Educational Institutions	0	0	0	0	0	0	0
Credit Institutions	5	3	5	4	5	4	2
Government	6	6	3	0	4	5	4
Agricultural Enterprise	9	4	7	7	8	0	0
Private Farmers	34	16	26	0	26	0	0
TOTAL	71	46	56	26	56	9	8

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	14	2	14	6	14	14	2
Government Institutions	0	0	0	0	0	0	0
TOTAL	14	2	14	6	14	14	2

Beneficiaries

	Direct	Indirect	Total
Female	6,784	27,016	33,800
Male	6,880	44,039	50,919
TOTAL	13,664	71,055	84,719

Success Stories from Armenia

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. VISTAA

With the assistance of ACDI/VOCA volunteers and staff, a local NGO, the VISTAA Expert Center, was established and registered in 1998. VISTAA, Volunteers in Service to Armenian Agriculture, was the first private consulting agency to work in agriculture in Armenia. The idea began with a few enthusiastic local experts who had worked with ACDI/VOCA volunteers on various past assignments. They decided to open their own local consulting agency to provide assistance similar to that provided by ACDI/VOCA.

USAID supported the idea and granted the initial \$20,000 to the newly established agency. VISTAA began work with three specialists on staff in 1995. VISTAA quickly grew as a result of being very popular among local and international organizations, farmers and private companies.

Supported and managed by ACDI/VOCA, VISTAA has increased the number of specialists in its database and enlarged its capacity to serve various different clients. Supported by ACDI/VOCA experts, VISTAA developed short and long-term strategies for development and fundraising. Successful

implementation of these activities, along with its core capabilities, has encouraged the continuation of USAID support. Today VISTAA is the most active and successful local NGO in the country providing technical and business assistance to agribusinesses. It has a database of 150 local experts and implements more than 50 assignments per year targeting local farmers, processors, and marketing enterprises. VISTAA works with more than 25 foreign organizations and companies with annual cash flows exceeding \$500,000.

VISTAA today has the necessary knowledge and is constantly increasing its capacity so as to be well positioned to take over the role of ACDI/VOCA once USAID phases out of the country.

2. Areni Winery

In 1993 privatization of land and state ownership of processing industries created a situation where farmers were unable to market their products, as state factories would no longer pay for the commodities. Many communities and villages found themselves in a devastating situation. For years Areni village had produced high quality grapes and sold them to the state winery. After privatization they were not able to sell the grapes and, as there were no other sources of income in the village, Areni found itself in dire straits, as well.

ACDI/VOCA was asked by the community to assist with the situation. Based on business and technical studies implemented by the ACDI/VOCA expert volunteers, it was suggested that Areni establish a community winery in the village. Appropriate design and calculations were provided by ACDI/VOCA volunteers. The village was able to receive a loan to implement this idea. Thus they established the first private community scale winery in Armenia.

The winery started with \$9,000 initial capital and produced 10 tons of wine in the first year. The next year ACDI/VOCA volunteer consultants visited the winery and, as a result of their recommendations, the winery improved its quality and established new and improved bottling and labeling systems. Due to these improvements, the winery doubled production. The next year the winery was able to buy grapes from all over the Vayots Dzor Valley. Today the Areni Winery is producing 80 tons of four varieties of high quality wines per year, which have a steady and growing market in Armenia. The winery currently generates \$150,000 in revenue.

Establishment of the winery also had a positive indirect impact. Stimulated by the success of Areni, other communities throughout Armenia have established similar enterprises. In addition, the state winery in this region has been forced to restructure and improve its operations due to this new competitive market.

3. Forestry Production

Due to the severe energy crisis in Armenia, massive tree cutting occurred from 1992 to 1995. Forty percent of Armenian forests were damaged or eliminated. For a country like Armenia, which possesses few forestry areas, this was a fundamental environmental, economic, and energy problem. In 1995, ACDI/VOCA initiated a project aimed at rehabilitating forests and establishing commercial wood production in Armenia. Forty-six thousand fast growing poplar trees were imported from the U.S., and 53 different clones were tested to find the most appropriate for production. This project was executed jointly with the AESA, Armenian Engineers and Scientists of America. AESA covered the expenses of the purchase of trees and in-country nursery establishment. ACDI/VOCA provided volunteers during the four-year project to assist with all local activities and project implementation.

Seventeen thousand cuttings of the six selected clones were planted on 19 hectares of land. An additional 15 hectares of plantation were established based on initial test results. In 1999, four new hectares were allocated for commercial seedling production.

Results show that fast growing poplar trees can significantly and rapidly rehabilitate forests in Armenia. Moreover, several tested varieties of poplars can successfully grow on saline soil. Thirty percent of the normally productive Ararat Valley is composed of saline soil, and therefore is not cultivated currently. The economic and environmental importance of project findings were so obvious that the government has decided to allocate large state reserve land areas for massive plantation of poplars. The goal of the project is to ultimately have 2000 hectares of commercial plantation that will produce 500 cubic meters of wood annually from one hectare, which will satisfy the country's needs for burning and construction.

Summary of Lessons Learned in Armenia

1. Volunteer programs must leverage the resources of other donor organizations or local organizations providing assistance to agriculture. Leveraging and complimenting the strengths and capacities of other organizations bring larger and more tangible results.
2. Volunteer program implementers must develop a program implementation strategy that focuses on specific areas and industries to maximize impact;
3. Project impact is enhanced when volunteer assistance works with each client on every step of the cycle of industry development (production, processing, and marketing) to ensure that the product will find its market.
4. Volunteer programs must leverage the resources of other donor organizations or local organizations providing assistance to agriculture. Leveraging and complimenting the strengths and capacities of other organizations bring larger and more tangible results.
5. High project impact requires the combination of short-term volunteers technical assistance with local consultants (in this case, from VISTAA) and access to funding. ACDI/VOCA utilized VISTAA consultants to complement ACDI/VOCA volunteer assignments and provided funds from a small grants program.
6. Volunteer program implementers must screen clients and select only those that satisfy the program plan and the USAID strategy.
7. Volunteer program implementers must develop individual volunteer projects that are within their corporate capabilities.

FTF Resources Leveraged in Armenia

ACDI/VOCA received a grant from the USAID Caucasus Mission to issue small grants to help support volunteer's recommendations, demonstrate new methods and technologies and to test new products and services. Since 1992, 63 volunteer assignments have received mini-grants totaling \$280,000. Assistance provided by A/V volunteers to other donor organizations and their clients resulted in approval of over \$ 2,500,000.00 of loans and/or grants to agribusinesses involved in livestock production, milk processing, fruit and vegetable processing.

2. AZERBAIJAN

Program Strategy and Evolution

Azerbaijan was the last country to be incorporated into the FTF program since its start in 1992. Since January 1996, 60 volunteers, completing 65 assignments, have provided technical assistance and training to progressive Azeri agricultural enterprises. The FTF strategy targeted private farmers and entrepreneurs to help increase their capacities in production, management, processing, marketing, and information systems. The ultimate goal was to assist the host organizations to become viable, profitable enterprises that can use their successes in rural Azeri communities.

Azerbaijan was one of the most difficult countries to implement the mission of the FTF program. Slow privatization reforms and the restrictions of Section 907 limited the coverage of the program in Azerbaijan. From the beginning, it was necessary for the FTF program to identify which areas were the most flexible, reform-oriented, and receptive. Early on, the program discovered that the regions of Masalli, Gelilabad, Quba, Sheki, and the Absheron Peninsula achieved faster economic results and implemented volunteer recommendations efficiently. Due to Section 907 restrictions, USAID had neither permanent offices nor an established strategy for Azerbaijan. Most NGOs in Azerbaijan primarily focused on the humanitarian assistance to refugees and internally displaced persons (IDPs). Since most of the refugees and IDPs were private farmers, the FTF program focused on agricultural training and worked with many NGOs assisting refugee communities through horticulture, animal husbandry and food preservation. Upon the recommendation of several volunteer assignments, ACDI/VOCA-Azerbaijan assisted in the creation of the USAID-funded Food Preservation and Processing Income Generation (FFPIG) project. The project provided food preservation and business development technical skills, training and materials to 10,000 refugees in central and northern Azerbaijan.

In general, the FTF Azerbaijan strategy remained unchanged throughout 1996-1999, having only a few minor adjustments and modifications along the way. During this time, the FTF program moved from developing traditional crops such as wheat and barley to more profitable areas of fruit and vegetable growing and processing, improved feed ration programs, and dairy production, etc. By providing technical assistance to these private farmers and enterprises, ACDI/VOCA helped improve crops, livestock and high value products by at least 15% to 21 hosts. In 1999, ACDI/VOCA continued assistance to agricultural production and processing with an increased focus on improved food production and post harvest handling/marketing of fruits and vegetables, sheep and dairy cattle

Significant Accomplishments

1. Creation of Agro-Meslehet

To further agricultural education, ACDI/VOCA worked to identify and employ under-employed agribusiness experts. The direct result of this became a \$145,000 grant received by ACDI/VOCA in 1998 for developing the Support to Private Agro-Enterprise Development (SPAED) project, which was directed towards increased training and providing demonstration funds in support of budding agro-entrepreneurs in Azerbaijan. As a result of the project, ACDI/VOCA created Agro-Meslehet (Agro-Advise), an NGO created to provide consultants and training to local enterprises and organizations. Agro-Meslehet (Agro-Advise) recruits local consultants and matches them with local agribusiness clients. Agro-Meslehet now has 90 consultants in its database and has completed 45 consultancy projects: 30 with local companies and 15 international agencies. The FTF program provided the original strategic plan for the local agricultural consultancy group. ACDI/VOCA intends for Agro-Meslehet to become the successor organization to the FTF program in Azerbaijan. Since its creation, international NGOs have

paid for several local consultancies from Agro-Meslehet. UMCOR, World Vision and IRC are contracting additional paid consultancies through Agro-Meslehet.

2. Agriculture magazine made sustainable

Shortly after beginning operations, ACDI/VOCA became actively involved in developing an agricultural information system. Recognizing the need for information distribution in Azerbaijan, the FTF program provided a volunteer specializing in agricultural journalism to help improve the agricultural journal *Azerbaijan Farmer*, magazine appearance, content and distribution. As a result, the magazine covers all of its production costs and distributes agricultural materials all over Azerbaijan. As a result of the volunteer assignment, advertising revenue has increased from \$0 for the first issue to \$960 in the fourth issue and advertisers now include two international firms. This start-up company now covers all of its costs through both sales and advertisement (up from 25% prior to the volunteer's assignment) and reached the break-even point after its fifth issue. This magazine has since published a consolidated database of wholesale and retail prices on strategic agricultural products, assisted in developing raion-wide the agricultural information system as well as advertised on radio and television.

Program Impact in Azerbaijan

By providing technical services to private farmers and agricultural enterprises, ACDI/VOCA volunteers have helped those private farmers involved with horticulture increase their sales and profits by at least 20%, increased vegetable production yields by 25% and improved the distribution of agricultural services by 30%. The tables below provide a more detailed description of program impact.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average % increase production	Hosts who developed business-plans
Private farmers	21	24	10	13	9	14%	4
Agricultural Enterprises	12	12	8	6	8	18%	6
Associations	0	0	0	0	0	0	0
Government Institutions	0	0	0	0	0	0	0
Educational Institutions	0	0	0	0	0	0	0
TOTAL	33	36	18	19	17	16%	10

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	3	3	3	0	2	2	0
Educational Institutions	2	3	2	0	2	2	0
Credit Institutions	1	1	0	1	1	1	0
Government	0	0	0	0	0	0	0
Agricultural Enterprise	6	8	5	0	5	6	4
Private	8	8	6	0	6	7	5

Farmers							
TOTAL	20	23	16	1	16	18	9

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	0	0	0	0	0	0	0
Government Institutions	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/ improved materials	Hosts who mobilized resources
Educational Institutions	5	6	4	4	4	1
Government	0	0	0	0	0	0
TOTAL	5	6	4	4	4	1

Beneficiaries

	Direct	Indirect	Total
Female	9,070	22,671	31,741
Male	6,728	20,521	27,249
TOTAL	15,798	43,192	58,990

Azerbaijan Additional Impact

Sector	Sales	Profit	Yield
Horticulture	25% increase	20% increase	20%
Vegetable Growing	20% increase	18% increase	25% increase
Livestock	10% increase	12% increase	
Ag. Services*	30% increase**	33% increase**	30% increase**

* includes: extension, marketing surveys, business planning, feasibility studies, association development

** as a result of Agro-Meslehet (local successor group) direct involvement

Success Stories from Azerbaijan

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. Agro-Meslehet

ACDI/VOCA’s creation of Agro-Meslehet (“Agro-Advice”) was in direct response to the first SPAED, an offshoot of Farmer to Farmer, goal. Agro-Meslehet is a local non-governmental organization (NGO) that provides agri-business and technical consulting services to Azerbaijan’s private farmers and other agricultural entrepreneurs. Started in March 1998 through funding by ACDI/VOCA, Agro-Meslehet is

currently the only local NGO offering technical assistance and training to the emerging and potentially prosperous agricultural sector. Agro-Meslehet's goal is to strengthen private agricultural development by focusing on five areas:

1. Developing ties between skilled Azeri agriculturalists and Azerbaijan's emerging private agricultural sector;
2. Developing a database of qualified technicians and matching them with emerging private farms and other agro-enterprises;
3. Providing professional technical assistance and training to local and international businesses, humanitarian agencies, and multilateral institutions;
4. Creating agricultural extension and business materials for Azeri clients;
5. Developing a pool of broad-range local agricultural consultants.

With technical assistance provided by volunteers Bob Cowell and John Etter, Agro-Meslehet added four broad-range agricultural consultants (generalists) to its database of 90 technical experts. The consultant-generalists were put through two phases of training: 1) input phase, during which they learned basics of data collection, needs assessment techniques, and interviewing skills and 2) output stage, where they learned how to make recommendations. The program consisted of classroom simulations as well as field exercises. Consultants then wrote a final paper based on data given to them by the U.S. volunteers prepared based on the Harvard Business School case studies.

After evaluation, the volunteer concluded that the trained consultants are now prepared to perform complex feasibility studies, needs assessments, and business planning tasks for Agro-Meslehet and for commercial ventures. They are well positioned to train others on the skills that they acquired from the volunteer.

It is difficult to quantify the success of these types of assignments until actual requests for consulting services occur. However, ACDI/VOCA and Agro-Meslehet believe that general consulting will ultimately translate into a sizable revenue generating mechanism for the organization. For example, the World Bank task group in Baku recently contacted Agro-Meslehet and they were pleasantly surprised to find out that, in addition to technical experts, Agro-Meslehet had generalists in its database. As a result, the task team will be contacting Agro-Meslehet to hire generalists for a yearlong assignment.

2. Poultry Development

In May 1999, ACDI/VOCA extended financial assistance to a local poultry farm. As a result, 2,100 eggs and chicken broilers were purchased and installed at the farm and currently the farm has approximately 2,000 chickens. Very soon, the farmer will be selling fresh chicken to the farmer's markets and supermarkets around Baku. Chickens are fed with the U.S.-manufactured feed based on a predetermined rate. The U.S.-manufactured chicken feed facilitates faster weight gain and has made the farm more efficient. The chickens raised are healthy and well attended. The farmer has also installed a slaughtering machine and refrigerator at the farm completing the business cycle: production, slaughtering, packaging, and storage.

As a result of ACDI/VOCA involvement (demonstration funds) the farm raised its production by 30%. The farm's revenue reached \$2,000 a month and net income totaled \$800. The farm supplied three local stores with fresh chicken meat. As the owner stated, demand for his chickens exceeds supply and he has been investing almost all of his earnings back into production (he only retains 8% of net earnings for personal consumption). His ultimate goal is to start supplying large supermarket chains with fresh chicken meat. Even though several of the supermarkets have expressed interest, the farmer has been hesitant to sign a contract noting that his production at this time remains very low to meet constant monthly demand for a large

quantity of fresh chicken. He believes to reach the maximum capacity next fall and will then be able to supply large stores.

3. Reshe Feed Mill

The assignment took place at “Reshe” feed mill located just outside of Baku on the Absheron peninsula. Reshe is one of the first private feed mills that emerged after the collapse of the Soviet Union. During Soviet times the feed mill owner, Mr. Shahbala Guliev was a feed expert in the Ministry of Agriculture. Currently, his feed mill purchases such raw materials as corn, wheat, barley, cottonseed, millet, lime and salt from districts and surrounding farms. Its customers are small and medium-scale livestock and poultry farmers on Absheron Peninsula. Shahbala also offers optimal feed rations and general consultations on livestock breeding and management.

The feed mill is located on 100 square meters of land. It has a continuous mixing system in place with a horizontal mixer, elevator, and a grinder. Prior to the volunteer assignment the feed mill was producing one ton of feed a day (30-35 tons a month) that was packaged in 50-kg plastic bags. Corn, cottonseeds, wheat, and barley was purchased cooperatively with neighboring feed mills and stored in a jointly owned warehouse.

ACDI/VOCA volunteer, Mr. Robert Albrecht determined the need for a one-ton vertical mixer for the mill to be able to better dose ingredients by weight and increase the quality of end product. Robert and Shahbala spent ten days (16 hours a day) designing and building the mixer. By the end of the volunteer assignment the mixer was completed and ready to begin operation.

Shahbala continued improving the feed mill after the volunteer departed (these improvements were recommended by the same volunteer). He built six two-ton grain bins and installed conveyor belts between the bins and a mixer. As a result of these improvements Shahbala was able to triple his daily production capacity (3 tons a day) and increased his revenue by 31%. Most importantly, he was able to significantly raise the quality of feed and increased sales to retail outlets. Recently, Reshe Feed Mill signed contracts with 15 small and medium poultry firms to provide high quality feed. The farmers have subsequently switched from high priced, average quality Iranian and Turkish imports to the affordable and higher quality feed provided by the Reshe mill.

With ACDI/VOCA direct assistance, the Reshe mill contacted a nearby beer brewery plant and arranged for the purchase of inexpensive brewery leftover materials as well as fermented agricultural wastes to increase the protein and energy content of the feed. Upon completion of feed mill improvements the Reshe mill expects 110% increase in production, increase in the clientele base from the present 15 to 25 farmers, supplying three more retail outlets with his product and hiring three more employees.

Summary of Lessons Learned in Azerbaijan

Technical assistance (TA) in general was well received in Azerbaijan. Even though farmers and processors primarily complain about lack of finances and adequate farming equipment, valid technical assistance has produced good results. Close to 80 percent of hosts have either fully or partially tried implementing volunteer suggestions and recommendations.

1. Volunteer projects must be linked to funding source and local TA provider

Technical assistance coupled with demonstration funds made available through the Support to Private Agro-Enterprise Development (SPAED) project worked extremely well. Agro-Meslehet consultants

matched with appropriate FTF volunteers provide the volunteer with the essential background information of the assignment. Agro-Meslehet was able to identify and assist close to 43 farms and processing facilities. The aforementioned organizations underwent a thorough background check prior to receiving grants and assistance. They were assisted with developing the business plans. As a result, approximately 70 percent of the enterprises are qualified for agricultural loans and are ready to become credit cooperative members once such cooperatives are set up. Secondly, many of them have developed solid foundations for growing into full-fledged associations in the near future.

2. Volunteer TA is not successful in sectors requiring capital investment

Volunteer TA in Azerbaijan has been less successful in the sectors that require large amounts of financial investment such as grain crops, wheat, barley, etc. Technical assistance with soil preparation has not produced results either. Farmers that represent these sectors tend to be conservative, resistant to changes, and resistant to new ideas and approaches.

3. Volunteer TA should focus on non-traditional agriculture products

Based on four years of experience in Azerbaijan, ACDI/VOCA believes that volunteer programs can be successful by focusing on non-traditional, alternative product development. With ACDI/VOCA's limited help, Azeri farmers will not be able to effectively compete with the Western and Turkish multinationals dominating local markets, but could be competitive in specialty, niche product development and sales.

FTF Resources Leveraged in Azerbaijan

ACDI/VOCA leveraged the funds of other programs through Agro-Meslehet. Agro-Meslehet was able to secure two one-year contracts with AED and World Vision in the amount of \$80,000 to conduct training programs for Internally Displaced Persons and refugees in the Goradiz and Masalli regions. Agro-Meslehet will bid for similar grant in year 2000 as well as a \$150,000 grant from TACIS to set up the first grain exchange in Baku.

Over the course of the program, 3 FTF clients participated in the USDA Cochran Fellowship and 6 participated in the Department of Commerce's SABIT program. Additionally, during FY99 five representatives of Azerbaijan visited Israel on a Moshav program after being recommended by ACDI/VOCA.

B. CENTRAL ASIA

1. KAZAKHSTAN

Program Strategy and Evolution

With the collapse of the Soviet Union in the early 1990's, and in response to the technical assistance needs of the New Independent States (NIS), USAID mounted a Special Initiative to put FTF volunteers into NIS countries to assist in their transition to democracy and free market economies. To achieve this goal, the following objectives were set forth: to increase food availability, improve the effectiveness of farming and marketing operations, and accelerate agribusiness development.

The FTF project initially focused its efforts to meet USAID/BHR FTF goals as stated above. In doing so, FTF volunteers provided training and advice in agribusiness development, and developing institutions to address the technical needs of farmers and new entrepreneurs to private farmers and new. In 1992, when

the FTF project began in Kazakhstan, the agricultural sector was undergoing drastic changes, as large state and collective farms were being privatized and government support for these new farm owners was scarce. FTF targeted these new farmers, delivering technical assistance in basic farm management and agricultural production, i.e., grain, fruits, livestock etc.

In the early stages of the FTF/Kazakhstan project, the food processing sector was not well established, as much of the food processing for the former Soviet Union was done in Russia who relied upon Kazakhstan as the stable supplier of raw commodities. Thus, a majority of the FTF technical assistance program was directed toward agricultural production. However as the food processing industry slowly developed, FTF shifted its technical assistance orientation to the food processing industry. Many agricultural producers receiving FTF assistance were not able to take the necessary steps to improve operations due principally to lack of resources. As mentioned above, agricultural producers did not have access to credit and few support organizations that could provide resources to improve farming practices. Recognizing the general lack of resources and inability of farmers to implement FTF volunteer recommendations, the FTF program reduced the number of assignments with agricultural producers and focused its efforts on assisting support organizations for farmers, entrepreneurs, and policy reform initiatives. One such support organization for entrepreneurs was the Kazakhstan Community Loan Fund (KCLF), which was originally initiated through an assessment of a FTF volunteer. The KCLF is a micro-enterprise development institution based in the city of Taldykorgan. Since 1996, (after the KCLF secured itself), FTF volunteers have provided technical assistance to the development of KCLF.

Currently ACDI/VOCA's FTF program has shifted its strategy to assist the Kazakhstan Ministry of Agriculture (MOA) and other organizations to develop policy reforms that are more conducive to agricultural development. In cooperation with the MOA, ACDI/VOCA provided several volunteer legal experts (specializing in cooperative regulations, grain laws and agricultural leasing), to help the Ministry address these processes, practices and policy of the aforementioned topics. Such policy reforms include developing an inventory credit system whereby stored grain can be used as collateral for accessing credit. At the request of the MOA draft regulations and policies were developed with input from key stakeholders of the grain industry. FTF provided technical assistance on other key policy issues to include agricultural credit and agricultural equipment leasing.

In addition, ACDI/VOCA's FTF program dedicated considerable resources to developing agricultural consulting services with local institutions in three regions (Almaty, Kustanai, and Uralsk). FTF volunteers worked with local institutions to develop agricultural consulting services in all topics of agriculture, which would fulfill the role of a typical agricultural extension service. In all three regions, separate entities were pooled to provide specific training and services to farmers. Through the help of FTF volunteer assignments, a relationship has been established between agricultural universities in the US and Kazakhstan. At the moment, the government does not have the resources to provide agricultural assistance to farmers, and these farmer consulting centers are expected to fill this void. ACDI/VOCA FTF continues to provide technical assistance to these universities leveraging resources to help these agricultural departments strengthen their extension programs. The FTF program has also helped developed focused agricultural programs related to natural resources. Through the recommendations of two forestry volunteers and the help of the Department of Forestry, the Ile Alatau National Park was created to help preserve the natural resources near the city of Almaty. Since the parks opening, six volunteers have trained over 150 trainers in basic forestry techniques and preservation.

Although the USAID/Central Asian Region (CAR) Mission does not have a strategy for agricultural development, there is an appointed member for monitoring of USAID-funded agricultural development activities such as FTF. FTF continues to contribute to USAID/CAR Strategic Objective 1.3. Accelerated Development and Growth of Private Enterprise by providing business management training and technical assistance to agricultural businesses to include the food processing industry.

Significant Accomplishments

1. Environmental protection and creation of national park

ACDI/VOCA worked extensively with the Department of Forestry, Green Salvation organization, and representatives of the park service to develop the *Ile-Alatau Natural National Park* in the Tien Shan Mountains. The park's proximity to the city of Almaty makes it a particularly sensitive ecological zone vulnerable to human degradation. ACDI/VOCA has dedicated considerable resources to developing the park by ensuring the protection of its bio-diversity and is financially self-sustainable. ACDI/VOCA volunteers have provided extensive technical assistance to park administration, including: training park rangers, mapping out protected zones, classifying species, and designating picnic areas. Volunteers also played a key role in assisting the Ile-Alatau Natural National Park to get listed with the National Heritage.

2. Legislative Initiatives

ACDI/VOCA volunteers have been instrumental in promoting and drafting new legislation in agriculture. Volunteers have assisted the Ministry of Agriculture and other organizations to draft:

- the *Grain Law*, which included provisions for licensing grain elevators. Unfortunately, the law was not passed due to opposition by the Ministry of Finance, which viewed licensing of grain elevators as an impediment to free commerce.
- the *Farmer's Cooperative Law*, which allowed for the development of Western-style cooperatives. The Ministry of Agriculture originally supported the draft Farmers' Cooperative Law, but later, revoked review of the draft law.
- the *Agricultural Equipment Leasing Law*, which permitted greater profit earnings for the leasor and more flexible leasing periods. Current legislation only allows a mandatory 3-year lease to buy arrangement. Passage of the law is pending.

3. Curriculum Development

During the past several years, ACDI/VOCA has provided several volunteers to improve curriculum and deliver lectures in agricultural economics and agricultural marketing within the Department of International Economics and Law at the Kazakh State Agrarian University. Volunteers made significant impact at the Department of International Economics and Law, which has resulted in new courses on commodity futures markets and international commodity markets. The faculty has adopted many of the lecture material provided by volunteers into their own courses. Course curricula for 6 courses have been updated and students now have access to computers and other useful informational tools. As a result of ACDI/VOCA assistance, approximately 1,900 students (per year) are now receiving a stronger education with up-to-date and relevant information, which should better prepare them for jobs in the agricultural commodities market.

Program Impact in Kazakhstan

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average production increase*	Hosts who developed business-plans
Private farmers	20	30	17	7	10	95%	3
Agricultural	10	16	6	2	9	103%	2

Enterprises							
Associations	5	5	0	0	0		0
Government Institutions	0	0	0	0	0		0
Educational Institutions	2	3	1	1	0		0
TOTAL	37	54	24	10	19	99%	5

* average based on the production increase of those hosts who increased production

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	20	54	4	6	11	6	1
Educational Institutions	0	0	0	0	0	0	0
Credit Institutions	6	15	2	1	1	1	1
Government	3	7	0	0	0	0	2
Agricultural Enterprise	3	5	2	0	2	1	3
Private Farmers	0	0	0	0	0	0	0
TOTAL	41	81	8	7	14	8	7

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	3	13	1	1	1	0	1
Government Institutions	0	0	0	0	0	0	1
TOTAL	3	13	1	1	1	0	2

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/ improved materials	Hosts who mobilized resources
Educational Institutions	4	14	2	1	2	2
Government	0	0	0	0	0	0
TOTAL	4	14	2	1	2	2

Beneficiaries

	Direct	Indirect	Total
Female	9,572	24,389	33,961
Male	7,785	23,652	31,437
TOTAL	17,357	48,041	65,398

Success Stories from Kazakhstan

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. Bazzalt Dairy Plant

An example of an agricultural business that shows great potential for success is the joint-stock company “Bazzalt,” with headquarters in Almaty. Bazzalt is predominantly a food processing equipment distributor, but also owns other enterprises such as a restaurant and dairy plant. Several of ACDI/VOCA’s FTF volunteers have worked with Bazzalt over the past few years. Bazzalt recently became a majority shareholder in a dairy plant in the city of Atyrau. In just one year, an initial investment of approximately \$50,000 has led to a \$1 million-valued enterprise. The dairy plant has upgraded equipment and undergone extensive reorganization to produce high-quality dairy products, which it hopes to market to Chevron and its subsidiary, Tenghiz Chevroil.

The dairy plant was originally constructed in 1957 to produce butter. In 1984 it was modified to produce 55 tons of dairy products per shift. Until recently milk was made from reconstituted powder milk imported from Russia. Besides dairy products, the dairy plant also has a bakery facility with capacity to produce 2,000 loaves per day, and a pasta production unit capable of producing 800 kilograms of pasta per day. The plant markets its products at 20 outlets in the Atyrau area. The dairy plant also has six large warehouses with a total storage capacity of 40,500 square meters, to include refrigerated space of 5,740 square meters. The plant also possesses a small fleet of 25 vehicles.

Products include the following: 1) milk, 2) cultured milk products, 3) sour cream, 4) curd and curd byproducts, 5) ice-cream, 6) pasta (macaroni), bread, and other staple foods.

With ACDI/VOCA’s assistance, the Bazzalt dairy plant has accomplished the following:

- Switched from producing reconstituted dairy products using powdered milk to using fresh fluid milk, which greatly improved the taste of products;
- Acquired milk-tank truck to deliver fresh fluid milk from dairy farms to dairy production plant;
- Improved quality control;
- Trained key personnel in using computers for financial record keeping/accounting;
- Improved bookkeeping and developed a chart of accounts for better financial management of multiple operating units, i.e., milk production, ice cream production, curds production and other dairy products;
- Renovated production plant to improve efficiency of production and improve sanitary conditions;
- Installed new plumbing system to make lavatories fully functional;
- Purchased and installed new packaging equipment (wax cartons);
- Reorganized and reduced personnel.

2. Development of an Inventory Credit System

ACDI/VOCA has provided technical assistance to the Ministry of Agriculture (MOA) to develop guidelines, policies and regulations for an inventory credit system. Originally, an ACDI/VOCA volunteer performed an assessment of the grain industry to propose possible scenarios for implementing an inventory credit pilot project. The project would entail licensing grain elevators to store grain and issue receipts for stored grain to be used as collateral against loans. An inventory credit system is viewed as

one of the most appropriate means of enabling farmers to access credit. Currently very few farmers are able to access credit, as most farm assets are of too little value to suffice collateral requirements of commercial banks. The option of using stored grain as collateral is a practical option for many grain producers. ACDI/VOCA has provided the following technical assistance to the MOA:

- Revised draft of the Law on Grain for the Republic of Kazakhstan. This law is intended to determine the legal, organizational and economic foundations of activities in the grain market; ensure security of food and satisfying the need of the Republic of Kazakhstan in food grain, fodder grain and seed grain through the formation of organizational grain market;
- Review of warehouse insurance policies and procedures;
- Draft regulations on grain warehouse receipts, and draft warehouse agreement for warehouse participating in inventory credit system pilot project;
- Draft Warehouse Licensing Regulations.

Although an inventory credit system pilot project has not been implemented, the MOA considers an inventory credit system as a priority for revitalizing the grain industry of Kazakhstan. In February 1999, the Minister of Agriculture appointed ACDI/VOCA to a working committee to implement a pilot project. However, the MOA has limited resources, and is unable to implement an inventory credit system pilot project at this time. Although the MOA has made little advance to implement a pilot project, a private grain consortium has begun to implement its own inventory credit system, but has not been successful to date. Recently there have been some positive developments to facilitate an inventory credit system. A general licensing law was proposed, which included provisions for licensing grain warehouses. In due time, these provisions for licensing grain warehouses may be modified to accommodate an inventory credit system. In addition, the World Bank has expressed interest in developing an inventory credit system for Kazakhstan. ACDI/VOCA continues to seek funding to support the development of an inventory credit system pilot project.

Summary of Lessons Learned in Kazakhstan

1. Volunteer TA delivered to associations and through seminars is more cost effective than TA to individual farmers

When ACDI/VOCA began its projects in Kazakhstan, many projects were with farm owners. At the time, the majority of agricultural production was carried out by large collective farms. These farms were in the early stages of privatization, and ACDI/VOCA sought to introduce modern farm management techniques and farming practices. However, over the years it became evident that many of these farms were unable to implement recommendations made by volunteers due to lack of resources. Conditions for farming in Kazakhstan include little or no access to credit, undeveloped marketing channels and lack of an extension service. ACDI/VOCA decided that it was not cost-effective to conduct projects with individual farms and instead, began to work with groups of farmers and farmers' associations. Volunteers provided training seminar to groups of farmers on basic farm management to include bookkeeping and business planning. Although ACDI/VOCA reduced its level of assistance directly to individual farmers, it continues to assist individual farms that show signs of success and have access to resources. Providing seminars to groups of farmers has proved to be much more cost-effective and provides a forum for farmers to exchange experiences and gain a better understanding of appropriate farm management methods.

2. Developing extension service offices is not sustainable without Government support

During the past couple of years, ACDI/VOCA has been working with training centers and agricultural institutes to develop agricultural consulting services to serve as an agricultural extension service.

ACDI/VOCA assisted in identifying training needs and developing an appropriate organizational structure to provide appropriate consulting services to local farmers. Information on basic farm management and agricultural practices was provided and staff were trained to deliver typical extension services. Although there is demand for farmer consulting services, these farmer extension services were not sustainable. Most farmers are unable to pay for services and the training centers could not deliver consulting services without financial support. As a result, these extension services will most likely not succeed without external financial support. ACDI/VOCA realizes that development of these extension services is not sustainable without resources to support it. It is hoped that the government of Kazakhstan will recognize the need for supporting these local agricultural extension services and continue their development.

3. Grassroots assistance is less effective without supporting legislation

ACDI/VOCA has made significant contributions to assisting the Ministry of Agriculture and other agricultural institutions develop new policy reforms that would facilitate agricultural development in Kazakhstan. ACDI/VOCA volunteers assisted in introducing policies and regulations for an inventory credit system and drafting the Grain Law, the Farmer's Cooperative Law and the Agricultural Equipment Leasing Law. ACDI/VOCA has been instrumental in shaping these reforms through sharing information and experiences from the United States. This was particularly helpful for drafting the Farmers' Cooperative Law. Many Kazakhs are unfamiliar with the democratic principles inherent in Western-style cooperatives. An ACDI/VOCA volunteer was able to explain the history of cooperative development in the United States, and the importance of democratic principles underlying the management structure of cooperatives. ACDI/VOCA has played an active role to promote cooperative development throughout Kazakhstan. Recently, ACDI/VOCA received substantial feedback from many farmers requesting assistance in cooperative development. However, without adoption of sound laws governing cooperatives, many farmers put themselves at risk by forming cooperatives; current tax codes are not favorable towards cooperative entities.

Although ACDI/VOCA has made significant contributions to policy reform, little progress has been made in getting these reforms adopted by government. This inaction on behalf of government is a major impediment to implementing the necessary reforms for effective agricultural development. In many respects, the lack of follow through by government can be attributed to the lack of resources coupled with a relatively high turnover rate within the Ministry of Agriculture. The Ministry has been indecisive in determining appropriate policy reform measures for agricultural development. Despite these weaknesses in the government, ACDI/VOCA is confident that appropriate reform policies will be adopted in due time. It is hoped that the new Minister of Agriculture will take action to adopt some of the policies developed by ACDI/VOCA. This optimism is spurred in part by increased participation of grassroots organizations to promote policy reform. The National Farmers' Association (KazAgro Federation) demonstrated this which has actively lobbied and promoted the Farmers' Cooperative law. The KazAgro Federation has made a concerted effort to educate farmers on cooperative development and has recently received a grant from the Eurasia Foundation to develop pilot cooperatives and to reintroduce the Farmers' Cooperative law.

FTF Resources Leveraged in Kazakhstan

As a result of working with ACDI/VOCA, 8 clients have received USDA Cochran Fellowships for agricultural study tours in the US. Recipients of these fellowships learned about modern agricultural practices in the US and returned motivated to promote agricultural reforms in Kazakhstan.

ACDI/VOCA also played an active role in helping several clients receive grants from the Eurasia Foundation totaling approximately \$90,000. These grants have served to improve services and promote policy issues that support farmers.

Table 6 Russia and Western NIS Region Program Activities

By Type of Client	Belarus		Moldova		Russia		Ukraine		Total Vols	Total Assignments
	Vols	Assignments	Vols	Assignments	Vols	Assignments	Vols	Assignments		
Private Farmers	53	57	25	25	22	63	80	89	180	234
Agricultural Enterprises *	24	27	17	17	84	156	20	20	145	220
Associations, NGOs, support organizations	20	21	24	26	314	347	57	60	415	454
Cooperatives	0	0	1	1	0	0	0	0	1	1
Credit Institutions	3	3	8	9	2	2	5	5	18	19
Educational Institutions	18	18	20	21	22	33	15	15	75	87
Government Institutions **	7	8	31	31	14	16	0	0	52	55
Other	0	0	0	0	0	0	0	0	0	0
TOTAL	125	134	126	130	458	617	177	189	886	1070
By Sector										
Dairy	8	10	1	1	48	75	15	18	72	104
Grains	15	15	1	1	61	83	71	77	148	176
Meat	23	26	6	6	34	54	37	39	100	125
Fruits & Vegetables	63	64	26	29	64	94	40	40	193	227
Credit	6	6	8	8	13	13	0	0	27	27
General ***	10	13	84	85	238	298	14	15	346	411
TOTAL	125	134	126	130	458	617	177	189	886	1070

* Agricultural Enterprises include processors, input suppliers, elevators, etc.

** Government institutions also include things such as extension services, policy work, etc.

*** General Sector covers miscellaneous assignments in areas such as extension, policy work, curriculum development, etc.

C. RUSSIA

Program Strategy and Evolution

The FTF program in Russia began in 1992 and provided 458 volunteers during the course of the program who completed 641 volunteer assignments in more than 35 regions. ACDI/VOCA committed 26% of its program resources to working with agricultural enterprises and 50% towards providing technical assistance to associations, support organizations, and cooperatives. Cooperating with the Association of Private Farmers (AKKOR), the Ministry of Agriculture, the Agrarian Institute of Russian Agricultural Academy, the Moscow Peasants' Union and others, the program provided volunteer technical assistance to the regions in western Russia with local governments supportive of the privatization process and progressive clients. ACDI/VOCA placed a strong emphasis on working in areas where other U.S. and European sponsored technical assistance organizations were also working in an attempt to leverage and combine resources. These areas included the regional centers of St. Petersburg in the northwest, the Vologda region in the northeast, Gorkiy in the east, Stavropol in the southeast, Rostov-on-Don in the southwest, and Smolensk in the west.

During the first 3 years of the program, FTF technical assistance primarily focused on production agriculture in areas such as commodity production, farm management and record keeping, cooperative organization and development, commodity storage, processing and marketing, sustainable agriculture

practices and natural resource management. Recognizing the evolving nature of private agriculture in Russia and to increase the impact of volunteer assignments, ACDI/VOCA modified the focus of the FTF program from production-related technical assistance to post-production assistance in 1995. Assignments targeting post-production agriculture worked predominately with bakeries, meat and dairy processing facilities, and flour mills and addressed issues pertaining to storage, processing, marketing, management, and business plan writing. In addition to the focus on post-production agriculture, ACDI/VOCA also further narrowed the program focus geographically by targeting the regions of Moscow, Nizhny Novgorod, Pskov, Tver, Perm, Saratov, Samara, Volgograd, Krasnodar and Buryatia.

One of the main challenges to working in Russia is the sheer size of the country. Initially based in Moscow, ACDI/VOCA opened regional offices in Saratov (1993) and Krymsk (1994) to expand the geographical coverage of the FTF program. These offices proved more effective and efficient in identifying progressive clients and maintaining relations with existing clients. In 1995, ACDI/VOCA consolidated the two branch offices into the Saratov office to increase cost effectiveness and made the Saratov office the program's main office due to the large number of clients in the south. The Moscow office covered the northern and central regions and continued to serve long-term clients (i.e. clients who regularly requested volunteer assistance).

Significant Accomplishments

1. Legislative initiatives

Although Russia has made progress towards creating the framework for land and enterprise privatization, the issue of debt restructuring by the former collectives and state-owned enterprises continues to remain a major obstacle to significant reform. Recognizing this, ACDI/VOCA provided a volunteer, United States District Court Judge specializing in bankruptcy procedures, to the Ministry of Agriculture to help address agricultural bankruptcy processes, practices, and legislation. The result was the formulation and approval of two government resolutions concerning farm debt reconstruction. Moreover, the volunteer provided advice on a bankruptcy law for agricultural enterprises that is currently awaiting approval by the Russian government.

2. Association Development

As the FTF program evolved, ACDI/VOCA increased the numbers of farmers and enterprises receiving technical assistance by supporting the development of agricultural support organizations such as associations, cooperatives and extension offices. These organizations easily and quickly multiplied the knowledge transfer by training a core group of individuals to work with the members. Moreover, their consultants provided assistance in finding investors and marketing products. ACDI/VOCA volunteers helped establish extension service centers in 10 regions of Russia, increase membership in 7 pre-existing associations, and develop more than 12 new associations.

3. Successor Organization Created

Based upon the successful creation of similar organizations in Armenia, Azerbaijan and Moldova, ACDI/VOCA created the NGO "Agro-Inform" in Russia in 1996 as a local provider of technical assistance to farmers and enterprises. Agro-Inform arranges seminars, provides local consultants and conducts market and product research.

4. Commercial Ties with U.S. Businesses

ACDI/VOCA volunteers helped 12 Russian businesses and educational institutes establish partnerships with US-based partners. Partnerships with US partners resulted in tremendous benefits for the Russian organizations. For example, ACDI/VOCA helped Saratov company UNITOP and Saratov Milk Processing Plant establish business relationships with U.S. casein importer, JLS Foods, which resulted in the shipment of a container of edible grade casein to the U.S. The deal, valued at \$80,000, followed a similar arrangement valued at \$20,000 with US-based Erie Foods International for a shipment of 20 tons of casein.

Program Impact in Russia

By providing technical assistance to the new emerging private farmers and enterprises, ACDI/VOCA volunteers helped 45 milk producers increase their yield by 65%, increased field crop yields by 15% for 47 farmers, and helped 39 vegetable producers increase yields by 150%. Volunteers also introduced 157 new bakery products, 86 new meat products to 11 meat processing plants, 76 new dairy products to 22 dairy processors, and 16 new vegetable products for vegetable processors. The chart below provides a more detailed description of program impact.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average % increase production	Hosts who developed business-plans
Private farmers	67	51	27	36	29	17	16
Agricultural Enterprises	118	128	68	73	61	21	23
Associations	122	132	52	66	57	14	18
Government Institutions	3	3	2	2	2	12	0
Educational Institutions	6	6	5	5	0	0	0
TOTAL	316	320	154	182	149	64	57

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved Policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	196	191	127	46	116	107	39
Educational Institutions	14	10	9	0	7	6	2
Credit Institutions	2	2	1	1	1	1	1
Government	6	4	4	0	4	2	1
Agricultural Enterprise	27	28	17	0	19	12	9
Private Farmers	18	12	10	0	0	0	4
TOTAL	263	247	168	47	147	128	56

Sustainable Environmental Practices Assignments

Type of host	Total #	Total # of	Hosts who	Hosts with	Hosts with	Hosts	Hosts who
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	of hosts	assignments	adopted innovative practices	improved waste or pollution management	improved management of natural resources	who developed business plans	drafted laws or published books
Associations, NGO, SO	18	24	11	2	6	5	1
Government Institutions	3	3	2	0	0	0	1
TOTAL	21	27	13	2	6	5	2

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/ improved materials	Hosts who mobilized resources
Educational Institutions	17	17	12	8	12	9
Government	5	6	3	2	3	1
TOTAL	22	23	15	10	15	10

Beneficiaries

	Direct	Indirect	Total
Female	50,588	135,561	186,149
Male	70,119	185,895	256,014
TOTAL	120,707	321,456	442,163

Success Stories from Russia

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. Raising Emu in Russia

Two Agribusiness volunteers, Dr. John Blake from Auburn University, Alabama and Doug Moorer from Featherhill Emu Farm, Monroeville, AL, traveled to Volgograd in February 1999 to work with the Krasnodonskoye Agro-Firm Company. The volunteers assisted the company in setting up incubators for U.S.-donated emu eggs and provided technical assistance in emu egg hatching, production, and management.

On his previous assignment with Krasnodonskoye in June 1998, Dr. Blake determined the feasibility of creating an emu-raising operation in the Volgograd region. Upon his return to the United States, John Blake continued his voluntary work resulting in his discover of organizations (namely, *Featherhill Emu Farm, Alababma*) willing to donate emu eggs to Russian counterparts.

Recently, Krasnodonskoye and Olkha approached ACDI/VOCA with another request for an emu expert to provide assistance in proper management, nutrition, and disease control of young emu chicks. Clover Quinn, the owner and manager of an emu farm in Montana, filled the request. In addition to the aforementioned issues, Clover helped re-design the available facilities to adapt them to raising emus in winter conditions.

As a result of Blake’s work, a total of 225 emu eggs, at a total cost of \$17,675, were donated to Russia. Of that amount 200 eggs were shipped to Krasnodonskoye Farm, and 25 to Olkha Private Farm managed

by Vladimir Alksnis. In addition to the eggs, the volunteers also donated six shipping containers and packaging materials to the host organizations.

Krasnodonskoye and Olkha are the first emu-raising operations in Russia. They have strictly followed recommendations provided earlier by the volunteers and have been successful in hatching a total of 115 emu chicks which in three months have already approached the weight of 25 kilograms each.

2. Volgogradski Dairy Processing Plant

The Volgogradski Dairy Processing Plant from Volgograd, Russia, has been working with the Farmer to Farmer Agribusiness Management Program since April 1999. Since then, the plant has received four volunteers who have assisted with various aspects of the enterprise's development. The volunteers have also assisted the plant's contractors who supply them raw milk. The components of the technical assistance have included dairy herd management, agribusiness marketing and management, and soybean processing.

In April 1999 the plant requested a volunteer expert in dairy herd management to address the issue of proper management of milking cows. The goal was to increase milk yields at the contractors' farms. Veteran volunteer Damon Szymanski filled that request and provided the farms with a number of specific recommendations related to milking procedures, cow feeding, and management of the herds. Following the implementation of the volunteer's recommendations, the farms increased their milk production on average by 15%.

A month later, the plant hosted Jeanne and Edward Schwallers, experts in agribusiness marketing and management. They provided a series of workshops on the management and marketing at Volgogradski and other dairy-processing operations across the Volgograd region.

In June 1999, ACDI/VOCA fielded Youssef Hafez, an exceptional expert in soybean processing to Volgogradski. This operation hoped to expand product variety in its newly established soy milk processing department. At the project site, the volunteer trained specialists in the plant on methods of producing ten new types of soy yogurts, as well as to how to produce soy ice cream and soy milk beverages with fruit flavors. As a result, Volgogradski expanded the assortment of soy milk products by 12 new items. The cost of production of soy-milk products is about one-tenth that of regular milk products, so the plant is expected to generate a large profit.

In May 1999, the Volgogradski Dairy Plant hosted an international seminar on new technologies in the dairy processing industry, sponsored by the All-Russian Institute for Dairy Processing Industry. The seminar was attended by dairy specialists of over 40 dairy processing enterprises from Russia and other NIS countries, as well the ACDI/VOCA Program Director from Moscow and the Saratov Regional Project Manager. During the seminar, the plant's management illustrated the impacts achieved as a result of ACDI/VOCA technical assistance, and provided information on ACDI/VOCA programs.

Summary of Lessons Learned in Russia

1. Piggy-back assignments are more cost-effective and maximize a volunteer's time on assignment

ACDI/VOCA had piggy-back projects (one volunteer works with multiple hosts) in several regions to maximize a volunteer expert's time in Russia and the resources spent on the technical assistance mission. Because it is relatively cheap to move a volunteer around from place to place (region to region) once in Russia, ACDI/VOCA tried to organize a series of similar projects in several regions of Russia. This

enabled ACDI/VOCA to increase the number of clients who received technical assistance, thereby driving down per assignment costs.

2. Repeat volunteers are more effective because they bring previous experience in the NIS to new assignment

The Program also anticipates using a high percentage of repeat volunteers (i.e. volunteers who have been on assignment at least once, if not more, in Russia). Volunteers who have already worked in Russia are more effective on short-term assignments because they know the situation (economically, politically, socially) in the country and have a better understanding of the cultural make-up of the Russian people (how to work with them, etc.). To underscore this point, in FY99, over 40 percent of the volunteers used for ACDI/VOCA assignments were repeat volunteers.

3. Regional offices are more effective at identifying and providing services

Effective implementation of the FTF Program in Russia requires a regional presence outside of Moscow. Regional offices can effectively identify hosts in their areas, build long-term partnerships, support volunteer logistics, ascertain regional constraints to economic development, and establish relationships with local administrations and hosts. Building trust between the FTF workers and volunteers within the regions leads to greater accomplishments in volunteer assignments and creates an environment in which hosts are able to continue growth with the people they are familiar and comfortable with.

4. Develop support organizations to facilitate communication and skill spread at grassroots level

Improving and developing communication organizations provide an important link between producers and suppliers with common interests. Foreign TA should develop viable indigenous Agricultural Support Organizations to meet the needs of agricultural experiences. A greater willingness and capacity to share information at the grass roots level is conducive to replication of successful FTF activities both within and outside of the (local) community.

5. Volunteer TA programs must be flexible

The flexibility of the FTF program to fill specific needs of the host organizations is a strength of the program that should be preserved. Focusing volunteer assistance in priority sectors and regions maximizes the impact of the program. This is a point that can also be applied to cultural sensitivity issues. For example, independent farmers and agribusinesses (especially those that have left a state or collective farm operation) are fearful of the word "cooperative." They are hesitant to work together even though they recognize the fact that they will have a hard time surviving against the former monopolies if they work alone. There is a need for cooperatives, or farmer-owned businesses, as they are set up in the United States. ACDI/VOCA has worked to change this situation, though we can only respond to requests for such assistance. Our strategy is to support the community leaders that want to start cooperatives and help them educate future members and establish solid articles and by-laws when setting up the organization.

6. Long-term relationships and multiple volunteers increase impact

Long-term partnerships with host organizations and local partners increases volunteer impact as well. Multiple volunteer assignments with the same host builds trust and is a powerful tool for achieving sustainable results. Over the years, ACDI/VOCA has learned the importance of cultural differences and

what needs to be done to make the volunteer experience a positive one for both the volunteers and the host organizations.

FTF Resources Leveraged in Russia

ACDI/VOCA multiplies its effectiveness overseas by enabling budding entrepreneurs to come to the United States for study tours. ACDI/VOCA has helped approximately 100 agribusiness people from 17 regions of Russia have received training in the U.S. through different programs (Cochran, PEP, FtF, AED, etc.) since 1992. Training participants have documented 200 percent increases in business production as a result of the information gleaned on ACDI/VOCA study tours. These tours also provide valuable exposure to U.S. products and trade opportunities.

ACDI/VOCA also promotes and encourages the growth of enterprises by providing assistance in obtaining loans. ACDI/VOCA assisted 11 clients to obtain low interest loans from various investors for business development. In one particular case, the Borets Joint Stock Company worked with an ACDI/VOCA volunteer to develop a business plan and to find an investor to open a milk processing facility. As a result, Borets obtained \$400,000 to purchase new equipment. In a similar case, the "Terminal" Joint-Stock Company obtained a \$250,000 loan for the purchase of farming equipment to advance their vegetable processing facilities.

D. WESTERN NIS

1. BELARUS

Program Strategy and Evolution

Launched in the spring of 1993, ACDI/VOCA provided 125 FTF volunteers (134 assignments) who worked to promote privatization at the grassroots level by working primarily to support private farmers and enterprises (74% of resources), NGOs (12% of resources) and research institutes (14% of resources) dedicated to implementing market reforms. In general, the ACDI/VOCA FTF Program in Belarus worked most diligently toward achieving USAID's 'Strategic Objective' of "a change in knowledge or understanding through training." Because of the profound lack of contemporary, reputable scientifically based publications of information specifically related to agriculture, ACDI/VOCA worked to bridge this gap through the expertise of short-term volunteer technical advisors and the dissemination of appropriate technology agricultural publications.

ACDI/VOCA's general program focus in Belarus, as in other areas of the NIS, supported working with private farmers and entrepreneurs in making the transition to a market-oriented economy. The program also initially included close collaboration with all levels of the Belarus government to support the transition to a market economy and a privatization of agricultural land and enterprises. However, in early 1995, after a demonstrated lack of progress towards creating a market-oriented economy and continued authoritarian decrees by the government, the U.S. Embassy in Belarus and the USAID Regional Mission in Ukraine requested that ACDI/VOCA not work with the Ministry of Agriculture or other government organs in transforming state/collective farming structures into viable privately owned farmer cooperatives and associations. This restriction was further strengthened in 1998 after the "Drozdy Ambassadorial Residence incident." Beginning in the summer of 1998, a policy of "selective engagement" was introduced for all U.S. Government-funded organizations that prevented the provision of any type of support to members of the Belarusian Presidential Administration (national, regional and local authorities) without prior approval granted by the U.S. Embassy in Belarus. Although the second restriction did not have an immediate affect on ACDI/VOCA's FTF program, both policies led to

ACDI/VOCA increasing its involvement with the private farmers and entrepreneurs working in the agricultural sector at the grassroots level.

Private enterprises and farmers in Belarus continue to rely on barter transactions, primarily driven by a universal lack of credibility in the Belarussian Ruble, which has as many as 10 official exchange rates. Notably, even the Belarussian Government refuses to accept the national currency for payment of debts. This is further compounded by the continued strong regulation of the hard currency market by the government, preventing any significant stabilization. Despite these political and economic restrictions – and in part, due to them - ACDI/VOCA sought to optimize the results and impact of FTF technical assistance through a generalized approach that incorporated neither geographical nor sub-sector-specific limitations. Moreover, ACDI/VOCA heightened its efforts to distribute information to private farmers and private enterprises by building the capacity of organizations willing to disseminate information. Accordingly, ACDI/VOCA's FTF program in Belarus after 1995 provided short-term, high-impact technical assistance to private farmers, small and medium-scale agricultural enterprises and non-governmental organizations engaged in:

- Production of vegetables, fruits, grains, forage and livestock,
- Processing of vegetables, fruits, and dairy and meat products, and
- Agricultural information dissemination (including locally produced newsletters).

Significant Accomplishments

ACDI/VOCA volunteers working in these areas helped increase the membership in 2 beekeepers associations from 10 to 65 members each and were instrumental in building the organizational and professional capability of the Belarussian NGO "ORACUL." As a result of volunteer technical assistance and the support of ACDI/VOCA staff, ORACUL has managed to become a leading research organization and business support center. Significantly, ORACUL is a staunch advocate of private farmers and publishes a regional newsletter for farmers. With ongoing support from ACDI/VOCA, ORACUL has received multiple grants from the USIS Democracy Commission Small Grants Program, United Nations Development Program, Eurasia Foundation, Counterpart International, and local and regional Executive Committees.

Program Impact in Belarus

Working with ACDI/VOCA volunteers, 5 private enterprises increased their production by more than 100%. Bio-humus (an inexpensive organic fertilizer) producers POLAR Ltd. and Binor M greatly increased their production capacity, with POLAR increasing production by 350% and Binor M by 100%. Dairy processor VESTA Enterprise doubled their daily ice cream production by simply by modifying the methods of utilizing their equipment. Overall, FTF volunteers helped 11 Belarussian private farmers increase production by 31%, 5 private enterprises increase production by an average of 111%, and 2 associations increase membership. Program impact is discussed in more detail in the chart below.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average %	Hosts who developed business-plans
Private farmers	42	57	9	12	11	31	4
Agricultural Enterprises	21	25	11	8	7	111	6
Associations	2	2	2	2	0	10	2

Government Institutions	2	2	1	0	0	0	1
Educational Institutions	3	4	1	1	1	0	0
TOTAL	70	58	24	23	19	51%	13

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	15	17	7	2	4	6	5
Educational Institutions	6	9	5	1	2	2	1
Credit Institutions	3	3	2	1	2	3	1
Government	2	2	0	0	0	0	0
Agricultural Enterprise	2	2	0	1	1	1	1
Private Farmers	0	0	0	0	0	0	0
TOTAL	28	33	14	5	9	12	8

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	1	2	1	1	1	1	1
Government Institutions	2	2	1	0	0	0	0
TOTAL	3	4	2	1	1	1	1

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/ improved materials	Hosts who mobilized resources
Educational Institutions	3	5	1	1	1	1
Government	2	2	0	0	0	1
TOTAL	5	7	1	1	1	2

Beneficiaries

	Direct	Indirect	Total
Female	7,427	36,425	43,852
Male	6,304	38,215	44,519
TOTAL	13,731	74,640	88,371

Success Stories from Belarus

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. ORACUL

ORACUL, a Belarussian, non-governmental organization, requested technical assistance in the development of the organization. Through the support of ACDI/VOCA, ORACUL has managed to become a leading research organization and business support center in Gomel. Additionally, ongoing support from ACDI/VOCA has assisted the NGO’s staff in receiving multiple grants from USIS’ Democracy Commission Small Grants Program, United Nations Development Program, Eurasia Foundation, Counterpart International, and local and regional Executive Committees. The Director of the NGO has also been the recipient of three U.S.-based training opportunities as a result of letters of support received from ORACUL, in addition to ORACUL’s work with ACDI/VOCA.

ACDI/VOCA’s work with ORACUL was instrumental in the NGO’s establishment as a publisher of good quality, appropriate agricultural information, such as newsletters, bulletins and digests. ACDI/VOCA fielded volunteers to assist and teach ORACUL staff data collection and analysis techniques, journalistic standards, design, layout and publication of resource materials. As a result, ORACUL has been awarded numerous grants, totaling more than \$100,000, from various institutes and organizations for its continued organizational and professional development.

2. Belsad Fruit Growing and Research Institute

This institute was a recipient of ACDI/VOCA’s technical assistance targeting improvement of existing fruit growing and general research and development practices. The volunteer, from the USDA, assisted scientists at the institute with the introduction of new fruit cultivated varieties (cultivars), such as strawberries, raspberries, blackberries, and others, through laboratory testing and analysis. As a result of the volunteer’s efforts, BELSAD researchers also became members of international scientific associations that will greatly assist BELSAD in the future with access to contemporary quality-oriented research data and professional contacts.

As a result of BELSAD’s lack of funding due to the break-up of the Soviet Union, the ACDI/VOCA volunteer encouraged staff to introduce “field days” as a source of revenue generation. The idea has since been effectively used twice annually during fall and spring planting seasons. The field days have provided two very beneficial results. BELSAD has been able to inexpensively publicize, “who it is” and “what it does.” In turn, this has led to the institute selling all of its seedlings and transplants. It has also contracted with fruit producers, subsequently generating additional revenue, for the provision of technical guidance in planning, designing and caring for the farmers’ crops.

3. Vesta Enterprise

The Vesta Enterprise was founded in 1995. In March 1996, the owner began producing “Fantasia” brand ice cream for sale in the local Gomel region market.

Utilizing second-hand Italian-made ice cream production equipment, the owner and his 18 employees began developing recipes. Unfortunately, due to a lack of formal training and previous experience in the dairy-processing business, VESTA’s level of production and new product developments did not develop as originally anticipated.

In April 1998, an ACDI/VOCA volunteer provided technical assistance to VESTA. The volunteer's vast knowledge and experience in the dairy business and his familiarity with the Italian-made equipment used by the enterprise greatly enhanced the value of his technical assistance and the overall contribution he was able to make. During the first week of his two-week assignment, the volunteer was able to double VESTA's daily production output from 1,000 to 2,000 liters of Gelato (Italian-style) ice cream using the same equipment. This doubling of output was possible due to alterations made by the volunteer regarding aging and freezing of the ice cream mix. An added bonus included an improvement in the taste of the ice cream due to less preparation time.

While working with VESTA, the volunteer also encouraged experimentation, such as adding fruit or nuts, to expand the line of products offered. The introduction of Italian-style Fruit Ices, as suggested by the volunteer, has been overwhelmingly successful for VESTA. A positive sign for future product developments, VESTA has had to continually increase the quantity of Fruit Ices produced to satisfy local demand. Two additional products introduced by the volunteer included ice cream sandwiches and yogurt. Products introduced were based primarily on availability of local raw materials and utilization of equipment currently owned by the company.

In March 1999, the owner/director and marketing manager of VESTA were provided with the opportunity to participate in a U.S.-based training program focusing on dairy processing. The program, held at the University of Iowa, was designed and coordinated by the ACDI/VOCA volunteer who had been to Gomel, Belarus and assisted VESTA during the previous year. The participants were responsible for their return trip airfare but all other costs were covered either by the volunteer or Matrix, a USAID-funded, U.S.-based organization with an office in Des Moines.

Upon returning to Belarus, the VESTA staff commented that participation in the training program was "a chance of a lifetime opportunity."

Summary of Lessons Learned in Belarus

1. Volunteer TA programs must have a broad focus with demand-driven flexibility

The broad focus of the FTF program in Belarus allowed ACDI/VOCA to have the programming flexibility necessary to identify quality-oriented hosts throughout the country and address the technical assistance areas that could produce the greatest impact, given the continuously shifting priorities (i.e. "target sectors") and unpredictable 'decrees' by the President of Belarus.

2. Volunteer TA should be augmented by financial or input support

Recognizing the obstacles facing farmers, ACDI/VOCA was very successful in securing donations from either volunteers, U.S. based companies, or international organizations for augmenting the impact of the technical assistance provided by volunteers.

3. Volunteer TA is most effective at the grassroots level

The least effective segment of the Farmer-to-Farmer Program in Belarus was realized early on and was swiftly addressed. It involved the reorientation of target hosts with whom ACDI/VOCA would work. Due to the lack of sincerity expressed by the majority of state and collective farm managers in transforming the old Soviet style agrarian system into a viable demand-driven market economic structure without price controls and arbitrarily developed production quotas, ACDI/VOCA focused its attention at the grassroots level. By working with the private producers and processors and affiliated support organizations, e.g. ORACUL, in rendering appropriate technical assistance that was requested, valued,

and appreciated, ACDI/VOCA's program in Belarus was much more effective and produced more tangible results.

FTF Resources Leveraged in Belarus

Assisted more than 30 individuals, through AED, Cochran Fellowship, and SABIT programs, from the Belarusian private entrepreneurial and agricultural sectors in realizing participation in U.S. and N.I.S. based study tours that broadened participants' understanding about contemporary technologies and knowledge of the diversity of business opportunities provided within the vast 'agricultural sector' and encouraged mitigation of contacts with professionals in other countries.

ACDI/VOCA distributed more than 5,000 packets of vegetable, herbs and flower seeds (\$7,500.00 to \$10,000.00 value) donated by U.S. seed companies to 18 private farmers, 3 from each of the six regions of the country, during "Seed Education" and "Herbs Production" seminars. The non-hybrid varieties of seed, chosen for the northern climatic conditions of Belarus, will allow for their reclamation and further use and distribution in subsequent years, thus improving the diversity and quality orientation of produce in the country.

ACDI/VOCA introduced three new varieties of potatoes (Russet Burbank, Ranger Russet, and Umatilla Russet) into the private farming sector in three regions – Brest, Gomel, and Vitebsk. The potatoes (18 pounds of tubers) were donated by the University of Idaho Extension Service. The three varieties of potatoes are currently being registered with the Ministry of Agriculture for future sales of 'clean', quality-oriented seed potatoes by the farmers.

ACDI/VOCA helped edit a winning proposal from the NGO "ORACUL" (a long-time ACDI/VOCA client) submitted to United States Information Service (USIS) Small Grants program. The proposal, which was funded, will provide ORACUL with \$20,000.00 for implementing a business-support program focusing on law, land reform legislation and agricultural policy affecting farmers and other members of the private agricultural community in Gomel and throughout Belarus.

2. MOLDOVA

Program Strategy and Evolution

Beginning in 1993, ACDI/VOCA's original FTF strategy in Moldova was to promote the development of private farmers and a market economy. Over the course of the program, ACDI/VOCA provided 126 FTF volunteers, who completed 130 projects to private farmers and enterprises (33% of resources), associations and NGOs (18%), educational institutions (17%) and government institutions (24%). ACDI/VOCA worked closely with other foreign technical assistance programs to both coordinate and leverage their resources where possible while complementing their programs with volunteer technical assistance. Although the emphasis of ACDI/VOCA's strategy changed as the political and economic situation of Moldova evolved, the FTF program consistently met USAID's strategic objectives in Moldova. Specifically, the program met USAID's Strategic Objectives:

- 1.1 Increased transfer of state-owned assets to the private sector,
- 1.3 Accelerated development and growth of private enterprises,
- 1.4 A more competitive and market-responsive private financial sector
- 2.1 Increased, better informed citizen participation in political and economic decision-making.

As one of the first foreign organizations in Moldova, ACDI/VOCA's initial objective was to provide firm-level assistance to those enterprises, associations, and individual farmers who were among the first to become privatized so that they could become leaders within their community and within the agricultural sector. However, ACDI/VOCA quickly ascertained that providing technical assistance at the grassroots level without the requisite legal support was insufficient for promoting genuine reform; while Moldova has made consistent progress since 1991 towards creating a market economy, it often lacked the legislation for establishing the necessary legal foundation. Accordingly, ACDI/VOCA utilized the relatively reform oriented government to become involved in policy and legislative issues in order to address some of the major obstacles facing agricultural reform.

Over the course of the program, the increasing numbers of foreign technical assistance programs in Moldova and relatively stable economy created a genuine momentum in the privatization process. In turn, this created increasingly larger numbers of private farmers receiving their own plots of land and increasing numbers of enterprises trying to become competitive in a market economy. By 1997, this evolution caused ACDI/VOCA to more aggressively target building the capacity of associations, cooperatives and rural NGOs (collectively termed "support organizations") as a means of meeting the demand for information required by the larger number of private farmers and entrepreneurs. ACDI/VOCA also provided volunteer technical assistance directly to their members on issues such as production, business and marketing practices. ACDI/VOCA's increased focus in this area resulted in building the capacity of 16 cooperatives and associations and the creation of a beekeepers association, a horticultural association and the first extension office in Moldova.

In addition to the increased emphasis on developing support organizations, ACDI/VOCA also increased its work with small- and medium-sized enterprises (SMEs) in the agriculture sector through the Alliance for Collaboration on Enterprise Development (Alliance) project. Beginning in late 1996, the Alliance project allowed ACDI/VOCA to utilize more FTF resources on developing support organizations while continuing support to SME development. Most importantly, the leadership of the newly created associations participated in "East-to-East" exchange, or trips to similar organizations in Eastern Europe, through the Alliance project that allowed them to learn organizational practices while establishing both organizational and commercial partnerships. Significantly, participation in an East-to-East exchange trip to Poland and Hungary led the newly created horticultural association to begin purchasing equipment from a Polish company and open negotiations with a German processing plant (with whom they met in Hungary) interested in buying Moldovan apples from the association members. Additionally, the experience led the association to begin lobbying the Moldovan Ministry of Agriculture to implement a policy similar to the policies in Poland and Hungary whereby fruit growers receive interest-free loans. The policy is intended to provide Moldova's fruit growers with the financial means to upgrade their equipment and begin implementing Western practices.

As part of ACDI/VOCA's strategy to ensure program sustainability, and linked to its strategy of increasing technical assistance to private farmers and enterprises, ACDI/VOCA helped create the NGO "ADSISTO," or "help" in Moldovan. Created in 1995, ADSISTO provides consultative services and training to associations, organizations and enterprises engaged in the economic and social sectors. ADSISTO consultants often complemented ACDI/VOCA's volunteer activities.

In late 1997, ACDI/VOCA began using FTF funds as "Demonstration Funds." The Demonstration Funds greatly increased the impact of volunteer assignments by covering the costs for translating materials provided by the volunteer, purchasing small quantities of inputs (i.e. for a test-plot) or procuring equipment (i.e. computers or small farm machinery). The recipients of volunteer assistance and the Demonstration Funds worked with an ADSISTO consultant to develop a detailed plan that clearly described how the funds and FTF volunteer training would be utilized. The ADSISTO consultant also ensured that the Funds were spent according to the agreed plan and worked with the client to implement

the volunteer recommendations. Because of this close collaboration with the ACDI/VOCA clients, the ADSISTO consultants often continued to provide advice and information after the original volunteer assignment was completed.

Significant Accomplishments

1. Legislative Initiatives

Despite Moldova's steady progress towards a market economy, it often lacked the necessary legal foundation to support and protect the emerging private farmers and enterprises. ACDI/VOCA volunteers played key roles in shaping several key pieces of legislation that helped create the groundwork for significant progress on reforms. Specifically, ACDI/VOCA volunteers were instrumental in shaping the following legislation:

- (a) amendments to the Moldovan Land Code (drafted in 1995, but approved in late 1996)
- (b) Law on Ecological Expertise and Evaluation of Impacts on the Environment (1995)
- (c) Law on re-gauge of products and toxic substances (1995)
- (d) Law on Savings and Credit Associations (SCAs), especially the Article on creating and organizing the National Supervisory Body of SCAs (1998)

The amendments to the Land Code paved the way for the dissolution and privatization of collective farms and legalized the ownership of individual plots by private farmers. The results of the legislation were immediate once the legislation was passed in late 1996. In 1997 and 1998, more than 220,000 private land owners were created in the break up of 250 collective farms. Approximately 500,000 additional private owners will be created during the privatization of 500 collective farms in 1999. Privatization of the former collective farms is expected to be complete by the end of 2000.

The legislation on environmental practices helped create the basis for environmental protection in Moldova. In 1994, ACDI/VOCA volunteers reviewed numerous environmental laws, re-wrote other laws and amendments and helped draft new legislation. One year later, the same volunteers returned to help revise the Environmental Impact Evaluation Laws, the Ecological Expertise Law, and the Pollution Tax Laws.

Finally, ACDI/VOCA volunteers played key roles in drafting the legislation on savings and credit associations (SCAs) and creating a National Supervisory Body to coordinate the SCAs. The legislation was vital to creating rural credit unions and for leveraging a World Bank funded credit program targeting small private farmers. After the legislation was drafted and approved in 1998, more than 140 SCAs were created along with the national coordinating body, compared to 11 SCAs prior to the legislation. Through these SCAs, more than \$1.5 million in loan capital has reached private farmers.

2. Successor Organization Created

In 1995, ACDI/VOCA helped create the non-governmental organization ADSISTO, or "assistance" in Romanian, as a local organization capable of providing technical and consultative services and training to associations, organizations and enterprises engaged in the economic and social sectors. ADSISTO and their 50 local consultants often complement ACDI/VOCA's volunteer activities, as explained earlier, and were also involved in helping ACDI/VOCA implement the pilot phase of the Social Investment Fund. Independent of ACDI/VOCA, ADSISTO has established a strong reputation and is often the coordinating organization for completing short-term projects funded by the World Bank, USAID, TACIS and other donors. In 1999, ADSISTO completed an agricultural sector survey for ACDI/VOCA and won another grant from the Council of Europe to operate a 10-month training program for students on Romanian language and culture that includes a 2-week summer camp designed to increase ethnic awareness.

ADSISTO is also working with USAID contractor Booz Allen & Hamilton to expand the distribution of information to new private farmers on the rights of landholders. For the future, several USAID contractors currently have ADSISTO listed as a sub-grantee on large proposals to be awarded in late 1999 or early 2000.

3. Association Development

In response to the growing demand for technical assistance and with the objective of increasing the level of technical assistance provided to producers, ACDI/VOCA targeted association development after 1997. ACDI/VOCA's increased focus in this area resulted in building the capacity of 16 cooperatives and associations and the creation of a beekeepers association, and a horticultural association. The *Apis Mellifera Beekeepers Association* was the response to the numerous requests for information on beekeeping received by ACDI/VOCA over the past several years. Starting with an initial group of 20 members in December 1998, the association's membership expanded to 32 members within 6 months and is expected to exceed 60 members by December 1999. The association hosted several seminars on beekeeping practices in the spring and summer of 1999 and will participate in its first marketing exhibition in November 1999.

While working with an ACDI/VOCA volunteer on an assignment with an apple grower establishing a demonstration orchard, ADSISTO consultant Ilie Donica and the apple grower developed the concept of creating an association of fruit growers to increase the beneficiaries of the demonstration orchard and to market products. In July 1999, the *Moldovan Association of Fruit Producers* was created with assistance from another ACDI/VOCA volunteer. As of September 1999, the association had 37 members. The association recently began lobbying the Ministry of Agriculture to implement a policy similar to the policies in Poland and Hungary whereby fruit growers receive interest-free loans. The policy is intended to provide Moldova's fruit growers with the financial means to upgrade their equipment and begin implementing Western practices.

Program Impact in Moldova

By providing technical assistance to the new emerging private farmers and enterprises, ACDI/VOCA volunteers directly assisted 9 fruit and vegetable producers to increase production by 41%, 4 grain producers to increase production by 15%, 5 associations to increase membership and improve member services, and developed new curriculums for 3 educational institutes. The chart below provides a more detailed description of program impact.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average production increase *	Hosts who developed business-plans
Private farmers	15	20	8	14	10	8%	1
Agricultural Enterprises	11	16	6	10	2	178% **	
Associations	3	4	2	3	2	5%	
Government Institutions	3	4	2	3	1	10%	
Educational Institutions	1	1	1	1	1	5%	
TOTAL	33	45	19	31	16	42%	1

* average based on the production increase of those hosts who increased production

** one enterprise had a 350% production increase.

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	17	21	12	5	5	9	1
Educational Institutions	1	1	1	0	0	0	0
Credit Institutions	3	9	3	2	1	2	3
Government	3	4	3	2	3	2	2
Agricultural Enterprise	1	1	1	0	0	0	0
Private Farmers	4	5	4	0	0	0	0
TOTAL	29	41	24	9	9	13	6

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	1	2	1	0	1	0	0
Government Institutions	5	19	5	3	2	1	3
TOTAL	6	21	6	6	3	1	3

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/improved materials	Hosts who mobilized resources
Educational Institutions	3	19	3	3	3	1
Government	1	4	1	1	1	0
TOTAL	4	23	4	4	4	1

Beneficiaries

	Direct	Indirect	Total
Female	5,427	26,587	32,014
Male	8,268	27,071	35,339
TOTAL	13,695	53,658	67,353

Success Stories from Moldova

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. First Extension Service Center Created

Mr. Trofim Gavrilov, the Deputy Director of the Anenii Noi District Agricultural Department, requested a volunteer knowledgeable in the organization and operation of an agriculture extension service center. ACDI/VOCA provided a volunteer expert, Wayne Schoper, who advised the Department on how to establish and operate such a center.

Volunteer Wayne Schoper came to Moldova in August 1998, where he worked closely with Trofim Gavrilov on creating a consulting center for the farmers of Anenii Noi. Schoper's recommendations encompassed the working concepts of an extension service center, the methods of marketing the center's services, and other relevant aspects. Shortly after the volunteer left the country, the center was officially registered under the name of "Agroconsultant." The staff of the center used office and training equipment provided by ACDI/VOCA to develop consulting activities within the region, and they achieved several positive results in the first year of activity.

Following this assignment, a number of important goals have been achieved, including:

- establishment of five demonstration plots for use in training farmers;
- training of more than 200 farmers in the region through seminars and farm visits;
- design of a marketing and information database;
- establishment of collaborative relations with similar organizations and academic institutions;
- development and distribution of public relations materials; and
- recruitment and training of 13 extension agents throughout the region.

One of the top priorities of the current agricultural reform policy in Moldova is to develop a sustainable extension service system. Several foreign organizations are involved in implementing this plan and ACDI/VOCA has contributed greatly by creating a promising extension service unit.

2. Private Beekeeper

Although most beekeepers in Moldova continue to use the outdated and inefficient Soviet techniques, Petru Arhip, who has worked in beekeeping for many years, requested technical assistance from ACDI/VOCA in order to improve the productivity of his hives. He has worked with three ACDI/VOCA volunteers over the course of two years to improve his beekeeping practices, resulting in a more diverse variety of products, improved marketing practices, and higher production levels.

In April 1996, volunteers Jerald and LeJune Ely helped Petru Arhip convert 10 of his hives to the modern vertical multi-story model, which have proven to be very efficient. As a result of this conversion, each hive produces 40-45 liters of honey per colony, compared to the old, horizontal style from which he received only 30-35 liters of honey per colony. Petru Arhip also introduced a much more aggressive marketing policy, which has helped him maintain a consistent clientele. Arhip realized significant impact in marketing after the second project, when volunteer Roger Hoopingarner visited him. As a continuation of this project and due to good recommendations by the volunteer, Petru won a six-month internship at an apiary in the United States. After his trip, Petru began bottling some of his honey in smaller containers, thereby increasing his profits. He also started to use labels that have a nice marketing appeal. Roger Hoopingarner recommended that Petru expand hive products and to prepare honey using the Dyce method. Petru did so, and in addition, started to bottle and sell medicinal jars of pollen.

These projects led to the following accomplishments:

- introduction of new types of practices (multi-story hives as opposed to one-story hives);
- aggressive marketing strategy;
- diversification of products;
- successful internship in the US.

Because of his work with ACDI/VOCA, Petru Arhip has served as a model of improved beekeeping practices for beekeepers in his region. Most importantly, he was the first beekeeper to implement a marketing strategy, putting him in a leading position among beekeepers. Petru's initiative, knowledge, and openness to ideas led him to become president of a newly created beekeeper's association, Apis Mellifera, which was created on the advice of another ACDI/VOCA volunteer, Ann Harman. (Ann was working with another beekeeper at the time.) The association is currently registered as an NGO and has 20 members. The association exponentially increases the benefits of the ACDI/VOCA assignments by allowing the distribution of information gathered from each volunteer assignment to each of the members.

3. Biruinta Apple Orchards

The Biruinta cooperative was created by 850 people who worked on a collective farm in the village of Cojusna. In 1997, the company produced 1,500 metric tons of apple juice and 20 metric tons of apple juice concentrate. In order to succeed in the current economic conditions, the company needed to increase the quality of their apples and improve the productivity of their orchards. The president of Biruinta, Nicholai Munteanu, requested ACDI/VOCA's assistance in planting a new orchard and in teaching better orchard maintenance techniques.

In May 1998, volunteer Robert Bowers visited Biruinta's apple orchards and nurseries to offer advice on how to run a successful enterprise. In addition to recommending new practices for tree care and prevention of various diseases, Bowers suggested planting a small demonstration plot of American apple varieties using American techniques in order to determine which are the most appropriate and productive varieties to be grown at Biruinta. ACDI/VOCA purchased 160 apple trees of four different varieties and 2,200 Moldovan apple trees for the demonstration plot, all of which were planted using American techniques. As a result of this demonstration plot, Munteanu and ADSISTO consultant Ilie Donica developed the concept of creating an association of fruit growers in Moldova.

After implementing the recommendations left by the volunteer specialist, the following results took place:

- one demonstration orchard planted, according to strict directions left by volunteer;
- lower production cost due to the decrease of the quantity of pesticides used;
- Moldovan Fruit Producers Association founded in 1999, with 37 members;
- group of four apple growers visited Hungary and Poland to receive training in apple growing and processing, with assistance from ACDI/VOCA;

The existing situation in the Moldovan agricultural sector has a negative impact on the fruit growing industry, where massive areas of orchards are being cut down. This practice was stopped in the village of Cojusna due to the Fruit Producers Association. The entire industry will benefit in the long-run from the creation of the Fruit Producers Association.

Summary of Lessons Learned in Moldova

1. Technical Assistance requires enabling environment

Although technical assistance at the grassroots level is more effective than TA at the macro level (i.e. to the government), successful grassroots TA requires an enabling environment in order to have greater impact. Accordingly, TA should first target resolving legislative obstacles to implementing reform and follow-up with focused TA to individual farmers and enterprises at the grassroots level. Primary legislative obstacles to reform normally include:

- a lack of legislation governing land ownership or land sales,
- legislation inhibiting access to credit,
- no legislation authorizing the formation of cooperatives,
- no tax benefits for agricultural organizations (especially cooperatives),
- poor market access caused by high import/export tariffs, and
- lack of laws governing contracts.

ACDI/VOCA realized these obstacles early into implementing the FTF program and began allocating resources towards their resolution.

2. TA must be linked to a source of credit or input supply to be most effective

One of the biggest obstacles facing farmers in Moldova is the lack of low-interest, long-term credit available to farmers to purchase inputs, equipment or land. This was also the major obstacle preventing or restricting the implementation of volunteer recommendations. Complicating this situation is the lack of experience in financial institutions in dealing with individual farmers or small enterprises. This often leads to high interest rates, thereby further reducing access to credit.

To address this, ACDI/VOCA began working with the financial institutions to remove organizational barriers and teach lending methods. ACDI/VOCA also worked to initiate and advise on legislation pertaining to the extension of rural credit to farmers. Most importantly, ACDI/VOCA used Demonstration Funds to directly support the recommendations made by volunteers to farmers. These funds were used to purchase the inputs necessary to implement the recommendations, immediately increasing and expanding the level of impact resulting from the volunteer assignment.

3. Technical Assistance should focus on building the capacity of local support organizations (BSOs, associations, NGOs)

Foreign technical assistance programs are only temporary, while the need for training or information remains. Once established, local providers of TA (BSOs, NGOs) and associations continue to provide the necessary skills transfer to keep developing the sector and provide individual clients with information. Foreign TA should be used to build the capacity of these types of organizations so that the foreign TA providers, like ACDI/VOCA, can leverage the skills in the local organization during the project and so that TA can continue after the foreign TA provider leaves.

ACDI/VOCA helped create the NGO ADSISTO in 1995 for precisely this purpose. ADSISTO consultants often worked alongside ACDI/VOCA volunteers, learning from the volunteer at the same time as the client while helping make practical recommendations incorporating local conditions and resources. After working with the volunteer, ADSISTO consultants were able to provide ongoing TA while helping implement the volunteer recommendations. Moreover, the knowledge gained by the

ADSISTO consultant from the ACDI/VOCA volunteer is subsequently applied to other non-ACDI/VOCA clients, thereby expanding the number of TA recipients and spread of information.

Associations provide an excellent forum for exchanging or distributing information. ACDI/VOCA helped create an association of beekeepers and another of fruit growers. The impact was almost immediate as information spread among the members and as members networked among themselves and discussed successful practices.

When working with associations, TA should be provided to build the capacity of the association and should also target individual members of the association. This is an immediate way for the association to be perceived as providing services to members while also enhancing the skills of individual members.

4. TA should include multiple volunteers or other form of follow-on training

Multiple volunteer assignments increase the impact of TA provided to an individual client. Short-term technical assistance is most effective when it is targeted to resolve specific needs or problems. Multiple volunteers addressing numerous issues or following up on previous assignments increase the depth of knowledge gained by the client.

Volunteer TA should also be linked to other types of TA, such as training programs to other countries or training seminars within the home country. These types of programs provide a broader background for the advice provided by the volunteer while enforcing or expanding upon the volunteer's recommendations.

5. There must be a clearly defined graduation point for TA recipient

Prior to initiating any volunteer TA program, there should be a clearly defined level or point where a client is no longer eligible for volunteer TA. Early in the FTF program, several ACDI/VOCA clients received multiple volunteers without visible impact. Upon realizing this, ACDI/VOCA immediately revised its policy so that volunteer assignments were more closely linked to the level of impact expected to result from the assignment.

6. TA must develop business linkages inside country by encouraging networking among clients

Farmers and small business owners often are not familiar with the resources available within their own country and immediately assume that it is necessary to receive foreign information or buy/sell products abroad. In the associations that ACDI/VOCA supported and helped create, the principal impact was the networking by the members and the information exchanged. This networking was enhanced by encouraging clients to participate in or attend trade shows and exhibitions. To further support this information exchange and networking among clients, ACDI/VOCA hosted round-table discussions and referred clients to other clients.

7. Volunteer TA programs should concentrate on quality of program and not quantity of volunteers

Program impact is created by TA provided to clients with the highest potential to succeed. Therefore, the program focus should be on identifying high-quality clients and coordinating the qualifications and timing of volunteers to maximize time spent in-country rather than the number of volunteers provided.

FTF Resources Leveraged in Moldova

ACDI/VOCA staff and volunteers helped several clients receive a total of \$85,000 in financing. In 1995, ACDI/VOCA assisted IMATA in successfully writing a proposal to Eurasia for \$75,000 for training at the Institute. The training involved a ten-month program in Chisinau and a one-month training trip to Czech and Hungary (half the class of 25 in each country for a month) for training in those countries. Also in 1995, ACDI/VOCA volunteer Emereth Brunner persuaded the Rotary Club of Shawano, Wisconsin to raise over \$5,000 for the association for the purchase of a truck for his host in Moldova, Coslet and Company. The purchase of this truck was a major step towards alleviating the lack of transportation for produce in the village of Cornesti. The truck resulted in the clients receiving a better price for their produce by allowing the clients to sell their products in the larger district city markets and in Chisinau, the capital. Finally, in 1997, ACDI/VOCA volunteer Roger Hoopingarner invited beekeeper Petru Arhip to the US on a 4-month paid internship after working with him in Moldova. As a result of Arhip's work, Hoopingarner also loaned Arhip \$5,000 for investing in new equipment upon his return to Moldova.

Because of ACDI/VOCA's grassroots orientation and the strong qualities of ACDI/VOCA's clients, ACDI/VOCA was able to successfully recommend and place a total of 63 clients in reverse training programs to the United States or Eastern Europe. ACDI/VOCA placed 5 clients through the reverse FTF program, 11 with the USDA Cochran Fellowship Program, 15 with the AED NET program, 1 through USIA Community Connections, 13 through Global Outreach and 18 through ACDI/VOCA-sponsored East-to-East trainings in Poland, Hungary, Bulgaria and the Czech Republic.

3. UKRAINE

Program Strategy and Evolution

ACDI/VOCA began implementing the FTF program in Ukraine in 1992. Since then, 177 volunteers have completed 189 projects in support of the private farmers' movement in Ukraine. During the life of the FTF program, ACDI/VOCA committed 33% of its resources to supporting associations and cooperatives, 47% to providing technical assistance to private farmers and 11% to working with private enterprises. ACDI/VOCA allocated in line with USAID's Kiev Mission agricultural strategy, ACDI/VOCA focused its activities in the targeted oblasts, which include: Poltava, Odessa, Vinnitsia, and Lviv. ACDI/VOCA's FTF program supported USAID's Strategic Objective 1.3 Accelerated Growth and Development of Private Enterprises, especially Strategic Objective 1.3a A More Market Responsive Agricultural Sector.

Operating in a system of continued strong state interference throughout the agricultural sector and a series of protectionist policies aimed at supporting the continued existence of collective farms and state-owned enterprises, ACDI/VOCA volunteers were instrumental in supporting the private farmers and entrepreneurs who broke away from the command system. Under these constraints, ACDI/VOCA's strategy changed from supporting farmers associations in the early years of the program to working on cooperative development projects and agricultural extension projects from 1994 to 1996 and finally focused on specific production assistance in the final 3 years of the program. In the last years of the program, ACDI/VOCA worked intensively with private farmers on crop production and animal production in an effort to boost the profitability of private farmers and improve their overall competitiveness.

In the years immediately following Independence, and in the early phase of the FTF program, farmers associations in Ukraine proved to be strongly political entities with little connection to or benefit to members. Moreover, cooperative development was a slow process with information being distributed,

but few agricultural cooperatives being formed due to the widespread misconception that cooperatives were the same as collective farms. At the same time, agricultural extension work, though crucial for new farmers, was ultimately deemed unsustainable due to the lack of state support for such activity. In the final 3 years of the project, ACDI/VOCA provided technical assistance to private farmers in the areas of crop and animal production. The sole objective was to support the individual private farmers and prove that private farming is more profitable than collective farming.

While focusing FTF resources on improving production, ACDI/VOCA utilized additional resources received through the Alliance for Collaboration on Enterprise Development (the Alliance) project to work with agricultural processors. The strategy was to develop the production capacities of producers with FTF resources while adding the capability to create value-added products through the Alliance's work with processors. The Alliance project also worked to develop support organizations, creating 8 associations of processors; associations of processors proved to be much less political and more interested in promoting privatization reforms than similar groups of farmers. Moreover, as in Moldova, members of these associations also participated in 16 East-to-East exchange trips. Participation in one such trip led a milk processor to begin developing soy milk products which are sold at 11 confectioneries in Ukraine.

Significant Accomplishments

1. Soybean and Rape Production Increases

ACDI/VOCA implemented 95 volunteer projects on crop production, marketing, storage and association development, approximately 20% of which focused on rape and soybean production. In Ukraine, a trend is developing in which increasing land is put under high protein crops. In the Odessa oblast alone, the amount of land planted in rape will increase by 5 times by the 2000 harvest. Traditionally, rape seed is an alternative to the sunflower, the most popular crop in the country. Today, ACDI/VOCA clients grow about 20 kinds of rape seed. In addition, ACDI/VOCA created two soybean associations. Overall, half of ACDI/VOCA's FTF clients who worked with volunteers and implemented their recommendations on planting soybeans and rape increased their yield by 10%. One soybean producer generated more than \$10,000 in gross profits from his soybean crop as a result of working with an ACDI/VOCA volunteer.

2. Livestock Production Increases

ACDI/VOCA completed 25 volunteer projects targeting production and marketing issues. With declining animal populations, market prices for animals increased, allowing producers to increase their profitability. ACDI/VOCA swine farmers implementing volunteer recommendations increased their swine production by 50%; one producer increased production by 50% in just six months and is now one of the leading swine enterprises in Ukraine.

Program Impact in Ukraine

By providing technical assistance to the new emerging private farmers and enterprises, ACDI/VOCA volunteers helped 50 private farmers and enterprises increase production by 20%, 120 private farmers and enterprises develop business plans, and 5 associations expand membership and adopt new services. The chart below provides a more detailed description of program impact.

Production-related Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts with Increased efficiency	Hosts who adopted innovative practices	Hosts who increased production	Average % increase production	Hosts who developed business-plans
Private farmers	150	89	65	55	20	20%	80
Agricultural Enterprises	45	20	20	20	30	20%	20
Associations	20	35	0	10	5	10%	10
Government Institutions	0	0	0	0	0	0%	0
Educational Institutions	10	10	0	5	5	10%	10
TOTAL	225	154	85	90	60	15%	120

Organizational Development Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who Expanded membership	Hosts with New or improved services	Hosts with New or improved policies	Hosts who drafted Laws or mobilized resources
Associations, NGO, SO	15	25	5	5	5	5	5
Educational Institutions	5	5	1	1	1	1	1
Credit Institutions	5	5	0	0	0	0	0
Government	0	0	0	0	0	0	0
Agricultural Enterprise	0	0	0	0	0	0	0
Private Farmers	0	0	0	0	0	0	0
TOTAL	25	35	6	6	6	6	6

Sustainable Environmental Practices Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts with improved waste or pollution management	Hosts with improved management of natural resources	Hosts who developed business plans	Hosts who drafted laws or published books
Associations, NGO, SO	0	0	0	0	0	0	0
Government Institutions	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

Training Assignments

Type of host	Total # of hosts	Total # of assignments	Hosts who adopted innovative practices	Hosts who developed new courses	Hosts who developed new/improved materials	Hosts who mobilized resources
Educational Institutions	0	0	0	0	0	0
Government	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

Beneficiaries

	Direct	Indirect	Total
Female	48,847	51,518	100,365
Male	125,806	174,756	300,562
TOTAL	174,653	226,274	400,927

Success Stories from Ukraine

ACDI/VOCA clients produced significant impact at both the firm level and national level. Listed below are sample “success stories,” or detailed descriptions of the impact resulting from FTF volunteer assignments. Additional “success stories” are attached as attachments at the end of this report.

1. Rivne Hog Production

The agricultural enterprise, Zarya, located in the Rivne Oblast, is involved in livestock production. It is a large and relatively new company by Ukrainian standards. Zarya was founded as a state enterprise in 1992, but in 1996 it was privatized by its employees. Today Zarya is an open-joint stock venture. The company specializes in hog and cattle production. Annual hog production is 9,800 heads and dairy cowherd production is 3,360 heads.

ACDI/VOCA provided technical assistance to this enterprise in the area of general hog production management in March 1998. The volunteer selected for this assignment, Max Barnett, did an outstanding job. Mr. Barnett, an Illinois native, was impressed by the high accomplishments of the company on hog raising and marketing. In the United States the hogs currently reach 100 kilograms market weight within four and a half to five months. Zarya was at the market level of 120 kilograms in six and a half months, placing it just below par for American standards. In the United States the current hog meal is made from soybean meal, meat and bone meal, fishmeal, corn distillers, dried grains and wheat middling. All these protein supplements have additional mineral, vitamins and salt. Ukrainian hog producers do not have access to these products at a reasonable cost. Poor quality feed costs \$100-150 per ton and a better quality feed would cost up to \$200. The host used 70% of his own feed, and bought the remaining 30% from a feed company in Poland. It was obvious that primary need for Zarya enterprise was hog feed improvement.

The biggest concern for the ACDI/VOCA volunteer was the low amount of protein feed. The grain feeds used by the host would not produce higher weights and quality unless they could be balanced with proteins. At that time there was no good quality protein feed available in Ukraine so the volunteer showed the host how to make his own protein feeds. Mr. Barnett made a 45% protein supplement consisting of sunflower seed, peas (instead of grain), meat and bone meal and blood meal. A feed specialist from Zarya took this 45% protein hog supplement and re-adjusted the grains to create the proper protein level for hogs. Daily gain was noticeably increased.

By using the hog feeding program designed by this ACDI/VOCA volunteer the host was able to market the pigs at 120 kilos in 5 and a half months. In the long run Zarya Enterprise will raise hog numbers annually to 20,000 heads.

In September 1998 ACDI/VOCA also hosted a two-day seminar on hog production in Kiev. The participants of the seminar visited Kiev Atlantic feed processing facility. There 30% of the private hog producers made contracts for buying protein feeds. The manager of agricultural Zarya Enterprise was one of them. He has not had to purchase any feed from Poland since then.

2. Shcarlat Grain Processing and Marketing

An American volunteer, Lyle R. Stacy, from Iowa came to the Ukraine in August 1998. The farm where he worked is only involved in grain production (they raise wheat, barley, buckwheat, and sugar beets). The volunteer was asked to review the current farm operation and advise the host on any inefficiencies that existed. Besides the emphasis on grain crop production the volunteer was expected to suggest ways on improving the marketing strategy.

The ACDI/VOCA volunteer inspected the growing crops and concluded that for agronomic reasons the yields may be reduced. It was determined that the rotation of crops currently in practice was inefficient. One of the recommendations made to the host was to change crop rotation to increase yields by introducing soybeans. One of the possibilities of crop rotation would be soybeans-sugar beets-wheat-sunflower-buckwheat-barley. Soybeans would add 40-60 kilograms of nitrogen per hectare for the following year's crop.

As it turned out the host had no experience raising soybean and there was no information available on that crop. Lyle R. Stacy made inquiries and introduced Rimma Shcarlat, the owner of Shcarlat operation, to a representative of an American private company, "New Genetics," based in the city of Novaya Kahovka, Ukraine. The company is working primarily with large collective farms in the area of soybean production and marketing, and providing them with seeds, needed inputs, and markets soybean.

The Shcarlats initiated the first private farm in Bogodukhov Rayon, Kharkiv Oblast that produced soybeans. Many private farmers from the region have come to see their soybean field. The Shcarlats are willing to share their knowledge about this crop with others. Rimma planted soybeans on 30 hectares in May 1999 and received 15 centners per hectare.

This year soybean is extremely popular and Rimma managed to market it at \$200 per ton. The Shcarlats are determined to plant soybeans next year. Seeds and herbicides will be purchased again from the "New Genetics" company.

By introducing a new crop Rimma not only improved soil composition and generated extra income for her family, but she also introduced the idea to other farmers in the area, who may follow her lead thereby improving their own farms.

Summary of Lessons Learned in Ukraine

1. Volunteer TA must consider local conditions to be effective

The Ukrainian private farmer must operate within a set of macro-economic factors that are predominately unfavorable, especially the tax system which is unduly punitive and laborious. Advice from volunteers must consider the economic and social factors affecting clients with whom they are working.

2. Rivalries between private farmers and collective farmers prevents logical business partnerships

3. Farmers must diversify their income stream

ACDI/VOCA encourages farmers to not rely upon the sale of agricultural produce as the sole source of income, but to diversify their income through activities such as selling inputs, developing a crafts operation, bottling well water, or managing a small lumber mill.

FTF Resources Leveraged in Ukraine

ACDI/VOCA helped place 17 participants in the FTF program into other training programs to the United States. Specifically, 3 people entered the US Commerce Department SABIT program, 6 people were trained in the USDA Cochran program, 1 person participated in the AgLink Program and 7 private farmers went to the US on a trip sponsored by USAID in 1998.

Significantly, one of ACDI/VOCA's private farmer clients received \$16,000 from a local bank in 1997 based after an ACDI/VOCA volunteer helped write a business plan.

Section 3 Quarterly Activities

I. PROGRAM ACTIVITIES

A. CAUCASUS AND CENTRAL ASIA REGIONS

By Type of Client	Armenia		Azerbaijan		Kazakhstan		Total Vols	Total Projects
	Vols	Projects	Vols	Projects	Vols	Projects		
Private Farmers	1	1	4	5	0	0	5	5
Agricultural Enterprises *	4	4	2	2	0	0	6	6
Associations, NGOs, support organizations	0	0	2	2	1	1	3	3
Cooperatives	0	0	0	0	0	0	0	0
Credit Institutions	0	0	0	0	1	1	1	1
Educational Institutions	0	0	0	0	0	0	0	0
Government Institutions **	2	2	0	0	0	0	2	2
Other	0	0	0	0	0	0	0	0
TOTAL	7	7	8	9	2	2	17	17
By Sector								
Dairy	1	1	0	0	0	0	1	1
Grains	0	0	2	2	0	0	2	2
Meat	2	2	1	1	0	0	3	3
Fruits & Vegetables	1	1	3	4	0	0	4	4
Credit	0	0	0	0	1	1	1	1
General ***	3	3	2	2	1	1	6	6
TOTAL	7	7	8	9	2	2	17	17

* Agricultural Enterprises include processors, input suppliers, elevators, etc.

** Government institutions also include things such as extension services, policy work, etc.

*** General Sector covers miscellaneous assignments in areas such as extension, policy work, curriculum development, etc.

B. RUSSIA AND WESTERN NIS REGION

By Type of Client	Belarus		Moldova		Russia		Ukraine		Total Vols	Total Projects
	Vols	Projects	Vols	Projects	Vols	Projects	Vols	Projects		
Private Farmers	4	4	3	4	1	1	6	7	14	15
Agricultural Enterprises *	1	1	1	2	9	16	0	0	11	19
Associations, NGOs, support organizations	0	0	5	6	0	2	0	0	5	8
Cooperatives	0	0	0	0	0	0	0	0	0	0
Credit Institutions	0	0	0	0	0	0	0	0	0	0
Educational Institutions	0	0	0	0	0	1	0	0	0	1
Government Institutions **	0	0	1	1	0	0	0	0	1	1
Other	2	2	0	0	0	0	0	0	2	2
TOTAL	7	7	10	13	10	20	6	7	33	46
By Sector										
Dairy	0	0	0	0	1	3	2	2	3	5
Grains	0	0	0	0	5	10	1	1	6	11
Meat	2	2	1	1	1	1	0	0	7	7

Fruits & Vegetables	5	5	4	4	2	3	3	4	11	12
Credit	0	0	0	0	0	0	0	0	0	0
General ***	0	0	5	8	1	3	0	0	6	11
TOTAL	7	7	10	13	10	20	6	7	33	46

* Agricultural Enterprises include processors, input suppliers, elevators, etc.

** Government institutions also include things such as extension services, policy work, etc.

*** General Sector covers miscellaneous assignments in areas such as extension, policy work, curriculum development, etc.

II. SIGNIFICANT ACCOMPLISHMENTS JULY 1 TO SEPTEMBER 30, 1999

A. ARMENIA

Two major accomplishments of volunteer activities implemented in the last quarter of fiscal year 1999 are the following:

1. With the help of ACDI/VOCA volunteer Jim Morse (CF 400161), the production of a new cheese type was introduced to Armenia. An existing cheese factory organized the demonstration project. A "yellow" type cheese was produced. With the initial success, reasonable costs, and well acceptance on the local market resulted in expanding operations and attracting of big loan for further development of the product.
2. As a result of a goat breeding assignment by Dr. David Scarfe (CF 400176), a breeding program has started in Armenia. This assignment provided a solid basis for the creation of a new industry in Armenia. The following accomplishments recorded:
 - 250 people were brought together for implementation of this activity. Good teamwork and combination of local strengths of various participants were established.
 - Vardahovit village of Vayots Dzor was established as a site for initial stage of the project.
 - Materials, instruments and equipments were introduced to the Country for Artificial Insemination
 - Guided by volunteer 137 animals were inseminated with imported semen.
 - Complete instruction and plan of action were developed and distributed to project participants.

B. AZERBAIJAN

1. Soil conservation

ACDI/VOCA volunteer Peter Pitts worked with the Masalli and Galilabad farmer associations on various plowing techniques to eliminate moisture loss and control erosion. However, the most positive impact of Pitt's visit was the work done in the area of green manure. Based on Pitt's recommendations, some of the high moisture farmland will be turned into pasture for animals to graze and the farmers will introduce Indian grass, Switch grass, Big and Little Blue stem varieties. Alfalfa will be also introduced extensively as an alternative since its root system can reach over three meters in depth in search of water. Once mixed with various grass species in a pasture and with careful animal management, this will have the indirect impact of helping to eliminate any possible bloat problems currently suffered by herds.

2. Increased honey sales

Beekeeper Latif Latifov owns 115 hives consisting of 67 Lengstroth and 48 Dadant types of hives. Latif hives produce around three tons of honey a year. With assistance from ACDI/VOCA volunteer Dennis Billingsley, Latif found several retail outlets in Baku to sell his honey. Most notable of them is a

Ramstore supermarket chain where Latif in September set up a honey booth offering samples of honey as well as honey combs. Honey is packaged in 100, 250 and 500-gram plastic containers. Currently, honey sells at \$10 per kilogram. Latif's daily revenue averages \$100 a day (7 days week) from which 10 percent is paid to a storeowner. Latif does not pay any additional fees for renting the space or utilities. In 4 weeks, Latif grossed \$3,100 of which his revenue totaled \$1,090. Significantly, Latif has signed a one-year contract with Ramstore to become the store's exclusive supplier. If the cash flow continues at the aforementioned rate, Latif will have \$13,080 at the end of the contract term. This is an outstanding result for a farmer in Azerbaijan.

3. Expanded mill operations and increased profits

The Reshe feed mill is one of the first private feed mills that emerged on the ruins of the collapsed soviet economy. Its customers are small and medium scale livestock and poultry farmers on Absheron Peninsula. Shahbala also offers optimal feed rations and general consultations on livestock breeding and directions. Prior to working with ACDI/VOCA, the feed mill was producing one ton of feed a day (30-35 tons a month) that was packaged in 50-kg plastic bags. Corn, cottonseeds, barely, wheat and barley was purchased cooperatively with neighboring feed mills and stored in a jointly owned warehouse.

To help Reshe improve their operations, ACDI/VOCA volunteer Robert Albrecht helped design and build a one-ton vertical mixer for the mill to be able to better dose ingredients by weight and increase the quality of end product. After Albrecht's departure, the mill expanded upon the model and built six two-ton grain bins and installed conveyor belts between the bins and a mixer. This resulted in the mill tripling their daily production capacity (3 tons a day) and increased the mill's revenue by 31%. Most importantly, Reshe was able to significantly raise the quality of feed and increased sales to retail outlets. Recently, Reshe signed contracts with 15 small- and medium-sized poultry firms to provide high quality feed. The above farmers have subsequently switched from high priced, average quality Iranian and Turkish imports to the affordable and higher quality feed provided by Reshe mill.

With ACDI/VOCA assistance, the Reshe mill also contacted a nearby beer brewery plant and arranged for the purchase of inexpensive brewery leftover materials as well as fermented agricultural wastes to increase the protein and energy content of the feed. Upon completion of feed mill improvements, the Reshe mill expects a 110% increase in production, an increase in the clientele base from 15 to 25 farmers, supplying three more retail outlets with their product and hiring three more employees.

C. BELARUS

1. New seminars for farmers

ACDI/VOCA Belarus received the first grant ever awarded to anyone in Belarus from the World Bank Small Grants Program for conducting two seminars, "Seed Education" and "Herbs Production," and publication of a brochure highlighting technical information taken from 10 ACDI/VOCA volunteer assignments. In support of the two seminars, ACDI/VOCA Belarus received more than 5,000 packets of vegetable, herbs and flower seeds (\$7,500.00 to \$10,000.00 value) appropriate for Belarus' northern climatic conditions. The seeds were distributed to seminar attendees.

2. Local NGO client won grant

ACDI/VOCA helped edit a winning proposal from the NGO "ORACUL" (a long-time ACDI/VOCA client) submitted to United States Information Service (USIS) Small Grants program. The proposal, which was funded, will provide ORACUL with \$20,000.00 for implementing a business-support program

focusing on law, land reform legislation and agricultural policy affecting farmers and other members of the private agricultural community in Gomel and throughout Belarus.

D. KAZAKHSTAN

1. Progress toward licensing warehouses and grain elevators

The Ministry of Agriculture requested assistance in developing licensing criteria for the licensing of warehouses/grain elevators participating in a grain warehouse receipts pilot project. Over the past year, the Ministry of Agriculture has been trying to implement a pilot project for an inventory credit system. ACDI/VOCA volunteer David Miller was the fourth volunteer to work with the Ministry of Agriculture on developing guidelines, policies and regulations for the development of an inventory credit system using safely stored commodities as collateral for credit. Miller worked with the Ministry to define some of the specific problems related to the legal and practical implementation of an inventory credit system and provided the Ministry with proposed legislation along with several ideas on how to begin a pilot project for an inventory credit system. Miller also developed a legal framework and procedure for licensing elevators to issue warehouse receipts.

2. Extension services training

The Eurasia Institute and other organizations under the umbrella of the International Business Center in Uralsk, Western Kazakhstan, are developing services similar to those offered by a typical extension service. They train students and staff to provide education, training and consulting services to farmers and rural communities in the Uralsk oblast. The Eurasia Foundation requested ACDI/VOCA assistance in assessing the current services and outreach efforts of the center and provide technical assistance and training to staff and consultants to develop and administer an agricultural "extension service." ACDI/VOCA volunteer Rick Costin showed consultants how to visit farmers and actually do consulting recommendations, and lectured to students on management, economics, and making profit. Costin also made a series of useful recommendations to the host for improving consulting services to include: developing a demonstration farm to serve as an example of cost-efficient and profitable farming; organize farmer meetings and present information and advertise their consulting services; tailor consulting services to the present needs of local farmers; and offer information and advise on Western-style cooperative for developing farmer cooperative.

E. MOLDOVA

1. Created Real Estate Brokerage Firms

Volunteer Edi Shannon helped advance the development of a secondary land market in Moldova by conducting training on real estate brokerage operations for the first agricultural real estate firms in Moldova. The four new firms were created by USAID contractor Booz Allen & Hamilton with assistance from ACDI/VOCA. Creation of the firms is crucial to the development of the secondary agricultural land market in Moldova and is a high priority for USAID's agricultural strategy in Moldova. ACDI/VOCA provided the firms with computers purchased with Demonstration Funds and also brought volunteers James Shannon and Virgil Holtgrew under the *Alliance for Collaboration on Enterprise Development* program to provide training on small business operations and land appraisal.

2. Farm Management Training

AGREX, a Moldovan NGO that provides training to farmers, received funding from TACIS to provide farm management training seminars, but recognized that their skills and capacity were not sufficient.

ACDI/VOCA volunteer Leo Dorr worked with AGREX to develop a curriculum for farm management seminars for private farmers and farmers associations. Dorr also worked with the AGREX training staff on various techniques of conducting seminars, emphasizing interactive teaching methods. ACDI/VOCA used Demonstration Funds to purchase a pre-developed farm management curriculum from Michigan State University that also will be incorporated into AGREX's own curriculum. AGREX has seen an immediate change in the response to their seminars and an improvement in the application of their training.

3. Rural Development and Extension

ACDI/VOCA volunteer Randy Frescoln from the USDA worked with the Institute for Management and Rural Development (IMRD) to develop a strategic plan for the organization. IMRD is the newly created organization charged with creating an extension service for Moldova. In addition to helping develop the strategic plan, Frescoln helped IMRD identify potential sources of funding to compensate for the lack of government support, including renting space currently owned by IMRD to businesses. Moreover, Frescoln established a communications link (via e-mail) between IMRD and the Center for Agriculture and Rural Development at Iowa State University. This link with another rural development institute will allow IMRD to receive on-going advice as it begins to establish the extension service system and further define its operations.

4. Swine Production

Private farmer Nicholai Perubin identified a strong market for pork and pig products in the Holercani region. ACDI/VOCA volunteer Jerry Goldsmith worked with Perubin to improve current swine practices in preparation of expanding the existing swine production. ACDI/VOCA used Demonstration Funds to help purchase some of the building materials necessary to implement some of Goldsmith's recommendations. Perubin plans to more than double the size of his current operations by the spring of 2000.

5. Greenhouse Design

ACDI/VOCA volunteer Kevin Wallick worked with hosts Mihai Musuc and Constantin Ojog on improving their greenhouse designs to improve the heat efficiency using locally available material. The new greenhouses will be more heat efficient than the existing facilities and 30% cheaper to operate. ACDI/VOCA used Demonstration Funds to purchase building materials for the re-designed greenhouses. Both Ojog and Mushyk plan to demonstrate the new, more efficient greenhouses to farmers. Significantly, Ojog is and will continue to be a local consultant to ACDI/VOCA clients who use greenhouses.

6. Beekeeping Association ties with Romania

ACDI/VOCA volunteer Ann Harman returned to Moldova to follow-up on her previous work with the Apis Mellifera Beekeepers Association that she helped create in 1998. During this visit, Ann helped the association establish ties with the Romanian Beekeepers Association and worked with the Moldovan leadership on organizational development and organizing future activities.

F. RUSSIA**1. Cheese operations improved and new varieties introduced**

The Vita Joint Stock Company located in Kuzovatovo requested assistance in improving the current practices of processed cheese production, assisting in quality control issues and expanding the assortment of processed cheese. ACDI/VOCA volunteer Bill Broske developed a procedure for fast-curing the cheese to reduce production time and improve quality. Broske also introduced 5 new types of processed cheese to the plant.

2. New bakery products developed and marketing improved

ACDI/VOCA volunteer Charles Beyersdorfer worked with the Tobus Joint Stock Company in Voronezh and the Bread and Pastry Plant #2 in Volgograd to develop new products and develop marketing plans. At each organization, Beyersdorfer demonstrated 10 different new bread and pastry products (10 new ones at each location, for a total of 20 new products). Significantly, Beyersdorfer taught each company about testing products before selling trying to mass produce them as part of developing a general marketing strategy.

3. Increased greenhouse production

ACDI/VOCA volunteer David Adams worked with the Belaya Dacha Joint Stock Company and the Moscovsky Joint Stock Company, both in the Moscow region, to reduce the occurrence of disease and determining the proper media for growing produce in greenhouses. The advice and training are expected to greatly increase yields while reducing operating costs.

4. Canola introduced to Rostov-on-Don region

ACDI/VOCA volunteers Duane Johnson and Norman Illsley worked with the staff of the Yug Rusi Joint Stock Company to introduce canola (rape) to the Rostov-on-Don region. Johnson worked with the company's agronomists on developing a planting schedule and trained them on various aspects of raising canola. He also worked with them on methods of drying the canola prior to transforming it into oil. On the management side of production, Illsley worked with the company to address the logistical and mechanical needs of producing and harvesting canola.

5. Emu care improved

ACDI/VOCA volunteer Clover Quinn worked with 2 emu farms, Krasnodonskoye farm and Olkha farm, on improving the health of the emu chicks. Quinn advised both farms on how to improve the chicks nutrition intake, prevent diseases, and adopting the existing facilities for cold weather. Quinn also worked with both farms on developing a plan for flock management and maintenance over the next several years.

6. Soil conservation techniques

ACDI/VOCA volunteer Neil Humburg worked with several organizations to promote basic issues of soil conservation. Humburg helped the Minlebaev farm receive tree seedlings from the Forestry Department to reduce soil erosion. Additionally, Humburg worked with the farm on techniques of contour planting of tree seedlings on a 330-hectare sight and creating hayfields on non-eroding areas. At the Farming Development Service, Humburg delivered a 2-day seminar on progressive soil management, no-till technology, crop rotation and proper use of pesticides and herbicides. Humburg continued this theme at the Saratov State Agrarian University, where he delivered a series of seminars on no-till agriculture.

7. Venture deemed feasible and business plan developed

The Aksar Food Trading Company requested assistance in assessing the feasibility of starting a flour mill and sunflower processing plant in the village of Chaadaevka. ACDI/VOCA volunteer Patrick O'Brien quickly ascertained that the proposed operations were realistic and immediately began working with the company to develop a business plan for the proposed venture.

G. UKRAINE

Soybean production increase

ACDI/VOCA volunteer Walter Barrett worked with a Rima Urievna Shcarlat, a private soybean farmer in the Poltava oblast, on producing and marketing the soybeans. As a result of their collaboration, both Barrett and Shcarlatt are convinced that the next harvest will be increased by approximately 25%, based primarily on pest management techniques now employed by the farmer. Moreover, Barrett introduced Shcarlat to snack foods made with soybean and brought him several samples from the US. The Ukrainian farmer became interested in these products has produced sample runs of the snack food product since Barrett left in September. Using the samples, Shcarlat was able to sign an agreement with a local brewery for delivery of the soybean snacks in 3 months.

ATTACHMENTS

ATTACHMENT I NIS-FTF COMULATIVE TOTALS THROUGH CY 1999 - FTF IMPACT INDICATOR TABLES**Table I – Strengthened U.S. PVO and Institutional Partnerships**

Indicators	CY 1997	CY 1998	CY 1999
a. Number of FTF Implementor/Institutional Partnerships	56	62	39
b. Number of FTF Implementor/U.S. Organization Partnerships	23	35	28

Table II – FtF Host Organizations

Indicators	CY 1997	CY 1998	CY 1999
a. Number of hosts with first-time FtF assignments	132	157	123
b. Number of FtF implementor/host organization partnerships	75	25	72
c. Number of FTF facilitated U.S. org./host org. partnerships	21	31	19
d. Number of host organizations that have graduated	19	16	8
e. Number of inactive host organizations	20	6	22
f. Total Number of host organizations	267	235	244

Table III – Improved Mobilization of resources by PVCs PVO Partners

Indicators	CY 1997	CY 1998	CY 1999
a. Est. value of FtF volunteers professional time	\$2,310,000	\$2,522,033	\$2,119,754
b. Est. value of resources leveraged by FtF implementors, U.S. partners, hosts and volunteers	\$410,000	\$347,185	\$426,015
c. Number of host organizations assisted in mobilizing resources	34	39	49
d. Value of resources mobilized by FtF host organizations	\$394,900	\$1,767,225	\$1,179,900

Table IV – U.S. Public Awareness Raised

Indicators	CY 1997	CY 1998	CY 1999
a. Number of FtF volunteers who have performed public outreach activities.	38	67	65
b. Number of media events by implementors and FtF volunteers	26	40	39
c. Number of group presentations by implementors and FtF volunteers	24	48	59

Table V – Summary of Primary Strategic Objectives of Host Organizations

Indicators	CY 1997	CY 1998	CY 1999
a. Number of host organizations with Broad-Based Economic Growth as the primary objective	174	273	168
b. Number of host organizations with sustainable Environmental Use or Protection as the primary objective	37	34	18
c. Number of host organizations with Building Sustainable Democracies as their primary objective	56	58	15
d. Total number of host organizations	267	365	201

Table VI – Strategic Objectives for Broad-Based Economic Growth

Indicators	CY 1997	CY 1998	CY 1999
a. Number of host organizations with production increase over pre-project levels	57	111	97
b. Number of host organizations operating with increased efficiency	85	150	110
c. Number of host organizations adopting innovative practices	65	129	125
d. Number of host organizations with increased financial performance	47	69	56
e. Number of host organizations with increased foreign exchange earnings	2	7	10

Table VII – Strategic Objectives for Sustainable Environmental Use or Protection

Indicators	CY 1997	CY 1998	CY 1999
a. Number of host organizations with improved waste or pollution management	8	11	8
b. Number of host organizations with improved management of natural resources (soil, water, forest, grazing lands, national parks)	26	43	24

Table VIII – Strategic Objectives for Building Sustainable Democracies

Indicators	CY 1997	CY 1998	CY 1999
a. Number of host organizations that were created with FTF assistance and are operating with democratic principles	4	10	8
b. Number of host organizations that have expanded membership	8	12	11
c. Number of host organizations providing new or improved services to members	37	31	21
d. Number of host organizations with improved policies for functioning of grass roots, democratic organizations	4	11	8

Table IX – Objectives for Change in Knowledge through Training

Indicators	CY 1997	CY 1998	CY 1999
a. Number of host organizations with Change in Knowledge through Training as an objective	115	124	94
b. Number of host organizations with new courses or new subject matter for courses	32	34	22
c. Number of host organizations with improved training materials and skills	46	72	47
d. Number of persons trained with FTF volunteer assistance	5,802	8,159	8,718
e. Number of host counterparts trained in U.S. Reverse FTF and all other U.S. training/exchange programs (e.g. USIA, NET, Cochran Program)	12	48	22

FARMER-TO-FARMER

SUMMARY OF HOST ORGANIZATIONS AND IMPACT BY USAID STRATEGIC OBJECTIVES

TABLE X:

	# of Orgs.	Broad Based Economic Growth Table VI	Sustainable Environmental Management Table VII	Building Sustainable Democracies Table VIII
Hosts with First-Time FtF Assistance	123	39	12	8
FtF Grantee/Host Organizational Partnership	72	52	14	6
U.S. Org./Host Organization Partnership	19	8	1	2
Total Number of Graduated Host Organizations	8	11	0	0
Inactive	22	7	0	0
Total Host Organizations	244	117	27	16

TABLE XI

NUMBER OF HOST ORGANIZATIONS AND LEVEL OF IMPACT

	# of Orgs. Table II	Level 1 Primary	Level 2 Secondary or Spread Effect	Level 3 Strategic Impact
Host with First Time Assistance	123	77	19	0
FtF Implementor/Host Organization Partnerships	72	47	18	3
U.S. Org./Host Org. Partnerships	19	6	3	3
Total Number of Graduated Host Organizations	8	6	2	0
Inactive	22	4	0	0
Total Number of Host Organizations	244	140	42	6

ATTACHMENT 1: NIS FARMER-TO-FARMER PROGRAM RESULTS

USAID Goal: Broad-based economic growth and agricultural development encouraged

USAID Goal: Democracy and good governance strengthened

USAID Objective: The development of politically active civil society promoted

PVC Strategic Objective: Increased Capability of

PVC's PVO Partners to Achieve Sustainable

Service Delivery

Grantee: ACDI/VOCA FAO-0705-A-00-S095099

FTF Contribution to Private Sector Agricultural Development	FY98		FY99	
	# of hosts	% of total	# of hosts	% of total
a. Total number of host organizations	175	100%	168	100%
b. Total number of host organizations with production increase as planned program result.*	78	62%	80	56%
c. Number of host organizations with production increases over pre-project levels.	48		45	
b. Total number of host organizations with increasing innovative practices as planned program result.*	112	63%	114	65%
c. Number of host organizations adopting innovative practices.	71		74	
b. Total number of host organizations with increasing financial performance as planned program result.*	36	47%	42	52%
c. Number of host organizations with increased financial performance.	17		22	

*This number should be a refinement of the total number of host organizations. The intent is to create a percentage of host organizations that relate directly to each indicator. This will show the true results of work with host organizations and prevent any dilution of the percentage. Only count the host organizations in this category with whom you worked specifically on this objective.

FTF Contribution to the development of politically active civil society	FY98		FY99	
	# of hosts	% of total	# of hosts	% of total
a. Total number of host organizations	175	100%	168	100%
b. Total number of host organizations with planned program result of promoting and defending member interests (cooperatives and associations) with the government at the local, regional and/or national levels.**	11	73%	12	92%
c. Number of host organizations with result of promoting and defending member interests (cooperatives and associations) with the government at the local, regional and/or national levels.	8		11	

**A refinement of "Building Civil Societies", item c of attachment 2