



John Ogonowski
Farmer-to-Farmer
Program (FTF)

**FINAL REPORT
CNFA**

Farmer-to-Farmer Program

West NIS

Funded by the U.S. Agency for International Development (USAID)
Under the West NIS Farmer-to-Farmer Program
Cooperative Agreement No. FAO-A-00-99-00017-00
Project No. 938-0705

Report on Activities during FY 2004 -FY 2008
(October 1, 2003 – September 30, 2008)

October, 2008

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY.....	3
II. OVERVIEW OF EXPERIENCE.....	4
A. Country Political and Programming Issues.....	4
B. Major Modifications.....	6
C. Key Adjustments.....	6
III. SUMMARY OF MAJOR OUTPUTS AND ACCOMPLISHMENTS.....	7
IV. SUMMARY OF WORK BY FOCUS AREAS.....	12
V. ANALYSIS OF KEY IMPACTS, SUCCESS AND FAILURES.....	17
VI. MAJOR LESSONS LEARNED.....	19
VII. RECOMMENDATIONS FOR FUTURE.....	20
VIII. ANNEXES	
A. Standard Indicator Tables.....	22
B. Lists of Volunteers/Hosts.....	34
C. Impact Assessment.....	39
D. List of Key Personnel.....	115
E. Success Stories.....	117
F. FY08 Overview.....	124

I. Executive Summary

This report marks the end of a successful five year Farmer-to-Farmer (FtF) Program in the West NIS region. Over the course of the project, 434 volunteers have assisted more than 135 different host organizations in Ukraine, Belarus and Moldova. They have shared their expertise in a wide variety of production techniques including nutrition, no-till farming, forage production, veterinary services, and composting. Volunteers also assisted with post harvest activities such as packaging, branding, marketing, management, new product development, business planning, and sales. Additionally, volunteers have worked with financial institutions to improve access to credit in the agribusiness sector, with insurance companies to expand their range of agricultural services, and with agrodealers to improve agricultural input supplies.

Over the past five years of implementation, CNFA's FtF program has worked with the challenges of transition in all three countries of operation, while consistently fielding high-quality volunteers to rural institutions, impacting nearly 220,000 individuals through increased sales, new products, and access to financial services. Beginning in FY05, CNFA expanded its initial efforts in the region to include value-adding enterprises, impacting a broader range of beneficiaries in unique ways by assisting organizations located throughout the value chain. In addition, FtF assistance in Belarus has significantly expanded since FY05, thanks to strong support and collaboration with the local USAID Mission, which enabled a near doubling of the program.

Summary of Impacts

Country	Total Volunteers	Primary Hosts	Direct Beneficiaries	Indirect Beneficiaries	Increased Net Income ('000 US\$)	New Products and Services
Ukraine FA1	139	33	8,889	25,422	26,051	267
Ukraine FA2	56	17	2,151	24,323	242,882*	n/a
Ukraine FA3	26	30	936	118,286	15,960	10,679
Belarus FA1	77	24	3,114	10,900	1,926	44
Moldova FA1	136	31	5,208	15,624	1,063	71
Total	434	135	20,298	194,555	287,882	11,061

* For FA2, this number represents increase in value of hosts' net equity.

Beyond substantial increases in sales, efficiency, employment, and adoption of new technology as a result of the program, there has been significant impact generated by the friendship and goodwill that volunteers create. In addition to their work in West NIS, CNFA volunteers have also spread the word about the FtF program here in the US, reaching nearly 20,000 people through their outreach efforts.

Over the life of the project, CNFA developed and adjusted excellent reporting systems, allowing for improved project management and concurrent tracking of volunteer impacts. Sustainability of program impacts has been assured through a focus on developing local capacity at all levels of operations; a dramatic example of this is the CNFA-Ukraine office, which, in October 2008, became a for-profit, private business service provider, continuing FtF objectives through US/Ukrainian agribusiness exchange.

The current FtF program culminated in professional conferences in each country, designed to encourage continued participation and highlight key recommendations and successes. CNFA also conducted an in-depth impact assessment, providing a unique perspective on program-wide impacts and implementation; the lessons learned and recommendations from this study will contribute to CNFA's strong foundation for the next phase of FtF implementation.

Ukraine, Belarus and Moldova are all going through dramatic transitions from communist, command-and-control economies to a free market system. Issues such as land privatization, political reform and expansion of trade into new markets are shaping the future of these countries. Yet despite the continuous change that is taking place, agriculture has remained one of the primary engines of growth within each of these countries. The ability of individual farmers, cooperatives, associations, and enterprises to respond to this opportunity will affect national fortunes as well as their own.

This dynamic environment has proven to be the ideal platform for an agribusiness volunteer program. Host organizations are eager to learn and grow, and volunteers find a fertile plain in which new ideas and techniques may be planted. CNFA has built on this opportunity by finding a wide variety of hosts which have measurable, reasonable and timed goals. This has also led to the recruitment of experts in a broad range of fields, from cooperative board member training to vegetable growing technology.

In the overwhelming majority of cases, the relationship between hosts and volunteers in this program has reflected that dynamism and has resulted in a productive and friendly partnership. As the following report shows, the Farmer-to-Farmer goals of economic development and cultural exchange have been consistently met by the West NIS program.

II. Overview of Experience

A. Country Political and Programming Issues

For the most part, the West NIS program enjoyed stability and increasing opportunity in the agribusiness sectors in Ukraine, Belarus, and Moldova. All three countries are trying to manage the privatization of land and organization of agricultural production as key components of their development. Each country has pursued a somewhat different path in this regard, and CNFA has worked to tailor volunteer assignments to these approaches.

West NIS Farmer-to-Farmer Focus Areas (FAs)

Ukraine FA1: Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets;

Ukraine FA2: Increase farmers' incomes, especially small-scale and women farmers, by improving access to credit and business development training;

Ukraine FA3: Increase farmers' incomes, especially small-scale and women farmers, by increasing their access to input supplies;

Belarus FA1: Increase rural incomes by improving the performance of privatized collective farms and individual private farmers throughout Belarus;

Moldova FA1: Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets.

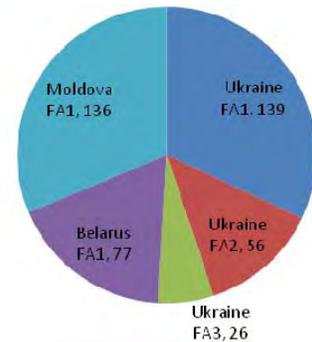
In Ukraine, economic progress has been dramatic and there are multiple opportunities within the agribusiness sector, although this has been tempered somewhat by political instability and

barriers to land reform. Farmer-to-Farmer volunteers have worked with associations and institutions to encourage advocacy and political participation in an attempt to remove some of these constraints. Additionally, the program worked to increase this growth by adding focus areas that sought to increase access to credit and inputs. Both have been very successful and have given the program a macro-level impact that is not always possible with production-based volunteer assignments.

Because of these varied focus areas, the Ukrainian program has hosted a breadth of volunteers with a wide range of expertise, including new product development, marketing, cooperative development, agricultural lending principles, credit union internal audit, financial broker training, and salesmanship and retail marketing.

Belarus has been the most restrictive operating environment and the transition to a market economy in this country has presented some unique challenges. Over the course of the program, many former collective farms were sold to industrial holding companies at the request of the government. This has created management challenges within the farms as they struggle to become profitable.

Politically, CNFA has enjoyed an unusually good relationship with the Belarusian authorities and has been able to reregister its office every year—something no other international organization has been able to do. In March, 2008, Belarus recalled its Ambassador from Washington and requested that the US Embassy remove Ambassador Karen Stewart from Minsk. Eventually, the majority of American personnel at the Embassy, including the Ambassador, were forced to leave and have not yet returned. Due to USAID and State Department concern about their ability to support FtF volunteers while in Belarus, all assignments were postponed in April, May, and June. The program was able to restart in July, and make up most of the missed assignments. Only three of the originally planned 20 assignments to Belarus were canceled, but were replaced by assignments in Ukraine and Moldova.



Total Volunteers by Focus Area

The Belarus program has focused on the dairy and fruit and vegetable (F&V) sectors, and assignments have been primarily production-based, such as herd management, nutrition, forage production, and no-till farming techniques.

The Moldova FtF program has worked to assist the country through a difficult economic and agricultural time after severe drought and blocked trade with Russia. Moldova’s small size and the program’s focus on the dairy and F&V sectors has allowed volunteers to have noticeable impact, including the spread of recommendations beyond initial host recipients. Volunteers have also enjoyed access to government officials and have made appeals in meetings and through position papers for a variety of policy changes that would help to accelerate growth in the agribusiness sector. Additionally, hosts and government officials have participated together in conferences organized by CNFA and FtF and attended by volunteers.

Assignments in Moldova have ranged from vegetable growing techniques, to sales and marketing, to agricultural insurance practices.

B. Major Modifications

The initial West NIS FtF award was a four year cooperative agreement ending in September 2007. In May 2007, USAID awarded a one year, \$1,326,166 extension to the project, which allowed it to continue until September 30, 2008.

After the first program year, USAID and CNFA decided to build upon initial success in Belarus with an additional \$247,929 allocation. This was funded in part by a transfer of CNFA project funds from Ukraine and Moldova, and in part by a buy-in to FtF from the local Mission. This allowed the number of annual assignments to increase from 9 in FY04 to an average of 17 per year during the next four years of the project.

C. Key Adjustments

There were no major changes to the scope of the project in terms of core countries or focus areas. Over the life of the project, however, some changes and improvements in project implementation and management did occur.

In FY05, CNFA worked to develop innovative projects to target new types of hosts, including value-adding enterprises, commercial banks, and groups of private farmers. By working with organizations farther up the value chain, the program aimed to impact small farmers by stimulating demand for the raw products they provide. Commercial banks and lending and insurance institutions were likewise included for the services they provide in facilitating investment in small farms, as well as in helping small farmers to mitigate risks.

Impact assessment and reporting systems also significantly evolved in FY05. This reflected an effort to streamline the reporting process and reduce the paperwork burden on field staff while improving the project's ability to collect and measure indicators. Changes included reporting current data on active projects rather than delaying impact assessment until a year or more after the first assignment with a host. CNFA is now able to correlate both inputs (volunteer assignments) and impacts for the same period of implementation, bringing greater clarity to program reports and allowing for improved project management as result of up-to-date information now available on host performance.

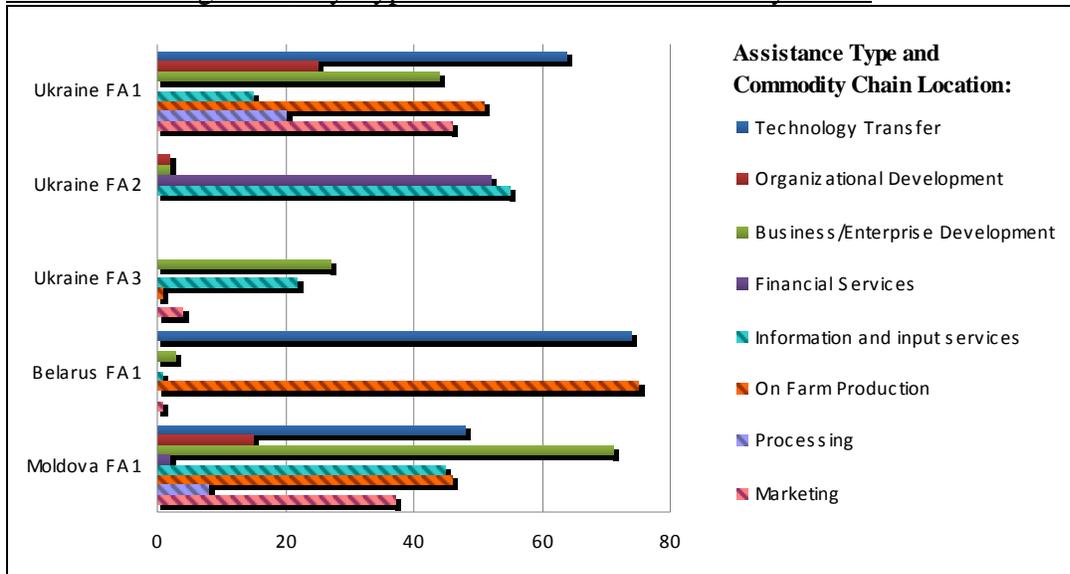
Another part of this change was the transition of all projects to the same calendar year reporting schedule. This facilitated the aggregation of data and calculation of annual totals for numerical impacts, which is particularly relevant for agricultural activities, where in many cases income results are only known after the end of the calendar year due to post-harvest sales and subsequent processing.

One major milestone reached by the Ukrainian program involves the end of the program more than its implementation. Beginning in October, 2008, the Ukraine FtF office will become Bridges, a private business services provider which will operate for profit and will focus on bringing Ukrainian businesspeople on study tours to the US, and American volunteer experts to Ukraine. The company already has more clients than it can handle and will embark on the first study tour trip immediately. Many FtF volunteers have already committed to being a part of the program. This sustainable provision of program services upon its completion is one of CNFA FtF’s greatest successes.

III. Summary of Major Outputs and Accomplishments

Over the life of the West NIS Farmer-to-Farmer program, CNFA conducted 434 volunteer assignments in support of 135 host institutions—exceeding volunteer targets by nearly 150 assignments. Technology transfer (186), organizational development (42), business/enterprise development (147) and financial services (54) assignments were conducted at various levels of the commodity value chain—information and input support services (138), on farm production (173), processing (31) and marketing (88). Ukraine’s Focus Areas 2 and 3 (FA2, FA3) allowed CNFA to provide support farther along the value chain to impact farmers in unique ways; these focus areas account for the majority of assignments in financial services and information and input support services.

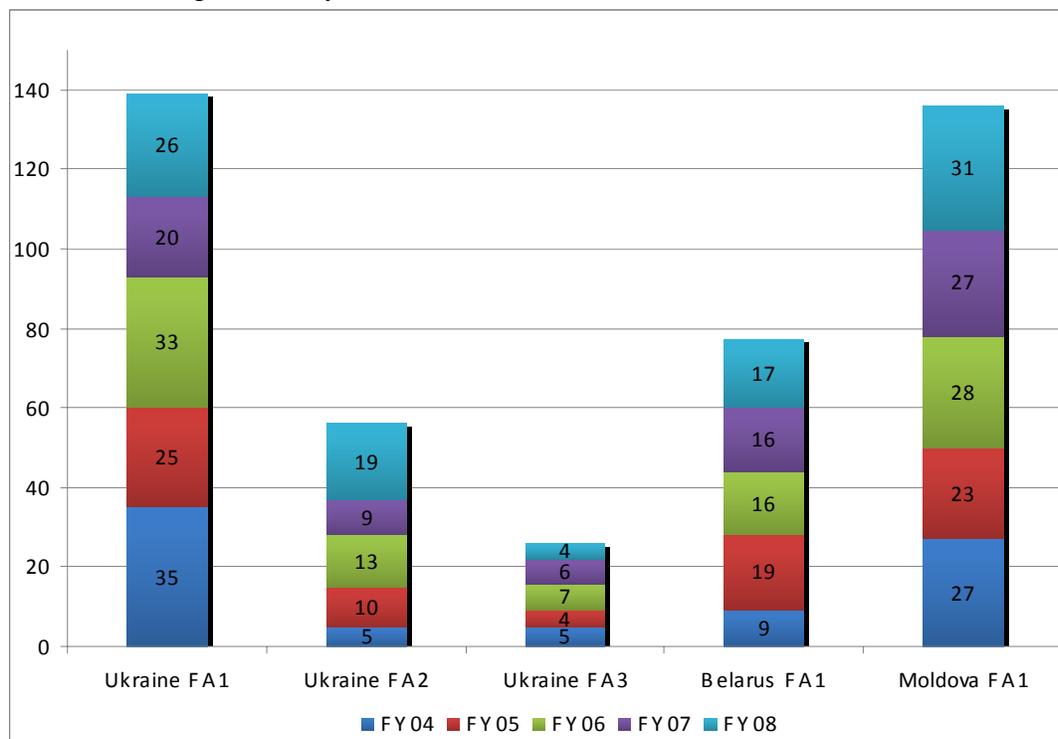
Volunteer Assignments by Type and Location in Commodity Chain



CNFA’s 434 volunteers came from 41 states in all regions of the country. These volunteers donated time worth \$4.5 million, and leveraged an additional \$102,000 in investments for various projects. CNFA host organizations responded with \$7.1 million in mobilized resources, and contributed \$25,000 toward program operations. For every \$1 leveraged by volunteers, host institutions were able to mobilize \$70. These volunteers trained 7,719 individuals and provided assistance to 20,298 direct beneficiaries. Including family members, nearly 200,000 individuals

were impacted. It is especially noteworthy that, in Ukraine's FA2 and FA3, the majority of the direct beneficiaries and those receiving training were women.

Volunteer Assignments by Year



CNFA volunteers worked with 135 host institutions over the life of the project. All but one of these hosts has adopted volunteer recommendations, and ninety-three percent report improvement. Over 220,000 individuals have benefited as a result; Ukraine's FA3 impacted an especially high number and accounts for over half of that figure. Over the life of the project, CNFA continually expanded its host network, working with forty-six new cooperatives and associations, twenty-three new individual private farmers, twenty-six other private enterprises, eleven rural financial institutions and one new public sector technical agency.

As a result of volunteer assistance, CNFA host institutions have increased their gross value of sales by \$33.4 million and their revenue has increased by \$50.5 million. Eleven thousand new products and services are now being offered by these hosts, with Ukraine's FA3 leading the way with 10,000 new products. Volunteer assistance for Ukraine's FA2 has led to a \$12 million increase in the value of rural and agricultural loans and 1,430 more such loans being made. Each FA2 host increased the value of its net equity by \$14.3 million, on average, and over half of all hosts maintained their loan delinquency below ten percent. Ukraine's financial sector is expanding rapidly, and CNFA's decision to work with large financial institutions already experiencing notable organic growth is likely responsible for these large FA2 figures. While volunteer assistance cannot be solely credited with these achievements, volunteer recommendations have been critical to assuring the long-term viability of these host organizations, which face significant new challenges as Ukraine's economy continues to open.

These FA2 achievements are especially important as agricultural credit is a fledgling industry in Ukraine, providing an essential and long overlooked service to local farmers.

Over the life of the project, CNFA volunteers and implementers have conducted 315 group presentations and coordinated 113 media events in support of their volunteer assignments. Although much outreach is conducted by word of mouth, and not all volunteers report their outreach, approximately half have provided us with information about their activities. Nearly 20,000 people have been reached through group presentations and meetings conducted by CNFA volunteers to spread the word about their Farmer-to-Farmer experiences. Examples of successful volunteer outreach include:

- Cecil Mashburn delivered seven presentations, participated in a radio show, and had two newspaper articles written about his two cooperative start-up assignments in Ukraine in FY04;
- Bruce Williams, host of his own television program in North Carolina, has included several segments on his activities as a vegetable production volunteer in Ukraine and Moldova;
- Craig Williams gave five separate presentations, authored four newspaper articles, and participated in a radio broadcast to discuss the state of Belarusian agriculture and the objectives of the FtF program, all in support of his volunteer experience;
- Jerry LeClar delivered four presentations, including one to 110 people at Cornell University, where he discussed farm business management for burgeoning cooperative associations;
- Ann Young created a blog to record and report on her financial management assignment in Moldova;
- Bill Maltby made two presentations to students, one at the State University of Kiev, and another at a Ukrainian high school, discussing financial aspects of Ukrainian and American agribusiness.

CNFA has chosen to honor its volunteers over the life of the project by submitting them for the President's Volunteer Service Award. Forty-one volunteers received the award in 2006, and an additional forty have been honored this summer and will be included in a press release by the DC mayor's office.

Conferences:

In the project's final month, three conferences were held to encourage continued participation of host organizations and to reinforce some of the most important recommendations made by volunteers.

The Ukrainian program hosted a conference in September in support of its FA2 activities, entitled "Credit Unions: Challenges and Opportunities". Approximately sixty representatives from credit unions discussed strategies for improvement and the need to work together to expand their market share and protect their niche from the intervention of banks. Bill Maltby, Mitch Medigovitch and Michael Steele, all experienced bankers and financial consultants, were in attendance and spoke at length. All three have volunteered with FtF and local credit unions and therefore had targeted recommendations to offer. The conference featured enthusiastic

participation from the credit union representatives and a declaration to work together on common political and risk mitigation goals.

CNFA-Belarus hosted “The Belarusian Experience in Capital Diversification in the Agricultural Sector” for ninety participants. This was a working conference for farmers and agribusiness professionals, during which discussions were held on methods for attracting investment, reducing risk through capital diversification, agricultural reform, and challenges to the producer-processor relationship. The event was attended by Ivan Bambiza, Deputy Prime Minister for the agricultural sector, and Nadezhda Kotkovets, First Deputy Minister of the Ministry of Agriculture. This was an unusual event in Belarus and inspired frank and open discussions. One possible outcome is the creation of a Union of Agribusiness Entrepreneurs.

In Moldova, CNFA organized “Agribusiness Volunteering—A Driving Force of Private Agricultural Sector Development in Moldova”, which had almost 100 participants, including most hosts with which volunteers had worked, a Deputy Minister of Agriculture, and Gary Linden, the USAID Moldova Country Officer. Volunteers Tom Cadwallader and John Kappleman were also in attendance, and Bruce Williams sent in a multimedia presentation. The agenda focused on some suggestions for continued growth and cooperation through competitive crops, lobbying efforts, new technologies, and business management strategies.

Success Stories:

In addition to these program achievements, there were a number of particular success stories which reflect significant impact for individual hosts. These include:

Ukraine, 2004 – Farmer-to-Farmer volunteers assisted Nadra Bank in entering the fledgling agricultural credit market—an essential service sorely needed by Ukrainian farmers. After receiving intensive training in sound agricultural lending practices, Nadra began implementing them immediately, providing 112 loans worth \$1.4 million by July 2004.

Belarus, 2004 – Thanks to strong local initiative and assistance from CNFA volunteers, Kodik Agribusiness has transformed from a small, part-time family venture to a high-paying employer of thirty workers. Four volunteers provided training in business management and improved production techniques, enabling the business to more than double wages and increase income by fifty-nine percent.

Moldova, 2004 – Through assistance from six US volunteers, Lactica Dairy Cooperative was able to expand its milk collection facilities and improve the services it offers to its members. Milk production doubled as a result and the cooperative made \$280,000 in sales—a forty percent income increase over the previous year.

Ukraine, 2005 – CNFA’s Small Enterprise Management Training program (SEMT) has assisted the Ukrainian National Association of Savings and Credit Unions (UNASCU) in significantly expanding its agricultural lending, a crucial service for traditionally underserved Ukrainian farmers. As a result of this training program—developed by US agribusiness volunteers—both the number and value of UNASCU agricultural loans tripled, to more than 12,000 loans worth

over \$5.2 million, while also decreasing the percentage of non-performing loans from seven to three.

Belarus, 2005 – Thanks to training and recommendations from four volunteers, Mikhail Savko of Rosa-Agro farm learned to evaluate his farm's operational efficiency and made significant changes to improve output. As a result of these changes, the farm's grain and forage production nearly doubled, higher quality feed led to increased milk production, and the resulting higher quality milk fetched higher prices on the market as well. As Rosa-Agro's profits increased, Mr. Savko was able to triple his employee's wages, providing 308 individuals with increased incomes.

Moldova, 2005 – With marketing and business planning assistance from two volunteers, Camedones Fruit Dryer was able to expand its produce-drying facility to year-round production, providing more steady employment to its 80 formerly-seasonal employees, and a year-round market for 600 local farmers and raw materials suppliers. The business expertise they developed through volunteer assistance helped Camedones win a \$48,500 grant to purchase needed equipment, which will allow for a seventy percent production expansion and offer increased incomes to more than 700 individuals.

Ukraine, 2006 - As a result of assistance through CNFA's Agrodealer Business Management Training course (ABMT), three agrodealers in southeast Ukraine's Kherson province increased their combined sales of farm inputs by nearly \$120,000 in 2006. With improved marketing and distribution, their combined customer base increased by 500 clients, resulting in nearly \$40,000 of additional revenue for each agrodealer.

Belarus, 2006 – With the assistance of four CNFA volunteers who provided expertise in no-till crop production and dairy farm management, Kholodon Agro more than doubled its revenue from milk sales, from \$44,213 in 2004 to \$97,050 in 2005. They were also able to increase monthly wages for their 100 farm workers, from \$83 in 2004 to \$114 in 2005.

Moldova, 2006 – During CNFA volunteer Norval Dvorak's first assignment with the Tersimeda Cooperative, he recommended building a new cattle-feeding lot to provide a market for local grain. Back in the United States, Mr. Dvorak raised \$10,000 for this project and returned to Tersimeda to see it implemented. When completed, the new feedlot is expected to increase revenues by \$27,000.

Ukraine, 2007 - At the Yahotin Cannery, CNFA volunteers contributed to a significant increase in production volumes, from 3 million to nearly 8 million standard jars of canned products in 2007. Additionally, 200 permanent and 250 seasonal employees of the cannery saw incomes increase by a total of \$130,000. This expansion in the cannery's production catalyzed a corresponding increase in both the number and incomes of growers supplying the cannery with raw material, with an additional forty farms and \$47,000 in combined income increases.

Belarus, 2007 – The husband and wife volunteer team of Peter and Layne Bogdanov helped two brand new businesses thrive in a short amount of time. Neither BelRosBioTech nor PromKhimElectro had any real experience in top-soil or compost production until these stellar

volunteers arrived in 2006. Within one year, production soared from 0 to 350 tons, bringing in \$25,000 in sales revenue, through the guidance of the Bogdanovs.

Moldova, 2007 – CNFA’s Farmer-to-Farmer Program helped Kirovograd Orchard Association quadruple its sales, from \$13,307 in 2006 to \$57,921 in 2007, which increased net incomes from \$7,129 to \$16,440. A significant increase in the Association’s productivity was enabled through several volunteer-guided improvements in orchard operations. The combination of a shift to high density planting, employment of progressive apple growing technologies, and establishment of relationships with supermarkets created significant gains in both fruit yield and profitability.

Ukraine, 2008 - Volunteer Ralph Kurtzman spent extensive time with the members of the Association of Mushroom Producers, improving production of compost and access to markets. As a result, dependence on imported compost decreased, and the Association was able to produce 900 tons of mushrooms in 2007, which sold for upwards of \$1.6 million.

Belarus, 2008 –After their recent merger, Ostrovo Farm and Voystrom Agribusiness contacted CNFA seeking new ways to increase profits and streamline production. A three-volunteer team of US dairy experts provided guidance on reorganizing the farm’s milking, animal feeding, and waste management systems, ultimately leading to increased quantity and quality of milk. Over 180 farm employees have already benefited from these efforts, with an increase in gross revenue of \$378,000 over the previous year.

Moldova, 2008 - As a result of CNFA volunteer assistance, Glodeni Meat Plant reported a significant increase in the company’s output, from 597 tons of fresh and processed meat products in 2006 to 2,220 tons in 2007, with sales quadrupling from \$524,744 to \$2,129,602. This was made possible by a combination of more efficient production equipment and greatly improved marketing.

IV. Summary of Work by Focus Areas

The West NIS FtF program had broad focus areas that allowed for various points of intervention along a variety of value chains. Within the criteria of increased access to markets, credit, and inputs, the project worked with sectors and hosts which had the potential to drive change. Generally, CNFA made host selection its highest priority as the project worked with partners which had specific needs, measurable and timed goals, and the potential for success and sector-wide influence. When volunteers arrive to work with this kind of host, expectations are realistic and clearly defined, and cooperation is likely. Along with the recruitment of good volunteers, this factor may be the most important reason for the program’s success.

The size and dynamic nature of the Ukrainian economy allowed the program to add focus areas that targeted farmer’s access to credit and inputs. By some accounts, these efforts were the program’s most effective because of their high number of beneficiaries; if volunteers were able to help increase the agricultural lending portfolio of a financial institution or improve the

services of an agrodealer, a network of many farmers from different value chains stood to benefit.

The following is a breakdown of the hosts, assignments and impact of each focus area.

Ukraine:

Focus Area 1 - *Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets.*

Improving farmer access to markets represented the largest component of CNFA-Ukraine's FtF activity. With eighty percent of Ukraine's fruits and vegetables and seventy percent of its dairy production accounted for by small farmers and household plot owners, FA1 was designed to support commercially-oriented producers and processors to capitalize on this market opportunity and increase rural incomes. CNFA volunteers assisted Ukrainian farmers by providing business planning and marketing training, production training to grow crops demanded by the market and meet necessary quality standards, and organizational development support to operate more effectively in the market by combining resources. Increasingly, technical assistance was also provided to downstream agribusinesses which were in a position to raise farmer incomes through the markets they service. By working at multiple points in the F&V value-chain, CNFA volunteers facilitated viable market linkages and helped expand high-value horticultural production, which allows Ukraine's small farmers to generate significant income from their land. FA1 efforts were also utilized in working with small-scale dairy farmers and producers of other commodities, including honey, mushrooms, herbs, and meat, which also offer significant potential for income generation from small-scale production.

Lessons Learned:

While farmers were the main focus within the FtF program, CNFA-Ukraine found it effective to cooperate with processing plants and other agribusinesses, which allowed the program to reach and impact high numbers of farmers by accessing those institutions' raw material suppliers. The Kyiv Milk Processing Plant (KMPP) project, initiated by KMPP, was aimed at assisting the farmers who supply the plant with raw milk to improve their forage production and milk quality. By working with KMPP, each volunteer was able to impact not only the plant's own 830 employees, but also the employees of the Plant's forty-two suppliers as well, reaching approximately 2,500 total beneficiaries. This project was especially successful because the initiator (KMPP) could identify the common problems and ensured access to all suppliers.

Focus Area 2 - *Increase farmers' incomes, especially small-scale and women farmers, by improving access to credit and business development training.*

Through FA2, CNFA aimed to increase the availability of rural credit in Ukraine, which is still in its infancy. As largely urban lending institutions begin to penetrate Ukraine's rural areas, lack of knowledge about the business of agriculture by both lenders and borrowers limits growth, increases risk and results in higher interest rates and a reliance on collateral-based lending. In response, CNFA volunteers worked on both sides of Ukraine's financial services market,

assisting both credit professionals and agricultural clients to understand and mitigate risk, improve long-term planning and introduce innovation. By FY07, FA2 hosts included credit unions, commercial banks and leasing companies distributing agricultural equipment, and in FY08 an insurance company was added to the list of recipients of volunteer assistance. The impact of this work was measured by the increased value of rural credit accessed by Ukrainian farmers.

Focus Area 2 Hosts

Aktiv Credit Union
Dovira Credit Union
Gromada Credit Union
Leasing Project (with
agricultural leasing
organizations)
Nadra Bank
Raiffersen Bank Aval
TAS Insurance Group
UNASCO
Unity Credit Union
Zaporizhya Credit Union

Lessons Learned:

The financial services market in Ukraine has progressed considerably since the beginning of the program, with Ukrainian financial institutions gradually becoming more open to agricultural lending. This is especially true for local credit unions, which have proved to be the most viable instrument for increasing access to credit for rural farmers and agribusinesses. The productive cooperation between CNFA-Ukraine and these credit unions culminated in a conference in September 2008, which brought together more than eighty credit unions to discuss challenges Ukrainian credit unions face today and opportunities for further development with farmers and other agricultural sector players. As these institutions continue to work together and become more competitive, there will be increased access to financial services for their members within the Ukrainian agribusiness sector.

While working with credit unions in FY08, CNFA-Ukraine utilized follow-up assignments, bringing previous volunteer consultants back to Ukraine to work with the same hosts. This practice turned out to be very successful, as the volunteers were already familiar with the operations performed by the credit unions and could provide assistance relevant to their current needs.

Focus Area 3 - Increase farmers' incomes, especially small-scale and women farmers, by increasing their access to input supply.

CNFA's activity in this focus area was designed to support the development of farm input supply stores across Ukraine to serve the millions of recently-privatized small-scale farms. The strategy was a) to offer shop owners training in business skills and marketing to strengthen their performance, and b) to facilitate and promote expanded access by those stores to the wholesale farm input distribution chain in Ukraine. As in FA2, although the hosts were agrodealers, the impact was measured in increased input sales to Ukrainian farmers.

Focus Area 3 Hosts

Agrimatko Agrodealers
(3 groups)
Kyiv Atlantic Agrodealers
Nunhems Agrodealers
(2 groups)
Svytjaz
Syngenta Agrodealers
Torgoviy Dim
Zelenyi Svit

Lessons Learned:

Agrodealers are available for trainings in the off-season only. During the rest of the year they are extremely busy with sales of inputs. However, it is very difficult to bring an American agrodealer expert to Ukraine during the agrodealers' off-season, as this is the time when they are busy consulting with agrodealers in the US as well, and so usually are not able to travel. This

constraint made it more difficult to recruit volunteers but CNFA was still able to find many qualified personnel and time assignments to meet the agrodealer's needs. Overall, this focus area has been an excellent opportunity to reach a large number of farmers while strengthening a local institution.

Belarus:

Focus Area 1 - *Increase rural incomes by improving the performance of privatized collective farms and individual private farmers throughout Belarus.*

CNFA FtF Belarus provided volunteer technical assistance to strengthen the performance of privatized collective farms. Volunteer trainings aimed to enhance the farms' capacity for increased income-generation by promoting innovative production practices and by transferring the technical knowledge and skills necessary to make informed and efficient business decisions. FtF Belarus' efforts also supported the country's emerging private agricultural services sector by providing volunteer assistance to an informal group of individual private farmers specializing in onion production and to a group of farms interested in learning more about precision farming.

The overarching goal of FtF Belarus has been to increase rural incomes and to establish models of successful private enterprise throughout the country. By working directly with private farmers and successfully increasing their incomes, standards of living have been raised, jobs have been created, and working examples of modern farms have been provided for other local farming enterprises as they enter into the market system.

Over the life of the program to date, CNFA-Belarus volunteers have impacted over 4,300 private farmers and farm employees and have contributed to the sale of more than \$30 million of agricultural produce.

Lessons Learned:

During FY08, the Belarus program attempted a team volunteer approach. Three experts with separate but related specialties traveled to multiple hosts over the course of three weeks. This combination of a dairy farm manager, a veterinarian, and a breeder allowed hosts to simultaneously approach a variety of issues affecting their farms in an inter-connected way. This was received very positively by the hosts and might be replicated by CNFA again in the future. It is essential, however, that such an assignment be well planned and work with a large number of recipients.

Moldova:

Focus Area 1 - *Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets.*

Improving farmer access to markets has been the main focus area of CNFA-Moldova for the past five years. CNFA assistance in this area has included:

- Training of farmers and agribusinesses in the areas of business management, marketing, and technology transfer to help producers and processors meet market requirements and to improve Moldova's agricultural competitiveness;
- Cooperative development support to help small farmers establish democratic, member-run organizations and operate more effectively in the marketplace;
- Technical assistance to facilitate the expansion of value-adding enterprises, in order to create pull-through demand and expand cash markets for farmer output.

Due to the fact that program beneficiaries are mainly small- and medium-sized farmers, CNFA has concentrated its assistance on the F&V sector, where producers can generate significant income from their relatively small plots of land.

Over the life of the project to date, CNFA-Moldova volunteers have impacted close to 13,000 farmers and contributed to the sale of \$15.2 million worth of fresh and processed high value agricultural commodities.

Lessons Learned:

Advanced knowledge is better appreciated and used by hosts with at least a basic understanding of their field and some experience. Over the life of the project, the FtF Moldova team has observed that hosts that are experienced and open to new technologies and modern business practices show much better results than start-up enterprises, which perhaps have plenty of enthusiasm but lack the experience to effectively implement the recommendations volunteers might provide.

It also takes time for some new ideas to reach the implementation stage, as the example of Volodeni Dairy Farmers' Group illustrates. FtF Moldova has had activities with this host for three consecutive years, but it was only at the end of the third year that volunteer John Kappelman returned from assignment saying, "Leonid [the group leader] just explained to me his vision of his new milking parlor. He just tried to sell me what I taught him three years ago. I am so glad that he is finally considering this idea as truly his—I don't even care that he does not remember who gave it to him!"

By working with small processing enterprises, FtF Moldova was able to contribute to the creation of sales markets for small-holder producers and teach enterprise owners how to negotiate a "win-win" result for both farmers and processors, thus improving the farmers' lives. In the final year of program implementation, FtF Moldova has challenged itself with a project which was outside of its focus area—working with an insurance company. This step was an important one for the insurance sector in general, as agricultural insurance in Moldova is a very new activity. Two volunteers assisted the company with the development of new agricultural products, the calculation of damages and the marketing of crop insurance on the Moldovan market. These assignments took place recently, but Moldcargo is already working to implement recommendations and increase its agricultural portfolio. When the FtF program continues in Moldova, this type of assignment will be a priority because of its ability to affect the agribusiness sector as a whole.

V. Analysis of Key Impacts, Successes and Failures

Over the life of the project, CNFA's FtF program has resulted in significant increases in dairy and meat production, improved crop production, better meat processing (leading to new markets), added value to fruit, and increased access to credit and inputs for rural farmers in the West NIS region. While the project's standard indicators reveal this success, there were a number of hidden impacts which did not come across. Near the end of the project, CNFA discussed strategies with USAID to better measure the impact of the program and decided to engage the services of a consultant to conduct an impact assessment of the West NIS FtF program. This was completed over the course of two months by Elon Gilbert, an economist with extensive experience evaluating and measuring the FtF program. He traveled to all three countries to interview hosts, staff and volunteers. Much of the material contained in this section and the two following is taken from that report. The full report can be found in Annex C.

Volunteer assistance has helped to improve host production systems and processes, with many hosts reporting greater productivity of equipment, labor and land, resulting in lower costs of production. Changes in equipment and the layout of facilities are also translating into improvements in capacity, quality and operational efficiency for many hosts. Host managers wish to take advantage of market opportunities and appreciate that they need both the volume and required quality of products to participate successfully.

Recognition of the importance of labor efficiency among hosts has also been a key accomplishment. For many hosts, efforts to improve labor productivity have translated into fewer staff with higher skills and wages. Volunteer recommendations figure prominently in this process, most notably in Belarus. In contrast, some hosts have hired additional staff to improve efficiency in response to volunteer assessments that staff capacity had not kept pace with the growth of business and that critical functions were either understaffed or missing.

Most CNFA hosts are in the beginning stages of translating these improvements in capacity, quality and operational efficiency into sales, revenues and profits, but they still have far to go. Marketing is a key component of success at this stage and a number of projects have featured assistance in this area. Although many volunteer recommendations on marketing have been adopted and several hosts have made good progress in this area, the overall assessment of volunteer contributions has had somewhat mixed results. Volunteers clearly made useful contributions to the marketing and promotional efforts of some hosts, however, for some, recommendations on how to penetrate more profitable markets were premature.

CNFA's efforts to impact agricultural workers through projects further up the value chain have had important impacts as well. In Ukraine's FA3, impacts on suppliers have been noted for many CNFA hosts, usually involving efforts by the host organization to increase the quality and volumes of raw products, as well as to even out the timing of deliveries. Impacts on consumers are noteworthy in many host organizations as well, particularly in Ukraine's FA2. In these cases, the adoption of volunteer recommendations is translating into improved performance, lower costs, and better risk management. Without the latter, there is a serious possibility that these rural credit organizations would not be able to continue to serve their clients in the future.

CNFA's FtF program has also had impacts beyond the scope of our focus area projects. Evidence of improvements proposed by volunteers spreading beyond their specific host organizations—spillover effects—are evident in all three countries. The most dramatic spillovers are taking place in Belarus, where there is growing interest among public and private farms in no-till techniques, introduced to the country by two CNFA volunteers. One host in particular is now actively promoting no-till farming among other producers and government agricultural officials, which will likely lead to increased spillover effects in the future. In another example of spillover effects, artificial insemination techniques are being included in an animal science textbook, thanks to a government animal scientist who learned the approach from a CNFA volunteer.

In addition to spillover effects, environmental impacts are potentially very significant for several hosts as well, particularly those adopting no-till farming. The no-till system significantly reduces soil erosion, conserves soil nutrients and reduces equipment, energy and fertilizer use. While environmental and spillover impacts occur gradually and thus commonly fall outside the timeframes of the FtF program cycle, they should nevertheless be noted, given the significant long-term effects of these impacts.

Spillover effects are also occurring on a vertical level, as CNFA hosts and volunteers have become involved in interactions with government officials, donor agency representatives, professional associations, and gatherings on policy matters in all three countries. These efforts to influence policy and the perspective of key actors are also occurring on a micro-level within host organizations themselves. Some examples include insurance industry volunteers meeting with government officials in the Ukraine to encourage the establishment of a guarantee fund for the industry. In Belarus, the success of one host and volunteer's collaboration on no-till farming techniques led local officials to lift their objection to it.

There is evidence that the abilities of most CNFA host organizations to deal creatively with problems and opportunities have been enhanced, both through interactions with volunteers during their assignments and during the process of implementing improvement measures. Many managers have begun to think like entrepreneurs. They have clear ideas of what is needed to improve their operations and where to obtain the necessary information. They are also more self-confident and empowered with authority and access to resources, compared to other managers. While these individuals may have possessed these attributes before their involvement with FtF, interactions with volunteers appear to have served as a catalyst that allowed them to assert this dimension of their natures more fully.

Likewise, many managers of CNFA host organizations are committed to improving efficiency, most notably to reducing costs through measures that save energy and reduce labor costs. There is less interest, however, in the productivity of land, possibly because land is not regarded as being in short supply.

Linkages with other donor programs have been a key aspect of CNFA FtF success throughout the life of the project. Partnerships have included joint projects with the USAID-funded Agricultural Marketing Project (Land O'Lakes) and the Agribusiness Development Project (CNFA-Moldova), as well as with USAID-DCA, TACIS, CIDA, DAI and the World Bank. Strong collaboration with Heifer Project International, USAID-DCA and the Mission-funded

Ukraine Access to Credit Initiative on joint projects combining FtF's volunteer technical assistance with local consulting and grant assistance available from partner organizations was a key component of FY06 implementation as well.

Challenges to program implementation have included difficulty in obtaining reliable net income data from private farmers, the unfavorable Ukrainian tax regime for cooperatives, and the largely state-controlled market system in Belarus. A Russian ban on imports of agricultural products from Moldova and Ukraine, which remained in place for roughly half the life of the project, produced significant drops in market prices for many crops from those two countries, particularly dairy and high-value horticultural crops critical to small-scale producers. The program was also negatively impacted by significantly poor weather in the 2007 season.

VI. Major Lessons Learned

Proper selection and sequencing of volunteers is often critical to their collective effectiveness. In the current project, considerable attention was given to locating volunteers who would match host requirements and situations, and to supporting those volunteers in the field. This approach significantly contributed to greater program impact. Likewise, the amount of effort devoted to project strategy development and the crafting of individual scopes of work has had a direct effect on the progress that will be possible with any individual host. Scopes of work must be tailored not just to host needs, but also to their present abilities.

1. Follow-up assignments with hosts are important in the implementation phase. Using the same volunteers who made the original recommendations to provide guidance during implementation is often especially effective. Similarly, multiple assignments by the same volunteer, either with the same or different hosts, often yield the best results.
2. The comparative advantage of short-term technical assistance is a key concept to consider in selecting which combination of services to provide to hosts. Most hosts have long lists of needs, only a subset of which are suitable for FtF assignments. While this distinction is well appreciated, the possibility of addressing more issues via closely clustering several volunteers with different areas of expertise to the same host is also attractive. Clustering of volunteers around a host or group of hosts makes sense on paper and often works, but there is a danger that this collection of volunteers will not cover the necessary ground or leave significant gaps. Clustering is therefore a practice that must be considered very carefully.
3. Strong and effective leadership is of central importance when selecting hosts. While selecting groups of hosts from specific focus subsectors and themes makes sense from several perspectives, the effective leadership criterion should take precedence over program coherence in decisions to include or exclude specific hosts. Host leadership must have the energy and authority to make decisions and oversee their implementation, without which the project is unlikely to make much progress.

4. Related to the leadership criterion, volunteers assisting with business management skills need to be carefully matched with managers who are motivated, receptive and preferably already “half-way there”. More than one volunteer trip is probably required to ensure that these types of assignments achieve results.
5. Volunteer recommendations are most effective when hosts have access to complementary inputs, particularly finance. FtF only offers short-term technical assistance, and implementation of volunteer recommendations usually involves expenditures. Although in the past some volunteers have assisted hosts in securing loans, ready access to financial resources should be a consideration in the host selection process. Without these resources, there are likely to be major delays in the implementation of volunteer recommendations and in their associated impacts. Partnering with organizations and projects that can assist in accessing resources is one way of addressing these issues.

VII. Recommendations for Future

Host ability to substantively participate in i) project strategy development, ii) development of SOWs, iii) volunteer selection, iv) in-country facilitation of volunteers on assignment, v) monitoring of impacts, and vi) refinement of project strategy should be a component of consideration for the program. While the capacities of potential hosts to perform all these functions may not be initially apparent, their level of engagement in strategy development, and their participation in the development of SOWs for the initial volunteers can be very revealing. The host manager should be clear and proactive in suggesting the specific skills and types of volunteers sought. This should serve as an indication of the extent to which the host leadership has thought through the assignment and the project strategy. Hosts should also be prepared to share costs by assisting with local volunteer facilitation (local transport, accommodation, translation, etc). FtF country staff must determine how much of this is practical on a host by host and assignment by assignment basis, but willingness to contribute should be a criterion in host selection. The ability of hosts to participate effectively in the monitoring of impacts and the refinement of project strategies may not be evident from the onset, but its importance should be stressed as a condition for continuing participation in the program.

Consideration should also be given to making the provision of volunteers to a particular host beyond the initial assignment conditional on the results of that assignment. An experienced volunteer with broad expertise in an appropriate sub-sector seems preferable for this initial assignment, rather than a first-timer who is very specialized. The initial assignment should include responsibilities for critically reviewing the project strategy and making suggestions for adjustments to field staff, as well as reviewing the scopes of work and suggesting qualifications of additional volunteers for that host.

Partnering with organizations and projects that can assist in accessing or even providing resources may be a means of obtaining complementary inputs to volunteer recommendations, such as financial services, longer term or local advisory assistance, or other special services. Potential hosts should be prepared to participate actively in identifying suitable partners.

Techniques such as sub-sector and value chain analysis may be useful in identifying specific points/groups of hosts where volunteer efforts might be focused productively. While this may be difficult both in terms of time and staff capacities, ideally staff would be able to locate and utilize existing studies or identify partners during the country program planning stage that: i) have the appropriate sub-sector perspective; ii) can help identify areas and specific hosts where volunteers would be most effective; and iii) provide key complementary inputs (and even cost share). Availability of good partners and hosts should be components of program strategy development, including selection of focus areas. Pressures to focus on themes where these conditions do not exist or where there is a limited pool of potential volunteers should be resisted.

Focus area strategies might give more explicit attention to how to enhance indirect impacts in: i) selection of hosts; ii) programming of volunteer assignments; iii) development of scopes of work; and iv) identification of volunteers. The overwhelming thrust of volunteer assignments is currently on direct impacts that benefit one specific organization, with limited attention to indirect impacts and spillover effects. These indirect impacts may be mentioned in focus area and project strategies, but receive less attention in scopes of work.

Finding a middle ground between the current FtF emphasis on economic growth and the secondary goal of poverty reduction is an important consideration for the future. This may be possible through working with cooperatives that have a focus on small-scale producers.

Annex A:
Standard Indicator Tables

Table 1a: Farmer-to-Farmer Program Volunteers FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area ¹	No. of Volunteers ²															Number of Volunteer Days Completed ³					Estimated FTF Program Expenditures ('000 US\$) ⁴					FTF Program Cost/ Volunteer-Day										
				Male					Female					Total					Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total			
				Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3																			Year 4	Year 5	Five Year Total
CNFA	West NIS	UKR	Focus Area -1	35	24	26	19	26	130	0	1	1	1	0	3	35	25	27	20	26	133	726	456	471	338	447	2438	667.2	450.8	359.78	254.23	387	2119	919	946	763	752	865.77	AVG = 849
CNFA	West NIS	UKR	Focus Area -2	4	9	11	8	16	48	1	1	2	1	3	8	5	10	13	9	19	56	119	189	241	154	278	981	109.4	170.6	182.7	115.84	282.8	861.34	919	908	760	752	1017.3	AVG = 871
CNFA	West NIS	UKR	Focus Area -3	5	3	6	4	4	22	0	1	2	2	0	5	5	4	8	6	4	27	113	72	141	105	69	500	103.9	64.1	110.65	78.98	59.54	417.17	919	907	776	752	862.9	AVG = 843
CNFA	West NIS	BY	Focus Area -1	9	19	15	16	17	76	0	0	1	0	0	1	9	19	16	16	17	77	193	343	249	249	229	1263	167.1	274.9	221.6	195.69	355	1214.3	866	825	889	786	1550.2	AVG = 983
CNFA	West NIS	MOL	Focus Area -1	24	23	25	26	28	126	3	0	3	1	3	10	27	23	28	27	31	136	576	416	521	528	571	2612	472.6	321.4	342.15	291.04	445.9	1873.1	797	786	658	551	780.91	AVG = 714
Total				77	78	83	73	91	402	4	3	9	5	6	27	81	81	92	78	97	429	1727	1476	1623	1374	1594	7794	1520	1281.8	1216.88	935.78	1530	6484.9	884	874	749	719	1015	850

¹Please list all focus areas that you will be reporting against as stated in your approved planning matrices. This should be completed the same for all tables. If you have left a small percentage of volunteer days as "flexible" or "unplanned", you may list them under a "flexible" sector category if they do not fit under one of your planned sectors. Subsequently, if the numbers of flexible volunteers become large enough in a single focus area, such that they would warrant tracking as a new sector or focus area, please switch all information for those assignments under the new sector heading.

²These three columns provide a cumulative (life of project) count of the number of volunteers, disaggregated by gender. One volunteer is considered to be the same as one overseas trip. Volunteers who travel more than once during the course of the FTF Program will be counted for every overseas trip they make. If a volunteer makes one overseas trip, but provides technical assistance under two different FTF Cooperative Agreements during the same trip, that volunteer may be counted once by each of the organizations operating under the different cooperative agreements. However, travel to multiple countries to perform multiple tasks under one Cooperative Agreement still counts as only one volunteer. In this case, you should mark the volunteer under the specific country and focus area where he/she spent the majority of time. The number of volunteer days can then be divided up more appropriately in the next column for "Volunteer Days".

³Volunteer Days should be calculated the same as "per diem days". Any day, or fraction thereof, in which a volunteer is entitled to per diem is considered a Volunteer Day. These days will be based on seven-day work weeks beginning from the day the volunteer departs for his/her overseas assignment to the day he/she returns from that assignment. If a volunteer works in more than one country, and/or in more than one focus area, he number of days should be divided up accordingly in this column.

To obtain the estimated program expenditure by focus area (FA), add each focus area's share of the total Ukraine field office expenditures to each focus area's share of Ukraine's DC expenditures. Each focus area's share of the costs is based on their respective number of volunteer days divided by the total number of volunteer days, which yields a percentage of volunteer days for each focus area or country (Moldova, Belarus).

Table 1b: Farmer-to-Farmer Program Funding Mobilized and Leveraged - FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Value of Volunteer Professional Time ('000 US\$) ¹					Resources Leveraged by the Grantee/ Volunteers ('000 US\$) ²					Value of Resources Mobilized by Host ('000 US\$) ³					Estimated Value of Host Contribution ('000 US\$) ⁴								
				Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total
CNFA	West NIS	UKR	Focus Area -1	246.8	220.1	231.3	200.9	189.1	1088	5.249	0.528	0.356	4.777	4.98	15.89	5	50	51.64	23.6	0	130.2	2.719	0.83	1.1	1.138	1.619	7.406
CNFA	West NIS	UKR	Focus Area -2	60.15	112.9	160.2	88.99	194.1	616.4	0.235	3.81	0.65	15.8	2.567	23.06	150	749.9	2493	0	0	3392	0.387	0.965	0.343	0.05	0.95	2.695
CNFA	West NIS	UKR	Focus Area -3	60	86.95	125.7	73.68	37.81	384.2	0.295	1	0.278	0.35	3.325	5.248	0	2.3	0	0	0	2.3	0.13	0.435	1.213	0.585	0.48	2.843
CNFA	West NIS	BY	Focus Area -1	44.39	115.3	123	110	104.4	497.1	1.665	1.867	6.658	1.939	5.83	17.96	0.212	0.785	0.867	0.872	1.765	4.501	0.48	0.785	1.08	0.884	1.855	5.084
CNFA	West NIS	MOL	Focus Area -1	192.1	128.2	301.1	526.8	784	1932	3.244	3.47	5.597	24.37	3.545	40.23	111.3	118.7	456.2	1280	1650	3617	1.46	2.645	0.862	1.505	0.41	6.882
			Total	603.4	663.4	941.3	1000	1309	4518	10.69	10.68	13.54	47.23	20.25	102.4	266.5	921.7	3001	1305	1652	7146	5.176	5.66	4.598	4.162	5.314	24.91

¹This figure will be based on each individual implementing organization's standard estimates.

²These funds are raised in the U.S. by the volunteer or grantee and counted as a matching contribution for the grant.

³"Resources mobilized" are resources that FTF program managers and volunteers assist their hosts in accessing, such as various sources of credit, state assistance, PL 480 local currency, other donor assistance, etc. Sum across years will provide LOP total. Figures for this column are based on Calendar Year 2007 data.

⁴This is the contribution made by the host organizations towards the cost of the volunteer assignment. It can be cash or in-kind contribution. Some examples might be translation services, transportation or room/board.

Table 2 - Number of Volunteers by Gender and US State of Residence FY 2004 - FY2008

Regions	States	Year 1			Year 2			Year 3			Year 4			Year 5			Five Year Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Northeast	Connecticut			0	1		1			0			0			0	1	0	1
	Delaware	1		1			0			0			0			0	1	0	1
	Maine			0			0			0			0			0	0	0	0
	Maryland	1		1			0	1		1	1		1			0	3	0	3
	Massachusetts	1	1	2	1		1	2		2	1		1			0	5	1	6
	New Hampshire			0			0			0			0			0	0	0	0
	New Jersey	2		2	1		1			0	1	1	2	1	1	2	5	2	7
	New York	3	1	4	2		2	2		2	7	1	8	3		3	17	2	19
	Pennsylvania	5		5	4	1	5	6	1	7	1	1	2	2	1	3	18	4	22
	Rhode Island			0	1		1	1		1			0	1		1	3	0	3
	Vermont	1		1	2		2			0			0			0	3	0	3
	Washington, DC			0		1	1			0			0			0	0	1	1
	Subtotal	14	2	16	12	2	14	12	1	13	11	3	14	7	2	9	56	10	66
Southeast	Alabama	1		1			0			0			0			0	1	0	1
	Arkansas	1		1	2		2	3		3	1		1	1		1	8	0	8
	Florida	5		5			0	1		1	2		2	2		2	10	0	10
	Georgia	1		1			0	3		3	1		1			0	5	0	5
	Kentucky			0	1		1	1		1			0	2		2	4	0	4
	Louisiana			0			0			0			0			0	0	0	0
	Mississippi	1		1			0			0			0			0	1	0	1
	North Carolina	2		2	5		5	4		4	6		6	9		9	26	0	26
	South Carolina			0			0			0	1		1	1		1	2	0	2
	Tennessee			0			0			0	1		1	1		1	2	0	2
	Virginia			0	1		1			0			0	1		1	2	0	2
	West Virginia			0			0			0			0			0	0	0	0
	Subtotal	11	0	11	9	0	9	12	0	12	12	0	12	17	0	17	61	0	61
Midwest	Illinois	4	1	5	4	1	5	3	1	4	3		3	4		4	18	3	21
	Indiana	1		1			0	2		2			0	0		0	3	0	3
	Iowa	4	4	8	7	4	7	4		4	3		3	4		4	22	0	22
	Kansas	2		2	1		1			0			0	5	1	6	8	1	9
	Missouri			0	1		1			0			0			0	1	0	1
	Nebraska	3		3	1		1			0	2		2			0	6	0	6
	Ohio	5	1	6	2		2	3		3	7		7	4		4	21	1	22
	Subtotal	19	2	21	16	1	17	12	1	13	15	0	15	17	1	18	79	5	84
Upper Midwest	Michigan	3		3	4		4	8		8	4		4	11		11	30	0	30
	Minnesota	2		2	3		3	1		1	4		4	2		2	12	0	12
	North Dakota			0	2		2	1		1			0			0	3	0	3
	South Dakota	1		1			0			0			0			0	1	0	1
	Wisconsin	8		8	5		5	15	2	17	9		9	16	2	18	53	4	57
	Subtotal	14	0	14	14	0	14	25	2	27	17	0	17	29	2	31	99	4	103
Rocky Mountain	Colorado	6		6	7		7	3		3	3		3	6		6	25	0	25
	Idaho	1		1	1		1	3		3	2		2	1		1	8	0	8
	Montana			0			0			0			0			0	0	0	0
	Utah			0	1		1			0			0			0	1	0	1
	Wyoming			0			0			0			0			0	0	0	0
	Subtotal	7	0	7	9	0	9	6	0	6	5	0	5	7	0	7	34	0	34
West Coast	Alaska			0			0			0			0			0	0	0	0
	California	7		7	8		8	8	1	9	8	1	9	8		8	39	2	41
	Hawaii			0			0			0			0			0	0	0	0
	Oregon	1	1	2	1		1	2	1	3	2		2	2		2	8	2	10
	Washington			0	2		2	2		2	2		0	1		1	3	2	5
	Subtotal	8	1	9	11	0	11	10	4	14	10	1	11	11	0	11	50	6	56
Southwest	Arizona	1	1	2	3		3	3		3	1		1	1		1	9	1	10
	Nevada			0			0			0			0			0	0	0	0
	New Mexico	1		1	2		2	2		2	1		1	1		1	7	0	7
	Oklahoma			0			0			0	1		1			0	1	0	1
	Texas			0	2		2	2		2	1		1	1		1	6	0	6
	Subtotal	2	1	3	7	0	7	7	0	7	4	0	4	3	0	3	23	1	24
Other														1		1	1	0	1
	Subtotal	75	6	81	78	3	81	84	8	92	74	4	78	92	5	97	403	26	429
	TOTAL	81	6	87	86	3	89	92	8	100	78	4	82	97	5	102	429	26	455

¹The same definition for volunteers given on Table 1a, Footnote 2 applies here. Therefore the TOTAL of this table should equal the total number of volunteers from Table 1. Note that the volunteer's state of primary residence should be used as the determining factor for this table.

Table 3a: Farmer-to-Farmer Program Volunteer Assignments By Type of Volunteer Assistance FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Technology Transfer					Organizational Development					Business/Enterprise Development					Financial Services					Environmental Conservation									
				Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total
CNFA	West NIS	UKR	Focus Area -1	19	7	7	15	16	64	7	10	5	0	3	25	9	8	15	5	7	44	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	UKR	Focus Area -2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	2	5	10	11	9	17	52	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	UKR	Focus Area -3	0	0	0	0	0	0	0	0	0	0	0	5	4	8	6	4	27	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	
CNFA	West NIS	BY	Focus Area -1	8	18	15	16	17	74	0	0	0	0	0	1	1	1	0	0	3	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	
CNFA	West NIS	MOL	Focus Area -1	11	7	9	7	14	48	2	6	2	3	2	15	14	10	17	17	13	71	0	0	0	0	2	2	n/a	n/a	n/a	n/a	n/a	n/a
			Total	38	32	31	38	47	186	9	16	9	3	5	42	29	23	41	28	26	147	5	10	11	9	19	54	n/a	n/a	n/a	n/a	n/a	n/a

¹On this table, each volunteer (as defined on Tables 1a and 2) should only be counted only once; the totals will be equal to the number of volunteers listed in Tables 1a and 2. If a volunteer provides multiple types of assistance, determine the one category that the volunteer spent the majority of his/her time with and use that for the classification. The volunteers will also be classified by one major country and focus area. All numbers are cumulative.

Table 3b: Farmer-to-Farmer Program Volunteer Assignments By Location in Commodity Chain - FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Information and Input (pre-production) Support Services ²					On Farm Production Farmers					Processing (including primary and final product transformation, storage, transportation)					Marketing (including branding, advertising, promotion, distribution, sales)					Overall Total Number of Volunteer Assignments									
				Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total
CNFA	West NIS	UKR	Focus Area -1	0	1	4	2	9	16	19	5	4	10	13	51	0	3	11	6	0	20	16	16	8	2	4	46	35	25	27	20	26	133
CNFA	West NIS	UKR	Focus Area -2	5	10	12	9	19	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5	10	13	9	19	56
CNFA	West NIS	UKR	Focus Area -3	5	4	6	6	1	22	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	2	4	5	4	8	6	4	27
CNFA	West NIS	BY	Focus Area -1	0	1	0	0	0	1	9	18	15	16	17	75	0	0	0	0	0	0	0	0	1	0	0	1	9	19	16	16	17	77
CNFA	West NIS	MOL	Focus Area -1	0	11	11	15	8	45	11	6	9	6	14	46	0	0	3	3	2	8	16	6	5	3	7	37	27	23	28	27	31	136
			Total	10	27	33	32	37	139	39	29	28	32	45	173	0	3	14	9	2	28	32	22	17	5	13	89	81	81	92	78	97	429

¹On this table, each volunteer (as defined on Tables 1a and 2) should only be counted only once; the totals will be equal to the number of volunteers listed in Tables 1a and 2. If a volunteer focuses assistance on multiple categories of the commodity chain, determine the one category that the volunteer spent the majority of his/her time with and use that for the classification. The volunteers will also be classified by one major country and focus area. All numbers are cumulative.

²This category should include activities related to such areas as extension services, input supplies, veterinary services and credit.

Table 4b Farmer-to-Farmer Program Beneficiaries - FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Direct Beneficiaries ¹															Beneficiaries Receiving Training ²															Indirect Direct Beneficiaries ³											
				Male					Female					Total					Male					Female					Total					Total											
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total						
CNFA	West NIS	UKR	Focus Area -1	2075	929	527	732	1193	5456	1353	825	367	391	497	3433	3428	1754	894	1123	1690	8889	709	364	237	253	295	1858	240	289	142	172	159	1002	949	653	379	425	454	2860	9804	6016	2557	3212	4833	25422
CNFA	West NIS	UKR	Focus Area -2	194	124	195	141	276	930	35	143	165	165	713	1221	229	267	360	306	989	2151	10	63	54	58	110	295	14	73	59	68	313	527	24	136	113	126	423	822	4179	4260	2800	8209	4875	24323 ⁵
CNFA	West NIS	UKR	Focus Area -3	31	30	71	105	206	443	27	29	47	130	260	493	58	59	118	235	466	936	6	13	24	70	134	247	0	17	8	79	195	299	6	30	32	149	329	546	0	1425	36125	41262	39474	118286 ⁵
CNFA	West NIS	BY	Focus Area -1	85	317	304	349	815	1870	67	197	224	222	534	1244	152	514	528	571	1349	3114	40	147	110	117	410	824	31	68	132	59	266	556	71	215	242	176	676	1380	532	1799	1848	1999	4722	10900
CNFA	West NIS	MOL	Focus Area -1	941	536	515	593	661	3246	649	344	424	258	287	1962	1590	880	939	851	948	5208	538	221	200	102	132	1193	501	176	141	58	42	918	1039	397	341	160	174	2111	4770	2640	2817	2553	2844	15624
Total				3326	1936	1612	1920	3151	11945	2131	1538	1227	1166	2291	8353	5457	3474	2839	3086	5442	20298	1303	808	625	600	1081	4417	786	623	482	436	975	3302	2089	1431	1107	1036	2056	7719	19285	15140	46147	57234	56748	194555

¹Direct beneficiaries receive face-to-face or hands on training or assistance from the FTF volunteer. Indirect beneficiaries (for example, those trained by direct beneficiaries) should not be included in this data.

²Direct Beneficiaries that receive technical or in-country training as defined under USAID ADS Chapter 253.4 and ADS Glossary as follows

Technical Training Formally structured learning activities, generally in a classroom, which do not lead to an academic degree. Can include technical courses at community colleges, technical institutes or universities, on-the-job activities tied to technical-area classroom work, or any combination of such formally structured, non-degree producing instructional activity.

In Country Training: A learning activity taking place in a classroom or workshop with formally designated instructor(s), learning objectives, and outcomes, conducted full-time or intermittently within the host country.

³Indirect beneficiaries are those who do not receive face-to-face or hands on assistance from an FTF volunteer, but who otherwise benefit from assistance. This may include family members based on survey counts or average sizes. This number is difficult to measure and best estimates are acceptable. However, to the extent possible, please footnote source for data or calculation.

CNFA FOOTNOTES

Family members of people receiving training, determined by country (average family size) as follows Ukraine (*2.86), Belarus (*3.5), Moldova (*3).

⁵Recipients of agricultural loans. NOTE this data reported on calendar year basis. Number shown includes loan recipients through 12/31/07

⁶Farmers served by assisted agrodealers NOTE this data reported on calendar year basis. Number shown includes farmers served through 12/31/07

* Individuals counted only once with first FTF program benefits.

Table 5: Farmer-to-Farmer Program Economic and Organizational Impacts - FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Economic Impacts						Organizational Capacity Impacts					
				No. of Relevant Hosts ¹	No. of Hosts Adopting Vol. Recommendations ²	No. Hosts Reporting improvement	No. of beneficiaries associated with hosts reporting improvement**	increased incremental net income ³ across all hosts adopting ('000 US\$) ^{***}	increased gross value of sales ('000 US\$)	No. of Relevant Hosts ¹	No. of Hosts Adopting Vol. Recommendations ²	No. Hosts Reporting improvement	No. of beneficiaries associated with hosts reporting improvement	increased Revenue ('000 US\$) ⁴	increased Number of New Products and Services
CNFA	West NIS	UKR	Focus Area -1	22	22	18	38,959	\$26,051	\$21,848	22	22	18	38,959	\$0.7	267
CNFA	West NIS	UKR	Focus Area -2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	UKR	Focus Area -3	9	9	8	118,286	\$15,960	\$3,132	9	9	8	118,286	\$2.3	10679
CNFA	West NIS	BY	Focus Area -1	26	26	26	11,631	\$1,926	\$5,723	26	26	26	11,631	\$5	44
CNFA	West NIS	MOL	Focus Area -1	44	43	40	42,924	\$1,063	\$2,701	44	43	40	42,924	\$43	71
			Total	101	100	92	211800	45001.001	33404.033	101	100	92	211800	50.483	11061

¹ Relevant hosts are those hosts who seek improvement in the given results category. The primary focus of both the host and the volunteer assignment should be on producing a result in this category for a host to be counted as relevant.

² This number is very subjective, but should reflect hosts that have adopted volunteer recommendations in a substantial way.

³ Increased Net Income: Increase in **Incremental** ("With" adoption of recommendation, less "Without" adoption of recommendation) **Net** (after subtracting production costs in both cases) **Income** (expressed in thousand US Dollars). The hosts and the volunteers will be enlisted to prepare simple enterprise budgets or per-hectare crop budgets (partial budgets will do) to compare the "With" and "Without" cases, as part of the terms of reference for their assignment.

⁴ Revenues raised through member dues, services fees, or other sources of income such as contracts or grants.

Note: Baseline data collected in prior years needs to be updated as of time of volunteer assignment. Prices change rapidly.

CNFA FOOTNOTES

* The discrepancy between the fiscal year schedule on which CNFA reports and the calendar year schedule governing the operations of our hosts results in a minor delay in economic impact reporting. While active hosts listed in Indicator Table 4 are current through 9/30/08, the economic impact data above is from the first half of CY08 and represents the results of volunteer inputs from both late FY07 and FY08.

** Numbers of beneficiaries who experienced increases in income, as documented in CNFA Project Impact Assessments. They include farmers, workers, host organization employees and their families.

***Increase in Estimated Net Income to all project beneficiaries, including farmers, employees, and enterprise owners. In some cases, formal financial records are available as a source of net income data. In many cases, however, particularly for farmers and farmer groups, net income must be estimated. CNFA has estimated gross margin in these cases, in order to approximate farmer net income.

Table 6: Farmer-to-Farmer Program Financial Sector and Environmental Impacts - FY 2004 - FY 2008

Implementing Agency	Geographic Region	Country	Focus Area	Improved Financial Services (e.g. Credit)							Environment/NRM								
				No. of Relevant Hosts ¹	No. of Hosts Adopting Vol. Recommendations ²	No. Hosts Reporting improvement	Number of hosts with loan delinquency rate maintained at less than 10%	increase in the amount of rural and/or agricultural loans ('000 US\$)	increase in the number of rural and/or agricultural loans*	increase in the value of host's net equity ('000 US\$) ³	No. of Relevant Hosts	No. of Hosts Adopting Vol. Recommendations	No. Hosts Reporting improvement	increased incremental net income (US\$)	increase gross value of sales (US\$)	Area covered by improved natural resource management (ha)	Total number of hosts adopting one or more environmental technologies	People with improved safety and working conditions	People with improved environmental services
CNFA	West NIS	UKR	Focus Area -1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	UKR	Focus Area -2	11	11	11	10	\$204,128	24,323	\$242,883	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	UKR	Focus Area -3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	BY	Focus Area -1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CNFA	West NIS	MOL	Focus Area -1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			Total	11	11	11	10	\$204,128	24,323	\$242,883	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

¹ Relevant Hosts are those hosts who seek improvement in the given Results category. The primary focus of both the Host and the volunteer assignment should be on producing a result in this category for a host to be counted as relevant.

² This number is very subjective, but should reflect hosts that have adopted volunteer recommendations in a substantial way.

³ Net equity equates to assets minus liabilities.

Table 7 - Increased Awareness in the U.S. Agricultural Sector Concerning International Agricultural Development

Implementing Agency	Geographic Region	Country	Focus Area	Number of Volunteers Performing Public Outreach Activities					Number of Press Releases to Local Media ¹					Number of Media Events by Implementers and Volunteers ²					Number of Group Presentations by Implementers and Volunteers								
				Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total	Year 1	Year 2	Year 3	Year 4	Year 5	Five Year Total
CNFA	West NIS	UKR	Focus Area -1	28	16	10	5	3	62	0	1	0	0	0	1	23	12	4	1	7	47	61	42	10	7	2	122
CNFA	West Nis	UKR	Focus Area -2	4	4	4	0	6	18	0	0	0	0	0	0	2	0	0	0	1	3	3	4	5	0	9	21
CNFA	West NIS	UKR	Focus Area -3	3	1	1	0	0	5	0	0	0	0	0	0	1	2	0	0	1	4	4	0	6	0	0	10
CNFA	West NIS	BY	Focus Area -1	13	8	11	3	5	40	0	0	0	0	0	7	5	8	0	3	23	21	16	18	0	4	59	
CNFA	West NIS	MOL	Focus Area -1	20	13	13	8	6	60	0	0	0	0	0	12	13	4	2	8	39	38	28	29	1	7	103	
			Total	68	42	39	16	20	185	0	1	0	0	0	1	45	32	16	0	20	113	127	90	68	8	22	315

¹A new category we intend to track is the number of press releases issued by the grantee to local press/radio/TV media in area of origin of volunteer. This is not a specific requirement in the cooperative agreements, and not all FTF grantees perform this activity, but we would like to track the extent to which it is taking place.

²Any internet-based outreach activity should be counted as a media event. Examples may include hosting a chat room or using the internet or an email system to disseminate a newsletter. This does not include emailing information packets for recruitment purposes. Other examples of media events might include newspaper articles, radio or television news coverage.

**Annex B:
Volunteer and Host List**

Farmer-to-Farmer Volunteers, FY04-FY08:

Tim Alzheimer	John Caldeira	Bernard Francque
Emmanuel Ajuzie	Walton Casson	Randy Frescoln
William Albanos	Dick Cates	Robert Fry
Bob Albrecht	Roy Chapin	Scott Gaffney
Mary Albrecht	Ricardo Chebel	Dr. Boto Wybrand
Jay LaMar Anderson	J. Peter Clark	Ganzevoort
Merle Anderson	Martin Connaughton	Charles Garver
Mark Arena	Joseph Coogan	John Gauthier
Ken Astrup	Doyle Cook	Gary Geisler
Chris Atwood	Rob Crassweller	Larry Gingrich
Awad Ahmed	Dr. Alexander	Ron Godin
Gerald Bahensky	Csizninszky	Bill Goeres
Ken Bailey	Joseph Dawyot	Jerry Grigar
John Balles	Richard Denby	Ewan Ha
Kenneth Baillet	Kevin Dennis	John Hackney
David Barnes	Archie Devore	Seth Hanauer
Bill Batko	Randall Dickey	William Hargraves
Robert Battel	Ken Diesburg	Russel Stanley Harris
Brian Bean	Tim Dietz	Ken Hart
Harold Lynn Beck	Thomas Dobler	Lorraine Hartman
Brad Beeler	John Dorland	Daniel Haskins
John Bellow	Mark Douglass	Martin Hass
Joe Beltramo	Tom Dumble	Richard Hatterman
David Bernheisel	David Durr	Craig Haugaard
David Berry	Norval Dvorak	Martin Havlovic
Robert Binversie	Dan Dybsetter	Jerry Hayes
Larry Birdsall	Cal Dyk	Jerome Heuertz
Russel Blair	Richard Edwards	Gary Hickman
Robert Blitz	Dean Eliason	Bruce Hicks
Fred Boeshans	Rey Elizando	Brad Hilty
Layne Bogdanov	John Ellerman	Clive Holland
Peter Bogdanov	Nathan Emery	Allen Housh
Robert Bond	Jim Estes	George Hughes
Norma Brenes	Guy Ewald	James Hurst
Kevin Brooks	DuWayne Federwitz	Larry Hutchinson
Alexandra Brower	Dick Fenwick	Todd Hutson
Willis Brown	Peter Ferretti	Omoanghe Samuel
Luke Brubaker	Charles Fischer	Isikhuemhen
John Brusky	Cesar Flores	LeWayne Jansonius
Herb Bucholtz	Wojociech Florkowski	Bill Jester
Garry Bullen	Mariana Folescu	Jeff Jobe
Jan Buresh	Larry Foster	Philip Kaatz
Thomas Cadwallader	Jim Fountaine	David Kammel

Rodney Kamper	Anton Nicholson	Curtis Swift
John Kappelman	Maurice Ogutu	Larry Thompson
Kathleen Kelley	Neil Osborne	Keith Thornton
Joe Kemble	Allison Paap	Duane Tirrell
Hany Khalil	Loren Parks	Frank Townsend
Tom Kimmell	Michael Paros	Mike Moylan
Dean Kleckner	Lucas Parsch	Merle Anderson
Len Knoblock	Pradeep Patnaik	John Tyron
Joel Koonce	Kathryn Pereira	Dora Turula
Steve Kovach	Dean Peterson	Jim Valentine
Jeff Kuntz	Randolph Piazza	Brent Van Dyke
Ralph Kurtzman	Eugene Pickley	James Van Ess
Louis Landesman	Dwain Pilkington	David Visher
Jerry LeClar	David Pinkham	Lester Vough
Richard Leep	Peter Pitts	John Warner
Bernard Lennon	Ron Prescott	Jerry Warren
Richard Lettner	David Quarles	Phillip Watson
Bob Lever	Roger Read	David Weaver
Mark Lichtenwalner	Bob Reel	Ian Weetman
Carl Liegel	Matthias Reisen	Robert Wells
Tom Lindahl	Don Renquist	Wayne Wickerham
Allen Lines	Michael Rice	Bruce Williams
James MacDade	Steven Richards	E. Craig Williams
Chris Machen	RoxAnn Rooney	Ken Williams
Glenn Maddy	Corey Rosenbusch	Russell Williams
Bryce Malsbary	Rob Rowland	Rick Wills
Bill Maltby	Thomas Sachs	William Wise
Larry Marchese	Nathan Sakolsky	Jim Worstell
John Marenic	William Schafer	Vince Wright
Cecil Mashburn	David Schermerhorn	Kyung Yoo
Martin Mason	Greg Schwab	Ann Young
Patrick McCaig	Maura Schwartz	Dave Ziegler
John McClelland	Michael Chase Scott	
Joseph McFadden	Dana Servheen	
Rick McGuire	Jonathan Joe Simmons	
Stanley McKee	Randy Smith	
Tom Meade	Norbert Soltwedel	
Mitch Medigovich	Michael Steele	
Mike Moylan	Duane Stevenson	
David Nagel	Andrew Stewart	
James Neibauer	Scott Stovall	
Brett Nelson	Dave Stroud	
Jim Nelson	Paul Sundberg	
Mark Nelson	Larry Swalheim	
Mary Nessel	Louise Swartzwalder	
Jeff Neville	Lynda Swenson	

Farmer-to-Farmer Host Organizations, FY04-FY08:**Ukraine**

Agrofirma Torgovy Dim
Aktiv Credit Union
All-Ukrainian Brotherhood of Beekeepers
Amako, Ukrainian Leasing Company (ULC),
Leasing House (LH)
Association of Mushroom Producers
Bdjolyar Cooperative
Demetra Cooperative
Dovira Credit Union
Energodar Cold Storage
Farmer Cooperative
Globino Cucumber Farms
Gorby Cooperative
Goryslavtsy Vegetable Farmers
Gromada Credit Union
Hazda Cooperative
Khomutets Vegetable Farmers
Kiev Fruit & Vegetable Farmers
Kirovograd Orchard Association
Kyiv Milk Processing Plant
Leader Service Cooperative
Lutsk Credit Union Development
Melesh Cold Storage Enterprise
Myrgorod cannery
Nadra Bank
Orshivtsi Cooperative
Petrivka Vegetable Farmers
Raiffeisen Bank Aval
ROSTOK farmer group
Shkurupiivka Vegetable Farmers
Sviatilivka Cooperative
Svytjaz LLC
TAS Insurance Group
Ukrainian Ostrich Association
Ukrainian National Association of Savings
and Credit Unions (UNASCU)
Unity through Natural Law Credit Union
(Unity CU)
Veles Dairy Cooperative
Verbky Vegetable Farmers
Vinnitsa Vegetable Farmers

Volyn Farmers Association
Yahotin Cannery - Stara Fortetsya
Yaroshy Vegetable Farmers
Zaporizhia Vegetable Farmers
Zaporizhya Association of Credit Unions

Belarus

ABC-Agro Farm
 Agro-Box Farm
 Agricultural Information and Consultation
 Center (AICC)
 BelRosBioTekh and PromKhimElektro
 Agribusinesses
 Biocom Ltd
 Grodno and Gomel Pig Farmers
 Grodno Fruit Growers Group
 Kholodon-Agro Farm
 Kodik Agribusiness
 Malinovy Sad Agribusiness
 Mayak Farm
 Narochany Farm
 Negorelskoye Farm
 Novo-Agro Farm
 Oguinskoye Farm
 Oma Farm
 Ostrovo Agribusiness
 Profitagro Farm
 Progress Farm
 Radovets Farm
 Rodnik Farm
 Rosa-Agro Farm
 Soly Farm
 Sovbel Farm
 SoyuzInvestStroi (SIS)
 Vilia Farm
 Vitex Farm
 Yanina Enterprise
 Zhodino Farm

Moldova

AgroEcoLux Fruit Cooperative
 AgroVelPrim Apple Marketing cooperative
 Agrostoc and BasAgroProd Cooperatives
 Alvisedo Impex LLC
 Aniuvico Service Cooperative
 Avicola Cimislia JSC
 Cainarii-Vechi
 Camedones LLC
 Chimsem Input Supply Cooperative
 Cimislia Vegetable Marketing Cooperative
 Copanca Vegetable Producers
 Covali & Co Cannery
 DonAproCom Business Cooperative
 Drochia Vegetable Growers Group
 Dubasarii Vechi & Delacau Greenhouse
 Vegetables Growers
 Focar- Agro LLC
 Glodeni Meat Plant
 Gradiste Vegetable Growers Group
 Gura Bicului Farmers' Group
 Hincesti Meat Processor (Exivladim LLC)
 Hlinaia Vegetable Producers Group
 Javlacta Dairy Cooperative
 Lozova Vegetable Growers
 Lactica Dairy Cooperative
 Mindria Albinii Beekeepers' Cooperative
 (MABC)
 Moldcargo LLC
 Oloi Pac LLC
 Provetlac Dairy Cooperative
 Serviprest Business Cooperative
 Singereii-Noi Greenhouse Growers (SNG)
 Soroca Fish Farmers Group (SFFG)
 Tandor-Service Business Cooperative
 Tersimeda Cooperative
 Triodor LLC
 UniAgroProtect – Union of Agricultural
 Producers of Moldova (UAP)
 Ungheni Vegetable Growers
 Vindex-Agro LLC
 Vita-lact Milk Collection Cooperative
 Volodeni Dairy Producers Group
 ZMC-GROUP LLC

**Annex C:
Impact Assessment**

IMPACT ASSESSMENT

CNFA Farmer to Farmer Programs
Ukraine, Moldova, and Belarus
2003-2008

**Prepared by Elon Gilbert
On behalf of CNFA
September, 2008**

CONTENTS

ACKNOWLEDGEMENTS	3
I. INTRODUCTION	4
II. ASSESSING IMPACTS	1
III. THE CASE STUDIES	6
UKRAINE	6
TAS Insurance Group	6
Gromada Credit Union	12
Yahotyn Cannery	17
MOLDOVA	21
Camedones Fruit Dryers	21
Drochia Vegetable Producers Group	25
Glodeni Meat Plant	31
Vita-Lact Milk Receiving Cooperative	36
BELARUS	41
Cherven Farm	41
Valbik Agribusiness	45
Kholodon-Agro Farm	50
IV. FINDINGS	55
V. LESSONS LEARNED	66
APPENDIX A: SCOPE OF WORK	70
APPENDIX B: SCHEDULE OF ACTIVITIES	71

ACKNOWLEDGEMENTS

An undertaking of this type relies heavily upon the insights of those people that have been directly and indirectly responsible for, and knowledgeable about, the impacts that have been achieved. Since there were ten hosts located in three countries who received a total of 41 volunteers, there was an abundance of potential informants that might contribute to the assessment. The author wishes to express his gratitude to all the hosts' representatives, CNFA staff and volunteers, both former and current, that made time available to respond to my questions by phone, email and in person. Thanks also to the CNFA country staff in Ukraine, Moldova and Belarus for facilitating the meetings with hosts and other informants in each country. The contributions of volunteers who reviewed and commented on drafts of the sections concerning their respective hosts; and Conrad Fristch, Chief of Party of the Agribusiness Development Project in Moldova (who reviewed the entire report!) are especially appreciated. Their insights were critical in understanding many of the most important impacts examined in this study. Finally, many thanks to Maggie Richards and Susie L. Miller for their assistance with editing and formatting of the report.

I. INTRODUCTION

This report presents the results of an impact assessment of selected Farmer to Farmer (FtF) projects in the West Newly Independent States (NIS) region, encompassing Ukraine, Moldova and Belarus. CNFA has implemented the FtF program between 2003 and 2008. CNFA staff made a selection of organizations where, in their view, significant changes had taken place during and since the periods they hosted volunteers. CNFA engaged this consultant in July-September, 2008 to assist them in validating and documenting the impacts associated with volunteer activities.

“The aim of the assessment is to capture and trace the impact of volunteer assignments fielded by CNFA through the FtF program in the three abovementioned countries, as well as to expand analysis of FtF beyond the data that has been collected on an annual and semi-annual basis, and to provide a comprehensive overview of achievements and obstacles encountered over the five year period of project implementation,” (Scope of Work, Impact Assessment, CNFA, 2006).¹

The following section (II) summarizes the approach used for the assessment that examined direct economic impacts for the host organizations where this was possible and relevant, as well as a range of other impacts. The process and specific activities, most notably the field visits to three participating countries, are also briefly described.²

The main “results” section (III) consists of 10 case studies of FtF projects that featured the provision of two or more volunteers for each host organization over the past 5 years. The case studies include background information on the hosts, summaries of the volunteer activities, and discussions of the changes that have taken place, at least partially as a result of those volunteer assignments.

The final two sections (IV) cover findings and the lessons learned.

¹ The full text of the Scope of Work is included as Appendix A.

² The schedule of activities is included as Appendix B.

II. ASSESSING IMPACTS

Impact assessment, specifically the *ex post* impact assessments of development projects, might be appropriately characterized as development archeology.³ It is more of a voyage of discovery than an orderly and tightly structured process. The projects may have been planned that way (orderly and tightly structured), but development rarely happens in that fashion.⁴ The examination of projects that have gone seriously astray might even be termed development forensics. However, public and private agencies concerned with development rarely do formal impact assessments of failures, the assumption being that either there are no impacts to report or the results are negative on balance.⁵

This impact assessment is no exception to that general observation. The host projects selected by CNFA for inclusion as case studies were generally organizations with whom CNFA had worked over a period of time and had a fair amount of data available. In some cases the volunteer inputs had been concentrated in a relatively short time frame, but enough time had passed for one to see results (impacts) from the adoption of recommendations. In other cases, the projects were still ongoing at the time of the assessment (volunteers were either in country or expected), but there had already been notable developments. All the host organizations offered informative experiences associated with volunteer assignments. CNFA sought a greater understanding on the nature of the impacts and roles played by volunteers.

This is a purposeful, rather than random sample of host projects. The purposes include illustrating that the provision of short-term volunteers with the requisite expertise who are well matched with the requirements of host organizations in developing countries can contribute to significant development impacts. While that proposition may be generally accepted, the degree to which it is common or easily achievable for a program that supplies only short term volunteer assistance is less obvious. The assessment is also intended to enhance our understanding of the types and extent of impacts, direct and indirect, economic and non-economic. Further, the assessment sought insights on the circumstances or conditions that are conducive to achieving impacts by FtF volunteers.

The assessment has focused on what is termed “development impacts”, notably those changes that have affected the host organizations and the broader communities in which they are situated in their respective host countries. Development impacts commonly

³ *Ex post* impact assessments examine the results (impacts) from a set of activities, such as a development project, usually after the project has been completed. In contrast, *ex ante* impact assessments are undertaken prior to the initiation of activities, usually as part of the decision making process to consider if the activities merit being implemented.

⁴ See “Development Projects Observed” by A. Hirshman, The Brookings Institution, Washington, DC, 1967; and “The White Man’s Burden” by W. Easterly, The Penguin Press, London, 2006.

⁵ The World Bank and some other development agencies carry out assessments of all projects, including those that did not perform well, upon their completion, but such assessments tend to be pro forma in character and do not normally probe impacts to any degree.

include direct economic and technical changes in production, productivity, revenues, costs and profits in the case of the host organizations. Changes in employment (jobs), environmental quality, civil society, and policies, to mention just a few, are also development impacts. There are often indirect impacts where the ripple effects of changes made by a host organization extend to other organizations and communities, commonly through the spread (spilling out) of improved practices. Further, some of the most important impacts are obscured or invisible, as in the case where negatives are avoided or at least mitigated.⁶ These broader impacts can be significant and are noted in this assessment, although they are less readily measured in any formal sense.

The FtF program also has what has been termed a “people to people” objective. In its initial years, cross cultural exchange featured prominently in the program, but the pendulum shifted strongly to development impacts or economic growth when responsibility for the program was transferred to the Bureau of Economic Growth Agriculture and Trade in USAID in the late 1990s.⁷ Although there is a significant people to people dimension to FtF program impacts, these impacts are not a focus of this assessment.

Understanding the range of potential impacts is a critical first step in devising an approach for assessing them. The primary focus initially was on measuring changes in the performance of a host organization, such as a farm or a cannery, through its balance sheet, namely changes (presumably positive in nature) in gross and net revenues over time. But as the case studies that follow clearly illustrate, this is much too simplistic – and often not simple at the same time. It is frequently not a simple matter to obtain sets of accounts that are generally comparable and amenable to isolating the impacts associated with the adoption of a set of practices (e.g. improvements in animal nutrition). This is especially true where inflation and changes in exchanges rates are significant. There are techniques for correcting for such discrepancies, but they all take time and often require multiple interactions with those most directly involved in the host organizations.

CNFA collects a considerable amount of information which is summarized in profiles for each host organization. The host profiles (HPs) include information on changes in business activities and finance as well structure, objectives and membership (where applicable) between the time the project was initiated through to the time of the project impact assessment (PIA) or the most recent year (2007 in this case). Extensive use was made of the HPs, notably for assessing changes in enterprise mix, production volume, revenues, costs, profits and employment. Where needed and possible, the HPs were updated with the information requested from the hosts. In addition, data was requested relating to productivity changes for enterprises where the adoption of host

⁶ For a discussion of obscured and invisible impacts, see “The Impact of Maize Research in Africa: The Obscured Revolution” by E. Gilbert et al, USAID, 1994, pp2-4.

<http://www.bioline.org.br/> Bioline International

⁷ See “John Ogonowski Farmer to Farmer Program Mid Term Assessment”, by J. Singer et al, QED, 2007 pp 28-31 for discussion of balancing cross cultural exchange and development impacts for the FtF Program.

recommendations appear to have had major impacts (e.g. crop and livestock yields; unit costs of production), but this information proved difficult to access in most instances.⁸

Partial or marginal budget analysis focusing on changes in productivity and efficiency associated with the adoption of specific practices (e.g. no till farming in Belarus) is “cleaner” in theory, and model budgets can be constructed to obtain unit values (per hectare or per ton of product) to illustrate impacts. However, it can be very challenging to get actual (and useable) data on such topics from host organizations for a range of reasons, especially in the very limited time frame available for this assessment. That notwithstanding, this assessment has made use of budget information when that was available and relevant.

Cost information, particularly costs per unit of output, is arguably more relevant to assessing the impacts of many volunteer assignments than gross or net revenues. As the case studies illustrate, many of the most visible and immediate impacts from volunteer assignments are associated with cost reductions in energy, raw materials, equipment use and particularly labor. Increasing gross revenues commonly takes time and may not happen at all – but cost reductions raise profits (reduce losses) and are important volunteer contributions in the minds of host organization managers. Accordingly, efforts were made to collect information on changes in costs as part of the assessment, focusing on those changes associated with the adoption of volunteer recommendations (e.g. reduction in energy costs through the modification of fruit drying tunnels in Moldova). Again, this proved very difficult in nearly all instances. Although host organization managers were very aware of (and keenly interested in) the cost savings associated with improved practices, this awareness rarely translated into a “clean”, comparable set of figures in their books (the considerable efforts by volunteers in business planning and management notwithstanding!).⁹

For at least two of the hosts selected as case studies, notably the Gromada Credit Union and the TAS Insurance Group in Ukraine, changes in costs and revenues associated with these services are not relevant and are even misleading in understanding the impacts associated with volunteer assignments. For both of these organizations, the big story is better management of risk that is an “invisible impact” (avoidance/mitigation of negatives). One can use counterfactual scenarios to try to assess these impacts. For these two cases and possibly for others, the counterfactual scenario is basically disaster (collapse of the organization) or serious interruption/termination of services to clients (mainly farmers). Had these organizations surged ahead to extend more loans and sell

⁸ The difficulties related in large part to hosts not having the information readily available at the time of the interview, as well as perhaps some reluctance to share data in written form that might cause problems with tax authorities and competitors.

⁹ It is very possible that the questions were not phrased correctly. When the author asked for information on costs per ton of product, the response in at least one instance was “we don’t think in those terms”. Further discussion failed to clarify what terms they do think in for decision-making purposes, but they are apparently making good decisions in most instances.

more policies without developing and installing better systems for managing risks first, the outcomes could have been catastrophic.¹⁰

For most, if not all hosts covered by this assessment, budgets rarely tell the complete story, particularly for the impacts that have occurred in the relatively short time frames between the volunteer assignments and this assessment mission for several of the hosts. Impacts start in the minds of the managers of host organizations and their employees as well as in the minds of others that come in contact directly and indirectly with volunteers. For some hosts, impacts may not have progressed very far beyond a decision by a manager to make changes. The next step may be the development of a business plan or a formal proposal to a lending institution that are impacts in themselves, but implementation of the plan may still be in progress.

Obviously, not all the changes can be credited solely to the adoption of volunteer recommendations. Although an effort is made to identify the impacts where volunteer recommendations have featured prominently, no effort was made to formally attribute reported impacts to specific factors.

The case studies sought to capture the range of impacts with varying degrees of success in the time available. While the character of some impacts (e.g. production, sales, costs and profits) is predictable, others may come into focus only during an initial interview (e.g. indirect impacts associated with the changes in numbers of workers, group participants, suppliers and customers). Accordingly, it did not seem appropriate to try to administer and adhere to a highly structured approach, but it was also not feasible to have follow up sessions with the host to try to clarify points.¹¹

The assessment approach featured i) review of available documentation (Project Strategies, Host Profiles, Trip Reports, Debriefing Notes and Project Impact Assessments where available); ii) interviews with owners/senior managers of host organizations in the three countries and a few others that were associated with the program in some capacity;¹² and iii) interactions with current and former volunteers in person and by phone/email. The field visits took place in the 3-week period between July 20th and August 9th with one week devoted to each of the three countries. This report was drafted and finalized in the US in August and September after the field visit.

The original plan was to cover as many as 13 hosts in the three countries in three weeks, which was ambitious for starters.¹³ CNFA understandably wished to have as robust a sample as possible, but there are clearly trade offs with the depth and detail that can be

¹⁰ This is a lesson that policy makers and financial institutions in more developed countries continue to have problems understanding and effectively addressing.

¹¹ Although there was insufficient time for the assessment team to have follow up meetings with any of the host organizations, questions were prepared and relayed to some hosts by CNFA staff, which did help in providing additional data.

¹² Including the Chief of Party of CNFA's Agribusiness Development Project in Moldova as well as a private agricultural consultant and two animal scientists in Belarus.

¹³ Two of those hosts were dropped because insufficient information.

explored with individual hosts. Beyond obtaining certain data, it is extremely useful (essential in some instances) to be able to have multiple interactions with the host organizations, as well as field staff and former volunteers, but there was insufficient time in the schedule to accommodate more than a single interview. Analysis of data and initial results commonly generate more questions. Rarely do those initial contacts yield definitive results that allow one to reach “robust” conclusions on impacts. That notwithstanding, this assessment has been able to “make do” with what was readily available and hopefully provide some useful results in the process.

III. THE CASE STUDIES

This section includes 10 case studies of host organizations in the three countries (Ukraine, Moldova and Belarus) that participated in CNFA's FtF program between 2001 and 2008. These 10 hosts received a total of 41 volunteers during this period.

UKRAINE

Introduction: The three hosts selected for the assessment in Ukraine include an insurance company (TAS); a credit union (Gromada); and a cannery (Yahotyn). Two additional hosts (Leader Cooperative and Agromatco) were visited, but there was insufficient information available from these hosts for them to be included in the report. These hosts have received a total of 11 volunteers, as summarized in Table 1.

Ukraine: Summary of Volunteers Assisting Selected Hosts

Table 1

Host	Products	Project Dates	# Volunteers
TAS	Insurance	2008	4
Gromada	Credit	2008	3
Yahotyn	Cannery	2006	4

TAS Insurance Group

The Host: The TAS Insurance group is one of the leaders among a group of several private Ukrainian insurance companies offering agricultural insurance. Its central office is located in Kyiv, with 37 branch offices throughout Ukraine. The central office and 17 out of 37 branch offices provide agricultural insurance services to the clients. Six years of crop insuring experience, along with a large office network, has secured a solid platform for steady business development. In 2006, the TAS agricultural insurance portfolio accounted for 20% of the market share. The company had about 350 agricultural clients with a total of 120,000 ha of insured crops, which is about 1.5% of Ukrainian arable land.

TAS provides a broad range of products and services and is one of the leaders in agricultural insurance, covering both crops and livestock. TAS offers four agricultural insurance products to farmers, three of which relate to crop insurance (see box). Although all crops can be insured, the most often insured crops are rape and wheat - 17.6% and 7.6% of the total agricultural portfolio, respectively.

CNFA approached TAS in 2007, partially in response to multiple expressions of interest in agricultural insurance from other host organizations, to explore the company's interest

TAS AGRICULTURAL INSURANCE PRODUCTS

- **Crop insurance (multiple peril crop insurance);**
- **Insurance of crop planting costs (applied in those cases when replanting and re-tilling is necessary);**
- **Insurance of crop index (crop revenue coverage);**
- **Animal insurance (livestock risk protection).**

in receiving training and advisory services via the provision of FtF volunteers. The head of TAS's Agricultural Insurance Department, Yuriy Zolotar, welcomed the idea, recognizing the utility of having access to the knowledge of advanced agricultural insurance practices from American experts. In general, insurance companies lack basic knowledge of western practices, including product development, risk assessment, customer service, interaction between the private insurance companies and federal programs. The project strategy was approved in September 2007 and since then CNFA FtF has provided 4 volunteers (5 assignments) to TAS (see table 2).

FtF Volunteers Assisting the TAS Insurance Group

Table 2

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
11/07-1/08	Mariana Folescu	Banking Consultant, American International Consultants	NJ	Needs Assessment/ Policies
2/08	RoxAnn Rooney	Insurance Agent, State Farm	KS	Marketing Risk Assessment
4/08; 7/8/08	Rob Cerda	President, Crop Insurance Systems, Inc	KS	Product Evaluation Reinsurance
7/08	Mick Rice	Agricultural Insurance Specialist, Haight Crop Insurance, Producers Ag Insurance Group	WA	Loss Adjustment

In late 2007 Mariana Folescu assessed TAS's current situation and needs; evaluated its existing agricultural products; and made recommendations relating to existing and new products. Mariana conducted training sessions for TAS staff on US crop insurance practices, including products and risks covered, and offered two case studies of private insurance companies in the US. In the course of Mariana's assignment, TAS leadership expressed a strong desire for "more in-depth training by an agricultural insurance specialist involved on a day to day basis in underwriting, claims evaluation and monitoring, loss adjustment, working with agents, or an agent working with and Crop Insurance company," (Mariana Folescu, Trip Report, pp2,3).

The objective of RoxAnn Rooney's assignment in Feb 2008 was to advise TAS on the marketing of their agricultural insurance products and services. However, as RoxAnn notes in her trip report, "we spent very little time discussing this (as) the underwriting policies need to be developed much more in order to put a good marketing program in force....Yuriy understands this challenge and is using every opportunity possible to gain information to develop these policies into something the farmers will be able to use to finance their operations in case of a loss," (RoxAnn Rooney, Trip Report, 2008).

RoxAnn strongly supported TAS's plans to participate in a proposed trip to visit US crop insurance companies. The trip did indeed take place in June/July 2008 and was very successful.

Although Yuriy did not speak to this point directly when he met with the assessment team, the impression from both Mariana's and RoxAnn's trip reports is that their skill sets were not good matches for what TAS (Yuriy) was seeking at that time. The experience of the third volunteer, Robert Cerda, who is President of Crop Insurance Systems, was more on target and might have ideally preceded the missions of the other two volunteers.

Rob made two visits, (April and August 2008) and prepared detailed recommendations covering a range of topics including i) streamlining loan application information requirements; ii) combining its winter kill and yield policies; iii) simplifying crop loss adjustment procedures; iv) establishment of uniform dates for the efficient administration of the crop insurance program in any particular region; v) review of the crop index program; vi) development of an individual multi-peril crop insurance policy that more dependably establishes an individual's risk of loss; vii) a restructuring of TAS's insurance products so that these products more clearly define the rights and obligations of both parties to the contract; viii) reduction of the administrative burden agricultural producers face in obtaining crop insurance in a fashion that is consistent with sound underwriting practices; ix) examination of options for transferring risk (eg via options markets and reinsurance); and x) analysis of available data to refine the estimation of systemic and weather related risks.

Rob also connected TAS with the International Finance Corporation (IFC) and recommended that TAS join the IFC's working group on crop insurance in Ukraine, which he felt "will produce strategic advantages for TAS as the organization considers the future of crop insurance in Ukraine. IFC's goals, objectives and operating model will add value to TAC's [sic] future business strategy. Furthermore, the developmental environment the IFC plans to foster is likely to lead to an overall improvement in the operating climate for crop insurance companies in general," (Trip Report, Robert Cerda, 2008).

In between Rob's missions, Mick Rice worked with TAS on loss adjustment policy improvement, with an emphasis on loss adjustment strategy, required documentation and fraud identification. Mick's specific recommendations focused on i) improving TAS's ability to offer effective insurance packages for Ukraine clients, ii) improving client awareness of and understanding of loss adjustment procedures; and iii) improving TAS's loss adjustment effectiveness and efficiency, while continuing to mind the issues of program integrity and vulnerability to abuse.

Impacts: Impacts associated with volunteer assignments are taking place for TAS that should lead to greatly improving the company's ability to expand its agricultural insurance business. At the time of the meeting of the assessment team with Yuriy and

Vadim Kovalenko (vice chairman of TAS) in late July 2008, it was clear that TAS was seriously considering the issues that had been surfaced by the volunteers. Vadim noted that the structure of the agricultural sector in Ukraine is changing rapidly. There have been major advances since the disastrous situation in the 1990s with additional capital flowing in and growth of larger producers. Reasonably priced and reliable agricultural insurance can contribute to this transformation, much more than it is doing at present.¹⁴

It was too soon after the volunteer assignments to detect evidence of major changes or any impact related to any of the volunteer recommendations. Mick was just submitting his report and Rob's report was submitted at the conclusion of his second visit in August 2008, after the impact assessment. Rob did report that TAS had implemented several of his recommendations and was studying others. Rob anticipates that the measures that TAS has already decided to implement will result in:

- Reduced delivery cost for the crop insurance products.
- Reduced uncertainty in the premium rates through the adoption of a premium rating formula recognizing both the systemic and individual components of the insurance rate. Both of these will result in reduced insurance costs for farmers and is likely to increase the affordability of the insurance products and is likely to increase the demand for insurance.
- Improved relations with re-insurers as TAS implements more reliable premium formulas and, through an insurance transfer of ultimate net losses to reinsurers, an increase in TAS's capacity to accept a larger volume of the crop production risk thus increasing the supply of insurance.

The costs reductions in the products TAS offers feature basic changes in the way in which TAS writes policies and adjusts losses. Currently, TAS relies on unnecessary, burdensome paperwork, field staff, with agricultural training, to review applications, monitor field activities and adjust for losses on a farm by farm, field by field basis that is more typical of Soviet rather than capitalistic firms. Rob and Mick emphasized efficiencies in the delivery of insurance products with the goal of reducing costs for delivery and participation in the insurance program.

In addition, Rob and Mick introduced new insurance concepts for the efficient delivery of crop insurance to small and mid-sized farmers who may otherwise be excluded from the insurance due to the high costs of delivering the product to this market. For example, Rob discussed the creation of reliable production indices that are based on analysis of production history developed over a long period. For the user, this is a much less data- and staff intensive approach to offering a valid insurance product that has been shown to increase farmer wealth where the program operates. Costs and premiums are lower as a result of the decrease in information asymmetries that plague individual insurance coverage schemes and account for a large percentage of TAS costs to control. TAS and other insurers need to develop a crop insurance system that substitutes such technology

¹⁴ Rob Cerda questioned whether there is really any such thing as a "reasonably priced" insurance product in the normal sense of the word. Even with appropriate reinsurance, government subsidy is generally needed to encourage farmers to participate in crop insurance. (personal communication).

for the very costly and staff intensive model they currently use. These measures will in turn lower costs and premiums and increase the attractiveness of the policies to farmers.

The costly processes also reflect a lack of trust in farmers on the part of the insurers. Building trust takes time and there is no short cut to making this happen. As crop insurance becomes a regular feature of farming operations in Ukraine, TAS will have a growing core of regular customers that they will know and not feel compelled to monitor as intensively.

Ultimately, TAS and other agricultural insurers need to find ways to manage/share risks with external markets that serve this purpose (options, reinsurance). To do so, the insuring procedures need to be strengthened to make Ukraine more attractive to these markets and lower the costs of delivering these products to the market in the process. More than anything else, TAS and other agricultural insurers in the country need information. TAS is still feeling its way in this business and needs to have a better understanding of client conditions and requirements, something that requires more direct interaction with clients (possibly via focus groups) than TAS currently is practicing. Only after TAS gains this understanding and implements the changes now under consideration should one expect to see improvements in the quality of service and quantity of business (number of policies and extent of coverage) that will bring benefits to agricultural producers.

TAS has also shown an interest in more actively engaging in efforts to improve the legal/regulatory environment for agricultural insurance. Participation in the International Finance Corporation's working group on agricultural insurance is an important step. TAS has reservations about joining the working group and about sharing information with competitors generally, but Rob felt that it was important to participate and not be left out of developments that would benefit the agricultural insurance industry in the country. There are several government policies which need attention, including addressing the distortions caused by the current subsidies on insurance premiums.

A key question is whether companies, including TAS, can operate effectively and expand their agricultural insurance businesses prior to improvements in the facilitating environment, including policies and information database – and the roles FtF volunteers might play in this process. The IFC's position is that these improvements must take place first, but this could take years. Rob feels that the ongoing efforts of individual companies such as TAS are critical to the process, as there are important synergies between improvement efforts by these companies and activities at the IFC working group and government policy levels.

One's view on this topic affects whether or not a program like FtF is well suited to assist companies like TAS at this point in time. Addressing this question and the broader topic of the importance of reliable and reasonably priced crop insurance to agricultural transformation and economic growth in Ukraine and the region involves analysis and discussion that cannot be adequately covered in this assessment. FtF can definitely field volunteers with expertise that is very relevant to what TAS and other insurance

companies clearly need to develop this business. Volunteers have provided TAS with a much better understanding of what needs to be done. However, the nature of the challenges are such that major complimentary inputs appear essential to achieving significant impacts.

A further issue is the extent to which a focus on agricultural insurance serves the goal of the FtF program, namely to “*increase farmers’ incomes, especially small-scale and women farmers*”. The short answer is probably not very much in the near term. However, an effective systems of agricultural insurance that can efficiently reach out to small- and medium-sized farms will help agricultural growth and transformation by protecting a broader base of farms from the financial consequences of inevitable crop losses. For the benefits of crop insurance to accrue, agricultural insurers must first gain confidence in their insurance system and then convey that confidence to outside reinsurers and capital markets. There is evidence that crop insurance works to increase farmer wealth by providing basic protection against unavoidable crop losses and, thereby enabling producers at all levels to take more income-producing risks. The United States has the oldest and largest crop insurance program in the world and programs like FtF can help spread the experience to countries needing to gain an understanding of our experience.

FtF can help small scale and women farmers improve their lives and financial well being. In the absence of crop insurance, farmers tend to be risk averse and investment in agriculture is constrained by farmer aversion to the untreated risks. Crop insurance increases farmer confidence in the ultimate results of crop production. Crop insurance also increases a farmer’s ability to obtain capital from banks to expand their farm operations and adopt new production practices using the insurance as loan collateral. Thus, crop insurance will over time improve farm incomes at all levels. However, unless crop insurance programs can be streamlined to reduce delivery costs, most beneficiaries of the existing program will be large scale commercial farmers who can negotiate reductions to the inefficiencies in the existing program. Without involvement of industry experts who can educate companies like TAS on ways to reduce and constrain costs and build contemporary crop insurance systems that appeal to the reinsurance and capital markets, the current situation that favors insurance for only the largest farms is unlikely to change, (Robert Cerda personal communication).

Gromada Credit Union

Gromada Credit Union (GCU) is a medium-sized credit union with about 13 million UAH in assets (2.6 million USD), that was established in 1996. As of late 2007, membership was approximately 4700. Since its inception, GCU has developed into a leading provider of agricultural loans in Kherson oblast and provides nearly 2000 loans totaling 19 million UAH in 2007.

GCU's main customers are small-, medium- and large-sized farms and plot owners. The management of the credit union understands the necessity of educational services for their farmer members. Thus, GCU initiated the "Kherson Oblast Agricultural Extension Service", which is meant to provide educational assistance for the farmer members to be able to enhance their production efficiency, increase the profitability and thus pay back loans on time. GCU is also promoting Green Tourism, 4H clubs, and cooperative marketing.

The GCU FtF project was initiated in late 2007 following contacts between CNFA and GCU Chairperson Galina Shulakina. Over the past decade GCU had received advisory assistance from CIDA and IFC-supported Agribusiness Development Project that focused mainly on member services, such as extension and marketing. In the view of both Galina and GCU's General Manager, Larissa Polozova, the assistance they sought from CNFA should focus on the business aspects of running a credit union. Between December 2007 and September 2008, CNFA FtF has provided the services of three volunteers (6 assignments) to GCU as detailed in Table 3.

GROMADA CREDIT UNION VOLUNTEER ASSIGNMENTS 2007/08

Table 3

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
12/7-12/21/07; 5/23-6/7/08	Dean Peterson	Banker, Wachovia	NC	Internal Audit; Operations and Management
2/3-2/17/08; 4/13-4/30/08; 9/08	William Maltby	Banking Consultant, Highland Strategies, LTD	CO	Development of Rural Lending Products; Risk Management
6/9-6/25/08	Bryce Malsbary	Financial Services Professional, AIG VALIC Financial Advisors Inc	NC	Staff Incentive Plan Development

Dean Peterson's initial assignment in December 2007 focused on the development of an internal audit system, but his review of operations noted several items that deserved urgent attention. Larissa recalls that mainly Dean just listened during this assignment

(although his trip report includes a list of 38 specific recommendations that cover a broad range of operational topics).

During his first assignment in February 2008, Bill Maltby provided training to management and staff on the development of rural lending products which will allow the further growth of the credit union and make it more competitive. Bill was struck by GCU's exposure to risk; and by what in his judgement was the excessive centralization of the credit and deposit functions. He also was concerned about possible conflicts of interests faced by the village loan officers (termed "village inspectors"). Bill offered recommendations on these topics which included the development of a risk management matrix, changes in the organizational structure and the rotation of the village loan officers.¹⁵

In reflecting on these initial consultations, Larissa said that she listened, took detailed notes and asked questions, but she found it very hard to believe there were serious problems. GCU had been growing at an impressive rate and its performance had been highly rated. Village loan officers knew their clients well and she feared that knowledge would be lost or diluted if they were rotated on a regular basis.

However, at some point during or very soon after Bill's second assignment in April 2008, Galina and Larissa realized the extent of the dangers they faced and move rapidly to implement a number of major changes.¹⁶ During that assignment, Bill worked with GCU on the details of developing and implementing a risk management strategy as well as ways to decentralize the management system.

Bill's third mission in September 2008 was primarily to participate in a workshop on credit unions organized by CNFA, but he was also able to spend time in Kherson with GCU to follow up on Bryce Malbary's work on human resource management.

Dean returned in June 2008 to work on personnel, asset and liability management, physical security, branch layout design, loan portfolio risk management as well as to provide advice on another institution's request to partner with them to open up additional branch offices. Larissa particularly recalls Dean's advice on interactions with (and among) staff in order to address tensions and promote complementarities. He would visit with staff members from a department during the day and review his findings with management in the evenings, providing valuable assistance with communications in the process. Management came to realize that the source of some of recurring staff problems they were having had its roots in understaffing in some key departments. The cooperative had grown rapidly, but the staffing and structure had not evolved to accommodate this growth.

Bryce Malbary's assignment in June 2008 provided guidance in overhauling its human resource management systems. By this time Galina and Larissa had come to appreciate

¹⁵ Specifically there was the concern that the loan officers were making loans based on their informal knowledge of the client without subjecting process to a formal assessment.

¹⁶ The specific changes are itemized in the impacts section which follows.

the gravity of their situation and they had decided to address the following issues as a matter of utmost urgency:

- The risks inherent in their loan approval and monitoring procedures (possible conflicts of interest among village inspectors);
- Need for more strict adherence to reserve requirements as part of risk management strategy;
- The degree of centralization of authority which could seriously impede the continuing growth of the organization;
- The lack of capacity to perform critical functions (e.g. internal audit);
- Understaffing of some units where staff numbers had not grown to accommodate the growth in business that GCU had achieved.

Bryce Malbary's report on his assignment expresses the change very well:

Although GCU has “an incredible history of growth in loans, assets, and membership and...enjoys an exceptional reputation in the farming community.... GCU realizes...they must implement improved management practices that will positively effect the outcomes of all their services and products and at the same time enhance the working environment of all the GCU employees....[T]he management team...is determined to facilitate the necessary changes in order to maintain their current competitive position in their market. The management team realizes in order to reach the next level of excellence in service delivery all employees must participate in this process.”

(Trip Report, Bryce Malsbary, June 2008, p1)

Impacts: The provision of volunteers for GCU started in December 2007 and was incomplete at the time of the impact assessment in July 2008.¹⁷ Because CNFA's FtF program may end in Sept 2008, there will be no additional volunteers, at least under the current program.¹⁸ Nine months is a very short time for an organization like GCU to absorb, selectively accept and even begin to implement the findings and recommendations of three very experienced volunteers that addressed a broad range of issues. During half of that period, GCU leadership was not even convinced they had serious problems. GCU had grown very rapidly since its inception in 2001 and had received national recognition for its accomplishments. However, that rapid progress also carried the seeds of serious problems. Bill stressed the importance of protecting the gains that had been made and of knowing how to survive hard times. When that realization hit them, somewhere between Bill Maltby's first and second assignments in early 2008, GCU leadership moved quickly and deliberately to implement changes.

¹⁷ Bill Maltby's third assignment with GCU was taking place at the time this report was prepared in September 2008.

¹⁸ CNFA has submitted a proposal to USAID to continue the FfF program in this region, but because of funding limitation and the inclusion of several additional countries in the same region, it was necessary to make very difficult choices. Ukraine was proposed as an “associate award” in the CNFA proposal. The current CNFA-Ukraine field team is planning to operate as a separate entity and continue to field volunteers with support from other sources, most notably host organizations themselves.

Among the changes that GCU is in the process of implementing are the following:

1. GCU now has an internal audit system that is a direct outgrowth of Dean Peterson's assignments. In addition to the establishment of a structure, GCU has engaged the services of employees with the sufficient qualifications to perform audits.
2. GCU now appreciates the importance of the reserve requirements and is observing them. It is one of the few credit unions in the country that has demonstrated significant improvement in this area. The system to check on balances daily has been installed which allows management to more closely monitor key indicators.
3. As an outgrowth of a review of the performance of the village inspectors, GCU suspended new loan activity for one month to correct irregularities and address issues of possible conflicts of interest through the introduction of a rotation system for the village loan officers.
4. Authority is being decentralized to enable staff members to take more responsibility and act expeditiously.
5. Additional staff has been engaged for departments that were understaffed.
6. Systems for screening and selecting candidates for positions have been improved.
7. A system of bonuses for performance has been introduced as part of the compensation packages for staff.

In the wake of these changes, Larissa said that she had heard that at least one staff member had decided not to look for a job elsewhere.

As a direct result of these actions, GCU is much closer to achieving longer-term survival as an organization than it was less than a year ago. Major progress has been made, most notably in the realization by Larisa and Galina that they had problems that needed to be addressed urgently. This was a critical first step. Decisions have been made as a consequence and implementation of various measures is in progress. But it is still early days. GCU is not yet in a safe enough place to have a reasonable level of confidence in its future. Management is well aware of the challenges that existing competitors pose. A closer association with the European Community (or even full membership for Ukraine) will bring an additional set of challenges for GCU that it is not currently well positioned (in Larissa's view) to address successfully. FtF volunteers appropriately focused their efforts on the range of strategic, operational and management issues that required immediate attention. GCU is now thinking about what must be done to increase both its own competitiveness and that of its clients through the range of advisory services they are offering. "Merely providing finance is not going to lead to desired development or having a healthy portfolio. (GCU needs) to create the environment for finance to function well. This environment will involve things like market linkages (the Cooperative), etc," (Nitin Madhav, personal communication).

GCU is an example of an organization where progress/impact is not most effectively measured by volume of business (number of loans, value of loans, payments,

membership, deposits, etc) that was expanding at a rapid clip prior to its association with FtF. Rather the key impacts to date lie in the adjustments that GCU is making to better manage its operations. These changes should in time facilitate the healthy growth of the cooperative, but in the near term were essential to better ensure survival.

Unlike most of the hosts selected for this impact assessment, the provision of FtF volunteers to GCU is still very much in progress. GCU clearly has made exceptionally good use of volunteers (and has received exceptional volunteers). The impact assessment concurs with Bill Maltby's characterization that the volunteers fitted GCU needs "like a glove." Given this record and the challenges that GCU continues to face, it is unfortunate that the current FtF program is concluding at this time. Hopefully, some way will be found for GCU to access the advisory assistance it wants and needs, both for the implementation of the improvements in their core financial services, but also in their advisory services (e.g. extension). In this fashion, the potential impacts on increased agricultural productivity and farmer incomes from improved credit facilities can be greatly enhanced. Further, the experiences of GCU might be scaled out to other credit unions in Ukraine and elsewhere in the region.¹⁹

¹⁹ Bill Maltby returned to Ukraine in September 2008 to attend a workshop on the theme of managing credit unions for greater profitability sponsored by CNFA, which contributed to this purpose.

Yahotyn Cannery

The Host: Yahotyn Cannery is a subsidiary of the Stara Fortetsya Company (SFC), a company that was founded by its current director, Sergey Kalenichy, in 1996. Sergey is a former army officer who completed an MBA with a Canadian/Ukrainian program in 2003. Since then, the company has grown quickly and now features several different businesses, including canned food production. SFC acquired the Yahotyn cannery in 2004. The facility has five production lines and a separate storage facility that were built in the early 1990s by a local collective farm, but never used due to the poor economic conditions following the breakup of the Soviet Union.²⁰

The cannery had a very successful year in 2005 during which it was able to triple its production to over 3 million jars. The distribution of Yahotyn Cannery's products was conducted through intermediaries who concentrate mainly on distributing beverages and thus are not especially knowledgeable about marketing canned vegetables and fruits. The cannery continues to use these distributors because they are more aggressive in their marketing approach than other distributors and therefore are able to better serve the needs of a fast-growing company like SFC. Concurrently, the company started an advertising campaign to promote its own brands, which includes television commercials.

Volunteers: In 2005, Sergey approached CNFA seeking assistance in strategic planning, production management and marketing/distribution and the project formally began in October 2005. During 2006, Yahotyn received four CNFA volunteers (see Table 4).

FtF Volunteers forYahotyn Cannery

Table 4

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
3/12 – 3/30/06	Pradeep Patnaik	Food Processing Consultant	NC	Strategic Business Planning
6/4 – 7/14/06	Jeff Neville	Processor, Concord Foods.	MA	Improvement of Distribution System
7/16 – 8/3/06	Rey Elizondo	Food Processing Expert	CA	Production Management
8/20 – 9/7/06	John McClelland	Food Processing Expert	OH	Production Technology

Pradeep Patnaik helped the cannery to develop a five-year business plan and assisted Yahotyn with a loan package for expanding and upgrading the facilities. He also

²⁰ SFC got involved in the canning business somewhat by accident and Sergey had no previous experience in this subsector. However, the facility was attractively priced and there seemed to be good market prospects for the products it might produce, (P. Patnaik, personal communication).

organized the visit of Sergey and members of his management team to the Mt. Olive Pickle Company, in North Carolina, one of the largest cucumber pickling cooperative canneries in the United States. The timing of Pradeep's mission was fortuitous as it provided a framework for the volunteer missions that followed later in 2006.

Jeff Neville helped the cannery management evaluate their current distribution chain and marketing strategy. Jeff's analysis of the agreement with the Fozzi supermarket chain, their principal outlet at the time, concluded that the arrangement was not in Yahotyn's interests and recommended exploring other options.

Rey Elizondo analyzed the cannery's operations and provided detailed recommendations aimed at expanding capacity and improving efficiency. Following Rey's recommendation, Yahotyn introduced a new layout to use its space more efficiently. He also developed and initiated implementation of a Hazard Analysis and Critical Control Points (HACCP) system for the cucumber processing line. Introduction of the HACCP system is required to improve product quality and safety, which is critical to being competitive. HACCP certification is also a requirement for exporting to the EU market.

Finally, John McClelland acquainted cannery staff with advanced production technologies for expanding product lines and extending product shelf life.

In reviewing the contributions of the volunteers, Sergey, recalls the interest and enthusiasm associated with these missions during 2006. Sergey requested additional volunteers with expertise in canned food safety and cucumber pickling, but CNFA was unable to identify suitable candidates for these slots, (Project Strategy, October 2006). Sergey was disappointed that he was not able to get additional advisory assistance during 2007 and feels that he "lost a year as a result." This may be an extreme statement as Yahotyn reached 100% of its capacity in 2006 and maintained that through 2007 (3200 T of raw material/5 million jars of product). But it is a reflection of Sergey's desire to move forward briskly which the company is indeed doing in 2008. Production capacity is being further expanded and their strategy refined to become more competitive, working through other companies/outlets to promote their own label. Their goal is to become dominant in selected lines, notably a range of cucumber products, in Ukraine. They are continuing to export, particularly to France and Belarus, but 80% of their production goes to the domestic market through their own trade division.

Impacts: Volunteers have contributed to changes in Yahotyn's operations at multiple levels. As a direct result of Pradeep's mission, annual business plans are now a regular feature of Yahotyn's management system and are used to monitor progress as well as guide operations. The trip to the US that Pradeep arranged following his mission served to catalyze senior management into pursuing its plan to modernize Yahotyn's operations. Yahotyn was able to secure a loan to upgrade its facilities. Pradeep had assisted them in preparing the loan package during his mission – although this was not part of his formal SOW.

Similarly, Yahotyn has been able to translate the advice of the three other volunteers into improvements in production efficiency and marketing. Implementation of Rey's proposals for a cucumber receiving and sorting line resulted in a 15% increase in the production volume. Yahotyn obtained HACCP certification, following which they secured their first two contracts with Bonduelle, a large French company. These contracts totaled \$216,000 (UAH 1,080,000) and contributed to a significant increase in gross revenues during 2006 and 2007.

Yahotyn wishes to expand sales to EU countries, but this may be difficult to achieve until a HACCP regulatory system is established in Ukraine that has a strong reputation among EU buyers. Individual firms such as Yahotyn can obtain HACCP certification, but an effective government inspection system is required to give buyers in other countries the necessary confidence in that certification.²¹

Following Jeff's analysis and recommendations regarding Yahotyn's marketing agreement, the company switched to other chains and increased their sales three fold in the process. John McClelland provided information on advanced production technologies, including methods for extending product shelf life, which are serving to increase quality and efficiency, essential for greater competitiveness.

Virtually all the volunteer assignments focused on improving the production and marketing operations of the cannery. The progress that has been made as a result has enabled the company to grow and buy more raw products from producers. Volunteers have not worked with the producers themselves, nor has Yahotyn sought their assistance in this area, since they have experienced no problems in obtaining adequate supplies of raw product (mainly cucumbers) from the open market in recent years. Thus, the impacts on producers are indirect, in the form of improving the market for the output of vegetable producers.

The quality of company's management team is clearly the major reason why Yahotyn was able to make good use of well-qualified volunteers in support of its efforts to develop the cannery. The company's access to financial resources has been key in implementing volunteer recommendations.

The partnership with FtF has also served to move Yahotyn to another (higher) level in its ability to define its needs for advisory assistance. The character of these needs have become more refined and focused on specific skills that are not always readily accessible through a volunteer program like FtF, as illustrated by the experiences in 2007. At the same time, Sergey expressed a willingness to pay for at least part of the cost of that assistance, but needed help in locating individuals with the necessary skills.

The major contribution of volunteers may be contained in Sergey's statement that, "now we can understand where to go...we have put the missing pieces of the puzzle in place...we can see the future, what will happen....and we have the confidence to pursue these opportunities," (Personal communication, 2008). Part of this confidence comes

²¹ P. Patnaik, personal communication. This was an issue in 2006, but may have improved in the interim.

from understanding what one needs to know to achieve the company's objectives. For example, Sergey was very clear that they needed assistance in canning mushrooms and cucumbers. He also believes the company must continue to stay abreast of advances in the US and other developed countries to remain competitive. Yahotyn cannery may have had an inauspicious beginning in the early 1990s, but it is now well along the way to making up for the lost time.

MOLDOVA

Introduction: The four hosts selected for the impact in Moldova include a fruit drying company (Camedones LLC); a vegetable producers cooperative (Drochia Agroaccess); a meat packing company (Glodeni LLC); and a milk receiving cooperative (Vita-Lact).²² The hosts are very different from one another, both in the products they produce and in the manners in which they have benefited from volunteer assignments. These hosts have received a total of 20 volunteers, as summarized in Table 5.

Summary of Volunteers Assisting Selected Hosts

Table 5

Host	Products	Project Dates	# Volunteers
Camedones	Dried Fruit	2005-06	4
Drochia	Vegetables	2006	3
Glodeni	Meat	2006-07	3
Vita-Lact	Milk	2001-04	10

Camedones Fruit Dryers

The Host: Camedones LLC is a fruit drying and marketing company in Cimislia town in southwestern Moldova. The company produces dried fruits (mainly apples, but also plums and cherries). They also custom process dried vegetables, berries, and medicinal herbs. Fifty percent of Camedones' annual production is exported to Ukraine, Russia, and Poland; 35% is sold to export intermediaries; and 15% is sold domestically.

Camedones LLC was registered in 2003 and has three owners, each of whom is responsible for different areas of the company's operations. Vasile Camerzan, the General Director, oversees the production technology; Grigorii Donez is in charge of labor and production management; and Sergiu Popusoi is in charge of raw material purchasing and final product marketing.

The company buys fruit from local farms. A majority of the plums and apples are supplied under contract from 3 private farms.²³ Camedones serves as these farms' primary market for these two important crops. Other products (mainly cherries and sour cherries) are purchased from over 500 smallholders through three procurement agents.

²² It was originally planned to include an additional milk producer (Volodeni), but the meeting with the owner had to be cancelled due to a serious injury to one of the workers.

²³ The number of farmers supplying apples and plums to Camadones has declined in recent years from 10 as reported in 2006 to 3 for the 2008 season.

Initially (2005), the company's operations were limited to the harvesting season (June to November). Camedones has been expanding its facilities to include a building to be used for post-drying processing (such as additional cleaning, peeling, removing seeds/pits, and packaging) and cold storage. The cold storage should be completed in 2008 and will allow Camedones to buy and store fresh fruit so as to extend the drying operations by at least one month during the winter months and increase their production as a result.

The 2007 season was very poor due to drought. The prune and cherry crops basically failed, but there were enough apples to make up some of the difference. The current 2008 season looks much more promising based on results to date (as of late July 2008).

Camedones connected with CNFA FTF in early 2005 seeking assistance in business management and marketing. The three owners felt a lack of skills in these areas which they appreciated are essential for success in the both domestic and external markets (primarily EU countries).

Volunteers: A project strategy was developed and approved in April 2005 to supply 3 volunteers in Business Management, International Food Product Marketing, and Food Packaging/Brand Development, (Project Strategy, 2005).

CNFA provided 3 volunteers in these areas and one more in production technology. Assistance in production technology was neither envisaged in the original project strategy nor perceived as an area in which Camedones's owners felt they particularly needed assistance. However, by all accounts, that assignment had the greatest impact on the company's operations.

The list of volunteers and the focus of their assignments is summarized in Table 6.

FTF Volunteers Assisting Camedones LLC

Table 6

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
05/18 – 06/04/05	Vince Wright	Department of Revenue	AK	Business Management
08/25 – 09/12/05	Nathan Sakolsky	President of Intermark Associates LTD	AZ	International Food Product Marketing
11/07 – 11/23/05	Dana Servheen	Packaged Goods Marketing Specialist	WA	Food Packaging and Brand Development
10/2005 7-6/2006	Jim Valentine	Food Processing Engineer	CA	Fruit Drying Technology

Vince Wright conducted the first assignment on business management in May 2005. He assisted the host in setting up the company's long-term objectives and developing of an action plan for 2005, accompanied by cash flow projections. Vince also helped the

Camedones management perform gross margin calculations for each type of product sold by Camedones and determined the most profitable ones. As a result of this exercise, Camedones discovered that one of the company's main products, dried prunes with pits, was generating very low margins (4%), while the most profitable product, pitted cherries, was found to be generating a gross margin of 48%. These results confirmed Camedones' need to improve its post-drying operations.

Nathan Sakolsky trained Camedones on general marketing principles. With Nathan's help, Camedones' owners picked a brand name for the Camedones products- *Golden Fruits*. Nathan worked with Camedones management on product branding, promotion, and advertising. He introduced Camedones management to modern selling techniques such as in-store tasting, money off coupons, two for the same price deals, store advertising, etc.

The third assignment was dedicated to Food Packaging and Brand Development, conducted by volunteer Dana Servheen in November 2005. Dana trained the Camedones management in branding, packaging and labeling. She assisted the host in performing a comparative packaging cost analysis, in which she explored all possible packaging and labeling options. Moreover, Dana helped Camedones find a designer, who developed, under her guidance, several product labels and company logos.

For the final two assignments, Jim Valentine, a volunteer working with another CNFA project in northwest Moldova, offered a two-day training on fruit drying technology. As part of the training, Jim evaluated Camedones' production line and noted that there was scope for improving the efficiency of the drying operations employing readily available techniques. He offered an alternative drying tunnel design that would save approximately 30% in energy costs through conversion from indirect to direct gas heating. Camedones management thought Jim's idea was excellent, and committed to implementing his recommendations. Jim came again at the beginning of the 2006 production season to assist them in re-equipping one of their ovens.

Impacts: The most immediate and readily quantifiable impact of the FTF volunteers on Camedones was unforeseen and totally fortuitous. Jim Valentine was working as a volunteer in another part of the country and agreed to offer a short course on fruit drying technology. Camedones' owners are generally open to new ideas and are well aware that fruit drying technologies in other countries may be more advanced and they saw Jim's course as a way to gain some general exposure to various possibilities. They did not perceive that there were any shortcomings in their present drying operations which had, in fact, been designed and installed by one of the owners who had a background in fruit drying technology.

The installation of a linear flow drying tunnel has allowed Camedones to save 50% on their gas and 20% on energy costs, as well as to considerably reduce the drying period.²⁴ The new tunnel oven tested on drying apples decreases drying time for apples from 10-12

²⁴ The drying equipment was purchased with support from a grant to Camedones from CNFA's Agrobusiness Development Project.

hours to 7-8 hours. This translates into savings of more than \$30,000 per processing season (currently 4 months); that should increase by approximately 25% when the new cooling facilities become fully operational in 2009.

As a direct result of Vince Wright's mission, Camedones is preparing business plans on a regular basis and is using those plans as a basis for securing loans for expanding the facilities. They are using margin analysis calculations that Vince introduced to them to adjust their pricing and make decisions about which products to produce and how much of each during the relatively short season.

Nathan's and Dana's assignments focused on marketing, branding, labels and packaging. Sergiu said their ideas were very informative, but added that they had not made as much progress in implementing the recommendations as yet. Currently, Camedones mainly produces for, and markets to, lower grade markets, notably in the case of apples. The company has produced modest amounts of higher quality products for a retail market, and Sergiu definitely envisages expanding this activity in the future. Additional equipment will be required and will be purchased as funds permit. Nathan's and Dana's suggestions will be most useful as Camedones is able to produce for the retail market, hopefully in the next few years.

Camedones is already producing wholesale amounts for external markets and has identified a buyer in Germany ready to take higher quality dried fruits. This effort will involve working with growers to improve the quality of their fresh produce. To a major extent, such improvements will require having growers plant (or possibly graft) varieties that will meet these standards, which will take time (and quite possibly additional volunteers!).

The company has focused on contracts with a few relatively large producers whom it feels can be most reliably depended upon to deliver high quality fruit of uniform size, and Sergiu feels their supply is likely to become even more concentrated on a small number of farmers in the future. Such a development could be regarded as an indirect outcome of the contributions of the volunteers, but at most their ideas simply accelerated a process that was already in progress.

Drochia Vegetable Producers Group

The Host: The Drochia Vegetable Producers group (DVP), located in Drochia in northeastern Moldova, was started in 2003 by Maria and Tudor Darii for the purpose of promoting collaboration among vegetable producers for accessing inputs, marketing output and sharing information on improved practices.

During the Soviet era, collective farms in the Drochia region had a wide range of agricultural activities (animal production, cereal crops, row crops, and vegetables). After the collapse of the Soviet Union, the collective farms were privatized within a nationwide privatization program that resulted in the land being divided among the former collective farm workers. As a result, all villagers received shares of the various types of agricultural land. On average, every family in the Drochia region received 3.5 ha of land in 1998. As the most profitable agricultural activity proved to be vegetable growing, many villagers started planting at least part of their land with tomatoes, sweet pepper, cabbage, cucumbers, onion, potatoes, eggplant and other vegetable crops.

The Drochia vegetable growers group was formed with the support of the local extension center within its Participatory Extension Planning (PEP) program. PEP helped farmers to form groups according to their areas of interest and geographical locations and provided technical assistance in production, marketing and business management. All the Drochia group members had at least some experience with intensive vegetable production. Maria Darii is a progressive woman with hands-on farming experience who is known and well respected by all the members. She was selected by them as their group leader.

In 2003 the group had 9 members, mainly small-scale farmers. Membership has grown to 15 members over the years and the character of the group has changed in the process. The newer members tend to be larger producers and the group has become progressively oriented toward commercial vegetable production. Previously, one only had to pay the membership fee and be a vegetable producer, but now new members must commit to deliver at least L 100,000 (\$10,000) worth of product per year for sale through the group. In 2006, the group was formally registered as a cooperative.

Currently, nearly all the production for sale comes from 9 growers. Several of the original group - most notably the smaller producers - are no longer particularly active and do not sell very much through the group.

In 2005, two years after the group had been formed, there was a growing appreciation of the major scope for improvement in many of the group's practices and activities. Further, additional knowledge was an essential part of such progress. Group members were using the services of the regional extension services at the time and it was, in fact, the extension service that suggested approaching CNFA as a means of obtaining the next level of advisory assistance. With a firm intention to improve current practices and become more profitable, the Drochia group formally requested CNFA volunteer assistance in vegetable production, management, and marketing.

Volunteers: A Project Strategy to provide assistance to the Drochia Group was developed and approved in September 2005 and involved the provision of three volunteers during 2006 as detailed in Table 7.

FTF Volunteers Assisting the Drochia Vegetable Growers

Table 7

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
02/22/06- 03/08/06	Jerry LeClair	Former Farm Management Specialist at Cornell Cooperative Extension	NY	Business Management
05/07- 05/22/2006	Bruce Williams	Independent businessman, former Extension Specialist and Professor	NC	Vegetable Production
09/04- 09/21/2006	Kathryn Pereira	Agricultural economics researcher, and former organic farmer	WI	Vegetable Marketing

The Farm Business Management Assignment, offered by Jerry LeClair laid the foundation of sound business management practices that are indispensable to produce high value agricultural products that can be marketed at reasonable prices. He trained the group members in record keeping, budgeting, balance sheet and cash flows drafting.

The Vegetable Production Assignment provided by Bruce Williams was scheduled just before the beginning of the vegetable production season, thus maximizing its effectiveness. Bruce's first and strongest recommendation provided to growers was to use crop rotation as the primary means to control diseases and pests in the greenhouses. Secondly, the growers were strongly advised by Bruce to improve both sanitation and ventilation in the nurseries. Finally, Bruce was one of the pioneers to promote the cultivation of seedless watermelon in Moldova as an alternative crop for growers and a source of additional profits.

The Vegetable Marketing assignment carried out by Kathryn Pereira was meant as a logical step after the previous assignment. However, Kathryn assessed the two objectives of her assignment as being too ambitious for the group, which was not yet ready to develop a marketing plan. As a former farmer herself, Kathryn spent a significant part of her assignment discussing production issues with the growers and trained them in direct marketing skills. As a way to improve the group's marketing activity and avoid the unfair competition and low prices practiced by wholesalers, Kathryn recommended that the growers start their own open air marketplace in Drochia town first, and start to export only after their local market was established. Given her farming background, Kathryn could easily depict the bottlenecks in vegetable production faced by the growers and thus she strongly recommended mulching the fields, as well as emphasizing that producers

should come back to the recommendations offered by the previous volunteer, Bruce Williams.

Impacts: In the two years since Jerry, Bruce and Kathryn assisted the Drochia group, there have been several developments of note. Tudor indicated that all group members are keeping records along the lines that Jerry recommended. In fact, the larger and more active group members are using even more sophisticated systems.

Several of the group members adopted Bruce's recommendations on production practices, including a wiser crop rotation, improved sanitation practices, better practices to fight crop diseases and implementing modern production technologies. All the above together boosted the yields of potatoes, tomatoes and cabbage by an average of 48% in 2006. The productivity boost coupled with better and uniform quality and, consequently, higher prices and increased bargaining power, resulted in a significant increase in the group's sales and net income.

As part of his assignment, Bruce introduced a variety of seedless watermelon that involved considerable effort on his part in connecting with various seed suppliers in the US and getting the seeds to Drochia.²⁵ The variety has been well received by the market and consumers appear ready to pay a premium for it. Successful production requires patience and skills that most farmers seem reluctant to take the time to acquire. However, Maria produced seedlings in 2008 that did well and have been planted out, but as of the time of this assessment, the Dariis are the only ones producing the seedless variety in the area.

Growing conditions were harsh in 2007 as a result of a severe drought, and performance of several of the crops was not good. Sales were generally down and the group's initial effort to sell onions to Romania was a disaster. They had a contract with a buyer there, but when he received the onions, he lowered the price because of the quality. The group would have been better off just selling on the local market.

Kathryn had, in fact, encouraged Drochia to focus on domestic markets first. The cooperative has since managed to enter wholesale markets in Balti and Chisinau, the country's largest urban centers. Selling in these markets has enabled members to sell more produce at a faster rate, decrease storage costs, and establish new business links.

²⁵ In 2007, Maria and Tudor evaluated four cultivars of seedless watermelon. Approximately \$2,000 in seed (in kind) were donated by the Wilmington Cape Fear Rotary Club, Seminis Seed, or Pender Pines Nursery (other vegetable seed). Seedless watermelon cultivars tested in 2007 included Fenway, Vagabond, Millenium, and Gypsy. Of these cultivars, Tudor selected Millenium as one that produce fruit and vine characteristics best suited for the environment around Drochia. The Dariis paid almost \$2,000 of their own money for approximately 12,000 hybrid seedless watermelon seed of the variety "Millenium". In addition, Seminis seed (Raleigh, NC) donated approximately 1,000 seed of "Majestic" Seedless watermelon for evaluation. Normal watermelon cultivars are required as pollinators of seedless types, seed of these cultivars was donated by Pender Pines Nursery (Hampstead, NC) and Wilmington Cape Fear Rotary (Wilmington, NC). Since seeds were nearly impossible to obtain through normal commercial channels, volunteers transported them into the country. (Bruce William, Personal communication).

The cooperative most probably would have entered these markets, but Kathryn's suggestion accelerated this process.

The Romanian onion experience, together with several admonitions from Bruce and Kathryn (e.g. "produce something that no one else is producing or at least at a time when no one else is producing it), have greatly increased the group's knowledge and understanding of what is required to produce quality produce and effectively market it.²⁶ In Tudor's words, "Kathryn taught us lots of good tricks."

As of the time of this assessment, the 2008 season appeared much more promising than 2007 for the Drochia group. Total area under vegetable production by group members increased substantially from 43 H in 2006 to 167 H in 2008, mainly expanding the area under onions and potatoes (see Table 8). A portion of this increase is related to the addition of a few new group members who were already large producers. In any event, this expansion is a reflection of confidence in the group as a source of key services, notably input supply, marketing and extension advice. As production and sales were still very much in progress at the time of the assessment, information on sales and profits for 2008 was incomplete, but the early indications are that this season will be much better than 2007.

Drochia Vegetable Producers Group: Indicators 2005-2008

Table 8

Indicator	2005	2007*	½ of 2008
1. Area cultivated under vegetables (ha)	43ha	98.7 ha	164.5 ha
2. Area cultivated, by crop		Tomatoes- 5.2 ha Cabbage- 13 ha Cucumbers – 4ha Sweet pepper – 14.3 ha Eggplant – 6.2ha Carrot –2 ha Watermelon - 7 ha Onions - 36 ha Potatoes - 11 ha	Tomatoes - 7 ha Cabbage –16.5 ha Cucumbers – 4.2ha Sweet pepper – 16.7 Eggplant – 7ha Carrot – 2ha Watermelon - 7.5 ha Onions - 83.1ha Potatoes - 20.5 ha

²⁶ "In my opinion, much of the commercial production will continue to be stymied, due to...the huge number of small farmers selling excess home production (during the main season). Most commercial farmers would be better off focusing on off-season production or specialty crops until the economy settles out. Producers need to focus on quality and profitability. Producers would be better off raising one profitable crop a year (than achieving) record yields of a vegetable just (to) break even. Increased production efficiency by commercial growers is the only long term solution to the large number of issues facing the agricultural economy in Moldova," (Bruce Williams, Personal Communication).

3. Yield per hectare (tones/ha)	Tomatoes – 17 t/ha Cabbage – 33 t/ha Sweet pepper – 25 t/ha Egg Plant – 16 t/ha Bell Pepper - 9 t/ha	Tomatoes– 15 t/ ha Cabbage –34 t/ha Cucumbers– 6 t/ha Sweet pepper –21 t/ha Eggplant –28 t/ha Carrot – 18 t/ha Watermelon– 45 t/ha Onions- 15 t/ha Potatoes– 28 t/ha	Tomatoes – 30 t/ ha (est) Early Cabbage – 25 t/ha Cucumbers – 15 t/ha Sweet pepper – 25 t/ha Eggplant – 34 t/ha Carrot – 30 t/ha Watermelon– 65 t/ha Onions - 22 t/ha Potatoes - 32 t/ha
4. Value of inputs	18,695 MDL	84,000 MDL	135, 000 MDL
6. Coop Sales		134, 000 MDL	0
7. Sales of members, excluding coop sales		26,000,000 MDL	4,500,000 MDL (in progress)
8. Production costs	480,567 MDL	21,400,000 MDL	31,800,000 MDL (in progress)
9 Net profit/loss (7-8)	335,378 MDL	4,600,000 MDL	(incomplete)

* There was a serious drought in the region in 2007 that reduced yields and production.

As the Drochia group continues to move toward a more commercial orientation under the leadership of Tudor and Maria, one consequence may be a further focus on larger, more commercially-oriented producers. To a fair extent this has already happened. According to Tudor, PEP’s original premise in forming groups was that small growers needed services to successfully participate in production for market. The original group was dominated by small scale producers and a central rationale for forming the cooperative was to enable members to benefit from some of the economies of scale associated with accessing inputs and marketing output. Larger growers could take care of themselves.

In retrospect, Tudor feels that it was a mistake to focus on small growers as it has proven very difficult to get them to produce in sufficient quantity and quality in a timely fashion to successfully engage in the market. He believes that larger, more commercially-oriented growers represent the future of vegetable production in the Drochia region.²⁷

Over time, most of the smaller producers have become inactive and new members have been larger scale producers. The requirements for membership (commitment to sell a minimum amount of products through the cooperative) tend to further discourage small

²⁷ Former volunteer Bruce Williams comments, “I think Tudor is on the right track with targeting larger farmers. Small farms make great politics and rhetoric for politicians but in my experience, it is the larger farms and commercial style farm operations that really lead regions/counties/countries into agricultural success. The economies of scale are essential for a safe, cost effective, and abundant food supply with the smaller farmers forming the economic safety net and queue for future growth operations,” (Personal communication, 2008).

farmer participation. Further, those services could only be effectively delivered/obtained by forming groups. Currently, a core of 9 larger members are responsible for nearly all of the production and sales. These members are also the ones that have tried and selectively adopted the recommendations of the three FtF volunteers.

The overall impacts of the advice of FtF volunteers is most probably reinforcing this trend. The requirements for successful participation in urban markets both in Moldova and especially in places like the Drochia hopes to market its products in the future are very demanding. Volumes have to be sufficient; quality must be good and uniform; and products must ideally avoid the summer glut of production when large numbers of small producers harvest their crops. Volunteers have providing suggestions on how the Drochia group members might address these issues and by and large it is the core of 9 larger members that are responding.

At the same time, the Drochia group might share its knowledge with additional commercially-oriented farmers in the area. Perhaps the government or a donor project might be willing to underwrite a portion of the costs of the extension services,²⁸ as was already being done to some extent via Tudor's association with a federation of INGOs. The main idea is to reach larger numbers - including smaller farmers who are serious about becoming more commercially-oriented - than is possible by just focusing on a single cooperative or even individual farms.

²⁸ This is already happening to a certain extent via Tudor's association with Agroinform (<http://www.agroinform.md/en.html>), a federation of non-governmental organizations providing extension services to farmers with support from a Dutch organization. Agroinform assists small farmers (up to 5 H) with advice on production, marketing, credit and cooperative formation. Grants of Euro 15,000 are available to assist groups to get started.

Glodeni Meat Plant

Background: The Glodeni Meat Plant (GMP) is a limited liability company that processes beef, pork and veal in Glodeni town in northern Moldova. The company was founded in 2000 by the Negritu family, including Valeriu (husband), Lilia (wife) and Gheorghe (son). Their daughter, Valeria, recently completed schooling and is now working with the family business as well. The company sells fresh and processed meat products, including fresh meat cuts, minced meat, sausages, salami, and smoked meat.

The plant has a total of 4,300 square meters, and includes a slaughterhouse, two refrigerators, meat processing facility, and an office. The plant was built in mid-1970, but after the collapse of the Soviet Union, it went bankrupt. In 2000, the Negritu family purchased the plant from a bank and re-equipped the facility according to modern requirements. The slaughterhouse has automated transporting lines for the carcasses, recently renovated refrigeration units, showers for employees, a laboratory for meat testing, and access to natural gas, cold and hot water supplies.

GMP purchases its raw material mainly from private farmers in the area. All live animals are acquired from over 1,000 smallholder farmers in 19 villages around Glodeni town. They do not have problems getting all the animals they can handle and, in fact, have to turn some sellers away.²⁹

GMP has expanded dramatically since its inception. In 2000, the company had nine employees and that number has grown to 31 in 2008. The volume of meat and the revenue from sales has also grown significantly (see table 10). The range of products has increased and with it the amount of value added from processing. The company offers more than 15 types of meat products. Volume increased dramatically in 2007. As a result of the drought conditions that prevailed that year and consequent reduction of fodder, producers were forced to sell off large numbers of animals.

GMP operated at full capacity in 2007 and has been at least close to that ever since. The Negritus decided to expand and commissioned the design of a facility which required more space than could be accommodated on the land where the existing facility is located. Unfortunately, the owners of the adjoining land are unwilling to sell, so they have been forced to redesign the improvements and lost valuable time (and money) in the process. However, they are moving ahead with the revised plans with the hope of bringing the new facility on line in 2009. They had hoped to be able to continue full production in the existing facility during the expansion, but this will not be possible. In addition to expanding the facility, the Negritus have decided to modernize their production line, including the purchase of new equipment from Germany, which they regard as a requirement for the company to compete in the EU market.

²⁹ With the breakup of the Soviet Union, most livestock production was restructured from the collectives to smallholder family units as animals were also distributed to the labor force. About 90% of live animals acquired for slaughtering in Moldova are purchased from smallholders.

Markets in northern Moldova consume most of GMP's production, but currently (mid-2008) 20% is sold through a dealer in Chisinau. Most of the company's customers are large enterprises, schools, kindergartens and state institutions from the Glodeni area that buy meat and processed products for their cafeterias. In addition, the company markets its products directly to the final consumer through its own small store in Glodeni town. The Negritus are continuing to geographically diversify their markets and started supplying to 25 new sales points during the first half of 2008.

Volunteers: GMP contacted the CNFA FtF program in mid-2006, seeking assistance in production and marketing. The project was launched in October 2006. Three FtF volunteers provided advisory assistance to GMP beginning in late 2006, in the fields of marketing, business planning/plant operations and brand development/labeling (see Table 9).

FTF Volunteers Assisting the Glodeni Meat Plant

Table 9

Dates	Volunteer	Affiliation	Home State	Focus of Assignment
12/04/06- 12/22/06	Bob Bond	Consultant, Business Instructor, (W. Carolina)	NC	Marketing
02/05/07- 02/23/07	Dwain Pilkington	Independent consultant with US meat processors	NC	Business planning, plant operations
04/23/07- 05/10/07	Lorraine Hartman	Catalyst Group	CA	Brand identity, promotional strategy

Bob Bond assisted with the development of a marketing plan for GMP and reviewed its production capacities in process. He carried out a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis that captures the state of the company at that time (late 2006) (see box).

**GLODENI MEAT PLANT
SWOT ANALYSIS**

The company's main strength is its locally well-known and respected quality processed meat products, and its hard-working family (who are) open to new ideas.

The main weaknesses include lack of good business systems and procedures, and the lack of (sales and delivery) people to expand the business beyond the Glodeni town area.

They have the opportunity to double or even triple their business in northern Moldova and beyond, implementing direct sales and delivery, a competitive advantage at present.

Their threats are that their company and products are relatively unknown outside their current trading area, and their competitors are much larger businesses.

(Trip Report, Bob Bond, 2006)

Attention was also given to what is required to market an all-natural set of products.

Dwain Pilkington reviewed the plant operations and developed a list of necessary equipment that was needed to improve quality, efficiency and overall performance; and developed a time line for the purchase and installation of the equipment. He also offered advice on new products and marketing approaches, thinking particularly of what is required to market successfully in EU countries.

Lorraine Hartman's assignment focused on brand identity as part of a promotional strategy to expand the market of GMP products. The Negritus firmly resisted suggestions to change the brand name from NEGMATCOM³⁰ to something that was possibly easier for customers to respond positively to. They felt that they had been able to successfully build a customer base, mainly in Northern Moldova, that recognized and respected that brand name. Lorraine also offered several other specific suggestions relating to marketing.

Impacts: GMP has experienced significant growth since it was established in 2000. The growth in volume of production and sales in recent years is very impressive, as detailed in Table 10. The volume of sales has more than doubled since 2005 and revenues increased much more than that as a result of value addition.

³⁰ NegMatCom is a contraction of the names of the owners.

Glodeni Meat Plant, 2005-2008**Table 10**

Indicator	2005	2006	2007	½ 2008
Number of permanent employees	13	15	18	33
Average permanent employee monthly salary, MDL	700	2,560	3,402	3,500
Total payroll for permanent employees, 1000 MDL	110	460.8	734.8	693
Total quantity of meat sold by farmers to the processor, tons (line 55 in HP)	350	275	1043	594
Enterprise purchase price for meat from farmers, MDL/ton	Pork: 12,000 Veal: 11,000	Pork: 14,000 Veal: 13,000	Pork: 22,000 Veal: 14,000	Pork: 35,000 Veal: 22,000
Total value of produce sold by farmers, 1000 MDL	712.4	3,495	17,586	17,701
Enterprise total sales of fresh and processed meat, 1000 MDL	1,114	5,300	21,509	20,533
Cost of Goods Sold, 1000 MDL	842.4	4,009.2	16,270.8	16,016
Net income (loss), 1000 MDL	271.2	1,290.7	5,238.2	4,517
Annual Revenue per worker 1000 MDL	85	353	1,194	1,242*
Wages/Costs (%)	13	11.5	4.5	4.3

On the basis of performance to date, GMP definitely qualifies as a success story. The Negritu family is clearly the driving force behind the advances that have been made. GMP probably would have expanded without FtF volunteers, but the Negritus feel they received good advice and lots of encouragement from Bob, Dwain and Lorraine.

The purchase and installation of the equipment, much of which was proposed by Dwain, has facilitated gains in production efficiency.³¹ Notable among the new equipment purchases are an automated meat stuffer and a packaging machine, both of which save on labor costs. Labor costs as a percentage of total costs declined from 13% in 2005 to 4.3% during the first half of 2008, while annual revenue per worker increased from 85,000 MDL to 1,242,000 MDL during the same period. Concurrently, there has been a significant increase in staff numbers and average wages that is partially associated with

³¹ Efficiency can be measured in several additional ways, but the most common is changes in the unit costs of production (costs per ton of product). A reduction in unit costs of production would be a strong indicator of improvements in efficiency [adjusting for any changes in the costs/quality of raw materials/inputs and changes in quality of output (packaging etc)]. GMP was adding value via packaging etc, so costs per ton of product sold over time would have to take this into account. Unfortunately, there was insufficient time to quantify the efficiency gains measured in this fashion, but the Negritus are convinced that is what happened.

new equipment which allows the company to add value. Further, capacity utilization increased from a low level in 2005 to close to 100% at present, which serves to reduce fixed costs per unit of output.

Adoption of a number of Bob's suggestions on marketing helped increase the visibility of GMP products in the region. GMP's dedication to offer its customers all-natural products, and an introduction of an "All-Natural" label, has boosted the demand for its products.³² As a result, GMP was able to find a new distributor for its meats: Pegas Meat Packing Plant in Chisinau, one of the most reputable distributors in Chisinau that is recognized for its high quality products. Given Pegas' reputation and its selection of only the best of fresh meat suppliers, this new partnership is a very positive stamp of approval for Glodeni, one that should increase GMP's presence in the domestic market.

Not all the volunteers' suggestions were appropriate for GMP's circumstances. Others will be increasingly appropriate (or even essential) as GMP is able to move beyond its current set of customers within Moldova and market in the EU, as they hope to be able to do in the future. Currently, the domestic market absorbs everything they are able to produce. But as their additional capacity comes on line, they will need to explore additional markets and increase operating efficiency. Interacting with the volunteers has helped them in the way they think about the decisions they are making regarding capacity, value addition and marketing.

³² All natural and organic products are still rare, but demand is surging, particularly among urban and higher income consumers.

Vita-Lact Milk Receiving Cooperative

The Host: Vita-Lact is headquartered in Ignatei, a small village in Northeastern Moldova. The cooperative was formally registered in 2001 and provides a range of services including milk collection, cooling and marketing; AI and veterinary services; feed supplements and pasture rejuvenation. At its inception, Vita-Lact had 12 members, all from Ignatei.

CNFA selected dairy as a focus area for its FTF program in Moldova and developed a strategy in 2001 that envisaged the provision of volunteers to 6 cooperatives in the areas of “organizational, production, marketing and veterinary service development,” (“Dairy Cooperative Development AVP Moldova: Project Strategy” Oct. 18, 2001, p 10). This effort drew extensively upon the experiences of CNFA Moldova and individual volunteers with the Agribusiness/Fivils project that had assisted with the development of 8 cooperatives in the Floresti region beginning in 1999.³³ Six of the original 8, including Vita-Lact, requested further advisory assistance as a means “to better understand their markets and the business side of farming and managing cooperatives,” (op cit p 11).

The Volunteers: CNFA supplied a total of 10 volunteers (11 assignments) between mid-2001 and the end of 2004, as summarized in Table 11.

FtF Volunteers Assisting Vita-Lact

Table 11

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
05/13– 05/31/01	Merle Anderson	Co-op Manager	IA	Development of Co-operative Understanding III
06/05– 06/22/01	Boyd Wolff	Secretary of Agriculture	PA	Co-operative Development IV
07/24– 08/17/01	Richard Lettner	Dairy farmer	WI	Milk Production III
08/27– 09/17/01	Thomas Kriegl	Dairy Farm Management Specialist	WI	Dairy Farm Financial Management II
02/03- 02/23/02	Joseph Butterweck	DVM	CA	Veterinary Services Development
05/06- 05/23/02	Jim Nelson	Coop Manager	IA	Cooperative Development
12/08- 12/24/02	Ken Bailey	Associate Professor	PA	Business Management
06/02-	Kris Ann Fazio	DVM	TN	Veterinary Service

³³ The activities and accomplishments of the CNFA Agribusiness Partnership/Fivils projects are summarized the Project Strategy (Oct. 18, 2001). Some of the volunteers who assisted this program returned as FTF volunteers to work with Vita Lact and other cooperatives from 2001 onwards.

06/15/03				Development
06/02-06/15/03	Robin Fazio	Ag. Consultant	TN	Artificial Insemination Development
09/12-10/01/04	Lester Vough	Forage Systems Management Specialist	MD	Milk Production (Nutrition development)

The initial volunteer under the current FtF program was Merle Anderson who actually assisted several of the same cooperatives through the earlier project. Merle's first FtF assignment focused on several dimensions of cooperative development, including cooperative principles and how a cooperative is formed, financed, operated and controlled. This visit was catalytic in bringing about a change in relations with Ignatei's mayor at the time and resulted in the formation and chartering of the cooperative in 2001.³⁴ Merle returned later in 2001 for a follow-up assignment on Strategic Business Planning that addressed financial reporting, budgeting, long-range direction, annual goals, director and manager duties & responsibilities, job descriptions, performance evaluations and how to conduct effective meetings. As an experienced Cooperative Manager from Iowa himself, Merle was able to connect with Vasile Georghita, Vita-Lact's Manager, and developed a relationship that continues up to the present.

The nine other volunteers following provided advice on milk production, veterinary services, AI, animal nutrition and business management. Volunteers worked with management and provided training in their respective fields to members, as detailed in their individual trip reports.

In 2002, Vita-Lact entered into an agreement with a large dairy to buy all its milk, a relationship that continued up through mid-2008. The dairy fell seriously behind in payments in mid-2008, which caused serious problems for Vita-Lact's members. Vasile brought pressure on the dairy from several directions (letters to senior government officials, possible legal action, etc) and consulted with Merle Anderson on this process. Concurrently, Vasile sought to locate another buyer. The dairy has resumed payments and Vasile is in the process of finalizing an agreement with another buyer.

Vita-Lact had its first General Assembly in 2002 that coincided with the expansion into 2 additional villages and an increase in membership to 80. In 2004 the cooperative included three additional villages and was able to purchase equipment to provide mechanized services to members. As of mid-2008, membership had grown to approximately 400 members in 9 villages

³⁴ "The mayor of the village was very leery of Cooperatives. I asked for ten minutes of the mayor's time and got three hours. The mayor invited us to use his office to hold all of our Cooperative training sessions. He sat in on most of them. He voted with the other villagers to form the Cooperative. Vasile was selected to be the first Board Chair. He and others met with me a few days later, when I was working in Raspopeni village and we drew up a Manager Job Description, salary schedule, etc. The manager they hired resigned. There was too much for him to handle. The rest of the Board asked Vasile to become the manager. The rest is history," (Merle Anderson, personal communication).

Impacts: Vita-Lact is an example of a host where the qualitative impacts directly associated with volunteer recommendations have been critical to the survival of the cooperative. A significant portion of the volunteer assignments focused on business management, marketing and cooperative development and it is in this general area that the most significant impacts have taken place. Vita-Lact has a business plan that it updates annually and uses to guide the operations of the cooperative. Vasile manages the cooperative, guided by the principles of democracy, trust and transparency (although he also noted that total transparency can place one at a disadvantage and get one into trouble vis á vis competitors!). Although there are serious challenges, currently in the form of an urgent need to change outlets/buyers, management has demonstrated considerable skill in managing these situations as they arise and learning the importance of pre-emptive planning/action in the process.³⁵

From all accounts, it is the strength of character, persistence and wisdom of Vasile that explains the progress that Vita-Lact has achieved. Indeed, without him, Vita-Lact probably would have failed years ago. Vasile credits the FtF volunteers with providing him and his colleagues with the necessary organizational, managerial, business and technical knowledge that were required to get this far. Further, Vasile was able to visit the US as part of a tour organized through the earlier Agribusiness/Fivils project which dramatically illustrated the differences in the dairy industry between Moldova and developed countries such as the US.

Table 12 summarizes changes in key indicators since 2002.³⁶ Volume of milk and gross revenues have definitely increased in large part due to an expansion in membership (and number of cows). Vasile also felt that productivity had increased by approximately 50%. Improvements in productivity associated with better practices for animal health and nutrition are more difficult to document in the case of Vita-Lact for several reasons. Expansion of membership, particularly in recent years, brought in significant numbers of producers that had not been exposed to the training provided by volunteers earlier and tended not to be using improved practices. Average productivity data for all member cows can thus obscure the progress that in the view of Vita-Lact leadership and volunteers alike has been made by many producers who are using the improved practices. Ideally, there would have been time to isolate and compare the performances of the older and newer members to more formally examine and better understand any differences, but that was not possible.

³⁵ In mid 2008, Vita-Lact was facing a crisis caused by the failure of the major buyer to pay for deliveries in a timely fashion. Management had applied pressures in various directions and that was beginning to produce results (a partial payment arrived shortly thereafter). Further, management was moving forward with an agreement with another buyer. They are determined to reduce their dependence on a single buyer in any event.

³⁶ 2002 was chosen as the base year, even though the coop started in 2001, because the data for 2001 was incomplete. Suffice it to say that the coop's performance in 2001 was significantly lower than 2002 with only 12 members.

**Vita-Lact Milk Receiving Cooperative
Impact Indicator Table – 2002 through mid 2008**

Table 12

Indicator	2002	2006	2007	½ of 2008
Number of members	25	200	250	400
Number of cows	40	420	493	564
Average productivity per cow (liters/year)	2800	4000	3500	2600
Total sales revenue, MDL *	243,461	1,869,132	2,191,331	2,051,044
Total costs, MDL	239,363	1,858,279	2,171,309	2,022,586
Net income (loss), MDL	4,098	10,853	20,022	28,458

* Includes revenue from sales of milk supplied by non members which were significant in the early years.

The fact that productivity did increase between 2002 and 2006 from 2800L to 4000L per cow concurrently with a nearly 10-fold increase in membership during the same period is nonetheless significant and strongly suggestive of serious progress in the adoption of improved practices. Price differentials reflecting butterfat content have been introduced which is a direct incentive for adoption of better feeding practices. The decline in performance in 2007 is directly related to an extreme drought and the consequent shortages of fodder.³⁷ Further, the first half of 2008 does not include the summer months that are the most productive in terms of milk yields. The fact that Vita-Lact survived this period and was able build its membership in the process reflects the strength of the cooperative's reputation in the region.

Many of these practices were introduced via the volunteer assignments during 2001-2004 and have since been disseminated both formally via the cooperative and informally via interactions with fellow villagers/cooperative members. That is not to say that all the advice was on target. The presentations of a few volunteers were, in Vasile's view, more theoretical than practical, given the current stage of dairy development in the region. Efforts to improve AI were possibly premature in the face of the restrictions on use of semen from external sources prevailing at that time.

It is the change in mindsets associated with the ways in which many of the volunteers approached problems that are producing the most significant and lasting impacts.

³⁷ John Kappleman, an active participant/observer of Moldovan dairy developments and frequent CNFA volunteer observed that, "In the spring and summer of 2007, Moldova experienced what was very likely their worst drought in the past 100 years.... By early fall of 2007 the forage situation in Moldova was desperate. Cows in the villages flooded the slaughter markets because there was no forage to winter the cows. This situation accelerated the shocking decline we are now seeing in many Moldovan villages throughout the country. I compare what I see now in rural Moldova in many ways to what I saw in the 1980's Farm Crisis in the United States; the rural communities are failing, and depopulating. By early 2008, the Moldovan Agricultural Ministry was privately estimating that the national dairy herd had dropped to less than 45,000 cows. I was back in many of the villages early this year, and I believe the decline in cow numbers may be even more severe than the ministry was even estimating. This means the Moldovan national dairy herd declined by over 75%!" (Personal communication, 2008).

Improving productivity through the adoption of improved practices for animal health and nutrition is arguably the easy part. Developing and sustaining a dairy cooperative in a very challenging environment requires creativity and imagination. This is new territory compared to the mentality that prevailed during the Soviet era of collective farms.

For the future, Vasile sees major changes for Vita-Lact and the dairy industry in general. The system is currently “in state of chaos” brought on initially by the collapse of the old Soviet system and then perpetuated by the failure of the government to establish a policy framework within which a replacement system might flourish. Large collective farms were broken apart, leaving large numbers of small scale producers that by and large lack the knowledge and capital to modernize their operations.

Vasile envisions an industry in which there are fewer producers with more cows. The cooperative membership might be no more than 150 producers whose primary focus would be milk production. Producers would understand and have the resources to use improved methods that would enhance productivity and maintain a high quality of product. The widespread adoption of many of the productivity-increasing measures recommended by volunteers may be constrained by the current preponderance of small-scale operators.

He would like government to establish standards and give recognition to those producers that meet those standards. The standards should include ownership of a certain minimum number of cows to be able to sell milk to dairies. In 2004, the government launched a national strategy for reviving the dairy sector and selected Vita-Lact as an example of what they wanted other dairy producers to emulate, but the effort never got off the ground. However, the reduction of the national herd in the wake of the 2007 drought is serving to accelerate the restructuring process.

Vasile’s view of the future structure of the dairy industry is one of a range of opinions on the topic. Other observers see a gradual transition to larger units. At least for the medium term, cooperatives such as Vita-Lact can provide small producers with some of the benefits of scale as well as assisting them to increase productivity through the adoption of improved practices.

BELARUS

Introduction: Belarus is the smallest of the three West NIS FtF programs, but possesses several distinctive features that give it an importance beyond its size. The FtF program is the only international USAID contractor currently operating in the country. Belarus retains a centrally planned economic structure, and a significant number of state-controlled collective farms remain to be restructured. This is in sharp contrast to the situations in both Ukraine and Moldova.

The following sections summarize the impacts for three of the privatized collective farms to which CNFA has provided volunteers since the inception of the current FtF program in Belarus in 2003. These hosts include a vermiculture operation (Cherven Farm) and two large, privatized collective farms with both livestock and crops (Kholodon-Agro Farm and Valbik Agribusiness). CNFA has fielded a total of 10 volunteers for these three hosts, as detailed in Table 13.

Summary of Volunteers Assisting Selected Hosts

Table 13

Host	Products	Project Dates	# Volunteers
Cherven Farm	Vermiculture	2006	2
Kholodon-Agro Farm	Dairy, Meat, Crops	2006-08	5
Valbik Agribusiness	Dairy, Meat, Crops	2003	3

Cherven Farm

Background: In the early 1990s there were reportedly about 100 small-scale vermiculture (worm composting) operations in Belarus. Nearly all of these failed, as the owners thought that vermiculture was a get-rich-quick opportunity that required minimal knowledge, resources and effort. That experience notwithstanding, there is probably more interest and activity in vermicomposting in the country today (2008) than ten years ago.³⁸

There are approximately five commercial vermicompost producers in Belarus, including BelRosBioTekh, PromKhimElektro, TerraVita, Ocean Gal, and Kario. Collectively, these firms produce more than 3,000 tons of bio-humus each year. While some bio-humus is exported, the majority is used for domestic consumption. The industry is in its infancy,

³⁸ Information supplied by Svetlana Maximiova, a scientist at the Belarusian Institute of Zoology and an expert on vermiculture.

but gaining popularity and offering good income potential to entrepreneurially-minded people.

The Host: In 2005 Vladimir Kulik, the owner of PhomKhimElektro Agribusiness, was searching for new opportunities to diversify his whisk production business. He entered into partnership with Anatoliy Tubolets, the pioneer of vermiculture technology in Belarus. Anatoliy contributed 1,000 tons of worms and some basic knowledge on how to start and run a vermiculture operation. Vladimir invested his personal savings into purchasing the barn and the immediate surrounding area on a former collective farm (Cherven). Both of them found individuals willing to invest a total of \$250,000 in their business.

Cherven farm has 3,500 square meters of enclosed, warehouse-type space with concrete floors located throughout their 6 hectares. Additional facilities and land are available for expansion.

Although Anatoliy had more than a decade of experience with vermiculture, it was basically on a small scale. He and Vladimir sought to acquire knowledge about vermiculture as practiced on a commercial scale in more developed countries. Accordingly, they connected with CNFA in 2005, and a project strategy was developed and approved in December of that year.

The Volunteers: The project strategy envisaged the provision of two volunteers with expertise in vermicompost production and marketing, respectively. CNFA was able to recruit a couple, Peter and Layne Bogdanov, with the requisite expertise. They came for concurrent 18-day assignments in mid-2006.

Peter is the author of the 420-page Best Management Practices in Vermi-composting manual and with his wife, Layne, owns and operates a vermiculture company (VermiCo) in Merlin, Oregon.

FTF Volunteers Assisting Cherven Farm

Table 14

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
06/19-07/06/2006	Peter Bogdanov	Executive Director, VermiCo	OR	Vermiculture Production Management
06/19-07/06/2006	Layne Bogdanov	Marketing Specialist, VermiCo	OR	Vermicompost Marketing

Peter's recommendations related to improvements in feedstock preparation and its application practices, including the reduction of the feedstock age from one year to three months and more regular application of feedstock. Peter advised that it would be better to obtain fresh manure for feedstock directly from a neighboring farm. He also suggested

changes in row construction that would allow tractors with buckets to bring in fresh materials, form and feed the rows, and remove finished product from the rows. Adoption of these measures would reduce labor requirements significantly, as much of this work was being done by hand. Further, Peter strongly recommended that more attention be given to preventing predation, application of water, and the porosity of the worm beds.

Layne provided suggestions on marketing strategy, including packaging, product promotion, and blending.

Impacts: Several of Peter and Layne's recommendations have been adopted, and Cherven Farm selectively adapted others. In the period since the volunteers conducted training at Cherven in 2006, these improved practices have helped the farm increase the quality and quantity of their worm casting-derived compost and find new markets

Cherven has made a number of changes in production practices, including obtaining fresh manure from a neighboring farmer at a minimal cost, improving feedstock preparation and application practices, and better handling of worms. Adoption of several of Peter's recommendations resulted in reductions in labor requirements. In 2006, the farm had 53 employees and currently there are 7 producing significantly more product.

Production increased from 104 MT in 2006 to 500 MT in 2007, and the owners anticipate that production for 2008 will be approximately 1500 MT. Concurrently, costs of production have decreased significantly.³⁹

Cherven Farm: Production, Costs and Revenues 2006-08

Table 15

	2006	2007	2008 (6 mo.)
Revenue (1000 Br)	44,009	123,364	93,879
Net income (1000 Br)	7,482	20,298	15,447
Costs (1000 Br)	29,046	81,092	61,710
Employees	53	14	7

On the marketing side, increased production of worms and bio-humus allowed Cherven to expand the number of customers and its range of products. Cherven developed a marketing strategy focusing on promotion of bio-humus as an organic and nutrient-rich fertilizer, created attractive packaging for its product, and established a demonstration garden to educate potential consumers, as suggested by Layne in 2006. With the assistance of Svetlana Maximova, Cherven farm has signed a sales contract with Lekar Ltd., the biggest Russian company specializing in reselling bio-humus to countries in the Middle East.

Since the farm was in a development phase in 2006, at least some of this expansion was already envisaged and cannot be attributed to the volunteers. However, in the view of the

³⁹ There were major discrepancies between the verbal statements by the owners and the data that was supplied subsequently on production and costs that could not be resolved prior to the finalization of this report.

Cherven farm owners, the Bogdanov's recommendations did contribute significantly to the efficiency of the production of bio-humus and the success of marketing efforts that in turn greatly facilitated the expansion of the company's operations. In their view, many vermiculture ventures in the early 1990s failed because of a lack of understanding of efficient production techniques and effective marketing practices.

The company's current production capacity is 3500 MT per year, using the existing facilities that are heated and protected. They have space to handle a total of 10,000 MT per year, producing outside during the summer months. They are also planning to start the production of vegetables and other horticultural crops on their existing land that could be used as a demonstration farm to illustrate the effectiveness of bio-humus as well as be an additional source of revenue.

Realizing bio-humus's broad spectrum of beneficial agronomical properties and the ability to produce high crop yields, the local authorities have expressed their interest in supporting the development of a vermiculture production business in the region. As a long-term strategy, the agricultural authorities would like to promote use of the improved vermiculture practices among 30 farms in the region and have Cherven farm train employees from these farms. The Bogdanovs also provided assistance to a second farm in the Brest region as part of their assignment and that farm might serve in similar capacity in the promotion of improved practices in that area as well. As a next step, Cherven and the vermiculture enterprise in Brest plan to develop worm-derived medications, foliar sprays and soil drenches in partnership with another Belarusian private company. During their assignment, the Bogdanovs initially suggested several of these possibilities.

More generally, the Bogdanovs urged vermicomposters to "step back from concern about worms and learn how to produce good compost (thermophilically). This would be cheaper (no worms required) and safer (no worries about killing off worms from either extreme, thermophilic heat or toxicelements in the feedstock) and the resulting compost would serve as i) feedstock for vermicomposting and, ii) a highly beneficial, marketable commodity....[T]here is little understanding of the benefits of *aerobic* composting; their piles of organic matter (without turning and managing porosity) would become *anaerobic*. They know about fermentation, but that material isn't a good product. My recommendation is to....teach good composting practices and then graduate to vermicomposting. With this, you'd have a solid, multi-purpose base product (compost) and a second, value-added product (vermicompost) that could be sold separately or blended at different rates with compost and other additives. Experienced producers/marketers here in the US offer as many blends as possible (expanding, through specialization, their marketplace). For example, a producer could sell a blend for roses, another for tomatoes, and another for row crops," (Peter Bogdanov, personal communication).

The above approach (sequence) should be given serious consideration in the strategies for FtF projects focusing on composting in Belarus and other countries in the future.

Valbik Agribusiness

The Host: In the late 1980s, Krasnyi Partisan was a leading collective farm in the Lepel region of Vitebsk Oblast. However, on-going farm mismanagement considerably worsened its performance and financial situation. A severe summer drought in 1999 finally pushed Krasnyi Partisan into bankruptcy with accounts payables amounting to 89 million BYR (\$67,000). Although a Presidential Decree in 1999 allowed the privatization of collective and state farms, it was not an easy task for local agricultural authorities to find private businesspeople willing to invest into Krasnyi Partisan collective farm. In 2001 the collective farm was officially shut down by decision of the Lepel Municipal Executive Committee. Valeri Boykov was given 20-year rights to Krasnyi Partisan's 1,528 ha of farmland and the farm's assets for free, so long as they are used to produce agricultural products. In return, Boykov agreed to repay 89 million BYR (\$67,000) of old debt accrued by the collective farm.

Valeri Boykov & Co. Agribusiness (Valbik) was registered in 2001 and formed by the merger of Valeri's private swine production farm and the Krasnyi Partisan collective farm. Valeri graduated from the Law Faculty of the Belarusian State University in 1987 and started his career as a lawyer in Lepel Agricultural Administration. Later, he created a small private agricultural enterprise by leasing 50 hectares of agricultural land and purchasing a hog farm from Parizhskaya Kommuna, a former collective farm. The hog farm has since developed into a large, profitable swine raising operation. Valeri's doctorate thesis focused on the reform of agricultural enterprises in Belarus. He strongly believes that the government should not prop up inefficient collective farms with subsidies, but rather allow them to be reorganized into private agribusinesses.

In 2003, Valbik specialized in grain and dairy livestock production. Nearly all of the land is used for production of barley, rye, potatoes, beets, flax and perennial fodder grasses. Valbik's two hundred head dairy herd was maintained by pasture and fodder from the farm. The farm's swine operation produced 300 pigs per year. Local people prefer buying hogs from Valbik farm because of their reputation for high quality. At this time, Valbik employed 80 people, nearly all inherited from the Krasnyi Partisan collective farm. The workers live in the ten villages situated on the land formerly operated by the collective that also includes the Valbik concession.⁴⁰

During its first year of operation, Valeri culled the older and less productive cows, raised milk yields through better nutrition, improved milking procedure, and increased the average monthly weight gain of pigs. He also laid off a number of employees and developed plans to introduce a contract employment system in the future in hopes of further reducing labor expenses.

⁴⁰ The Valbik concession includes 1,528 H of suitable farmland out of the 3,700 hectares that comprises the Krasnyi Partisan collective farm.

Valeri is an active manager and a big thinker, but did not have much practical experience running a large, diversified agribusiness. He wanted to focus on seed production of perennial fodder grasses and legumes, improve the dairy herd with new dairy cows from the leading Russian breeder and renovate a mixed fodder plant. He was also considering starting a goose operation for meat and feather production and developing an ecological tourism service for fishermen and hunters.

In late 2005, Valeri sought the assistance of CNFA volunteers to be able to better assess options and adjust directions in response to changing situations and needs. He also wished to learn about specific ways to improve the efficiency of both the dairy and crop operations, drawing upon the experiences of other countries.

Volunteers: A project strategy for Valbik was developed and approved in early 2003, which envisaged the provision of three volunteers with expertise in dairy, crop production and strategic planning. All three were recruited and completed their assignments that year as summarized in table 16.

FTF Volunteers Assisting Valbik Agribusiness

Table 16

Dates of Assignments	Volunteer	Affiliation	Home State	Assignment
03/26-04/15/03	Paul Sundberg	Feed Management Consultant	OH	Dairy Cattle Production & Management
07/9-07/31/03	Danny Brunsell	Private Farmer	KS	Crop Production
09/12-10/01/03	Martin Havlovic	Extension Agent	WI	Strategic Planning

Paul Sundberg completed the dairy cattle production and management assignment in March/April 2006. He trained Valbik management and dairy cattle specialists in modern approaches to cost-effective dairy cattle production, genetics, milking, herd health management, breeding and reproduction, and nutritional management of the dairy herd. His advice ran the entire gamut of dairy-related practices from techniques for better forage production, genetics and animal health/nutrition to how each of these components relates to the efficiency and the economic success of the entire operation. “Cheaper isn’t always better,” Paul advised as he illustrated how better quality and higher priced feed translates into lower costs of production per kilo of milk. He was disturbed by the existing milking practices, which he characterized somewhat politely as “very much out of date,” and provided milking staff with hands-on training in techniques designed to significantly reduce the risks of spreading bacteria.

Danny Brunsell’s work focused on new cropping practices and alternative crop rotations. He recommended the inclusion of nitrogen fixing legumes, (luppins and vetch) as part of, “a structured rotation, gaining the soil fertility those crops and following with cereal grain crops. He noted that Valbik could also utilize a multi-year scheme in which cropland can

be planted to the grass seed production for a 4-5 year period and back to a cultivation period of 1-2 years,” (Trip report, 2006). Danny also provided advice on pasture management to avoid over grazing and ways to better coordinate the swathing and chopping of fodder crops to improve feed quality and enhance milk production.

Martin Havlovic’s assignment introduced Valbik’s senior managers to the concepts, principles and applications of strategic planning and helped them develop a business plan. Martin made use of the Bryson 10-Step model of strategic planning and felt that this was well understood by Valbik management. Martin also stressed that beyond preparing a business plan and updating it annually, the plan needs a champion who believes in the value of a plan and has the ability to encourage and involve staff participation in its design and implementation, (Trip Report, 2006). Although Valeri is definitely the boss and is a strategic thinker, Martin was not convinced that Valeri had the time or inclination to perform this role, which requires attention to detail and engagement with staff as participants in the process, not just as workers.

In response to Valbik’s immediate concerns about human resource management issues, Martin spent much of his time on this topic and ways to increase labor productivity. Successful implementation of many of Paul’s and Danny’s recommendations, as well as other improvement measures that Valbik management was considering, involve improvements in labor productivity. Workers or managers who have been part of state collective farms all of their working lives do not always readily embrace such changes. Martin observed:

Morale and motivation are low because the employee compensation is not tied to outcome-based performances but rather to work-defined positions. Thus, no employee is motivated to perform beyond minimal expectations (if these exist at all). Compensation is not tied to work out. The employees know this and consequently perform at minimal standards. There is no incentive to work otherwise....If a system of wages and bonuses were developed in which each employee knew what was expected of him (her) and he(/she) was rewarded as to whether he reached those work goals, worker productivity would increase...low performing employees ...should be released...with fewer, dedicated employees, Valbik Agribusiness can increase productivity...this “employee-relations philosophy” is markedly different from the traditional way labor is regarded. (Trip Report, 2006)

Impacts: In March 2004, roughly one year after the project was initiated and 6 months after the mission of the final volunteer (Martin), CNFA Belarus conducted a Project Impact Assessment of Valbik. Many changes had taken place in the dairy operations as detailed in the PIA:

Valbik Agribusiness has thoroughly improved sanitary procedures, milking practices, and increased quality and quantity of cattle feed....This enabled the farm to increase total milk production by 29% from 365 tons in 2002 to 470 tons in 2003, even as the number of milking cows was reduced from 170 to 150.

The rise in total milk production was also achieved by the increase of total forage quantities produced and introduction of several new fodder crops such as grain crops mix (oats and vetch), rye grass, grain, and sweet clover. This resulted in almost a twofold increase of total revenues from milk sales, from 62,050,000 BYR (or \$32,830) in 2002 to 123,200,000 BYR (or \$57,570) in 2003.

Following volunteer training in crop production, Valbik Agribusiness established a crop system design that is based on the integrated crop and livestock principle. Valbik is planning to plow a considerable tract of unused land currently allocated to perennial grasses, which will allow it to increase the area under grain production by 46% by 2007 and start producing legumes as fodder crops.

Based on training in strategic business planning techniques, Valbik Agribusiness has designed and is currently implementing a business plan that is strategic in that it focuses on critical issues facing the business in the long run.. In addition, the owner delegated more operational management tasks to his assistant, which enabled him to focus more of his time on running the farm business. Valbik has reorganized its operational structure to become more efficient. (PIS, 2004)

Valbik has undergone major changes in the 5 years since the above assessment and since the volunteers worked with this host. Most notably, the farm sold its dairy herd in order to retire the debt of the Krasnyi Partisan collective farm that it had inherited. The dairy staff that had successfully acquired and utilized the skills associated with Paul's detailed recommendations had been laid off, but according to Valeri, most were working with other dairies so there is potentially a major spread effect from this assignment, even though it may be seen in the current operations of Valbik.

Valbik has selectively implemented Danny's recommendations on crop improvement and grass seed production that is currently a major feature of the farm's activities. Table 17 summarizes the changes that have occurred since 2003.

Valbik Farm Indicators 2003 and 2007**Table 17**

	2003	2007
Number of employees (farmers)	81	17
Annual employee payroll (1000BYR/yr)	142,495	94,840
Where did Valbik buy its major inputs last year?	State suppliers	State & private suppliers
How many customers/clients did Valbik have last year?	12	17
Net income of Valbik Agribusiness (1000 BR)	6,638	59,000
Total costs (1000 BR)	311,610	724,000
Total revenue (1000 BR)	318,248	773,000
Heads of livestock	300 pigs 150 cows	426 pigs
Meat production (T/year)	46 tons	27 tons
Annual sales meat/milk (1000BYR/year)	97,470	108,000

Revenues and costs have both roughly doubled, but net income has increased more than 9-fold. Valbik was able to realize a profit even in a year that by all accounts was well below average in terms of rainfall for the region.

The most striking change between 2003 and 2007 is the reduction in the labor force from 80 to 17. Total wages have also gone down from BR 143 million to 95 million (which may be a major reason why Valbik was able to turn a profit in an average to poor year). However, the average wage per worker went up over 300%. A significant part of the reduction was related to the sale of the dairy herd (pigs are much less labor intensive). A system of performance bonuses has been put in place. More generally, Valeri has taken Martin's admonition to release low performing workers and rely on "fewer, dedicated employees" very much to heart and basically cleaned house.

For the future, Valeri, not surprisingly, has lots of ideas and routinely scours the internet for more. He remains interested in a range of new enterprises, but his passion seems to be finding ways to further improve efficiency. He is very interested in minimum tillage systems and is ordering a no-till drill similar to that currently in use by Kholodon Agro. He plans to introduce some version of the deep bedding system, which he observed on a trip to the US, which he thinks will economize on feed, labor and electricity.

Valbik does have annual business plans, but the extent to which Valbik's planning and management system has become more inclusive and participatory seems limited. When asked how decisions are made (thinking about the criteria for making decisions), Valeri replied quickly, "this is a dictatorship."

Kholodon-Agro Farm

The Host: Kholodon-Agro Farm (KA) is a large privatized cooperative farm producing grain and dairy products in Dzerzhinsk rayon of Minsk oblast. KA is owned and operated by the Kholodon Joint Stock Company (KJSC), a private company that has grown from a small scale wholesaler of refrigerating equipment, refrigerants, electric insulating materials, conditioning and ventilation systems and furniture for restaurants into a diversified, profitable large-scale business with a network of nine offices in different cities in Belarus.

In 2003 KJSC began financially supporting the Mir-Agro farm, an agricultural production cooperative, at the request of local agricultural authorities in Dzerzhinsk rayon. The dairy operations were and remain the most important activity of the farm, with livestock products (milk and meat) accounting for roughly half of total output and crop production (mainly forage) the remainder. Nearly all of the 2722 hectares of land are devoted to the production of winter and spring grain crops, leguminous plants, flax seeds and stocks, rapeseeds, perennial and annual grasses. There are nine villages situated on the land, whose residents include the over 100 employees of the farm.

At the time that KJSC became involved with the farm, it was dying. Quite aside from its debt, the on-going operations were losing money. Grain and grain legume yields were declining and vegetable production was one fifth of what it had been in 2002. The facilities and equipment were antiquated, inefficient and only marginally operational in many instances. The dairy herd was reduced by 20 percent to generate income and adjust numbers to the shortage of quality forages due to drought and poor yields.

In 2004, KJSC responded to changes in Belarusian policies and purchased the farm. The agreement between KJSC and the Mir-Agro cooperative farm specified that i) the purchase price was \$202,679; ii) KJSC was liable for the farm's debts (both interest and principal in excess of \$450,000), but did not have to pay them until 2009; and iii) all Mir-Agro workers would retain their jobs for 3 years (in return for the grace period for dealing with the debt) as long as they perform their jobs satisfactorily.

Under the leadership of the Director of KJSC, Vladimir Lukonin, a strategic plan was developed for KA that included upgrading staff, dealing with creditors, purchasing new equipment, and renovating the facilities. But the most significant change was a focus on financial viability, rather than production quotas that are a dominant feature of the remaining state-owned enterprises in Belarus. Although Vladimir was educated as a veterinarian, he had never worked in this field, and had little experience running an agribusiness. He and the other owners of KA appreciated the need to upgrade the management and technical skills of their employees in order to transform the farm into a profitable agro-business.

Volunteers: Vladimir approached CNFA FTF in 2004 and a project strategy was developed to provide three volunteers in business management, dairy cattle management and forage production respectively during 2005 (Project Strategy, Dec 2004). Since then,

CNFA has provided five volunteers to assist KA, two of whom have made follow up visits to Belarus (see Table 18).

FTF Volunteers Assisting Kholodon Farm

Table 18

Dates	Volunteers	Affiliation	Home State	Focus of Assignment
03/21-04/08/05	Bill Goeres	Private Farmer	WA	Dairy Cattle Management
04/12-05/01/05	Jim Estes	Agronomist	OR	Forage Production
05/24-06/08/05	Ken Hart	Ag Economist	ID	Farm Business Management
08/29-09/14/05	Gregory Schwab	Extension Soil Fertility/Mgmt Specialist	KY	No-Till Farming
04/08-04/26/06 04/07-04/21/07 07/28-08/08/08	Jerry Grigar	Natural Resource Conservation Service	MI	No-Till Farming

Bill Goeres's assignment focused on the introduction of cost-effective dairy cattle management practices. Bill's review found several deficiencies in KA's cattle management techniques and he provided training and detailed suggestions for improving reproductive performance, milk yields and quality, and reducing calf mortality. He shared the view that "labor quality could prohibit you (KA) from making the progress you desire," and he commented on the specific skill needs of current staff.

Jim Estes worked with KA's agronomist and manager on improving forage production, soil and water conservation, ration balancing, pasture management and rotational grazing. He strongly recommended the inclusion of alfalfa, and KA purchased seeds for planting during Jim's visit. He also noted that the undulating nature of the farm's topography indicated a high potential for erosion and suggested a perennial legume crop as a ground cover, which would protect the soil as well as be a source of nitrogen. The issue of no-till systems was discussed during Jim's mission and he communicated KA's interest in having additional information on this topic to CNFA.

Ken Hart's assignment focused on farm business planning and analysis. He reviewed all farm operations and business practices. Regarding current accounting practices, Ken observed that "accounting used... (is) mostly motivated by government reports (which) results in data that is unreliable in the context of... a business system." Ken demonstrated the importance of analyzing costs and returns for each enterprise in making decisions and assisted with the development of a basic business plan. He interacted extensively with

Vladimir and noted that he “has that ‘farmer look’ in his eyes as he toured the farm....I’d say Vladimir is hooked.”

Greg Schwab provided training in the transition from conventional tillage to no-till crop production, including residue management, rotations, seed quality, fertility management, weed control, and the economics and equipment requirements of no-till farming. He also advised on selecting suitable sites for the no-till trials. The first no-till planting of wheat took place on the final day of Greg’s visit.

Jerry Grigar from the National Resource Conservation Service based in Michigan came first to Belarus in 2006 to assist KA staff in hitching a tractor to the new drill, and bleeding and leveling its hydraulics. He also went through the basics of drive type selection as well as coulter, opening, and seed depth adjustment. With Jerry’s assistance, the farm’s technicians gave a demonstration of the no-till planter at KA that stimulated great interest among other producers and agricultural experts in Dzerzhinsk rayon. These included representatives of the government rayon/oblast agricultural committees and public research and extension services.

Impacts: The most prominent impact from the volunteer assignments for KA has been the adoption of a no-till system. The no-till system reduces fuel requirements per hectare from 25.5 to 4.25 gallons for a savings of approximately \$67 per hectare, not including reductions in labor and equipment costs. Most significantly, no-till dramatically reduces soil erosion. The soil nutrient losses are valued at over \$750 per hectare for the traditional till system compared to approximately \$50 for no-till. The reduction in soil erosion translates directly into higher yields, improved soil moisture retention and reduced fertilization requirements.

As a direct consequence of Greg Schwab’s assignment, KA purchased a no-till planter from Great Plains Manufacturing in Salina, Kansas in 2006. KA requested CNFA’s assistance in making the new equipment operational, including training staff and developing a plan for the transition from conventional to no-till farming.

Greg Schwab returned in September 2006 to review KA’s progress in implementing no-till technology. He found that the no-till crops planted in spring 2006 got 10-15% higher yields than their conventionally planted counterparts which was attributed to moisture conservation enabled by the no-till system.

KA increased the area under no-till crops to 300 hectares in 2007 and requested CNFA’s volunteer assistance in supervising the spring sowing campaign. Jerry Grigar returned in 2007 and again in 2008 to assist with the introduction of no-till techniques. He has made two additional trips to Belarus in 2007 and 2008 to provide additional assistance to KA on its no-till system.

Beyond no-till, KA has made significant progress in its dairy and forage production operations, as illustrated by the following tables. Revenue from dairy operations increased from Br 200 million in 2005 to Br 500 million in 2007, mostly as a result of

improvements in productivity. Liters per cow increased during this period as well, which can be traced most directly to improvements in husbandry and health practices, as recommended by Bill Gores and Jim Estes in 2005. KA strengthened the measures on mastitis control and sanitation, improved the cleanliness of the stalls by adding sawdust, took straw out of the ration, improved the herd's daily diet and milking procedure, arranged a proper heat detection system and lowered the calf mortality rate. KA added rapeseed meal as a protein source to the cow ration, improved forage quality by earlier cutting of grass, improved calf care practices, and improved dairy cows' reproduction efficiency (Project Impact Assessment, Feb 14, 2007). Milk yields have increased, costs per liter have declined dramatically, and profits have shown a corresponding improvement (see table). The entire region experienced a drought in 2007, which affected production and costs, but it is clear that performance overall has improved (see Table 19). Higher milk prices more than compensated KA for the higher production costs.

Kholodon-Agro Farm Dairy Performance 2005-2007

Table 19

	2005	2006	2007
Revenue/Sales (1000 Br)	208,000	424,000	500,000
Costs (1000 Br)	361,000	321,000	357,000
Profit (1000 Br)	(67,000)	103,000	143,000
Price (Br/kg)	273	336	444
Production (kg)	760,000	1,259,000	1,125,000
# cows	430	430	414
Milk yield (kg/cow)	1,784	2,928	2,654
Cost/kg	475	255	317

Forage and meat operations have witnessed significant improvement over the past three seasons, as illustrated by the above table. KA expanded its perennial and annual grass production as a means of enhancing soil fertility, as well as providing better feed for its dairy herd. Most of the forage production is used for the dairy herd, but improvements in productivity have enabled KA to generate revenue through sales that increased from Br 212 million in 2005 to Br 350 million in 2007.

Improvements in labor productivity have been a prominent feature of KA's progress. KA inherited a labor force of 103 in 2004 that it was obligated to retain for 3 years as part of the purchase agreement. As of mid-2008, the labor force is 67, but production has increased significantly in the interim.

The improvements in all of KA's operations have contributed to an increase in total revenues and profits since 2004. Increased production, sales and overall efficiency enabled KA to turn a loss-making operation into a profitable enterprise over the course of the 3 years since its registration.

The introduction of several improved practices, such as no-till, has played a major role in this transformation. Similarities in agro-climatic conditions between Belarus and portions

of the US mid-west are clearly a factor that has facilitated the transfer of a range of technologies from the US with minimal adaptation – a situation in which a program like FtF seems well positioned to make a major contribution.

Beyond the progress that has been realized by KA and other privatized collective farms that have hosted volunteers, information on improved practices is spreading to other producers. CNFA Belarus has made a special effort to include representatives of public and private providers of agricultural services in presentations and field days involving FtF volunteers. Participants have included researchers and extension staff from government agricultural institutions, some of whom see this connection as an opportunity for a major change in the orientation of their institutions. CNFA FtF began to work directly with some private service providers in recent years. These service providers are a potential means for scaling up the results achieved on farms like KA and extend promising technologies to significant numbers of producers throughout the country. Indeed, Vladimir sees that as part of his and KA's role for the future. He wishes to promote no-till in Belarus as a more profitable farming system that reduces soil erosion, and to have KA become a no-till training location to teach other farm managers and agronomists the basics of transitioning their crop production to no-till farming systems.

IV. FINDINGS

This section summarizes the major findings based on the 10 case studies presented in section III. This impact assessment does not constitute an evaluation of CNFA's FtF program. Further, the assessment comes at the conclusion of that program, and thus, recommendations relating to adjustments in current program activities seem inappropriate. However, practices that might contribute to greater impacts can be deduced from the discussion in this section, as well as from the section that follows (Lessons Learned). Some of the discussions of impacts in individual case studies are forward-looking and could be readily translated into recommendations relating to those projects. For example, the GCU and TAS projects in Ukraine could benefit from additional volunteer assignments at this critical juncture, as progress made in recent months has not yet been secured. Both findings and lessons learned relate to the issue of how impacts from FtF can be enhanced, and are directed towards those responsible for managing and implementing the next round of FtF programs, notably USAID and implementing organizations, hosts/partner organizations, and volunteers.

The findings relate to: i) the nature of impacts; and ii) ways to enhance impacts for FtF-type volunteer programs. Not surprisingly, many of the points echo those in the FtF Mid-term Program Assessment, as well as the FtF Program Manual, and reference is made to the discussions in these documents, where appropriate.

An effort was made to keep the resource and time constraints that the FtF program faces in mind in the discussion of findings and lessons learned. It is relatively easy to suggest ways to improve program management, but much more difficult to come up with approaches that do not add to program costs and complexity. Current FtF implementing organizations have already considered and selectively tried or adopted several of the latter. Ex post impact assessment is particularly challenging in this regard, as the time and resources required for a comprehensive assessment of impacts can be prohibitive, and the 5 year FtF program cycle is too short to accommodate the time frame needed to assess even the direct impacts properly, in the case of most host projects.

The Nature of Impacts

There are two major types of impacts, direct and indirect. Direct impacts are those experienced by the host organizations themselves, while indirect impacts relate to other parties (e.g. organizations supplying inputs to hosts, customers/clients of hosts, other organizations adopting similar practices (spread effects), government agencies, etc.) and the environment. Both categories can be further differentiated according to their characters. Some impacts are more readily quantifiable (e.g. changes in production, revenues, costs, etc.) than others (e.g. changes in attitudes, critical decisions and virtually the entire spectrum of indirect impacts). The methodology selected for this assessment focuses primarily on direct and quantifiable impacts, although this proved not appropriate and/or feasible for several of the host organizations, as discussed in the methodology section (II) and individual case studies (III).

Direct Impacts: Direct impacts upon host organizations are the main form of impacts covered by this assessment and the explicit priority in the FtF program strategy. Although the focus area and host project strategies envisaged broader impacts beyond the specific organization in at least some instances, virtually all the volunteer assignments focus primarily or exclusively on advising that organization on specific improvement measures. In some instances, volunteers worked with more than one host, but the primary focus of volunteer activities (training and advice) was on direct benefits for the hosts, rather than achieving indirect impacts beyond those hosts. This focus is appropriate, and it is hard to imagine how the host – volunteer relationship (which is absolutely critical to achieving results) could work otherwise.

The case studies reveal different types of direct impacts and suggest that these occur in sequence. The first step is *a change in attitudes or mindsets* by owner/managers, in which one or more volunteer assignments figure prominently. In most cases this change was underway prior to the arrival of FtF volunteers – the hosts were already predisposed to make improvements and that was a major reason for seeking CNFA assistance in the first place. They at least knew they had to make adjustments in order to be competitive, as their economies became more closely integrated into those of Europe and the rest of the world. But they didn't know exactly how to do this.

The initial set of volunteers working with each host (in some instances there was only one set) contained at least one volunteer who “turned on the light”. That “light” illuminated a combination of inefficiencies, threats, opportunities and possible improvement measures.⁴¹ Some version of this happened with all the hosts included as case studies. For Camedones, it was Jim Valentine's suggestion that a redesign of their drying tunnel could significantly reduce fuel costs. For Gromada and TAS it was the messages from Bill Maltby and Rob Cerda that they absolutely had to manage risk in a better fashion or face disaster. For Cherven and Camedones there was the opportunity to successfully participate in a rapidly expanding market for their products through concurrently improving quality and lowering costs.

Some senior managers were able to travel to the US on trips arranged by volunteers to see and hear first hand how many of the volunteer suggestions actually functioned. Pradeep Patanaik arranged a visit to North Carolina food processing facilities for Sergey Kalenichy and other Yahotyn senior staff. Managers of Vita-Lact, TAS and Kholodon Agro had similar experiences that strongly affected their thinking. This change in mindset cannot be quantified, but is an impact and is a prerequisite to all that follows.

Next in the sequence come one or more *decisions by managers to adopt improvement measures*. Preparation of business plans featured among the volunteer activities for several hosts (e.g. Yahotyn, Camedones, Glodeni and Valbik), which appear to have helped place the decisions on changes in the larger context of the entire scope of an

⁴¹ For a number of hosts, volunteers facilitated a SWOT analysis as part of one of the early assignments (e.g. Bill Maltby for Gromada Credit Union in Ukraine and Bob Bond for Glodeni Meat Packers in Moldova).

organization's operations. Business planning was unfamiliar territory for most managers, and although they appear to appreciate the logic of it (and continue to do it in some cases), it is unclear how extensively plans are used to guide decisions and monitor progress on a regular basis.

The decisions to change did not always happen immediately but often they did, as in the cases of Yahotyń, Gromada, Vita-Lact, Drochia Camedones, and all three hosts in Belarus. A prompt decision is a reflection both of the degree of commitment to the proposed change and the nature of leadership in the host organization. A family owns and operates one host organization (Glodeni Meat Processors) and family connections figure in the leadership of all the other Moldovan hosts as well. Valbik in Belarus (whose owner characterized the company decision-making system as a dictatorship, only somewhat in jest) may be an extreme, but authority is fairly concentrated in virtually all of the 10 hosts with one or a few key decision makers. Even where there is a democratic structure as with the cooperatives (Drochia and Vita-Lact in Moldova and Gromada in Ukraine), there is strong and effective leadership.

An important indicator of effective leadership (and impact) is evidence of an appreciation of a need to decentralize and restructure in some situations, even where this means some dilution in the control exercised by senior managers. This is exactly what was necessary and actually happened in the case of the Gromada Credit Union, in response to the analysis of FtF volunteers.

The third level in the impact sequence is where the *improvement measures are designed and installed*, but perhaps not yet fully operational. Examples include the remodeling of Camedones' fruit drying tunnel, the importation of a no-till seed drill by Kholodon Agro, and the creation of an internal audit unit at Gromada. This step is also major because in addition to strong leadership, other inputs are required, most notably finance and staff with the requisite skills to operate the new systems and equipment. Re-enter FtF volunteers - often the same volunteers on follow-up assignments to work with the same hosts, providing training, technical expertise and connections to sources of other inputs, finance and markets. Part of Jerry Griger's initial assignment for Kholodon Agro featured hooking up the new no-till seed drill to their tractors, as well as adjusting the coulters and lifters.

In addition to Kholodon Agro, acquisition and installation of systems, equipment, and facilities was in progress for several hosts at the time of the assessment, including Camedones, Glodeni, and Gromada. These events are definitely impacts, but it is too soon to see the effects on their operational costs, revenues and profits.

The fourth stage is when the *improvement measures are fully operational*. In most cases there is at least a year between the time volunteers make recommendations and when they become fully operational. Only at this point is it possible to quantify results in terms of costs, revenues and profits. Seven of the 10 hosts (all except Gromada, TAS and Glodeni) had reached this point, at least partially, and an effort was made to report and discuss the financial results to the extent possible. Unfortunately the 2007 season was poor

throughout the region, which seriously affected the performances of several host organizations, especially in Moldova.

Improvement measures were only partially operational for Camedones and Kholodon Agro, but sufficiently such that one could have confidence about positive outcomes and effects on production and productivity. In virtually all cases the direct impacts on host organizations associated with volunteer assignments had not been fully realized by those organizations, even as many as 5 years after the host first received their first volunteer.⁴² Thus, impact assessments, especially those that are carried out less than two years after the improvements have been operationalized, can fail to capture significant portions of the impacts.⁴³

The case studies contain multiple examples of improvements in the operations of host organizations, most notably in production systems and processes. Many of the impacts relate to improving efficiency – greater productivity of equipment, labor and land resulting in lower costs of production. Although Marx understood the importance of efficiency in the factors of production and regarded it as a contribution of the capitalist system, this concept did not feature in people’s minds during the soviet era. Quotas or volume of production were the key criteria, rather than the costs associated with that production. Efficiency was defined mainly in technical terms, and there were few incentives to achieve efficiency in the use of labor, capital and land.⁴⁴

Managers of the host organizations included in the assessment are definitely interested in improving efficiency, most notably reducing costs through measures that save energy (no-till farming) and reduce labor costs. There is less interest in the productivity of land, possibly because land is not regarded as being in short supply or is not something one focuses upon except as related to the efficiency of other factors (e.g. labor and equipment). Yet discussions on efficiency with host organization managers did not always connect on how one measured or thought about efficiency.⁴⁵

Reducing the costs of labor and specific inputs (e.g. fuel/energy) is something that host managers definitely understand, as evidenced by how readily several embraced volunteer recommendations relating to efficiencies in these areas. Several of the hosts have been able to produce more products and services with fewer workers, including all 3 hosts in Belarus. There private firms took over cooperative farms and there was a strong push to

⁴² Valbik Farm in Belarus, that hosted volunteers in 2003, is a qualified exception. The direct impacts on Valbik from those assignments have mostly played out, especially since the dairy operations were sold off in 2004. However, Valbik is associated with at least two types of indirect impacts, notably the diffusion of dairy management skills to other dairy operations who employed workers laid off from Valbik and Valbik’s decision to start no till farming following the example of Kholodon Agro.

⁴³ This is especially true where adverse conditions, notably bad weather, seriously reduce yields and performance, as was true in 2007 throughout much of the region. A single season is rarely adequate to make an assessment of impacts from improvement measures with any confidence.

⁴⁴ In fact the quota system may have discouraged performance (superior performance or exceeding one’s quota might induce higher quotas in subsequent years).

⁴⁵ Cost of production per unit of output was not a familiar concept to most managers. Deriving these figures from data on total production and costs did not always produce results that were consistent with the statements of managers and there was insufficient time to resolve such discrepancies.

improve labor productivity. By contrast, Gromada Credit Union hired additional staff to improve efficiency in response to volunteer revelations that staff capacity had not kept pace with the growth of business (loans) and that critical functions were either understaffed or missing (internal audit).

Changes in equipment and the layout of facilities (e.g. Camedones' drying tunnels and cold storage, Glodeni and Yahotyn's production line, and Kholodon's no-till seed drill) are translating into improvements in costs of production, notably capacity, quality and operational efficiency. Host managers wish to take advantage of market opportunities and appreciate that they need both volume and quality to participate successfully. A composite or comprehensive appreciation of operational efficiency was not always obvious, but managers understood key components such as labor costs.

The next stage of impact involves *translating improvements in capacity, quality and operational efficiency into sales, revenues and profits*. This result was in progress for 8 of the 10 hosts,⁴⁶ but still incomplete for all hosts.⁴⁷ Marketing is a key component of success at this stage and a number of host projects featured assistance in this area, including Camedones, TAS, Yahotyn, Drochia, Glodeni, and Cherven Farm. Although several of the volunteer recommendations on marketing have been adopted and several hosts have made progress in this area, the assessment of volunteer contributions in this area have somewhat mixed results. Volunteers clearly made useful contributions to the marketing and promotional efforts of Yahotyn (canned vegetables), and Cherven (vermicompost). However, those assisting TAS, Camedones and Drochia found that many of their ideas about improved market penetration were premature. Quality and certification issues relating to inputs and products had to be addressed first in several instances, before alternative market programs were feasible. These prerequisites required improvements in production and/or working with suppliers of raw produce (fresh fruit in the case of Camedones). In the case of TAS Insurance, basic work is needed in further defining the products (e.g. crop insurance policies), reducing costs and improving risk management systems before policies can be successfully marketed.⁴⁸

Another dimension of direct impacts is the extent to which a host organization's *ability to deal creatively with problems and opportunities* is enhanced both through interactions with volunteers during their assignments, and during the process of implementing improvement measures. The growth in this ability is not related to a specific stage of the impact sequence discussed above, but happens to some degree at all stages. There is at least the suggestion that this growth took place in the leadership of all ten hosts.⁴⁹ Some

⁴⁶ All hosts except Gromada and TAS, which were both still in the first year of their association with FTF and receiving volunteers at the time of this assessment

⁴⁷ Including Valbik, if one considers the no till seed drill that is on order as a direct impact, even though it followed an indirect route (via Kholodon Agro).

⁴⁸ The TAS case study illustrates the importance of the sequencing of volunteers. The marketing volunteer came before the volunteers equipped to assist with strategy, policy development, and management (including risk management and loss adjustment) issues, and her contribution was constrained as a consequence.

⁴⁹ It is important to note that there has been continuity in leadership in all the 10 host organizations, both during the period when the FtF projects were active, and since then.

host organizations whose FtF projects are more recent and still active up to the conclusion of the current regional program in September, 2008 (e.g. Gromada, and TAS), remain in need of guidance on basic matters from volunteers and others. At the other extreme, at least half the host organization managers now think like and in varying degrees have become entrepreneurs (e.g. Valbik, Khodolon Agro, Yahotyn and Glodeni). This group tends to have clear ideas of what is needed to improve their operations and where to obtain the necessary information. They are also more self-confident and empowered with authority and access to resources compared to the other managers. A large part of this capacity relates to individual motivations and traits, which have little to do with FtF. Yet interactions with volunteers appear to have served as a catalyst which allowed them to assert this dimension of their personalities more fully.

Indirect Impacts: Indirect impacts encompass all changes other than the direct impacts on the host organizations (summarized above). They feature impacts on both suppliers of raw materials to host organizations and their customers or clients. Host organization changes in staffing can have a ripple effect on employment and livelihoods in their respective areas. These are discussed as indirect impacts more as indicators of general trends, since the magnitude of these changes at the host level are not great.

Environmental impacts are a potentially very important indirect impact, even though they feature in only two case studies, both of which relate to the adoption of no-till farming in Belarus. Finally, there are the “spill up” and “spill over” effects of changes by host organizations on government and donor agency policies and programs and the spread of improved practices to other organizations. These types of indirect impacts are occurring in all three countries and potentially hold great significance.

Impacts on suppliers were noted in at least 2 case studies (Camedones Fruit Dryers and Drochia Vegetable Cooperative) and usually involved efforts by the host organization to increase the quality and volume of raw products, as well as to standardize delivery schedules. Camedones is primarily concerned about quality, with intent to meet the standards required for entry into the retail dried fruit market in Western Europe. Uniform size and consistent quality are required and this will most necessitate changes in fruit varieties. Camedones management had found that only a few growers were interested in making such adjustments and has been focusing efforts on a reduced number of suppliers as a result, most notably in the case of apples and plums. They still have a large number of small-scale suppliers of cherries. Camedones may still receive and dry lower-grade fruit, but thanks to the contributions of Vince Wright, Camedones managers are increasingly guided by margins and capacity utilization in their decisions on product mix. Their margins are much better for the higher-grade products, which is leading them to rely increasingly on a smaller number of larger scale growers. Similarly, as Drochia cooperative becomes more commercial in its orientation (guided in part by volunteer suggestions), the cooperative is increasingly dependent on a small core of growers/members to supply the quantities and qualities it needs to successfully enter markets in the Baltic countries.

Impacts on consumers are noteworthy in several of the cases associated with improvements in quality and food safety (e.g. Yahotyn cannery, Camedones, Vita-Lac, Drochia, Glodeni, Valbik and Kholodon Agro). The adoption of volunteer recommendations by Gromada Credit Union and TAS is translating into improved performance, lower costs, and better risk management. Without the latter, there is a serious possibility that these organizations would not be able to continue to serve their clients in the future.

Host organization **efforts to improve labor productivity are translating into fewer staff, with higher skills and wages**. Volunteer recommendations figure prominently in this process, most notably with all three host organizations in Belarus. Although the total impact on jobs is small for this group of hosts, it is indicative of trends in the region which are a cause for concern in the near- to medium term to the extent that laid off, unskilled farm workers have difficulty finding alternative employment.

Environmental impacts are potentially significant in two case studies, Kholodon-Agro and Valbik Farm in Belarus, both of whom have decided to convert to no-till farming. The no-till system significantly reduces soil erosion, conserves soil nutrients and reduces equipment, energy and fertilizer use. Two FtF volunteers, Greg Schwab and Jerry Grigar, introduced the no-till system. Kholodon Agro is now actively promoting no-till farming techniques among other producers and government agricultural officials in Belarus.

Hosts and volunteers become involved in **interactions with government officials, donor agency representatives and professional association** gatherings on policy matters in all three countries. In Ukraine, Rob Cerda joined TAS management in meetings with the International Financial Corporation with the goal of achieving greater collaboration among companies offering agricultural insurance on databases and positions on government policies. Bill Maltby made a presentation at a meeting of Credit Union representatives and officials on the need for developing a lending culture. In Belarus, both Kholodon Agro and Valbik serve as examples of the success of the government's policy to privatize poorly functioning collective farms. Kholodon Agro is also venturing into the provision of agricultural services, focusing initially on the promotion of no-till systems. Private sector participation in the provision of agricultural services, including extension and training, is a relative recent development in Belarus, where FtF volunteers have assisted a few private service providers. Volunteers making repeat visits have also been actively working with hosts to improve dairy policies in Moldova.⁵⁰

There was evidence of improvements proposed by volunteers working with specific hosts spreading to other organizations ("**spill overs**"), even though there was insufficient time to pursue this in any depth during the assessment. The most dramatic "spill overs" are taking place in Belarus, where there is growing interest among public and private farms in no-till farming techniques. Valbik Farm learned about no-till from Kholodon Agro and decided to adopt the approach. A government animal scientist who initially expressed skepticism about AI techniques being demonstrated by a volunteer was converted and has

⁵⁰ Most notably John Kappleman, a Wisconsin dairy farmer, who has made multiple visits to Moldova over the past several years.

included this approach in a recent revision of his animal science text book. In Moldova, the mission of Jim Valentine with Camedones that resulted in changes in drying tunnel design and improvements in energy efficiency is an example of a “*spill in.*” Jim had been working with other fruit dryers in the country on the same technology and Camedones was added somewhat as an afterthought.

The time frames for indirect impacts vary widely, but in general they are a consequence and therefore occur after improvements by host organizations (e.g. facilities, equipment, practices, etc.) become fully operational. Environmental and “spill up”/“spill over” impacts occur more gradually and thus commonly fall outside the timeframes of the FtF program cycle. These follow-on impacts pose a challenge for impact assessment efforts, but they should be at least noted given the importance that USAID places on impacts for the FtF program. It is quite possible that the environmental, policy and spread effects dwarf all other impacts, explaining the attention given to them.

Enhancing Impacts

Understanding the full range of potential direct and indirect impacts associated with volunteer assignments is an essential first step towards refining FtF approaches so as to enhance impacts. The preceding discussion of the nature of impacts provides an overview of the types of impacts that were noted during the impact assessment. The FtF Program Manual and the 2007 Mid-Term Assessment of the FtF Program both provide a range of useful suggestions on ways to enhance impacts.⁵¹ The following points focus on those that emerged from the impact assessment and should be regarded as a compliment to the more comprehensive coverage of this topic in those two documents.

Host Selection (section 2.6 of FtF Manual)

1. ***Strong, effective leadership.*** The assessment results illustrate the central importance of strong and effective leadership, and this should be a key criterion for selecting hosts, more important than what subsector or geographic region the host represents. The 2007 Mid Term Assessment proposes “selecting and working with strong host institutions,” (p46) which is understandable, but the case studies contain several examples where volunteers have been very effective in helping host organizations that are challenged and vulnerable (e.g. Gromada Credit Union and Vita-Lact). However, volunteers cannot substitute a lack of effective leadership. While a clustering of hosts in specific focus subsectors and themes makes sense from several perspectives, as discussed in the Manual and the Mid-Term Assessment, the effective leadership criterion should take precedence over program coherence in decisions to include or exclude specific hosts for reasons discussed above (as part of direct impacts). Leadership must have the energy and authority to make decisions and oversee implementation, without which little will happen.

⁵¹ Both of these documents can be downloaded from the USAID website.
http://www.usaid.gov/our_work/agriculture/farmer_to_farmer.htm

- 2. *Host ability to substantively participate in: i) project strategy development, ii) development of SOWs, iii) volunteer selection, iv) in-country facilitation of volunteers on assignment, v) monitoring of impacts, and vi) refinement of project strategy, as required.*** While the capacities of potential hosts to perform all these functions may not be initially apparent, their level of engagement in strategy development (including the strategy for the focus area as well as their own host project strategy), and their participation in the development of SOWs for the initial volunteers can be very revealing. The host manager should be clear and proactive in suggesting the specific skills and type of volunteers that are sought, even to the point of suggesting names of potential volunteers. Those candidates may not be available, but the suggestions should help the FtF program staff get a better sense of what is required, and more importantly, an indication of the extent to which the host leadership has thought through the assignment and the project strategy. Hosts should also be prepared to, in effect, cost share by assisting with local facilitation (transport, accommodation, translation, etc.). Farmer-to-Farmer country staff must determine how much of this is practical on a host-by-host assignment basis, but willingness to contribute should be a criterion in the host selection process. The ability of hosts to participate effectively in the monitoring of impacts and the refinement of project strategies may not be evident from the onset, but its importance should be stressed as a condition for continuing participation as a host organization in the program.
- 3. *Host access to critical complimentary inputs.*** The case studies clearly illustrate the importance of hosts having access to other complimentary inputs, particularly finance. FtF only offers short term technical assistance, and implementation of volunteer recommendations usually involves expenditures. Although volunteers can and indeed have assisted hosts in securing loans, ready access to financial resources should be a consideration in the selection of hosts. Without these resources, there are likely to be major delays in the implementation of volunteer recommendations (at best) and in the associated impacts. Partnering with organizations and projects that can assist in accessing resources, as was done with the Agribusiness Support Project for Camedones in Moldova, is one way of addressing these issues.⁵² Such partnerships may also be a means of obtaining other complimentary inputs, such as special services and longer term and/or local advisory assistance. Ideally, potential hosts should participate in identifying suitable partner organizations (and visa versa), where these are needed and do not already exist. Farmer-to-Farmer country staff can help in the process, but mainly to make the necessary connections, leaving hosts and partners to work out the details between themselves.⁵³
- 4. *Host responsibilities for extending information and services to others.*** Four of the hosts covered by the assessment had on-going responsibilities for providing information and services to agricultural producers, namely TAS, Gromada,

⁵² The FtF Program Manual (section 2.5) and the 2007 Mid-Term Assessment (pp44-50) contain useful suggestions regarding partnering.

⁵³ An initial, exploratory volunteer assignment might also be used for this purpose where in the opinion of FtF country staff the host project may be lacking in complimentary inputs, but is sufficiently promising to merit at least a single volunteer assignment and see where that leads.

Drochia, and Vita-Lact.⁵⁴ The possibility of the advice of volunteers reaching beyond the primary host organization (“spill overs”) with the active participation of the host organizations can greatly enhance potential impacts and should be considered as an important criterion in the selection of hosts.

Development of Focus Area and Host Project Strategies (sections 2.3, 2.4 and 2.7 of FtF Manual)

The quality of the project strategy documentation for the hosts covered by the assessment shows that considerable effort was put into its development as well as the crafting of the individual scopes of work that followed. This almost certainly contributed to the progress that has been made in working with these hosts. There is a lengthy list of tasks that FtF country staff might undertake aimed at further improving the quality of the strategies for both the focus areas and individual host projects, as detailed in the FtF Manual. Techniques such as sub-sector and value chain analysis can be useful in identifying specific points/groups of hosts where volunteer efforts might be focused. However, these techniques can be demanding both in terms of time and staff capacities, and thus difficult for smaller FtF country programs, in particular, to easily accommodate. Further, a program like FtF cannot effectively address all key constraints and opportunities identified via sub-sector and value chain analysis.

Ideally, FtF country staff can locate and utilize existing studies that cover this ground sufficiently for the selected themes. They should identify partners during the country program planning stage that: i) have the broader, sub-sector perspective; ii) can help identify areas and specific hosts where volunteers can be most effective; and iii) provide key complimentary inputs (and even cost share). Implementers may rightly feel that close associations with one or more partners endangers their identity, but to the extent that impact is the priority objective, such partnerships should be actively explored and selectively pursued. Availability of good partners and hosts should guide the program strategy development, including selection of focus areas, at least as much as government and USAID priorities. Ideally, there is a reasonable convergence between these considerations in each FtF program country, but this cannot be assumed, and pressures to focus on themes where these conditions do not exist and/or there is a limited pool of potential volunteers should be resisted.

All the key capacities that a host needs to effectively use FtF volunteers might not be revealed up front. Accordingly, consideration should be given to the provision of volunteers to a particular host beyond the initial volunteer conditional on the results of that assignment. FtF’s commitment to that host might be progressive in this sense. It follows that both the initial volunteer and assignment for a host need to be carefully selected. An experienced volunteer with broad expertise in the sub-sector/subject area seems preferable for the initial volunteer, rather than a first timer who is very specialized. The initial assignment should include responsibilities for critically reviewing the project

⁵⁴ Vita-Lact and Drochia provide extension advice, marketing and other services to cooperative members. Kholodon Agro is actively involved in promoting no till farming among other farms and is considering starting up a training program for farm managers interested in using this approach.

strategy and making suggestions to FtF for adjustments in strategy as well as the details of the scopes of work and qualifications of additional volunteers for that host.⁵⁵

The focus area strategies might give more explicit attention to how to enhance indirect impacts in: i) the selection of hosts (as discussed above); ii) the programming of volunteer assignments; iii) the development of scopes of work; iv) and the identification of volunteers. The overwhelming thrust of volunteer assignments for the host organizations reviewed for the assessment was on direct impacts that benefited that specific organization, but with limited attention to indirect impacts, notably “spill ups” and “spill overs” to other organizations. These indirect impacts may have been mentioned in the focus area and project strategies, but received less attention in the scopes of work. Indirect impacts took place, but somewhat as an afterthought in some assignments, rather than an explicit focus (e.g. Kholodon Agro, and Camedones).

The program and host project strategies included in the assessment make reference to benefits for farmers generally beyond the host organization, and for employment, and information on these topics is included in the host profiles. With the very important exceptions of working with decision makers in government and donor agencies and assisting hosts who are themselves service providers serving other farmers (e.g. research and extension services), the case studies suggest that FtF may not be a particularly effective vehicle for assisting large numbers of farmers, generating employment and reducing poverty in this region.⁵⁶ FtF strategies for this region can be most effective in supporting the on-going structural transformation process, and not in trying to seriously change its course in directions that foster employment and directly address poverty.

Most volunteers do well working one on one with management and staff of an individual host – and that hands on relationship is important in giving host organization managers the confidence to make key decisions. The changes that hosts make as a result can indeed serve as demonstrations to others, as evidenced by no-till farming in Belarus. Development projects and extension services are generally better equipped to extend the lessons from these successes to significant numbers of farmers than individual or clusters of volunteers. However, volunteers can assist agricultural service providers in extending information and services to large numbers of producers, as with TAS and Gromada.

⁵⁵ Facilitation of a SWOT analysis and preparation of a strategic or business plan could be a focus on an initial assignment with a new host. But also effective to have an assignment where there is a specific, tangible outcome (e.g. cost saving techniques).

⁵⁶ Up through 2004, FtF did place major emphasis on small farm dairy development through cooperatives in Moldova, which was possibly more effective in addressing poverty issues, but aside from the Drochia and Vita-Lact cooperatives, these types of hosts did not feature in the selection of case studies for the assessment. As noted, these cooperatives initially had a focus on small farmers, but the leadership sees larger producers as the core as these organizations going forward.

V. LESSONS LEARNED

In 2005, USAID's FtF office produced a compendium of good practices that drew extensively on the experiences of FtF implementing organizations.⁵⁷ This impact assessment might be regarded as part of a continuing series of contributions to this body of knowledge. As such, the emphasis in this section is on how the ten case studies in this assessment have further enhanced the understanding of the FtF program in particular, and international volunteer programs in general. Accordingly, the structure of this section follows that of the good practices manual and notes in particular the extent to which the findings of the assessment reinforce or otherwise qualify those of the manual.

The findings of this assessment are not relevant to many of the sections of the manual (e.g. section 4.4. outreach and public awareness). The sections that relate most directly to the assessment include 1.1 (Comparative Advantage of Volunteer Programs); 2.1 (Allocating Volunteers among Countries); 2.2 (Targeting Volunteer Program Activities); 2.6 (Selecting Host Organizations); and 2.7 (Planning Host Projects). This report is also an expression of the substance of section 5.3 (Volunteer Program Evaluation).

Comparative advantage of volunteer programs: The comparative advantage of short-term technical assistance is a key concept for FtF staff to consider in selecting which combination of services to provide to hosts. The hosts included in this assessment generally had long lists of needs and only a subset of those were suitable for FtF assignments. Field staff generally appreciates this distinction, but there is always the temptation to address more issues than might otherwise make sense, via clustering of several volunteers with complementary areas of expertise. Clustering of volunteers around a host or group of hosts makes sense on paper and often works, but the collection of volunteers often does not cover the ground, sometimes leaving significant gaps which can seriously constrain the effectiveness of the entire project.

The manual is correct both in this section and elsewhere in noting the importance of linking volunteer inputs with other resources in the development and implementation of a host project.

The assessment provides several qualifications on the issue of comparative advantage as follows:

- Volunteers with specific technical skills (e.g. no-till planting, heating systems for fruit drying tunnels) can assist hosts in achieving significant impacts, sometimes without major complimentary inputs (other than finance);
- Marketing is a problematic area, both in terms of volunteer understanding of the local markets and the frequent necessity of improving and standardizing product quality before trying to enter certain markets. While it is important to have

⁵⁷ *Managing International Volunteer Programs: A Farmer to Farmer Program Manual* edited by E. Gilbert, R. Navin, G. Alex, E. Benschoter, A. Cullen, and R. Flannery, USAID, Wash. DC, 2004.

- production decisions “follow the market,” promotion and marketing should flow from an efficient, high quality production line. This is clearly illustrated by the experiences of Camedones and Drochia in Moldova;
- Sequencing of volunteers is often critical to their collective effectiveness;⁵⁸
 - Multiple assignments by the same volunteers, either with the same host and/or different hosts in the same country or region, are often very effective. Examples include dairy in Moldova, credit unions and crop insurance in Ukraine, and no-till farming in Belarus;
 - Volunteers assisting with business management skills need to be carefully matched with managers who are motivated, receptive and preferably already “half-way there,” especially with host organizations that have significant remnants of Soviet-era management systems. More than one mission by the same or closely linked volunteer(s) is probably required to make these types of assignments achieve results.

While the importance of cost effectiveness vis-à-vis efficiency is clear in theory, the emphasis on effectiveness and impacts have major implications for the costs, structure and general orientation of FtF programs, as is discussed from several perspectives throughout the manual. The host projects covered by this assessment all benefited in varying degrees from the planning effort which staff accomplished upfront. Considerable attention was given to locating volunteers who would match the requirements and situations of the hosts, and to supporting them in the field. This approach is clearly more effective, illustrated by the 10 case studies.

One could argue that in the contexts of present day Ukraine, Moldova and Belarus, this is the only way to go. However, this may not be the case. Extrapolating this approach into the future could translate into fewer, higher quality volunteers working as teams (possibly sequentially) supported by FtF country staff with more skills and much more staff time in designing, implementing, monitoring and evaluating volunteer projects. In short, FtF would evolve into a short-term technical assistance program with only one arm (short-term technical assistance). This is hardly a new issue for USAID or the FtF implementers, but deserves further thought at this juncture with the approach of a new FtF season.

Balancing Objectives - Measurable impacts vs. the “volunteer experience”: Many volunteers might feel this is a false dichotomy. This is particularly true of the most effective volunteers (in terms of impacts) associated with the hosts covered in this assessment, many of whom had/are having life changing experiences.

Balancing Objectives - Immediate vs. longer-term impacts: At least one of the case studies (Kholodon Agro in Belarus) confirms that there can be links between an improved practice that can be introduced quickly via FtF and major contributions to problems requiring longer-term solutions. The introduction of no-till farming to Belarus has the potential to revolutionize farming and concurrently significantly reduce soil

⁵⁸ TAS is an example where the volunteers might have been better sequenced. For Glodeni, Yahotyn, Vita-Lact and most others, the sequencing worked with an experienced volunteer who could address strategy and also provide detailed suggestions in the lead off position.

erosion in the medium- to longer run.

Volunteers often have valuable training and experience in improving the operations of organizations, or in training people to be better managers. Yet the timeframe for such activities to realize measurable impacts in terms of growth indicators may be several years, often well beyond the completion dates for contracts for volunteer programs. (p4)

In general, this observation is quite valid and supported by experience. However, the Gromada Credit Union project in Ukraine is having a profound effect on the organization in a very short period of time.⁵⁹ When an organization is facing serious problems (or possibly major opportunities as well), managers can move very quickly. The trick is to identify those situations, select those in which volunteers can be effective, and then allow the volunteers and the managers to “seize the moment.” Timing may not be everything with organizational strengthening, but it is very important, as the experiences with Gromada Credit Union, Vita-Lact and Kholodon Agro illustrate.

Balancing objectives - Poverty reduction vs. economic growth: To the extent that the 10 case studies fairly reflect the focus of CNFA’s FtF program in the region, there is a strong emphasis on economic growth, rather than poverty reduction. The direct impacts relate to the hosts that are mainly medium- to large enterprises and cooperatives. Indirect impacts include the benefits to producers who supply raw products and live animals to the hosts that are processors; and better quality and/or lower priced products for consumers. While there is a trickle-down and -out dimension to the impacts associated with volunteer assignments, the effects on poverty are probably modest. Some of the direct impacts may indeed contribute to unemployment, as in the case of all three Belarusian hosts, who have significantly reduced their labor forces partially as a result of labor saving practices proposed by volunteers. This is mainly about achieving greater efficiency (definitely not about cost effectiveness in reducing poverty) in the same mode in which developed countries transformed their economies over the past century. There is a very good match between what experienced US volunteers can offer and where these hosts want to go. There may well be ways in which poverty reduction considerations can be more explicitly taken into account in some FtF projects in the region in the future, but probably with a different set of hosts and greater challenges for achieving impacts.

A middle ground on this issue may be found in working with cooperatives such as Drochia and Vita-Lact in Moldova who have (at least had initially) a focus on small-scale producers. However, the lessons from these examples are quite mixed from a poverty reduction perspective, as both groups have been evolving towards primarily serving a smaller core of larger and more commercially-oriented members. Similarly, Camedones LLC (also in Moldova) has been relying increasingly on a smaller number of growers who are capable of delivering the quantities and qualities of fresh fruit that they require as they move into more remunerative markets in the EU. This need not mean that only large scale producers can participate, but it definitely does mean that producers must have

⁵⁹ Unless the FtF continues in Ukraine after September 2008, the progress made with this host may not be secured as much as it needs to be. (B. Maltby, personal communication)

a strong commercial orientation in their farming operations, something that may not be descriptive of the majority of small farmers in the region at the present time.

Allocating Volunteers Among Countries: The manual lists the conditions that facilitate effective of volunteer programs, such as suitable hosts, regulatory frameworks, etc. By these standards, Belarus might not rank highly as a good prospect, at least at a cursory level. Yet the impacts that are related to the FtF program could well surpass those of the other two countries in the region. First, the hosts are mainly large production units that are prominent illustrations of a relatively new policy that is privatizing a number of failing collective farms; second, linked to this new policy are the beginnings of a major expansion in a range of private (and even public) agricultural services; and third, there is the capacity (authority) to rapidly disseminate improved practices, such as no-till farming, that in this case have major economic and environmental impact potential. These considerations may not be adequately captured in the criteria for country selection in the manual.

Targeting Volunteer Program Activities/Value Chains: The assessment findings strongly support a sub-sector approach with a cluster of suitable hosts and using a sub-sector/value chain approach to analyzing and developing project strategies in collaboration with those hosts and partner organizations. The assessment results also suggest identifying a team of volunteers with the range of requisite skills that can provide advisory services in a coordinated or sequenced fashion to those hosts (e.g. dairy in Moldova and Belarus), although not attempting to substitute for other types of essential inputs (e.g. finance) that are required. FtF programs and other volunteers can (and often do) help in arranging for these complimentary inputs via partner organizations, as is discussed in several sections of the manual.

The validity of this approach relates to: i) the synergies between different improvement measures (e.g. animal health, breeding and nutrition); and ii) the interconnected nature of the value chain as illustrated by the experiences of Camedones (fruit dryers) in Moldova. The benefits from improving the core processing operations may be constrained by the lack of high quality raw produce from farmers – a problem that might be most effectively addressed through varietal improvement. This takes time, but is an issue well suited for FtF volunteers. Focusing just on the host organization as opposed to the value chain in which that host must function may be putting the cart first and just missing the horse.⁶⁰

⁶⁰ “We have found this to be true in almost all cases where the focus is on expanding into new markets....[P]revious production technologies did not produce either the quality or a competitive production cost needed to compete in either the EU or the expanding high quality CIS markets....[T]his is what the value chain technology transfer activities is all about,” (C. Frisch, personal communication).

APPENDIX A: SCOPE OF WORK

QuickTime™ and a
decompressor
are needed to see this picture.

APPENDIX B: SCHEDULE OF ACTIVITIES

- **Late June/Early July:** Development of methodology; finalization of travel arrangements.
- **July 19/20:** Travel to Ukraine
- **July 20 – 25:** Meetings with host organizations and CNFA staff in Ukraine
- **July 25:** Travel to Moldova
- **July 25 – Aug 2:** Meetings with host organizations and CNFA staff in Moldova
- **Aug 3/4:** Travel to Belarus via Ukraine
- **Aug 4-8:** Meetings with host organizations and CNFA staff in Belarus
- **Aug 9:** Travel to Montana
- **Late August/early Sept:** Report Preparation
- **Sept 30:** Submission of Report

**Annex D:
Key Personnel**

Key Personnel:

Program Director:

Bill Witting	2004 – 2005
Rod Beason	2005 – 2006
Patrick Norrell	2006 - 2007
Gideon Donoho	2007 - 2008

Ukraine Country Director:

Eric Evans	2004 - 2005
Patrick Norrell	2005 - 2006
Nikolay Gordiychuk	2006 - 2007
Lina Dotsenko	2007 - 2008

Belarus Country Director:

Lucy Sokolovskaya	2004 - 2008
-------------------	-------------

Moldova Country Director:

Irina Eremciuk	2004
Willis Kidd	2005
Cristina Andrievschi	2006 - 2007
Nadejda Mocanu	2007 – 2008

**Annex E:
Success Stories**



USAID
FROM THE AMERICAN PEOPLE

UKRAINE

SUCCESS STORY

Increasing Access to Credit in Ukraine

Providing Credit Unions the Tools to Increase Lending to Rural Agricultural Borrowers



Photo: CNFA

Bill Maltby with Larisa Polosova, the head of the Gromada CU, and Vladimir Sitkin, FtF interpreter

“Gromada Credit Union is operated by experienced, knowledgeable leaders with the vision and energy to seek additional growth. Additional growth should be accompanied by improvements in technical capacity and management systems. CNFA should continue volunteer assistance to this viable organization to help insure their place in helping make regional farmers successful, and to insure their long-term sustainability.”

-Bill Maltby, FtF Volunteer

One of the focus areas of CNFA’s Farmer-to-Farmer (FtF) program is to improve access to credit, particularly for rural agricultural borrowers. Gromada Credit Union is one entity striving to do just that. Gromada is a medium sized credit union with \$2.6 million in assets, was established in 1996 and currently has a membership of 4,548 borrowers. During the last seven years it has developed an agricultural lending program and has become a leading provider of agricultural loans in the Kherson Oblast of Ukraine. The total volume of loans given to farmers is equivalent to about \$7.7 million, with an average loan amount of \$1,143.

The effective cooperation over the past few years of Gromada with specialists from the IFC’s Agribusiness Development Project has resulted in better servicing of farm loans. The credit union, however, still faces several challenges. The first is that Gromada does not have a system in place to conduct internal audits. Therefore, the management of Gromada approached the USAID-funded FtF program to train its employees in auditing and to assist in developing an internal audit system, including training in audit methodology, unification and adaptation of internal documents for audit needs and development of a standard form for audit reports. This problem was addressed by FtF volunteer Dean Peterson during his visit to Gromada in December 2007. His recommendations were so successful and invaluable that Gromada has requested that Mr. Peterson return in May to assist with agricultural loan risk management and assessment.

In February 2008, volunteer Bill Maltby visited the credit union to conduct trainings on the development of rural lending products. Implementation of new agricultural products will allow the further growth of the credit union and make it more competitive within the financial market. New agricultural products presented by Mr. Maltby were relevant to the current needs of rural borrowers, as researched and assessed by this expert FtF volunteer in collaboration with Gromada staff.

Another challenge faced by the credit union is the excessive centralization of the credit and deposit functions, which impedes the healthy economic growth of Gromada. During Mr. Maltby’s visit he stressed the necessity of decentralization of the credit union’s management system. Mr. Maltby will return to Gromada in April to conduct an additional assignment to tackle the challenge of credit union management and future development.

Increasing access to credit for rural farmers and agribusiness has been a proven method in increasing agricultural productivity and household income. Gromada Credit Union has had a lasting impact in Kherson Oblast and the techniques and improvements learned through the FtF program will hopefully spread to financial institutions in other regions of the country, thereby increasing rural access to credit on a country-wide level.



USAID
FROM THE AMERICAN PEOPLE

UKRAINE

SUCCESS STORY

Farmer Cooperative Improves Member Services

Farmer-to-Farmer volunteer
Larry Swalheim helps
strengthen the cooperative
and lifts members' spirits.



Photo: CNFA

*Larry Swalheim in the fields with a member
of the Farmer Cooperative*

“Once the members have cooperated together with the drip irrigation system, they will clearly see that they will be prospering by working together. Once the cooperative members have prospered they will be ready to add additional products and services for the benefit of their members.”

-Larry Swalheim, FtF Volunteer

The Farmer Cooperative, a group of farmers in a Crimean village in Ukraine, is involved in the production of vegetables including carrots, cabbage, table beets, and potatoes. As a recently formed cooperative, the group suffers from poor organization, lack of access to credit, and a pessimistic outlook of its members toward their future success. In 2007 the Farmer Cooperative approached CNFA's Farmer-to-Farmer Program (FtF) in Ukraine for assistance in making their cooperative into a successful operation.

In April of 2008, CNFA volunteer Larry Swalheim visited the cooperative to work with its members on cooperative service development. As the current CEO of Landmark Cooperative in Wisconsin, Mr. Swalheim is very familiar with a diverse set of products and services including animal feed production, petroleum marketing, sales of fertilizer and seeds, spraying of herbicides and extensive grain marketing. During his work with the Farmer Cooperative, Mr. Swalheim was able to draw on his extensive experience to teach the cooperative's members methods of strengthening their organization and improving services to farmer members. During his assignment Mr. Swalheim conducted seven seminars in six different towns, met and inspired groups of schoolchildren, and presented as many as 300 small gifts to the people in the Crimea region of Ukraine.

Over the course of his assignment, Mr. Swalheim shared his experiences and photos to illustrate the services that his Wisconsin cooperative provides for its 4,000 members. This is a relatively new and challenging concept in Ukraine, but Mr. Swalheim stressed the importance of cooperation and the potential for increasing incomes. By demonstrating the mutual benefits of cooperating on a drip irrigation scheme, farmers learned the benefits of working together and the importance of the future development and improvement of their cooperative.

By the end of the FtF assignment, the cooperative members were full of new ideas for services the cooperative can provide and were optimistic about their future. Volodymyr Yurchenko, head of the cooperative, has adopted Larry's three rules of cooperative management: 1) Serve the best services and products to your clients; 2) Don't aim to buy cheaper and sell more expensive. Aim for your clients to prosper; 3) Remember, if your client's business grows then the cooperative grows too.

This assignment has demonstrated the potential of the Farmer-to-Farmer Program, which sends Americans like Mr. Swalheim to work with farmers and agribusinesses around the world, to bring new hopes to the local people and charge them with optimism and new energy to attain their success.



USAID
FROM THE AMERICAN PEOPLE

BELARUS

SUCCESS STORY

No-Till Farming Techniques Dramatically Increase Production in Belarus

Greg Schwab and Jerry Grigar produce tangible results that have the potential to greatly impact Belarus' agricultural economy



Photo: CNFA

The newly purchased Great Plains no-till drill at work in the fields at Kholodon-Agro.

Farmer-to-Farmer assistance and Kholodon-Agro's continued investment in dairy, feed quality, and crop production activities has led to a significant improvement in production and increase in profit, which was recorded as \$76,402 in 2006 compared to only \$6,075 in 2004.

U.S. Agency for International Development
www.usaid.gov

Founded in 1992, Kholodon Joint Stock Company is a profitable large-scale wholesaler of refrigerating equipment, conditioning and ventilation systems and furniture for restaurants. In 2003, at the request of local agricultural authorities, Kholodon began financially supporting the Agricultural Production Cooperative Mir-Agro. This has been a common practice in Belarus as the country continues to go through the process of privatizing state-owned collective farms. In 2004 a newly-registered branch of the company, Kholodon-Agro, was established and began production of agricultural commodities. At present Kholodon-Agro is specialized in grain and dairy livestock production. Nearly all of the 6,723 acres of land is used for production of winter and spring grain crops, leguminous plants, flax seeds and stocks, rapeseeds, perennial and annual grasses. In addition to these commodities, Kholodon-Agro maintains a 478 cow dairy herd.

In 2005 Kholodon-Agro requested CNFA's assistance in production and farm management techniques. During these invaluable assignments, the farm owner learned about the potential benefits of no-till farming. In the summer of 2006, Dr. Greg Schwab, who is an extension agent at the University of Kentucky with expertise in soil, traveled to Belarus as a volunteer through USAID's Farmer-to-Farmer (FtF) Program to introduce the concept of no-till crop production.

Following Dr. Schwab's trip, Kholodon-Agro invested in a Great Plains no-till drill. In Spring 2006, another FtF volunteer, Mr. Jerry Grigar, visited Kholodon-Agro to provide additional training on no-till farming techniques, particularly how to properly hitch a tractor to the drill and the importance of bleeding and leveling its hydraulics. This training prepared the farm's specialists to conduct a demonstration of its operation on one of the farm's fields, creating a high level of interest among the agricultural specialists across the Dzerzhinsk Rayon and beginning the farm's first experiment with no-till production.

When Dr. Schwab revisited Kholodon-Agro Farm in February of 2008 he discovered that in the past two years the new drill had planted more than 2,500 acres and produced excellent results for wheat and oats. No-till oat yield was double that of conventionally planted oats. He was also very pleased to learn that the no-till crops planted in the spring of 2006 got 10-15% higher yields than their conventionally planted counterparts. The increased yield was attributed to moisture conservation enabled by the no-till system. In addition to higher yields, Kholodon is spending less on fuel and labor while dramatically reducing soil erosion and the associated environmental impacts. Kholodon plans on planting more than 70% of their crops using no-till this year, which will lead to a highly profitable and more environmentally friendly production in the future.

With assistance from CNFA, Kholodon-Agro is also planning on establishing on-farm research trials to fine tune other agronomic components such as weed control and fertilization for this new crop production system. Other farms across Belarus are also considering and quickly adopting no-till planting practices. This so called 'demonstration effect' will ensure that the trainings conducted by Greg Schwab and Jerry Grigar will have long lasting impact not only for Kholodon-Agro Farm, but for other farms across the country and the economy as a whole in Belarus.



USAID
FROM THE AMERICAN PEOPLE

SUCCESS STORY

Contented Cows Give Better Milk: USAID Volunteers Help Improve Dairy Operations in Belarus

CNFA has helped change the lives of more than 100 employees of Agro-Box Farm in the Village of Chernova



Photo: CNFA
Farmer-to-Farmer volunteer Rick McGuire conducted training sessions on Artificial Insemination practices. In this photo he is shown assisting with the calving process.

Total revenue of Agro-Box Farm almost doubled in the first year of USAID-funded Farmer to Farmer volunteer assistance from \$363,551 to \$681,496.

U.S. Agency for International Development
www.usaid.gov

In Belarus, 100 people from the Village of Chernova run Agro-Box, a collective farm which was privatized in 2004. Agro-Box specializes in crop and livestock production. The farm owns 5,360 acres of land, of which 4,626 are currently cultivated. Agro-Box Farm grows a variety of crops such as winter and spring grain crops, legumes, flax, rapeseed, and grasses, and maintains 848 head of cattle, including 290 milking cows.

In its attempt to successfully privatize, the farm faces several challenges, particularly in trying to increase profits from dairy production. One attempt to increase profit has been to shift from traditional tie stall housing to free stall housing for cattle, which is a well known method to increase milk production. However due to inadequate knowledge and preparation, this transition has created problems that have actually led to a decrease in daily milk production per cow from 13kg to 10kg. In addition, it is estimated that over 75% of the cows suffer from mastitis and other diseases, which can decrease milk yields up to 25% and reduce the quality of the milk. The veterinarians at Agro-Box Farm were unable to detect and treat these diseases, which has also considerably decreased profits of the farm.

In order to tackle these challenges, the owner of Agro-Box Farm requested assistance from CNFA through its USAID-funded Farmer-to-Farmer (FtF) Program. During 2006 and 2007 CNFA sent six volunteer experts to Agro-Box to assist with dairy improvements. Their activities included training sessions in the development of a viable forage production system, dairy herd management and nutrition, transition to free stall technology, artificial insemination, and dairy health management. In addition, one volunteer helped Agro-Box expand their pig operation.

As a result of FtF volunteer assistance, Agro-Box Farm has increased its revenue from milk sales from \$184,645 in 2005 to \$235,047 in 2006. In addition, due to its expansion into pig production, there was an 89% increase in meat production from 168 tons in 2005 to 319 tons in 2006. This translated into a dramatic increase of revenue from the sale of meat from \$94,860 in 2005 to \$434,579 in 2006. The total revenue of Agro-Box Farm almost doubled from \$363,551 in 2005 to \$681,496 in 2006. As farmers continue to implement new techniques and follow recommendations of FtF volunteers, success and hope for the future will grow in this small village in Belarus .



USAID
FROM THE AMERICAN PEOPLE

MOLDOVA

SUCCESS STORY

A New Home for Happy and Healthy Cows

A Moldovan Dairy Farm Builds a New Milking Parlor and is Ready to Welcome its New Residents



Photo: CNFA

Samples of a diverse line of dairy products produced by SANA Dairy Factory

“It was a unique experience for both me and my farm manager. I was very impressed with the willingness of US farmers to share with us information and their experience. We are grateful to them for giving us the opportunity to widen our horizons and demonstrate to us that under a strong management, dairy farming could be a profitable business.”

-Maria Acbash, Owner of SANA Dairy Factory

U.S. Agency for International Development
www.usaid.gov

As a result of drought, the Moldovan Agricultural Ministry estimates that Moldova’s milking cow population has declined from 200,000 cows nationwide at the beginning of 2007, to fewer than 45,000 cows today. Additionally, many of the remaining cattle have been liquidated due to a lack of sufficient forage. This has dramatically increased the reliance on imported milk to meet Moldova’s domestic demand.

Faced with unreliable supplies, very low quality, and seasonal shortages of milk needed to meet increasing market needs of the expanding milk processing and sales business, SANA Dairy Factory has decided to establish its own lines of supply. In 2007, the firm decided to build its own 200 head dairy farm on the site of the collective farm it had acquired and requested CNFA’s Farmer-to-Farmer (FtF) assistance in ensuring this project was a success.

Over the course of three volunteer assignments, American FtF volunteers have consulted SANA’s management on genetic management improvement, new product development, and cattle nutrition. Thanks to CNFA volunteers, SANA’s management and employees have been trained in modern cow care, sanitation principles and disease prevention; cow comfort; semen handling techniques; and transition cow and calves management. They have also received a pre-research study of skim milk and several package designs for future SANA products.

As part of the third assignment with SANA, John Kappleman, a returning CNFA FtF volunteer, trained Eugene Peikov, the farm manager, to balance feed rations and explained other necessary procedures to be implemented before the cows arrived at their new home. Furthermore, John played a crucial role helping the management connect with cattle dealers abroad, and traveled with Maria Acbash, the factory owner, to Austria to select the cows and make shipping arrangements.

In January 2008, volunteers Robert Binversie and John Kappelman, went above and beyond a traditional FtF assignment when they organized a US dairy farm tour for Maria Acbash and Eugene Peikov. For the SANA management, the tour was a rare opportunity to observe and learn from the experience of US dairy farmers. The farm manager had the opportunity to work at a dairy farm for a few days and learn cattle management, feeding principles, barn designs, and milking procedures. The owner of SANA observed the range of available dairy products in the US while exchanging opinions and ideas with American dairy colleagues. This experience encouraged SANA to begin producing skim milk, a product currently unavailable in Moldova.

As a result of CNFA FtF volunteers’ assistance, SANA is ready to keep its Austrian residents comfortable, healthy and happy. Furthermore, in April 2008, owner Maria Acbash was awarded with **“The Best Entrepreneur of the Year”** award while the Ionita brothers, who became her suppliers after the trip to the US, received the **“Best Young Farmer”** award. This is only the beginning of SANA’s success!



SUCCESS STORY

Modernizing Production: A Formula for Success

Volunteer assistance
increases sales and opens
new markets



Photo: CNFA

Agafia Ivanov, co-owner of Vindex-Agro, proudly displays fruits of the company's labor at an agricultural exposition

As a result of USAID/CNFA assistance, Vindex-Agro has been able to improve efficiency of production, and has shifted from seasonal to permanent employment, thus increasing avenues of stable income and health benefits for its employees

There is no shortage of fresh fruits and vegetables in Moldova, but turning these commodities into profit often proves to be a challenge. The legacy of the Soviet state-run economy has included a lack of essential expertise in marketing and profit maximization, leaving many of the newly-privatized companies without the means to access new markets and improve efficiency. With assistance from CNFA's Agribusiness Development Project (ADP) and the Farmer to Farmer Program, however, one Moldovan company is a step closer to success.

Established in 2000, Vindex-Agro LLC is a mid-size fruit and vegetable production/marketing company. In order to increase its market share, and thus influence the price of fruits and vegetables, Vindex-Agro has continuously sought ways to improve its production capacity and marketing ability. In 2003 the company purchased BAYER irrigation equipment through the Japanese Grant Program 2KR, and in 2004 began growing vegetables on a 20 hectare plot.

As a result of rising production volumes and financial revenue Vindex-Agro's management decided to enlarge the area planted with vegetables. Given the lack of local expertise and access to capital, the company turned to foreign assistance to realize its objectives. In 2005, Vindex-Agro applied to the USAID/CNFA Agribusiness Development Project, based in Moldova, for a matching grant of \$24,925 to install plastic tunnels and drip irrigation for vegetable production. CNFA's role as an implementer of the USAID Farmer to Farmer Program in Moldova encouraged Vindex-Agro to seek volunteer assistance in introducing new varieties, applying modern production techniques, and improving the marketing of its products. Over the next two years, Vindex-Agro hosted two Farmer to Farmer volunteers, who trained Vindex-Agro staff in marketing principles and production practices, such as brand promotion, packaging and labeling, harvesting and post-harvesting techniques, irrigation, and modern vegetable planting.

As a result of this volunteer assistance, Vindex-Agro improved the output quantity and quality of its products; increasing its sales more than two fold and adding an additional line of supermarkets to their distributors. Farmer to Farmer volunteers also assisted Vindex-Agro in developing a dynamic marketing plan, and have thus increased the company's local market share from 2% to 10%. Volunteers have also advised Vindex-Agro on proper post-harvest handling that will help meet the demand for fruits and vegetables during the off season.

Although initially a low-profit grain marketing business, with the assistance of USAID, 2KR, CNFA, and Farmer to Farmer volunteers, Vindex-Agro has been able to evolve into an innovative high value fruit and vegetable producer. Today, Vindex Agro is the biggest and the most progressive farmer in Orhei region.

Annex F:
FY08 Overview

I. SUMMARY OF FY08 PROGRAM IMPLEMENTATION

During FY08, CNFA's Farmer-to-Farmer program (FtF) implemented ninety-seven volunteer assignments, exceeding the target of eighty assignments in the FY08 Workplan. Forty-nine assignments were conducted in Ukraine, exceeding the target of forty; seventeen volunteers visited Belarus, one more than targeted; and thirty-one volunteers were fielded to Moldova, exceeding the FY08 target of twenty-four. This includes the initiation of nineteen new projects, including cooperatives, farms, private enterprises, rural financial institutions, and one public sector technical agency. CNFA was also again fortunate to have its annual registration renewed by the Belarusian government, allowing the continuation of FtF's important and successful work there.

Consolidated Impacts Table

Country	Total # of Volunteers Fielded to These Projects during FY08	# of Beneficiaries during FY08	# of Beneficiaries, including family members and indirect beneficiaries	Total beneficiaries (including family members and indirect beneficiaries) per volunteer
Ukraine (FA1)	26	1,690	4,833	186
Ukraine (FA2)	19	989	4,875	257
Ukraine (FA3)	4	466	39,474	9,869
Belarus	17	1,349	4,722	278
Moldova	31	948	2,844	92
TOTAL	97	5,442	56,784	AVG: 2,136

The table above displays the FY08 volunteer and beneficiary numbers for each focus area in the West NIS program. During FY08, CNFA conducted ninety-seven volunteer assignments and directly impacted nearly 57,000 farmers, rural entrepreneurs, and their families. In FY08, seventy-four volunteers supported Focus Area 1 (FA1) projects in Ukraine, Belarus and Moldova, which included a focus on value-adding hosts and high-value agricultural commodities. On average, these volunteers directly impacted fifty-seven beneficiaries each—that number reaches 168 if family members are included. In Ukraine's FA2, nineteen volunteers, through their work with agricultural lending institutions, were able to impact 4,875 loan recipients, an average of 257 each. The four volunteers who worked in Ukraine's FA3 were able to impact over 39,000 indirect beneficiaries, the customers of FA3 agrodealer hosts.

In FY08, volunteers helped to introduce over 11,000 new products and services to markets in Ukraine, Belarus and Moldova. In addition, volunteers donated over \$1.3 million in technical assistance over the course of 1,594 volunteer days.

Summary Volunteer Table

Country	Focus Area	FY08 Volunteer Target	Actual FY08 Volunteer Numbers			Cost/Volunteer Day
		Total	Male	Female	Total	
Ukraine	1	24	26	0	26	\$866
Ukraine	2	12	16	3	19	\$1,017
Ukraine	3	4	4	0	4	\$863
Belarus	1	16	17	0	17	\$1550
Moldova	1	24	28	3	31	\$781
TOTAL		80	91	6	97	Average= \$1,015

II. SUMMARY OF PROGRAM ACTIVITIES AND ACCOMPLISHMENTS BY COUNTRY AND FOCUS AREA

Ukraine

Focus Area 1 - *Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets.*

A. Summary of Focus Area

Improving farmer access to markets represents the largest component of CNFA-Ukraine's FtF activity. With 80% of Ukraine's fruits and vegetables and 70% of its dairy production accounted for by small farmers and household plot owners, FA1 is designed to support commercially-oriented producers and processors to capitalize on this market opportunity and increase rural incomes. CNFA volunteers assist Ukrainian farmers by providing business planning and marketing training, production training to grow crops demanded by the market and meet necessary quality standards, and organizational development support to operate more effectively in the market by combining resources. Increasingly, technical assistance is also being provided to downstream agribusinesses that are in a position to raise farmer incomes through the markets they provide. By working at multiple points in the fruit and vegetable value-chain, CNFA volunteers facilitate viable market linkages and help expand high-value horticultural production, which allows Ukraine's small farmers to generate significant income from their land. Similarly, though to a lesser degree, FA1 works with small-scale dairy farmers and producers of other commodities, including honey, mushrooms, herbs and meat, which also offer significant potential for income generation from small-scale production.

B. Activities and Accomplishments

During FY08, CNFA Ukraine implemented twenty-six FA1 volunteer assignments in support of eight projects. Three new projects were initiated in FY08. The Volyn Farmers Association project aimed to assist the private farmers of Volyn oblast in increasing their incomes through enhancing the Association's overall performance at the local market. This goal was accomplished with three volunteer assignments focusing on marketing strategy, association development and swine feeding rations. The Ukrainian Ostrich Association represents one of CNFA-Ukraine's efforts outside of fruit and vegetable production under the current FY04-08 program. Within the FtF project, volunteers assisted the members of the Association in improving their production practices and marketing skills. The Kyiv Milk Processing Plant (KMPP) project supported production of high quality inputs for a dairy processing plant located in the Kyiv region, to ensure higher sales and, in this way, expand the market for local milk producers. FtF volunteers assisted the plant's suppliers of raw milk with improving the quality of alfalfa used as forage for the milking cows' feeding rations and enhancing the overall quality of milk to meet European quality standards.

C. Impacts¹

1. Impact Chart

Project	Total # of Volunteers Fielded to These Projects during FY08	# of Beneficiaries during CY08	# of Beneficiaries (including family members)	Total Increase in Gross Revenue, CY08 (US\$)	Total Increase in Estimated Net Income, CY08 (US\$)	Net income Increase per Beneficiary (US\$)	Net Income Increase per Volunteer (US\$)	Total Beneficiaries (including family members) per Volunteer
Farmer Cooperative	3	62	177	\$83 974	\$51 376	\$829	\$17 125	59
Leader Cooperative	3	155	443	\$92 946	\$64 333	\$415	\$21 444	148
Orshivtsi	3	650	1 859	\$841 543	\$80 605	\$124	\$26 868	620
Mushrooms	3	159	455	\$515 649	\$150 309	\$945	\$50 103	152
KMPP	4	878	2 511	\$32 380 052	\$17 939 216	\$20 432	\$4 484 804	628
Ostrich	2	8	23	\$54 638	\$27 381	\$3 423	\$13 690	11
Volyn	5	86	246	\$392 577	\$31 739	\$369	\$6 348	49
Beekeepers	3	3 104	8 877	\$78 289	\$21 134	\$7	\$7 045	2 959
TOTAL	26	5 102	14 592	\$34 439 669	\$18 366 093	\$3 600	\$706 388	561

2. Analysis of Impact

CNFA volunteer assistance provided to project hosts during the year resulted in significant increases in both gross revenue and net income, which increased by **\$34.4 million** and **\$18.4 million**, respectively, for all project beneficiaries combined—farmers, employees and owners. A considerable part of the increased gross revenue came from the Kyiv Milk Processing Plant, which expanded its operations significantly with the assistance of FtF volunteers, who assisted the plant’s suppliers of raw milk in enhancing milk quality, which, in turn, led to an increase in both the processor’s and raw milk suppliers’ incomes.

Among the farmer groups producing dairy, the most significant results can be observed in the Orshivtsi project. With **650** beneficiaries (1859 including family members), the group increased its gross revenue and net income by **\$841,543** and **\$80,605**, respectively. Increased sales and net income were in great part attributable to advanced dairy herd management and harvesting and post-harvest handling technologies recommended by CNFA volunteers. The Association of Mushroom Producers experienced the most considerable increase in total gross revenue and net income in the group of enterprises not involved in fruit and vegetable or dairy production. In spite of its modest number of beneficiaries—159 producers—the Association’s gross revenue and net income increased by **\$515,649** and **\$150,309**, respectively.

3. Lessons Learned

While farmers remain the main focus within the FtF program, CNFA-Ukraine has found it rewarding to cooperate with processing plants and other agribusinesses, which allow the program to reach out to more farmers by accessing those institutions’ raw material suppliers. The Kyiv Milk Processing Plant project, initiated by the plant, was aimed at assisting the farmers who supply the plant with raw milk to improve their forage production and milk quality. This project was especially successful because the initiator (the plant) could identify the common problems and ensured access to all suppliers.

¹ CY08 data through 6/30/08.

Focus Area 2 - *Increase farmers' incomes, especially small-scale and women farmers, by improving access to credit and business development training.*

A. Summary of Focus Area

Through Focus Area 2 (FA2), CNFA aims to increase the availability of rural credit in Ukraine, which is still in its infancy. As largely urban lending institutions begin to penetrate Ukraine's rural areas, lack of knowledge about the business of agriculture by both lenders and borrowers limits growth, increases risk and results in higher interest rates and a reliance on collateral-based lending. In response, CNFA volunteers work on both sides of Ukraine's financial services market, assisting both credit professionals and agricultural clients to understand and mitigate risk, improve long-term planning and introduce innovation. By FY07, FA2 hosts included credit unions, commercial banks and leasing companies distributing agricultural equipment, and in FY08 an insurance company was added to the list of recipients of volunteer assistance. The impact of our work is measured in the increased value of rural credit accessed by Ukrainian farmers.

B. Activities and Accomplishments

During FY08, CNFA-Ukraine carried out sixteen volunteer assignments in support of four projects. The assignments with credit unions in Kherson and Marganets, as well as assignments with the Zaporizhya Association of Credit Unions, focused mostly on financial management and audits. In FY08, CNFA-Ukraine started implementing a new project extended to all regions of Ukraine: Improvement of Agricultural Insurance Practices. This project has supported the development of agricultural insurance in Ukraine through training the "TAS" Insurance Group ("TAS") staff in advanced agricultural insurance practices, including crop and animal insurance, loss assessment, product development, evaluation and promotion.

Robert Cerda, the President of Crop Insurance Systems, Inc. in Kansas, was the second volunteer fielded to this project. In addition to training "TAS" managers in advanced methods of development and evaluation of insurance products, Robert organized a visit of "TAS" employees and their clients to his insurance company in Kansas City, as well as to a number of key American institutions involved in agricultural insurance. As a result of Robert's volunteer assistance and the trip to America, "TAS" managers outlined some changes to be made in their insurance policies. In addition, many useful contacts have been established with American institutions, which are of great value to the Ukrainian insurance company, enabling them to serve local farmers better and also to serve as a leader in the agricultural insurance market.

C. Impacts²

1. Impacts Chart

Project	Total # of Volunteers Fielded to These Projects during FY08	# of Credit Beneficiaries during CY08	Total Ag Lending, CY08 (US\$)	Average Ag Loan value, CY08 (US\$)	Total Increase in Ag Lending, CY08 (US\$)	Net Credit Increase per Beneficiary (US\$)	Net Credit Increase per Volunteer (US\$)	Total Credit Beneficiaries per Volunteer
Gromada CU	5	1 633	\$4 041 237	\$2 475	\$82 474	\$51	\$16 495	327
Unity CU	3	500	\$1 134 021	\$2 268	\$309 278	\$619	\$103 093	167
Zaporizhya Association	2	1 992	\$1 241 447	\$623	\$8 851	\$4	\$4 426	996
“TAS” IG	6	750	\$61 855 670	\$82 474	\$61 851 710	\$82 469	\$10 308 618	125
TOTAL	16	4 875	\$68 272 374	\$14 005	\$62 252 314	\$12 770	\$3 890 770	305

2. Analysis of Impact

The table above summarizes significant indicators for assessing the overall performance of FA2 hosts during the calendar year. According to our estimation, **as of December 31, 2008**, CNFA-assisted institutions will have had provided **\$68 million (UAH 330 million)** in loans to **4,875** agricultural borrowers, resulting in an average loan to farmers of **\$14,005 (UAH 67,985)**. Significant contributions to the success of volunteer assistance has been made by the “TAS” project, which resulted in a considerable increase in the volume of agricultural insurance products offered to farmers, as well as in the value of the insured crops.

3. Lessons Learned

The financial services market in Ukraine has considerably progressed since the beginning of the program, with Ukrainian financial institutions gradually becoming more in favor of agricultural lending. This is especially true for local credit unions, which have proved to be the most viable instrument for increasing access to credit for rural farmers and agribusinesses. The productive cooperation between CNFA-Ukraine and these credit unions has culminated in a conference, which brought together more than 80 credit unions to discuss challenges the Ukrainian credit unions face today and opportunities for further development.

While working with credit unions in FY08, CNFA-Ukraine utilized follow-up assignments, bringing previous volunteer consultants back to Ukraine to work with the same hosts. This practice turned out to be very successful, as the volunteers were already familiar with the operations performed by the credit unions and could provide assistance relevant to their current needs.

² CY08 data through 6/30/08.

Focus Area 3 - Increase farmers' incomes, especially small-scale and women farmers, by increasing their access to input supply.

A. Summary of Focus Area

CNFA's activity in this focus area is designed to support the development of farm input supply stores across Ukraine to serve the millions of newly land-owning small-scale farmers. The strategy is a) to offer shop owners training in business skills and marketing to strengthen their performance, and b) to facilitate and promote expanded access by those stores to the wholesale farm input distribution chain in Ukraine. As in FA2, although the hosts are agrodealers, the impact is measured in increased input sales to Ukrainian farmers.

B. Activities and Accomplishments

During FY08, CNFA-Ukraine conducted four FA3 assignments within two projects. The Torgoviy Dim and Svytjaz projects were each represented by three agrodealers. These projects focused more on large-scale classroom training in salesmanship and retail marketing and less on direct consulting follow-up with agrodealers. As a result of these four assignments, a total of **39,474** farmers—the agrodealers' customers—have experienced better service and a wider range of products.

C. Impacts³

1. Impacts Chart

Project	Total # of Volunteers Fielded to These Projects during FY08	# of Agrodealers Trained, FY08	# of Farmer-Customers, CY08	Increase in Farmer-Customers, CY08	Total Input Sales, CY08 (US\$)	Total Increase in Input Sales, CY08 (US\$)	Increase in Farmer-Customers per Agrodealer	Increase in Farmer-Customers per Volunteer	Increase in Input Sales per Agrodealer (US\$)	Increase in Input Sales per Volunteer (US\$)
Torgoviy Dim	2	3	13283	71	\$2 588 019	\$18 689	24	36	\$6 230	\$9 345
Svytjaz	2	3	26191	208	\$13 363 142	\$10 768	69	104	\$3 589	\$5 384
TOTAL	4	6	39 474	279	\$15 951 161	\$29 457	47	70	\$4 909	\$7 364

2. Analysis of Impact

In FY08, CNFA volunteers provided training to six agrodealers, and the program has exceeded its revised LOP target of 24 agrodealers trained.

Agrodealer sales in FY08 are higher by **\$29,457** than in FY07. A significant increase is observed in input sales per agrodealer—almost **\$5,000**. In 2007, CNFA chose to focus volunteer assistance on agrodealers who sell directly to farmers, rather than regional wholesalers. These agrodealers engage in more transactions but smaller sales than previous CNFA hosts. The results of the FY08 show that the chosen strategy turned out to be extremely successful.

³ CY08 data through 6/30/08.

3. Lessons Learned

Agrodealers are available for trainings in the off-season only. During the rest of the year they are extremely busy with sales of inputs. However, it is very difficult to bring an American agrodealer expert to Ukraine during the agrodealers' off-season, as this is the time when they are busy consulting with agrodealers in the US as well, and so usually are not able to travel.

Belarus

Focus Area 1 – *Increase rural incomes by improving the performance of privatized collective farms and individual private farmers throughout Belarus.*

A. Summary of Focus Area

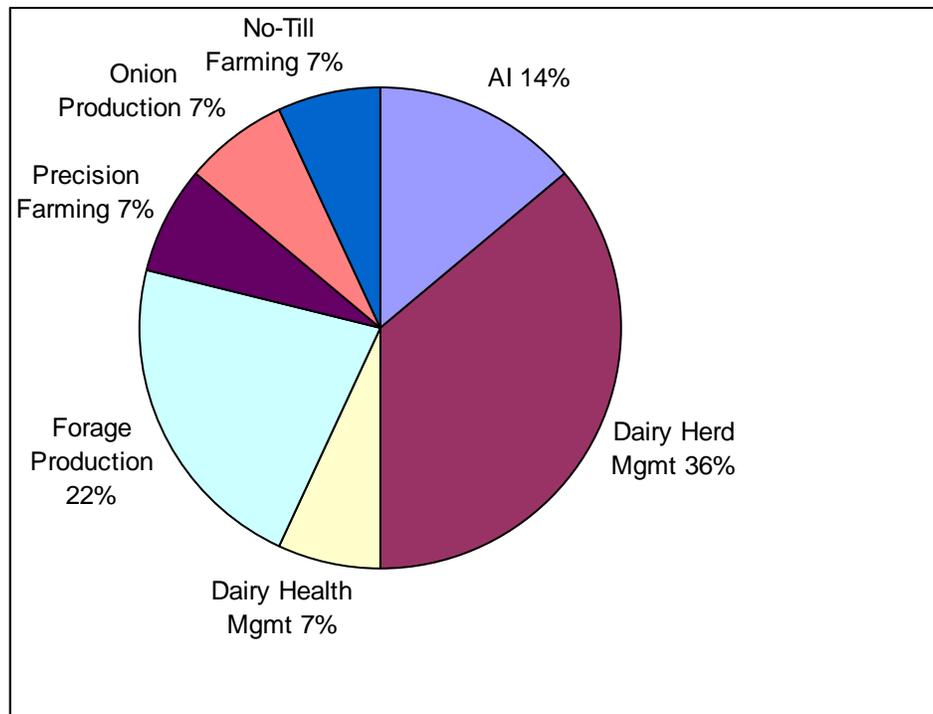
CNFA FtF Belarus continues to provide volunteer technical assistance to strengthen the performance of privatized collective farms. Volunteer trainings aim to enhance the farms' capacity for increased income-generation by promoting innovative production practices and by transferring the technical knowledge and skills necessary to make informed and efficient business decisions. CNFA FtF Belarus' efforts also support the country's emerging private agricultural service sector by providing FtF volunteer assistance to an informal group of individual private farmers specializing in onion production and to a group of farms interested in learning more about precision farming.

The overarching goal of FtF Belarus is to increase rural incomes and to establish models of successful private enterprise throughout Belarus.

B. Activities and Accomplishments

1. Accomplishments

CNFA FtF Belarus made rapid, good progress during the first half of FY08 in implementing its Focus Area strategy. CNFA FtF Belarus created Project Strategies and Host Profiles for seven new projects and developed volunteer Scopes of Work for 20 different assignments. Unfortunately, due to tense political relations between the US and Belarus, CNFA FtF Belarus had to suspend bringing American volunteers into the country, and, as a result, was only able to field 14 volunteers to five new projects—Narochany, Negorelskoye, Oma and Zhodino farms and the Agricultural Information Consulting Center—and one on-going project—Kholodon-Agro Farm. Fifty-seven percent of the volunteers' training focused on dairy-related farming techniques, including herd management, artificial insemination (AI) and health management. Twenty-two percent of the volunteer assignments addressed issues related to forage system development and alfalfa production. The remaining percentage of assignments was equally distributed among three promising new directions—precision- and no-till farming and onion production.



During FY08, CNFA FtF Belarus directed the majority of its volunteer technical assistance toward providing training at five privatized collectives. In addition to its work with privatized collective farms, CNFA FtF Belarus has expanded its host portfolio by adding the Agricultural Information and Consultation Center (AICC), a commercial provider of diverse solutions to Belarusian farmers on a range of topics, including the spheres of agricultural software, precision farming, and business economics. These additional efforts resulted in the completion of two assignments with AICC clients—a group of five private farmers growing onions and AICC’s current and potential clients using precision farming techniques.

In addition to program-related activities, CNFA-Belarus staff, in collaboration with the US Embassy in Belarus, selected four owners and managers of privatized collective farms who were recipients of CNFA’s technical assistance to participate in the US State Department’s International Visitor Program. In May 2008, Limma Parkhimovich, Profitagro’s manager; Alexander Korzhanets, Agro-Box’ manager; Vladimir Shapel, Ostrovo’s owner; and Konstatin Yermolenko, Chairman of the Belarusian Farmers’ Union, visited the United States.

In August 2008, CNFA FtF Belarus, per the US Embassy’s personal request, was involved in the dissemination of information on the Big-Iron Farm Show in North Dakota among its former and current clients.

In order to promote collaboration with other organizations, CNFA has initiated a highly productive and mutually rewarding relationship with Alexander Lapotko, a scientist with the Livestock Department of the Belarusian Research Institute of Animal Breeding, and Nikolay Afanashevich, a businessman representing one of the largest private dairy input (milking equipment and veterinary medicine) suppliers in Belarus. CNFA has arranged meetings and workshops involving FtF volunteers and specialists from the Institute and local breeding stations, which helps to promote the FtF program and its mission to a much broader audience.

In addition, in August 2008 CNFA FtF Belarus hosted Elon Gilbert, an impact evaluator, who visited three host organizations, Kholodon-Agro, Valbik farms and a small-scale vermiculture producer, in order to get acquainted with their performance and prepare an impact assessment of the FtF program in Belarus.

2. Problems and Opportunities

CNFA Belarus faced two notable obstacles in the past year. First, there were challenges in hiring qualified interpreters; experienced and knowledgeable interpreters for our volunteers are an integral component to ensuring success. Second, the tense political relations between the US and Belarus have had a deleterious impact on our program.

Despite these challenges, CNFA Belarus' proven success in impacting farmers and increasing rural incomes led the Ministry of Foreign Affairs to renew our registration certificate in February 2008.

C. **Impacts**⁴

1. Impact Chart

Project	Total # of Volunteers Fielded to These Projects during FY08	# of People with Incomes Increased during CY08	# of People with Incomes Increased (including family members)	Total Increase in Gross Revenue, CY08 (US\$)	Estimated Total Increase in Net Income, CY08 (US\$)	Net income Increase per Beneficiary (US\$)	Net income Increase per Volunteer (US\$)	Total Beneficiaries (including family members) per Volunteer
AICC	2	19	67	\$26 401	\$34 748	\$1 829	\$17 374	33,25
Kholodon-Agro Farm	2	83	291	\$143 458	\$17 850	\$215	\$8 925	145,25
Narochany Farm	2	361	1264	\$823 048	\$59 950	\$166	\$29 975	631,75
Negorelskoye Farm	3	161	564	\$327 804	\$45 299	\$281	\$15 100	187,83
OMA Farm	2	82	287	\$187 720	\$24 348	\$297	\$8 116	65,33
Zhodino Farm	3	398	1393	\$775 093	\$165 598	\$416	\$55 199	464,33
TOTAL	14	1 104	3 864	\$2 283 523	\$347 792	\$315	\$24 842	276,00

2. Analysis of Impact

Over the life of the program to date, CNFA-Belarus volunteers have impacted over 4,300 private farmers and farm employees and have contributed to the sale of more than \$30 million of agricultural produce.

In FY08, CNFA-Belarus trained over 1,100 beneficiaries through 14 FtF volunteer assignments. These assignments focused primarily on collective dairy farms in technical areas such as artificial insemination, dairy nutrition, forage production, and dairy herd management. CNFA Belarus also began a new project with AICC, a private consulting firm that provides services to agricultural producers in Belarus. Gregory Schwab was the first volunteer to visit AICC and had a very successful assignment in precision farming techniques that culminated in a formal round-table discussion about the future of precision farming in the country.

⁴ CY08 data through 6/30/08.

Project Impact Assessments conducted by CNFA Belarus for this report reflect on the estimated results for CY08, with impacts resulting from volunteer assistance during FY08. What follows is a brief description of those impacts:

According to the assessment for the host organizations CNFA-Belarus worked with in FY08, as a result of the 14 volunteer assignments completed, FtF Belarus volunteer training will contribute to the following impacts:

- 1,104 individuals (3,864 including family members) increased net incomes by a total of \$347,792;
- Beneficiaries increased their net income by an average of \$315;
- Each volunteer impacted a total of 276 beneficiaries, on average (including family members);
- Each volunteer produced an average net income increase of \$24,842.

All six of these farms are involved in dairy and livestock production. FtF Belarus observed substantial improvements in all areas of production as a result of volunteer interventions. Better milking procedures, improved sanitary conditions and mastitis control, improved rations for heifers and dry cows, and increased quality and quantity of forage all had beneficial effects on production levels. These improvements in production resulted in an increase in the farms' total revenues from sales. The implementation of volunteers' recommendations accompanied by the increase of the state purchasing prices for raw milk and meat (in September 2007 these prices almost doubled) had a positive impact on the hosts' production and sales performance.

Indicator	LOP Targets	2004 Total	2005 Total	2006 Total	2007 Total	2008 Year Estimated Results	Cumulative 2004 - 2008 LOP Total
Privatized Collective Farms Trained	15	3	5	6	6	6	26
Cereal Crop Farms	3	1	0	0	0	0	1
Livestock Farm	8	2	4	6	6	5	18
Vegetable Farms	2	0	0	0	0	1	0
Other Commod	2	0	1	0	0	0	1
Mobilized by Host		\$212	\$785	\$867	\$872	\$1 765	\$4 501
Individual Private Farmers Targeted	30	0	12	36	0	5	53
Farm Employees Targeted	2 250	478	1 030	1158	565	1 100	4 331
Priv Collective Farms Employees	2 000	478	940	899	565	1100	3 982
Priv Farmers Employees	250	0	90	259	0	0	349
Total Net Income of Farm Employees (Br)	6 500 000 000	892 896 000	2 788 141 760	4 793 429 120	3 601 735 200	7 874 116 000	19 950 318 080
Average net income per farm employee (Br)	3 000 000	1 867 983	2 706 934	4 139 403	6 374 753	7 158 287	4 606 400
Organizations Developing Strategic Plans	14	2	5	9	6	6	28
New Products & Services Offered by Farmers		11	4	12	12	5	44
Total Net Income of Farms (Br)	1 800 000 000,00	128 000 000	955 814 360	1 958 303 000	649 900 000	5 053 643 000	8 745 660 360
Average net income per farm owner (Br)	70 000 000,00	42 666 667	35 400 532	40 797 979	46 421 429	280 757 944	79 506 003

Targeted Farms' Production - Dairy (tons)	19 000	3 354	8 651,0	13 325,0	11 115,0	24 155,0	60 600
Targeted Farms' Production - Meat (tons)	3 500	677	1 459	1 938	1 218,0	2 650,0	7 942
Targeted Farms' Production - Vegetables (tons)	27 000	4 541	10 395	12 111	13 338,0	13 065,0	53 450
Targeted Farms' Production - Other Commod (tons)	80 000	11 509	42 731	86 827	91 951,0	137 760,0	370 778
Farmers' Sales (Br) - Dairy	5 800 000 000	1 024 500 000	2 536 060 059	4 726 250 000	4 351 800 000	14 534 520 000	27 173 130 059
Farmers' Sales (Br) - Meat	4 900 000 000	667 000 000	2 316 085 000	7 827 680 000	3 972 200 000	7 832 800 000	22 615 765 000
Farmers' Sales (Br) - Vegetables	2 300 000 000	564 000 000	825 816 000	1 037 710 000	1 249 900 000	1 077 800 000	4 755 226 000
Farmers' Sales (Br) - Other Commod	3 800 000 000	823 000 000	1 485 427 410	3 461 290 000	2 889 200 000	2 397 000 000	11 055 917 410
Total Gross Value of Sales (\$)		\$1 438 551	\$3 347 378	\$7 968 659	\$5 823 879	\$12 305 771	\$30 884 238
Increase in Gross Value of Sales (\$)		\$624 226	\$1 147 446	\$3 225 091	\$726 545	\$2 283 523	\$5 723 308

3. Lessons Learned

One useful finding of FY08 is in regard to the team assignments organized with multiple host organizations. In the case of the recent assignment of three volunteers to Zhodino farm in July 2008, work was assigned so that these three persons provided virtually full-service consultations not only to their main host, but also to a number of other farms throughout Belarus, training them in different areas of AI techniques and dairy herd and health management, and performing effectively as a team. Both volunteers and hosts commented positively about this adjustment.

Moldova

Focus Area 1 - *Increase farmers' incomes, especially small-scale and women farmers, by improving their access to markets.*

A. Summary of Focus Area

Improving farmer access to markets has been the main focus area of CNFA-Moldova for the past five years. CNFA assistance in this area has included:

- Training of farmers and agribusinesses in the areas of business management, marketing, and technology transfer to help producers and processors meet market requirements and to improve Moldova's agricultural competitiveness;
- Cooperative development support to help small farmers establish democratic, member-run organizations and operate more effectively in the marketplace;
- Technical assistance to facilitate the expansion of value-adding enterprises, in order to create pull-through demand and expand cash markets for farmer output.

Due to the fact that program beneficiaries are mainly small- and medium-sized farmers, CNFA has concentrated its assistance on the fruit and vegetable sector, where producers can generate significant income from their relatively small plots of land.

B. Activities

1. Accomplishments

During FY08, CNFA-Moldova completed 31 volunteer assignments in support of nine projects, including one cooperative, two informal farmer groups conducting joint commercial activities, five value-adding enterprises, and one insurance company. Of the nine hosts assisted in this reporting period, two were carried over from the previous year (Agrostoc Input Supply Coop and Volodeni Dairy Producers' group) and seven were initiated in the current year (ZMC Group Bakery, Straseni Vegetable Growers, Focaro Agro Swine Producers, SANA Dairy Processors, Triodor LLC, AvicolaCimGallus Egg Producers, and MOLDCARGO Insurance Company). About thirty percent of assignments concentrated on production technologies (vegetables, milk and livestock), twenty-three percent on business and financial management, sixteen percent on marketing and new product development, thirteen percent on cooperative development, six percent on food processing technology, six percent on artificial insemination and veterinary service development, and a final six percent on agricultural insurance development.

During this reporting period, the FtF Moldova hosts and volunteers have worked together on many successful activities. The most prominent are the following:

Drochia Vegetable Growers Group (a host from FY06) has continued growing seedless watermelons, a crop which was introduced to the Moldovan market for the first time last year. This year, the group members have decided to buy 12,000 seeds, worth approximately \$3,000, and jointly grow the crop. At the present moment, the yield proves to be a very good one—twice as high as the yield of regular watermelons. FtF Moldova is proud to report that the Drochia Group has established an agreement with the METRO Cash & Carry chain of stores to sell their entire watermelon crop. This activity represents an excellent replicable result, as FtF Moldova has been informed that a high number of Moldovan farmers have shown interest in beginning to grow seedless watermelon.

Focaro Agro LLC was new host for FtF Moldova, although a frequent client of CNFA's Agricultural Development Project (ADP). In FY08, FtF Moldova decided to provide support to Focaro for hog production, as this sector was not addressed by ADP. Focaro's swine operation began in 2006, and as a result of recommendations and support from FtF volunteers Keith Thornton and Tom Cadwallader, the farm began generating a profit in only its second year of operations, which is unusual for this type of business. Moreover, having the opportunity to expand its operations, Focaro Agro has decided to build an American-style dairy farm, using the expertise and recommendations of John Kappelman, co-owner of the 1,000-head, Platinum Milk Quality Award-winning Meadow Brook Farms dairy. To further support Focaro Agro and provide continuity of volunteer assistance, John Kappelman will organize a study tour to the US for Valeriu Belotcaci, the farm owner, covering all in-country related costs.

Moldcargo Insurance Company was also a new host in FY08. FtF Moldova requested two flexible assignments in FY08, which were focused on an unusual area of activity for the program in Moldova—the financial sector. Agricultural insurance activities are a new area for Moldovan insurance companies, thus the volunteer support was actively requested and used. The two volunteers working with MOLDCARGO, Robert Cerda and LeWayne Jansonius, helped the company to overcome a number of hidden problems, enhancing its competitiveness.

CNFA strongly believes that the impacts of these volunteer assignments in Moldova will continue into the future. FtF volunteers were able to plant the seed of change in their hosts' minds, and FtF Moldova is confident that many will continue to improve over time.

2. Problems and Opportunities

In 2008, the Russian market re-opened for Moldovan fruit and vegetable growers. However, the rules are extreme, and smallholder producers are unable to comply with the tough requirements imposed. Russian buyers have directly stated that they are no longer willing to sign agreements with small- and medium-producers; they prefer working with export associations, like the Moldova Apple Export Association or the Table Grapes Growers' Association.

Although this situation is seen as a setback by many farmers, in the long run, farmers will likely see that when they work together for the same goal, everyone gains.

C. Impacts⁵

1. Impacts Table

Indicator	Indicator Table (IT) or Planning Matrix (PM) Indicator	LOP Targets	2004 Total (1/1/04 - 12/31/04)	2005 Total (1/1/05 - 12/31/05)	2006 Total (1/1/06 - 12/31/06)	2007 Total (01/01/07 - 12/31/07)	2008 Semi Annual Total (01/01/08 - 06/30/08)	Cumulative 2004-2008 LOP Total
Coops and farmer groups assisted	PM/IT	29	10	6	7	3	3	29
Specialized in: fruits and vegetables	PM	15	3	3	4	3	1	14
dairy	PM	5	4	0	1	0	0	5
other commodities	PM	9	3	3	2	0	2	10
Total number of assisted farmers	PM	6 500	3 589	1 346	1 590	4 287	1 857	12 669
Dues-paying members	PM	3 000	2 109	749	318	71	74	3 321
Non-dues paying members			1 480	597	1 272	4 216	1 783	9 348
Total number of cooperatives' and farmer groups' employees			231	349	433	449	146	1 608
Permanent	PM		128	102	121	175	111	637
Seasonal	PM		103	247	312	274	35	971
Farmer organizations with elected board of directors	PM	14	6	4	5	5	0	20
Farmer organizations distributing financial statements to members	PM	13	5	4	7	5	3	21
Estimated value of leveraged resources mobilized by hosts	IT		\$111 270	\$118 707	\$456 190	\$1 280 150	\$1 650 395	\$3 616 711
Groups purchasing inputs in bulk	PM	22	9	8	6	3	3	29

⁵ CY08 data through 6/30/08.

Value of inputs purchased by groups (MDL)	PM	1 200 000	2 410 281	1 441 855	47 328 659	56 305 530	64 230 134	171 716 459
New products & services offered by groups	IT		17	15	20	19	0	71
Number of groups with written marketing plans		20	6	4	6	5	2	23
Total volume of produce sold by assisted farmers (T) - fruits and vegetables	PM	12 000	4 551	2 804	2 543	2 634	131	12 662
Total volume of produce sold by assisted farmers (T) - dairy	PM	6 800	5 926	381	515	600	1 046	8 468
Total volume of produce sold by assisted farmers (T) - other commodities	PM	6 000	4 677	1 145	1 067	2 185	1 040	10 113
Total number of assisted farmers selling under sales contracts	PM	4 800	3 360	1 212	1 075	1 853	71	7 571
Farmer group sales contracts	PM	28	10	25	16	55	18	124

2. Analysis of Impact

Over the life of the project to date, CNFA-Moldova volunteers have impacted close to 13,000 farmers and contributed to the sale of \$15.2 million worth of fresh and processed high value agricultural commodities. Unfortunately, since the impact table only includes 2008 data through June 30, it is difficult to assess the full economic impacts produced by volunteer assistance for the reporting period. This data does, however give a clear illustration of the program's overall progress toward LOP implementation targets. Below, the status of some key indicators not related to net income or sales is outlined:

Key Indicator	Level of Completion (%)
Number of assisted cooperatives and farmer groups	100%
Total number of assisted farmers	195%
Dues paying members	111%
Farmer organizations with elected board of directors	143%
Farmer organizations distributing financial statements to members	162%
Number of groups with written marketing plans	115%
Groups purchasing inputs in bulk	132%
Value of inputs purchased by groups	14,310%
Total volume of produce sold by assisted farmers (T):	
• Fruits and Vegetables	106%
• Dairy	125%
• Other Commodities	169%

The above figures indicate good progress for the Moldova program.

3. Lessons Learned

Advanced knowledge is better appreciated and used by hosts with at least a basic understanding of their field and some experience. Over the life of the project, the FtF Moldova team has observed that hosts that are experienced and open to new knowledge show much better results than start-up enterprises, which perhaps have plenty of enthusiasm but lack experience.

It takes time for some new ideas to reach the implementation stage, as the example of the Volodeni Dairy Farmers' Group illustrates. FtF Moldova has had activities with this host for three consecutive years, but it was only at the end of the third year that volunteer John Kappelman returned from assignment saying, "Leonid (the group leader) just explained to me his vision of his new milking parlor. He just tried to sell me what I taught him three years ago. I am so glad that he is finally considering this idea as truly his—I don't even care that he does not remember who gave it to him!"

Flexibility is an important component for successful activities. FtF Moldova is very pleased by the amount of flexibility that came both from the USAID and CNFA headquarters, as well as from the local team. By working with small processing enterprises, FtF Moldova was able to contribute to the creation of sales markets for small-holder producers and teach enterprise owners how to negotiate a "win-win" result both for farmers and processors, thus improving the farmers' lives. In this final year of program implementation, FtF Moldova has challenged itself with a project which was outside of its focus area—working with an insurance company. This step was an important one for the insurance sector in general, as agricultural insurance in Moldova is a very new activity, and both volunteers fielded to the MOLDCARGO insurance company have contributed a great deal to the development of the sector.

Specific lessons learned include the following:

- When fielding volunteers to agricultural service organizations, such as insurance companies, a ten to twelve day assignment proved to be most appropriate;
- Fielding volunteers during Moldovan holidays didn't prove to be a good practice, as all businesses are closed and volunteer time was wasted;
- Allowing volunteers to have activities outside their scopes of work can lead to situations with severe conflicts of interest.