



# **Restoring Kosovo's Agriculture Sector After Conflict—IFDC's Involvement**

**An  
International  
Center for  
Soil Fertility  
and  
Agricultural  
Development**





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**IFDC—An International Center for Soil  
Fertility and Agricultural Development**

January 2006

Library of Congress Cataloging-in-Publication Data

Restoring Kosovo's agriculture sector after conflict--IFDC's involvement / prepared by IFDC--an International Center for Soil Fertility and Agricultural Development.

p. cm.

ISBN 0-88090-151-9

1. Livestock projects--Serbia and Montenegro--Kosovo (Serbia) 2. International Center for Soil Fertility and Agricultural Development--Serbia and Montenegro--Kosovo (Serbia) 3. Poultry industry--Serbia and Montenegro--Kosovo (Serbia) 4. Agricultural assistance, American--Serbia and Montenegro--Kosovo (Serbia) I. International Center for Soil Fertility and Agricultural Development.

SF55.S4R47 2005

338.1'765'094971--dc22

2005016605

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IFDC publications are listed in *IFDC Publications*, General Publication IFDC–G-1; the publications catalog is free of charge.

# FOREWORD

*Prior to 1990, Kosovar farmers' needs for agricultural services were met by the Yugoslav co-operative system. This approach was successful from a production standpoint because average crop and livestock production compared favorably with other European areas with similar agro-ecological conditions. However, beginning in 1990, intentional actions taken by Yugoslav authorities resulted in the overall demise of the agricultural sector. Despite efforts by ethnic Kosovar Albanians to develop private parallel systems to fill the void in agricultural services, crop and livestock production levels fell significantly.*

*Despite lower production, and perhaps more importantly, due to the disintegration of other sectors (e.g., industrial), by the time of the 1998/99 conflict, over 60% of Kosovars lived in rural areas mainly as farm households. With the end of the war, Kosovo's agricultural sector was in total disarray. Rural populations were displaced and crops, livestock, and machinery were seriously damaged or destroyed. The rural economy was at subsistence level at a time when dependence on agriculture for survival and renewal had significantly increased. The donor community responded by funding activities to restart agriculture. IFDC was a recipient of a USAID emergency relief grant immediately following the war that allowed IFDC to reorganize and mobilize the private sector supply networks to facilitate the delivery of seed, fertilizers, and crop protection products required by the agricultural sector for the winter wheat crop. Kosovo's agriculture sector significantly improved, and within the year donor priorities shifted from emergency assistance to implementing activities to make agriculture sustainable and profitable.*

*IFDC had the opportunity to implement two additional projects that focused on developing a sustainable and profitable agriculture sector in Kosovo. In June 2000 IFDC began implementing the Kosovo Agribusiness Development Program (KADP) with funding from USAID. The IFDC/KADP project addressed constraints to development of sustainable agriculture by promoting private sector development based on access to improved technologies; establishing private sector trade associations; and training association membership to advocate for necessary policy changes required to support agricultural development. The private sector trade associations established under the IFDC/KADP project, along with the technologies identified to achieve marketable production of quality feed grains, poultry feed, and eggs, provided the foundation for the follow-on Kosovo Feed for Poultry Project (KFPP). The IFDC/KFPP project initiated in 2003 worked with and through the various trade associations to link small farmers, agri-input suppliers, feed millers, and poultry producers to create a value-added production-processing chain that continues to provide the momentum for economic growth.*

*IFDC is appreciative of the opportunity to make a difference in Kosovo. We recognize that Kosovo will continue to face many challenges, but expect continued progress in the agricultural sector to benefit the livelihood of all Kosovars, whether it is the rural farmer or the urban consumer.*

*Amit H. Roy  
President and  
Chief Executive Officer*



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Cover Photo Credit: Dr. Raymond Clark, IFDC

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# Restoring Kosovo's Agriculture Sector After Conflict—IFDC's Involvement

## Background and Program Rationale

Kosovo is a southern province of the Federal Republic of Yugoslavia, which is composed of Serbia and Montenegro. It is bordered by Bosnia and Herzegovina, Croatia, Hungary, Romania, Bulgaria, Macedonia, and Albania. The term Kosovo Conflict actually describes two sequential conflicts. Both of these conflicts reflect the simmering tensions between Serbs and Albanians that have been ongoing throughout the 20<sup>th</sup> century and for hundreds of years before. At odds were the ethnic Albanians, who make up 90% of the population, and the Serbs, under the leadership of Slobodan Milosevic. The first conflict from 1996 to 1999 was a civil conflict between ethnic Albanian separatists (the Kosovo Liberation Army or KLA) and the Serbian and Yugoslav security forces in Kosovo. Serbia was internationally recognized as having control over Kosovo, but the KLA was calling for full independence for the province. In February 1998, President Milosevic sent Serbian troops to take back KLA-controlled areas. Eighty people were killed in the battle, including many women and children. The government-sponsored violence

against Albanian civilians set off rioting by Kosovars and caused an escalation of the conflict. After peace talks failed, the North Atlantic Treaty Organization (NATO) intervened. In the spring of 1999, after months of unsuccessful attempts at restoring peace, NATO resorted to military action in the form of air strikes. On March 24 an air campaign was launched by NATO that lasted through June 9 when Serbia finally agreed to sign a UN-approved peace agreement with NATO ending the conflict.

The second conflict caused a massive displacement of the population of Kosovo. The goal of the NATO operation was to ensure that the ethnic Albanian refugees could return to their Kosovar homes. As a result of this last conflict, the agriculture sector suffered huge losses and recovery has been difficult. Prior to the conflicts, Kosovo was organized into 29 communes and based on a command economy. Within each commune a communal assembly and directorates controlled all aspects of public service, education, finance, taxation, the agriculture sector, and food. At least 35% of the gross domestic product (GDP) and 60% of employment in Kosovo is based on a broadly

defined agriculture sector that includes farmers and agribusiness enterprises involved in the procurement, processing, and distribution of farm inputs and marketing and processing of agricultural outputs.

About 600,000 hectares (ha) of land in Kosovo is agricultural. Of that area, approximately 408,000 ha is cultivated mostly with cereals (about 200,000 ha of maize and wheat). There are pastures on about 176,000 ha, and the remainder is cropped in vegetables, fruit, and vineyards. About 80% of the agricultural land is at elevations ranging between 300 and 400 meters. The plains of Kosovo and the Dukagjini are the most productive areas for wheat with yields of 3.2-3.7 tons/ha and maize with yields of 3.5-4.2 tons/ha. However, average yields of these cereals in Kosovo are, as a whole, substantially lower. Most cereal production is used for human (wheat) and livestock (maize) consumption in the rural areas; urban populations are heavily dependent on food imports from other surrounding countries. Vegetables are grown mainly for domestic consumption, with some exports to Croatia and Slovenia.

Investments in fruit production were important in the 1990s, and because they are mostly privately owned (about 85%), those orchards, in addition to vegetable production and possibly viticulture (fresh grapes), will be important components of private sector participation in agriculture. Although about 85% of the agricultural land is privately owned by thousands of small family farms of less than 3 ha, there were also a number of state-owned farms varying in size from 200 to 600 ha. Some farms produced crops and others were engaged in livestock production and processing. In 1999, 75% of all field operations of Kosovo agriculture were mechanized. On average there was one tractor for every 14 ha of cultivated land; in recent years there have been large investments in mini-tractors. However, none of the machinery was purchased with credit but exclusively with cash.

Prior to the armed conflict in 1999, prices for agricultural products and essential commodities were controlled by the state. Price controls were established in the public and private sectors and included wheat, flour, bread, cooking oil, sugar, and milk. All other products were market priced. Since the conflict, all prices are market determined, but humanitarian food supplies (immediately after the conflict) depressed the prices of essential foodstuffs.

The availability of agricultural credit in Kosovo was seriously constrained. The National Bank of

Kosovo was closed on May 5, 1990, and became an affiliate of the National Bank of Yugoslavia, which destroyed the banking system in Kosovo. For nearly a decade, no agricultural credit was available in Kosovo. At present the Economic Bank in Gjakova provides some very basic banking services to private shareholders as does the Instituto Bankario di Torino that is also considered a private local bank. Donor-supported (European Agency for Reconstruction/Agri-Business Unit, Micro-Enterprise Bank, and American Bank of Kosovo) banking services have provided most of the agricultural credit since the 1999 conflict.

In regard to the availability of services for the agricultural sector, it should be noted that the autonomy of Kosovo was suppressed and services in all areas of the economy, including agriculture, were reduced. This was particularly evident for the state enterprises that were substantially dependent on state support. Private farmers operated on a cash-only basis and supplemented incomes and investments by remittances from emigrated family members. Although land titles were well developed and legal, it was illegal to sell land between ethnic groups. The loss of land title documentation may well be a factor that suppresses land markets and the use of land for collateral in the post-conflict era.

The University of Pristina has faculties of natural science, economics, medicine, philosophy,

and agriculture. A veterinary school was opened several years ago, but there is no department for crop protection. Assistance is needed to improve the capacity and level of research and training in agricultural sciences and to implement modern technological standards.

**Agri-Inputs Supply**—Prior to the 1996-99 conflict, there was a multi-channel system for the distribution of agricultural inputs consisting of state-operated public sector agribusiness corporations (Agro-Kombinats), cooperatives, and private sector channels. The system included 17 Agro-Kombinats, approximately 65 socialized cooperatives, about 70 producer association cooperatives, and 150 to 200 private sector dealers or “apoteks.”

Private sector farm input dealers emerged during 1988-98. Three apparent types of business enterprises emerged during that period: (1) sole owner businesses (150-200) usually with only a small retail outlet, (2) consolidated medium-size enterprises (approximately 20) having between 2 and 10 retail outlets and some having central warehouses, and (3) large private enterprises (18) that can procure farm inputs from regional and international markets and distribute them to farmers through their own and independent marketing channels. The private sector input supply network conducts businesses in seed, fertilizers, pesticides, irrigation equipment, small tools, and farm machinery. Some are diversified integrated businesses, others are

specialized (particularly machinery), and still others provide market outlets for farm produce. Some large private enterprises are struggling to gain access to (and import) inputs from sources outside Serbia, but restrictions in communications, information, and travel are difficult constraints and a barrier to such trade. A policy issue that requires attention emerges from the need to establish an extensive network of regional trade contacts. Without these developments, the dependency on established suppliers in Serbia will continue, smuggling will increase, and there will be serious limitations in access to improved inputs, especially seeds, fertilizers and agrochemicals. Also, the lack of competition will result in higher prices for agricultural inputs.

**Processing of Agricultural Products**—The food processing industry was partially state-owned and partially private. Virtually all flour mills, bread factories, distilleries, and seed conditioning plants in the public sector were associated with the state farms and cooperatives. Many smaller private sector processing plants were also operating, particularly in the flour milling, feed milling, fruit and vegetable processing, and wineries.

An evaluation of the private flour mills in Kosovo by IFDC in December 1999 determined that there were 50 private flour mills that had sufficient capacity to meet the 500,000 tons of flour per year that was needed by the province but was constrained by

poor power supply, wheat supply, and insufficient warehouse space. The flour mills in the public sector had a processing capacity equivalent to that of the private sector and confronted more drastic constraints imposed by the poor and intermittent supply of electric power.

Although there is considerable potential for developing diverse small-scale agro-processing enterprises that could have significant impact on rural employment, this effort would also require substantial assistance and aid resources. A more effective means to achieve a greater and more immediate impact is to focus on those agro-processing developments that will benefit the largest number of farmers and entrepreneurs and provide the strongest and most immediate impact through rapid cash turnovers and multiplier effects. It was expected that such an impact in the agro-processing industry could be achieved through the revitalization of the flour mills (about 50) and the feed mills (about 40) considered to be economically viable and by improving seed production and supply for key crops. All of these efforts should be conducted in conjunction with the efficient supply of fertilizers and other required agro-chemicals.

**Flour Mills**—A well-established demand for flour ensures revenues and rapid cash flow to flour mills and wheat farmers producing surplus wheat. Imports of flour must be coordinated with the production of local flour mills to

prevent the depression of flour prices due to excessive flour imports.

**Feed Mills**—Poultry production appears to have the greatest potential for rapid revitalization. The development of feed mills especially for producing poultry feed will (1) facilitate the establishment of an efficient poultry and egg production industry, (2) promote the development of an expanding domestic market for animal feed, and (3) provide an outlet to the expected increased maize production.

**Seed Production**—The restoration of the production of improved wheat and alfalfa seed, to meet the increased demand for seed, is important for Kosovo to increase its seed production and enhance food security. With regard to the spring crops of maize, vegetables, beans, and potatoes, the 1999 production was sharply reduced since the mass displacement coincided with the planting season for these crops. About 20% of the normal maize area had been planted, much of which was subsequently destroyed.

**Livestock**—Before the 1999 conflict, there was a large livestock population of more than 400,000 cattle and sheep, 60,000 pigs, and about 4.5 million poultry, but only limited private veterinary services and no organized service for the protection and monitoring of livestock and food safety standards. Before leaving their villages during the exodus, farmers freed their animals to run loose, and many

were slaughtered by passing military and paramilitary forces. Also, families who stayed in Kosovo slaughtered their own animals to meet food needs. Tentative estimates put losses of larger animals at about 40% and smaller livestock at more than 50%. Some of the returning families were able to recover part of their herds.

Kosovo has always been on the low end of the scale in terms of agricultural food products, but it was obvious early on that the ratio of domestic food production to consumption requirements after the conflict would be very much reduced compared with the pre-conflict situation. Thus, the need for imports greatly increased.

Reliance on outdated technology, especially for seeds and fertilizers, has been regressive. Opportunities exist to improve access to improved seed varieties, hybrid maize, domestically selected wheat varieties, seed potato, and a wider range of fertilizer materials that are more cost effective and tailored to domestic soil and crop requirements. Such improved access needs to be matched with technology transfer to ensure appropriate application of this technology.

**Program Rationale**—The circumstances that Kosovo (United Nations Mission in Kosovo [UNMIK]) confronted after 1999, with a seriously damaged physical and institutional infrastructure, required aid and assistance programs that could provide (a) an immediate

impact in alleviating the humanitarian crisis, (b) the rebuilding of the physical infrastructure, and (c) the rapid establishment of an effective and efficient institutional infrastructure conducive to promote rapid economic growth and stability. The crucial importance of the agricultural sector in general and the agribusiness subsector in particular is described and briefly assessed above. This assessment clearly indicates that assistance to address and relax key constraints to agribusiness development will have a rapid and strong impact on economic efficiency, growth, and employment. A greater and more immediate impact of the program is expected by focusing on the development of agribusinesses that will benefit the largest number of farmers, entrepreneurs, workers, and consumers and also have the strongest and most rapid impact on employment and the economy. The USAID/IFDC program was designed to achieve such an impact by removing or relaxing key constraints to the development of more dynamic and efficient private sector agribusinesses and a more open and competitive market for agricultural inputs and processed and unprocessed agricultural products. The program included assistance for (a) the development of institutions such as trade associations, private sector extension services, information systems and credit services and (b) support for development of policies that facilitate competition, availability and access to credit and information, and access to modern updated technology.

Given the circumstances and the nature of constraints prevailing in Kosovo in 1999, there was a very sound and rational basis for USAID to fund a program having as major goals the development of effective and sustainable Agribusiness Trade Associations (ATAs), the expansion of markets for targeted agribusinesses, and improvement of their economic efficiency and competitive edge.

## Introduction

### Kosovo Emergency Agri-Input Program

Kosovo Emergency Agri-Input Program (KEAP) was started by USAID and implemented by IFDC in October 1999 immediately following the conflict. Kosovar Albanian refugees returned to find that institutional and physical infrastructures were seriously disrupted and often completely destroyed. That destruction resulted in a humanitarian crisis and a tremendous challenge to the local population and the international community. Donors responded generously with humanitarian aid and assistance to restore public services and the institutional infrastructure required to improve the productive capacity of farmers, entrepreneurs, and the population in general. The assistance provided focused mainly on efforts to facilitate the timely and efficient supply and distribution of agri-inputs that are essential to enhance the productivity of crop production in particular and the agricultural sector in general.

The emergency program was needed to address the urgent needs of the agricultural sector based on an assessment of the farm input requirements. Measures were also needed to organize and mobilize the private sector supply networks.

The objectives of the project were:

- Rapidly assess the agri-input needs for the spring 2000 planting.
- Identify what emergency agri-inputs were needed and how to get them delivered.
- Identify suppliers of inputs willing to participate.
- Establish linkages between Kosovo suppliers and regional input suppliers.
- Disseminate basic market information regarding inputs.
- Assess input credit needs and delivery systems.
- Assess damage repair needs of input supply installations.
- Develop an emergency plan for jump-starting selected agribusinesses.
- Assess priority policy issues regarding private input supply and the agriculture sector.

Nongovernmental organizations (NGOs) distributed seed, fertilizer, and pesticides valued at about \$10 million or 25% of the spring planting needs. The balance of \$30 million was organized through private dealers with their own capital and the help of a \$10 million revolving

credit fund. IFDC helped organize the Kosovo Dealers of Agri-Inputs Association (KODAA) as the supplier's organization. During this project and the follow-up KADP, additional associations were started. These included:

- Kosovo Flour Millers Association (SHMK).
- Kosovo Association of Poultry Producers and Feed Manufacturers (SHPUK).
- Alliance of Kosovo Agribusinesses (AKA)—the umbrella association for several agribusiness associations.

According to Development Alternatives, Incorporated (DAI) in their Evaluation of the USAID/Kosovo SME and Agriculture/Agribusiness Programs (May 2004), "Input supply was clearly the major requirement in the emergency period and targeting the private sector suppliers to mobilize and implement the importation and distribution of the inputs. This approach by IFDC worked better than an attempt to manage the entire input supply operation itself might have, as is often done in emergency situations. IFDC's knowledge of Kosovo and its agribusiness sector and its on-site capacity to move quickly were clearly the major strengths in getting this project implemented." The report went on to say, "A weakness, if there was one in this situation, was the inability to affect the policy apparatus that imposed the import duties and value-added tax (VAT) on agricultural inputs, excepting fertilizer."

#### Constraints Identified

- Absence of a transfer system, public or private.
- Lack of access to farm credit or agribusiness investment credit (short-term supplier credits were available).
- Absence of a policy framework and regulatory system.
- Loss of export markets from pre-war status for agricultural products. (Kosovo had been a net exporter of vegetables and fruits.)
- Kombinats had control of significant land areas that were better farmland and pastureland, but were not accessible to growers.

IFDC coordinated with the United Nations Mission in Kosovo (UNMIK), World Bank, other bilateral donor programs, and a large number of non-governmental organizations (NGOs) to achieve the project goals. Because of the emergency nature of this project, sustainability was not a goal, but the activities did lay the groundwork for the future development of a national agricultural input supply system that has been built upon with subsequent projects. KEAP provided the foundation for the follow-up KADP and later, KFPP.

The impact of the project and its accomplishments were very significant. The project was successful in securing and delivering \$40 million in seed, fertilizer, and crop protection products (CPPs) for the 2000 spring planting. KEAP contributed to the

revival of the agricultural economy of Kosovo after the destruction of the war. Farmers were able to begin growing crops again with the seed and fertilizer made available through this project. Income was generated and jobs created because of the project. Farmers were able to begin producing crops again to feed families and also to sell in the marketplace. More people were employed in the input supply distribution companies, the credit institutions, the trucking and other service companies. The economy began moving forward again.

Many lessons were learned from the initial project. Some of the findings include:

- Reducing the cost of imported inputs (seed, fertilizer, chemicals, tools, equipment, tree seedlings, breeding stock, veterinary supplies) that are subject to duties and VAT should be a high priority for policy reform.
- Continued availability of high quality seed, fertilizer, pesticides, livestock feed ingredients, and veterinary supplies is critical for increasing yields, productivity, and profits.
- Strong participation of the farmers, processing, marketing and input supplier associations to ensure rationalization of objectives and planning up and down the marketing chain should be a part of the agricultural development strategies for successful recovery in Kosovo.

The DAI evaluation further concluded that the KEAP “project was considered a major contributor to getting agriculture started again in 2000 and laid the groundwork for future work” by the private sector.

### **Kosovo Agribusiness Development Program**

KADP began in June 2000 as Kosovo was emerging from the humanitarian crisis following the war and return of refugees in mid-1999. There was no clear strategy for reconstruction of the agricultural sector, which accounted for 35% of GDP and 60% of employment. Many challenges faced the new Kosovo because it had to adjust not only from the crisis but also from decades of a communist system and of “silent destruction.” This situation presented a tremendous challenge to the local population and the international community. Donors responded generously with humanitarian aid and assistance to restore public services and the institutional infrastructure required to improve the productive capacity of farmers, entrepreneurs, and the population in general. Initial support for agriculture in the amount of US \$19 million was provided mainly by the United States. The assistance focused mainly on efforts to facilitate the timely and efficient supply and distribution of agri-inputs that are essential to enhance the productivity of crop production in particular and the agricultural sector in general.

The Serbian repression imposed during the previous decade stimulated the development of parallel Albanian Kosovar economic activity. The emergence of an active private agri-inputs supply network was part of that activity. Although the agri-inputs supply system in Kosovo was far more advanced than in other transitional economies, it confronted several important constraints and limitations, namely: (1) lack of competition within and outside the private sector; (2) lack of access to market information and markets for agri-inputs and farm outputs at the regional and international levels; (3) lack of access to institutional and commercial credit for trade and commercial transactions that results in the inefficiencies of a cash-only economy; and (4) lack of access to modern updated technology and its use to improve the economic efficiency and impact of a more dynamic farm inputs supply system.

**With grant funds totaling \$4.2 million over a 32-month period, the project exceeded all the targets and results indicators.**

The purpose of KADP was to address those constraints in a well-focused and realistic manner, to serve as a beacon of private sector-led development in the rural sector, and to help establish

effective backward and forward linkages using trade associations as the catalyst. With grant funds totaling \$4.2 million over a 32-month period, the project exceeded all the targets and results indicators. Notable achievements of KADP include the following:

- Strengthened three nascent trade associations, established an Alliance of Kosovo Agribusinesses (AKA) of agricultural trade associations as the main voice of private agribusiness and provided them the tools for effective advocacy and influence and for financial and member service sustainability.
- Developed policy advice on issues affecting agriculture including taxation, trade, regulation of inputs, commercialization of state and “social” land and assets, and food safety and quality control. The elected Kosovo government has adopted many of the AKA positions.
- Initiated the elimination of tariffs on fertilizer and drafted fertilizer legislation.
- Implemented an extension and field demonstration program that helped Kosovo significantly increase yields of its main crops (wheat by 29% and maize by 25%, for example) and introduced new crops, e.g., soybeans.
- Introduced modern technologies through farmer field demonstrations and other means that produced yield increases of

69% and net added income of \$200/ha for wheat and 150% and \$726/ha for maize.

- Helped an estimated 7,000 farm family participants in the extension program increase their average income by more than \$350 by developing packages of technologies and introducing improvements in farm management.
- Increased availability and use of agri-inputs (fertilizer use climbed from 40,000 to 71,000 tons, commercial seed from 16,000 to 43,900 tons, and CPPs from 25 to 80 tons).
- Led to a doubling of egg production to 160 million, reducing Kosovo’s dependence on imported eggs by nearly 50%.
- Helped generate \$16 million in credit for agribusiness enterprises and \$15 million in agribusiness investment. The project leveraged \$227,000 in other grants and \$250,000 in dues and service fees from project-led trade association activities.
- Spurred agri-input sales increases of 64% from the 2000 base year to \$18 million in 2002, flour production by 74% to \$11.7 million, and eggs and milled feed by 50% to \$16.8 million.
- Stimulated the assisted enterprises to double employment to 2,000 people.
- Expanded regional and international trade and other networks for clients.

The KADP project was only one of many players involved in the recovery and reconstruction of agriculture in Kosovo. UNMIK, the European Union (EU), the World Bank and other USAID partners and donors exerted varying influence on fiscal, privatization, trade and other policies that shaped the environment for agribusiness.

KADP, however, was uniquely successful and influential among donor agriculture-related projects. For example, IFDC:

- Made an immediate impact based upon the lessons and success of the USAID/IFDC projects in Albania and on the ethnic and geographic ties, which accelerated the process of training, trade, technology transfer, association formation, and agribusiness development.
- Developed strong trade associations that provided vectors for change, industry clusters, private sector extension services, and consolidated procurement.
- Promoted the establishment of AKA, which now has an important voice in agricultural policy and ensures a private sector viewpoint in government deliberations and decisions. This institutional capacity building will yield enduring results in policy advocacy.
- Established effective collaboration with the Ministry of Agriculture, Forestry and Rural Development (MAFRD),

USAID partners, the EU and others that helped build sustainability of extension services, raise significant commercial credit, and leverage the EU/European Agency for Reconstruction (EAR) fertilizer and seed import program.

- Set the stage for developing a feed grain-milling-poultry commodity chain.
- Helped minority groups gain access to agri-inputs and reached thousands of women through the vegetable producer and beekeeper trade associations.

Kosovo faces many challenges in the process of becoming a competitive player in the regional and global agricultural scene. The legacy of KADP is that it helped provide private agribusinesses and farmers with proven tools to increase production and influence and the public sector with more effective techniques and approaches to support agricultural development.

**The legacy of KADP is that it helped provide private agribusiness and farmers with proven tools to increase production and influence, and the public sector with more effective techniques and approaches to support agricultural development.**

MENTOR THAQI, IFDC



**Recica (with notebook), who is of Albanian ethnicity. Transparent business transactions are a useful means for bridging the ethnic divide that continues in Kosovo today between the Albanians and Serbs.**

**LEFT: IFDC staff Musli Musliu (extreme left), Kimete Isufi (fourth from left) and Dr. Raymond Clark (extreme right) helped facilitate the selling of 700 tons of maize produced by Serbian farmers represented by Novica Kostic (third from right) in Gjilan to the local feed miller, Xhemail**

### **Kosovo Feed for Poultry Project**

KFPP built on the foundation laid by KADP by working with and through the various trade associations to link small farmers, agri-input suppliers, feed millers, and poultry producers to create a value-added production processing chain that would provide momentum for sustained economic growth. KFPP promoted adoption of the KADP-identified technologies by producers in the feed grain, milling, and poultry sub-sectors in

order to achieve marketable production of quality feed grains, poultry feed, and eggs and other poultry products. KFPP had four major objectives:

1. Promote access to and adoption of improved agri-inputs associated with KFPP-promoted crop production technologies.

**KFPP provided a cluster-based model that could be emulated by agri-input suppliers, farmers, millers, and poultry producers throughout Kosovo.**

2. Create marketable surpluses of grain and oilseed by project farmer clients.
3. Improve efficiency in livestock feed production by local feed mills.
4. Increase competitiveness of Kosovo's poultry industry.

To achieve these objectives KFPP facilitated linkages that promoted access to improved agri-inputs to produce the consistent delivery of high-quality feed grains and oilseed surpluses by farmers to agri-processors for conversion to feed to be used by the poultry producers. The key activities implemented under KFPP included:

- Interacting with 10 agri-input suppliers to identify sources and obtain quality agri-inputs (seeds, fertilizers, and CPPs).
- Introducing 253 farmers to proven technology packages for increasing crop production.
- Conducting 27 meetings using feed mills as the hub to bring together all project clients (agri-input suppliers, farmers, feed millers, poultry producers) to form eight working "clusters."
- Training 25 poultry producers to increase efficiency in egg and broiler production.

Ultimately, KFPP provided a cluster-based model that could be emulated by agri-input suppliers, farmers, millers, and poultry producers throughout Kosovo.

**As one of five projects originally funded under the Small Farmer Support (SFS) program, the KFPP project directly supported the USAID Mission's Strategic Objective (SO), especially SO 1.3 Accelerated Private Sector Growth and IRs 1.3.1 (Increased competitiveness of the agriculture sector and 1.3.2 (Improved capacity of private enterprises). With USAID funding under SFS, Save the Children provided grant funds totaling \$832,545 over a 21-month period. IFDC and its partners leveraged project funds through cost-share and self-investment in the amount of \$1,680,000. This amount was triple the proposed match budget.**

While KFPP exceeded most targets and results indicators, notable accomplishments over the life of the project included:

- Increased availability and use of improved agri-inputs by project farmer clients. Commercial hybrid maize seed use increased by 200 tons; high-yielding wheat seed use increased by 1,500 tons; high-analysis fertilizer use increased to 7,600 tons, and use of CPPs increased to 30,800 L. The total value of these agri-inputs exceeded \$4.70 million.
- Provided direct technical assistance to 253 farmers. An additional 1,164 farmers received training on the benefits of the new technologies.
- Average yields obtained by project clients doubled for maize and sunflower and increased by 48% for wheat over average yields obtained by farmers using traditional technologies.
- Introduced soybean as an alternative crop at the farm level.
- Facilitated sale of 14,300 tons of grains and oilseeds valued at \$3.25 million by project farmer clients to local millers/processors through October 2004. Additionally, 12,194 tons of maize valued at \$2.65 million was sold in early 2005 after drying.
- Assisted KFPP participating feed mills to increase feed sales by 19,600 tons valued at \$6.27 million.

- Coordinated with the Kosovo Association of Poultry Producers and Feed Manufacturers (SHPUK) the joint purchase and emergency import of 400 tons of soybean meal valued at \$178,313 during the spring of 2004 when the international supply of soybean meal was reduced.
- Assisted SHPUK and the Alliance of Kosovo Agribusinesses (AKA) in advocating removal of tariffs (26.5%) on most imported agri-inputs and machinery. Customs tax was removed in June 2004, and VAT was removed in September 2004.
- Increased total domestic egg production by 52 million eggs/year and reduced the average cost of production by \$0.01 per egg. Additional significant increases were obtained in other components of the poultry industry including: layer numbers were increased by 235,000; pullet numbers increased by 230,000, and broiler production was restarted to produce 300,000 for the local markets.
- KFPP participating poultry producers (25) reported increased incomes from \$337,000 in 2002 to \$925,000 in 2003 and to \$2.41 million in 2004.
- Generated self-financed investments totaling \$1.69 million.

Ultimately, the project met or exceeded most targets and results indicators by promoting the activities necessary to energize the various components of the

production-processing chain required for a successful poultry industry. The marketable surpluses of quality grain at the farm level produced a “domino effect” for the feed mills and egg and poultry industry. By sourcing quality grains and oilseeds from local suppliers, feed millers realized cost savings. These savings, in addition to increased availability of improved balanced feed formulations based on technical assistance provided to the millers, were passed on to the egg and/or poultry producers. In turn, access to quality feeds at stable prices along with technical assistance from KFPP, resulted in significant gains in local market share for the domestic poultry industry.

The project did not meet its target for increased soybean and sunflower production. In the case of soybean, this was primarily due to soybean being a new crop for farmers and the lack of seed in 2004. For sunflower producers there was only one crushing facility purchasing harvested seeds. This kept output prices very low. In 2004 many of these farmers entered into a contract farming arrangement to grow barley for a local beer factory, which provided crop inputs and stipulated a significantly higher purchase price for outputs.

Despite the significant achievements, lessons were learned during KFPP that are relevant to future

activities, including the new Kosovo Cluster Business Support (KCBS) project, which started in October 2004. These lessons include:

- It takes time to convince all participants of the benefits associated with cluster development.
- Active trade associations are critical to developing commodity chains, clusters, and markets; serve as vectors for training and technology transfer; and are advocates promoting policy dialogue.
- Well-organized study tours, trade fairs, and media events play important roles in implementing cluster-based development projects.
- Focused efforts by small project staff and strong interaction with the public and private sector stakeholders and other development organizations leverage funds and achievements.

**“KFPP...is a good example of a cluster-based development approach. This is a very aggressive project that is providing strong support in egg production that is increasing rapidly and replacing imports from neighboring countries....It has laid the foundation for a major agribusiness cluster in poultry products.” – Development Alternatives, Inc. (May 2004).**

- Limited access to credit continues to constrain agribusiness growth in Kosovo's agriculture sector.

The legacy of KFPP will be that by linking small farmers, agri-input suppliers, feed millers, and poultry producers, a production-processing chain was created that promotes sustained economic growth. The technical foundation is now in place for the Kosovo poultry industry to experience development into a major agribusiness cluster. However, sustainability will depend on proper government policies such as correction of the recent policy, which exempts imported complete feeds from taxes but does not exempt imported raw materials required by domestic millers. It is anticipated that continued technical support through KCBS and advocacy by the trade associations on relevant policy issues will help the industry reach this goal.

Kosovo will continue to face many challenges as it seeks to identify areas where it is a competitive player in the local, regional, and global agricultural scene. As a result of KFPP, the Kosovo poultry industry and its "cluster" partners are better equipped to meet these challenges.

## Objectives Achieved in KADP/KFPP

### Kosovo Agribusiness Development Program

Agriculture is the primary sector in the Kosovo economy—accounting for 60% of employment and 35% of GDP. The total land area of Kosovo is 1.1 million ha, of which 408,000 is arable. All but 4% of the arable land is privately owned and dominated by smallholder subsistence farmers. About 200,000 ha is cultivated with wheat, maize, and forage. Pastures occupy about 176,000 ha, and vegetables, fruit, and vineyards are on the remainder. About 80% of the agricultural land is at elevations ranging between 300 and 400 meters. Productivity has been low due to low use of modern inputs, outdated technology, mono-cultural cropping, unclear land ownership, and little access to credit. An estimated 8% of farms are larger than 10 ha. Although about 85% of the agricultural land is privately owned by thousands of small family farms of less than 3 ha, there are also a number of state-owned farms varying in size from 200 to 600 ha.

Additional hurdles faced farmers and agribusinesses when KADP began in June 2000. State and socially owned agro-enterprises and support services were essentially bankrupt and characterized by old-fashioned management. The availability

of agricultural credit in Kosovo was seriously constrained. The National Bank of Kosovo was closed on May 5, 1990, and became an affiliate of the National Bank of Yugoslavia, which destroyed the banking system in Kosovo. For nearly a decade, no agricultural credit was available in Kosovo. Moreover, border taxes on agri-inputs were 26.5%, Kosovo was a regional "dumping" ground for agricultural products from the region, and there was a reluctance to change to the new world of competition and open markets.

Despite the many challenges, USAID and IFDC believed that growth of agribusiness in Kosovo was both possible and essential as the engine of growth for the economy. A seminar in mid-2001 on the future of agriculture in Kosovo and attended by 130 leaders in the sector concluded that Kosovo should be a market-driven private sector-led economy and that Kosovo needed to move quickly to:

**"KADP represents our major investment in agriculture in Kosovo, and the project has achieved significant results in a relatively short time." – USAID Mission Director Craig Buck on June 14, 2001, at a seminar in Pristina.**

- Establish a favorable policy and regulatory regime for business.
- Upgrade technology and develop value-added commodity chains.
- Identify new markets and promote regional trade.
- Develop private sector associations and support services.

It was reasonable, therefore, for IFDC to propose and for the USAID Mission to agree to a larger program that built on the initial successes and systematically aimed to reduce and eliminate constraints to establishing an economic and policy environment conducive to agricultural development. KADP was designed to accomplish four main objectives:

- Develop the three nascent trade associations into effective and sustainable providers of services to members and farmers and private sector advocates.
- Recommend priority policy reforms and organize advocacy.
- Increase yields of key crops by improving the supply of modern inputs and by transferring upgraded technology to progressive farmers.
- Stimulate the growth of agribusinesses by improving access to credit, business and technical training, and hands-on technical assistance.

The extension of the project to 32 months and the increase in the grant budget amount to \$4.2 million allowed IFDC to work to: (1) consolidate and strengthen the

sustainability of the federation of six agricultural trade associations and (2) improve the capability of the associations to work with the Ministry of Agriculture and other institutions to continue the extension, trial, and farm demonstration work of KADP. The project extension was also intended to enable a smooth transition to a new program for agribusiness development, including a project that would support agricultural production in key sub-sectors.

The project focused on four key elements as drivers for agribusiness development. They were trade association development, policy analysis and reform, technology transfer, and promotion of agribusiness and credit. The following four sections contain a brief summary of the activities, including achievements and lessons, for each component.

### **Trade Association Development**

#### ***Activities and Accomplishments***

The trade association development component served as the basic tool and driving force of the project structure and the catalyst for progress in the other three areas. The objectives for association development were to: (1) develop market-based trade associations and (2) strengthen the membership and capacity of agricultural trade associations so they could better provide membership services, achieve financial viability, and effectively represent agro-enterprises on policy issues.

Especially in an emerging and volatile environment such as Kosovo, agricultural trade associations represent the best way for individual firms to have their voices heard, shape an industry identity, achieve economies of scale in procurement and advertising, communicate with colleagues, learn about market information and new developments, and develop systems for delivering valuable business support services.

The objectives for trade association development included establishment of an umbrella Alliance of Kosovo Agribusinesses (AKA), increased dues-paying membership, and identification of revenue from other sources. Although the number of association members in the three original associations declined with industry consolidation, the number of dues-paying members increased to 159 (meeting the project target of 66% growth in dues-paying membership); and they represented over 80% of the market in their respective industries.

The project expanded AKA membership by three additional trade associations not anticipated in the terms of reference. Thus, the project significantly enhanced the effectiveness of AKA and the influence of private sector agribusiness. The introduction of democratic elections and responsive governance in the associations helped develop local capacity and demonstrate the western model for institution building.

During the first 2 years of the project (from May 2000 to May 2002):

- Fertilizer use increased from 40,000 to 71,000 tons (the target was 70,000).
- Commercial seed sales increased from 16,000 to 44,000 tons (the target was 30,000).
- CPP use expanded from 25 to 80 tons (the target was 75).
- Egg production doubled to 160 million eggs.
- KADP introduced 8 new fertilizer products and 17 seed varieties.

The umbrella advocacy association, AKA, founded in September 2001, initially united five agribusiness trade associations to develop and present their policy positions. The five included the three KADP-supported associations covering almost all commercially important agri-input dealers, poultry producers and feed millers, and wheat flour millers; and two independent associations—the Drini Valley Vegetable Producers Association (50% of whose members are women) and the League of Beekeepers of Kosovo (10% of whose members

**The early success of the agri-input dealers' association enabled IFDC to win agreement from EAR to conduct an auction and training for dealers for 18,000 tons of fertilizer for monetization for the wheat season in the fall of 2000. IFDC prepared a comprehensive training manual, conducted orientation seminars for 150, and worked with 32 successful bidders. IFDC also assisted EAR in the distribution of 17,500 tons of fertilizer during the spring of 2001.**

**In addition to the significant leveraging of USAID resources, the IFDC role ensured that the EAR donation was handled in a market-friendly way that strengthened the role of private sector dealers and gave them access to much-needed and scarce working capital. IFDC monitored the distribution and used the opportunity to introduce new fertilizer products. IFDC also won a contract with the EAR to handle the distribution of 3,500 tons of high-quality maize and potato seed.**

are women and a significant number are minorities).

In late 2002, AKA assisted the milk producers and processors of Kosovo to form an association that became the sixth member of AKA, bringing total membership to more than 3,000 agro-

enterprises. Other groups interested in joining AKA include the meat producers, machinery providers, and bakers of Kosovo.

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Membership in the KADP-supported associations opened access to new sources of credit. KADP helped members of the agri-input dealers' association and the poultry/feed association to obtain loans from the Dutch NGO Catholic Organization for Relief and Development (CORDAID). Association members also joined together to obtain significant loans from the EU agricultural bank (ABU).

The training and preparation of business plans helped dozens of clients obtain loans from the American Bank of Kosovo (ABK). Similarly the project and trade association support encouraged members to invest millions

**BELOW: Ten percent of the members of the League of Beekeepers of Kosovo are women. A significant number of the members are minorities. They are all working together to achieve mutual goals.**



DR. RAYMOND CLARK, IFDC

**In 2002 AKA helped the beekeepers' association to obtain a \$55,000 revolving fund to purchase treatment for a bee parasite, which was killing one-third of the bees annually. As a result the association was able to help 4,500 beekeepers (Kosovar Albanians and Serbs working together) to treat 43,000 hives. The successful treatment produced an additional 65,000 kg of honey with a market value of \$327,000 in 2002.**

of dollars in reconstruction and expansion.

The KADP staff organized three workshops on regional trade and helped the associations to organize a dozen delegations to develop trade linkages with neighboring countries and to attend agricultural fairs. In addition to the benefits of exposure and new business, the associations charged for their services, thus generating more than \$75,000 in non-dues revenue.

In mid-2002, AKA representatives and project staff began developing a blueprint for the long-term sustainability of the organization. The aim was to enable AKA to provide the advocacy, business advisory, and extension services on a fee-for-service basis beyond KADP.

The strategic plan incorporated an assessment of strengths and weaknesses of AKA and a structure and budget for a core team, with an 18-month plan for financial sustainability. The project staff also advised AKA on a successful application for a \$10,000 grant under an advocacy grant program for local NGOs. As of mid-2005, AKA and its member associations continue to advise the MAFRD of necessary policy considerations and to advocate on behalf of Kosovo's agricultural sector. Additionally, AKA and the trade associations are the avenues being used by the current Kosovo Cluster Business Support (KCBS) to promote cluster development and build value-added market chains in various agriculture industries.

The project produced a well-received monthly newsletter as a means to share information on market conditions and appropriate technologies and to build association identity. It also serves as a source for advertising revenue, which would generate funds for AKA if it chose to continue publication of the widely read journal of current agricultural news.

Tailored relevant training of association members and seminars continued throughout the project. For example, during the last 6 months there were 11 fertilizer-related training workshops in various regions in which 470 dealers participated. In cooperation with the Crown Agents, the project staff provided a complete training program for selected dealers on the safe use of CPPs. This was the first such effort in Kosovo.

#### ***Impact, Problems, and Lessons Learned***

The program efforts focused mainly on strengthening the establishment and effectiveness of the three most important ATAs in Kosovo: KODAA, SHMK, and SHPUK. These three trade associations directly assisted by the project have emerged as effective, democratic institutions that understand the benefits of group action and are dedicated to serving their members. The AKA federation has had an important impact on the development of policy and agribusiness in Kosovo. It is the primary advocacy voice of private agribusiness and has gained the attention of

politicians and decision-makers. AKA and its member associations have successfully conducted three democratic elections and changes of leadership and are functioning effectively in their capacity of policy advocacy.

The project provided extensive and continual training to 308 association members and helped them save \$6.32 million by organizing larger consolidated purchases and realizing economies of scale.

In addition to establishing solid agricultural trade associations, a main purpose of KADP was to assist the associations to become effective and financially viable after the project ended. The idea was to disengage management assistance and support for the three core associations and AKA under the KADP umbrella and to transfer responsibility for the other three associations operating within AKA to other projects and AKA itself.

The keys to success include continuous training in all aspects of association management, business and technical training, and of course real benefits to members, including access to credit, joint procurement, trade missions, and policy improvements. Alliances with counterparts in Albania helped accelerate the graduation process. Engaging the media as a partner was critical in building the group image and raising the profile of AKA.

As indicated in the above section, great strides were made toward

financial sustainability. Guided by individual business plans and an overall strategy, the three assisted associations and AKA raised \$18,600 in dues and \$76,600 in non-dues revenue during the project. To capture economies of scale and avoid duplication, AKA was to consolidate and handle many of the functions performed earlier by individual trade associations. In mid-2002 an independent consultant conducted the association assessment developed by the Center for International Private Enterprise of AKA sustainability and gave it a fairly high rating of 78%. Many of the evaluation concerns were rectified, e.g., job descriptions, policy and training manuals for staff prior to KADP ending.

It is always a challenge for trade associations to provide services of value to their members and to generate sufficient non-dues revenue to maintain financial stability, especially in places like Kosovo where members have come to expect free services. IFDC had hoped to extend the preparation period for the fledgling associations and encouraged AKA to prepare proposals aimed at securing additional donor funds.

**AKA assisted the Kosovar Parliamentary Committee for Agriculture in setting its legislative agenda and organized a visit of the Parliamentary Committee from Albania to exchange experience and enhance regional integration. A leader in promoting regional trade, AKA helped organize a 2-day agricultural workshop and business-to-business event in Pristina in June 2002 aimed at facilitating the integration of regional markets for agricultural inputs and produce.**

### **Policy Analysis and Improvement**

#### **Activities and Accomplishments**

A three-phased approach was adopted to address agricultural policy issues.

- Initially, short-term policy experts were engaged to study key issues affecting the recovery and modernization of agribusiness. The project staff then organized seminars and distributed the findings and recommendations and sometimes made direct approaches to the authorities with trade association members.
- In the second phase, with the involvement of a project policy advisor, KADP shifted the focus to AKA—providing training to help identify policy priorities, developing a policy action matrix, undertaking economic analysis, marshalling arguments, and advocating effectively, including using the media and political influence.
- In the third phase, AKA was given the lead role in pursuing

policy reform and in seeking grants and strategic alliances to support its efforts.

Ten short-term consultant policy experts were employed to assess various issues affecting the agriculture sector. Each consultant produced a paper with analysis and recommendations and held a workshop for key decision-makers in the private and public sectors. This program achieved the KADP objectives of encouraging and enabling effective trade association advocacy and building capacity so that private agribusiness could develop and advocate appropriate policy reform initiatives.

Examples of outputs include an assessment of and some successes in changing the UNMIK taxation on agricultural inputs, draft legislation and regulations for fertilizer, and well-researched analytical documents on the “Establishment of a Level Playing Field for Kosovar Agricultural Products” and on “Promoting Effective Use and Protection of

State and Socially Owned Farmland in Kosovo.” AKA subsequently launched a drive to improve regulations and enforcement on food safety and quality control.

With project help, AKA organized study tours to Albania and Slovenia to make contacts and to observe public-private interaction in the formation of agricultural policy on issues of specific concern to AKA members, such as fiscal and trade reforms and quality control. The project organized a press event in November 2001 to publicize an AKA-developed resolution to agricultural representatives of the political parties prior to Kosovo’s first elections since the conflict.

The project target was to achieve one policy success per association. Examples of results include:

- In response to IFDC intervention, UNMIK reevaluated tariffs and taxation on imported fertilizer and flour. The 10% customs duty on fertilizer was eliminated and the anomaly that charged more duty on wheat than on flour was corrected.
- AKA and the miller association conducted a comparative analysis with other countries and lobbied for fairer charge rates. As a result, the peak power penalty charges to flour and feed millers were reduced by 30%.
- IFDC experts drafted legislation for fertilizer, and provided technical input for similar legislation and enforcement for

seed and crop protection products.

- Project efforts encouraged the informal commercialization of idle state-owned land and other agricultural assets.
- AKA gained a seat on the Business Advisory Board to the influential think-tank, Riinvest.
- Elected legislators adopted AKA arguments, previously shelved by UNMIK as distortionary, for the need to counter unfair practices in regional trade.
- AKA received a \$10,000 grant to lobby for food safety and quality controls.
- An initial Memorandum of Understanding on trade liberalization was signed between the governments of Kosovo and Albania as a result of a joint representation promoted by the project.
- AKA helped decision-makers and private sector leaders achieve consensus on the future of agriculture.

#### ***Impact, Problems, and Lessons Learned***

KADP and the alliance of trade associations led by AKA achieved some significant breakthroughs on the policy front but not as many as hoped for. The project team faced many hurdles in trying to promote agribusiness-friendly reforms. UNMIK authorities, influenced by powerful institutions, adopted hard-line positions that there should be no market distortions or fiscal exemptions. Moreover, there were policy and

implementation differences among UNMIK, the Department of Agriculture, the Central Fiscal Authority, Customs, and others, making it difficult to conduct effective reform campaigns.

For example, AKA arguments for seasonal quotas in the face of subsidies and dumping of inputs and fruit, vegetables, and eggs by Macedonia were rejected. Weak UNMIK enforcement of illegal and contraband goods from Serbia made the situation more frustrating for legitimate Kosovar agro-entrepreneurs. Another example of the strict fiscal approach and an unsuccessful AKA effort is that the VAT is applied to all agricultural inputs, even though most farmers are subsistence and therefore do not sell any produce and cannot recover part of the tax as intended.

UNMIK resisted KADP/AKA arguments that state and socially owned lands should be commercialized and privatized so that the scarce land and assets could be brought into production. UNMIK argued that owners needed to be identified and rents placed in escrow. KADP drafted procedures on how to commercialize land but could not implement the plan, based on Yugoslav legislation of the 1990s.

There are, however, unofficial deals between state-owned enterprises and individuals so that land is now being entered into production. The project also encouraged commercialization of non-land assets and helped five

clients obtain leases to restart idle poultry facilities and feed mills.

Once Kosovars were elected to office in late 2001, the system became more politically responsive and receptive to AKA arguments and positions, many of which the new legislators and administrators adopted. The project therefore helped set the stage for the future and prepared AKA for a leading role.

#### **Technology Transfer to Farmers**

##### ***Activities and Accomplishments***

The objectives for KADP were to develop packages of new technologies, transfer technology to farmers and other producers via the agri-input dealers and other trade associations, develop technical materials, disseminate the results of on-farm trials and demonstrations, increase awareness of the potential and benefits of crop diversification, and develop sustainability by engaging MAFRD and others.

The results indicators for the project included Kosovo-wide average yield increases of 20% for wheat and maize, 40 field demonstrations, four extension methodology courses, and two surveys of the technical knowledge and transfer skills of agri-input dealers.

The targets were exceeded. Country average wheat yields increased by 29%, and maize by 25%. The results on the project trials demonstrated the potential for twice those yields, and the



**LEFT: KADP introduced several new maize varieties (obtained from international seed companies) in its research plots, which tested the performance of 29 varieties under conditions of improved fertilization and crop protection. This yield represents a 90% increase over the average production/hectare in the previous decade (excluding 1999).**

## KADP Extension Activities

The KADP project focused on identifying the most appropriate technologies for the three main crops in Kosovo—winter wheat, maize and potatoes. In terms of the appropriate technology, the project identified improved varieties that produced significantly higher yields under Kosovar climatic conditions when combined with the correct amount of fertilizer and CPPs required to support increased yields.

The results of 2 years of KADP test plot research concluded:

- Screening of 15 varieties of potatoes (obtained from the Netherlands and Germany) not previously used in Kosovo and recommendations on the use of 8 varieties that combined with the appropriate amount of nitrogen and phosphorus fertilizer increased yields by 76%. In the 1990s (excluding 1999) average potato yield was 7.8 tons/ha. By 2001, with dissemination of the information derived from the KADP field research, yields were averaging 18.7 tons/ha with some fields producing 30 tons/ha.
- Screening of 30 winter wheat varieties (obtained from CIMMYT and throughout Europe) from which 4 not previously used in Kosovo were identified as high-yielding varieties (HYVs). Two of these varieties (*Martina* and *Tamara*) were the first additions to the National Seed List being revised by the Ministry of Agriculture, Forestry and Rural Development (MAFRD). Relative to the traditional varieties (e.g., *Europa*) used by farmers, these new varieties increased yields by 1.5 tons/ha. Overall the high-yielding varieties are projected to increase farmers' incomes by more than \$300/ha when combined with the proper amounts of fertilizer and CPPs compared to the use of traditional varieties and no fertilizer or CPP inputs.

KADP also introduced several new maize varieties (obtained from international seed companies) in its research plots, which tested the performance of 29 varieties under conditions of improved fertilization and crop protection. With dissemination of this information via brochures, field days and promotion by KODAA, average maize yield increased to 4.5 tons/ha in 2001. This yield represents a 90% increase over the average production/hectare in the previous decade (excluding 1999). Several new varieties were given conditional approval for addition to the National Seed List.

Due to the significant success of the KADP maize and wheat technology packages (HYVs, high-analysis fertilizer—urea and DAP, and improved CPPs), the MAFRD requested to join forces with KADP and KODAA to conduct on-farm demonstrations of the technology packages. For the maize demonstrations, 200 farmers in 25 municipalities (including ethnic minorities and women) were identified to test the packages during 2002. Results from those experiments indicate that average maize yields from these farm demonstrations were 8.0 tons/ha. Oversight of the winter wheat trials established on 120 farms (30 municipalities) in the last quarter of 2002 was assumed by MAFRD.

Recognizing the growing need for livestock feed in Kosovo, KADP also initiated identification of technology packages for oilseed crops (soybean and sunflower) and research on production of high protein crops such as vetch, lentil and chickpeas (seed obtained from ICARDA) in 2002. Also, because the establishment of winter wheat (the primary crop grown) was problematic in some years due to adverse climatic conditions, KADP initiated testing of 8 varieties of spring wheat under conditions of optimum fertilization and crop protection as an alternative in the spring of 2002.

Additional activities on promotion of the maize technology package and oilseed technology packages were accomplished through the Kosovo Feed for Poultry Project (KFPP) and collaboration with identified partners (e.g., MAFRD, national institutes, and the EAR/SRSP). Continued promotion of wheat technology package and research on spring wheat and some of the high protein crops were assumed by MAFRD, the Peja Institute, and EAR/SRSP.

**One of the ambitious targets for the project was to increase the income of 6,800 farm families by \$350 in 2.5 years. A MAFRD study released in December 2002 reported the results of the participatory on-farm trials. KODAA supplied the inputs, selection of new seed varieties, and the technology. MAFRD reported that more than 7,000 farm families adopted the improved packages, which resulted in increased net profits/income of 49% for wheat and 400% for maize. With an average farm size of 2.5 ha and traditional net income of \$275 from the farm, the MAFRD data indicate that wheat farmers gained \$135 and maize farmers \$1,000, thus exceeding the project target.**

thousands of smallholder farmers who adopted the improved technology packages far exceeded the average yield increases. One key improvement was to convince some farmers to shift to higher nutrient value urea and diammonium phosphate (DAP) fertilizer from the traditional NPK and calcium ammonium nitrate (CAN). The project also produced a weekly survey of prices for agri-inputs and produce in Kosovo.

The project's crop trial program initially focused on winter and spring wheat and maize. More recent trials also included soybeans and fodder crops and tested not only new seed varieties against traditional seed but also experimented to determine the optimal seed, fertilizer and herbicide rates in the two main

agro-climatic regions of the territory. The project tested 85 new seed varieties and conducted value cultivation use trials of 34 varieties. An estimated 5,000 farmers, agribusinessmen, and officials visited the demonstration plots during 2002. The results were also disseminated through the project association networks and the media (more than 180 news clips and press articles).

KADP was recognized as the leader in field trial work in

Kosovo. For example, in 2002 the Ministry of Agriculture requested project staff to help 200 farmers across Kosovo to plant the new maize varieties and another 133 farmers to plant new wheat varieties to ensure that the increased yields were replicable. In addition, two new wheat varieties identified by the project gained entry on the National Seed List of varieties authorized for sale and multiplication within Kosovo.

#### *Increased Use of Fertilizers.*

Impacts of KADP on fertilizer use in Kosovo in years 2000 to 2002 are presented in Table 1. The increase in fertilizer use was greater in 2000, possibly because the need for agri-inputs (demand) was greater immediately after the conflict in 1999. However, one must recognize that donor credit was more easily obtained at that time. In 2000, the increase in fertilizer use due to KADP was 30,000 tons—20,000 tons of 15-15-15, and 10,000 tons of calcium ammonium nitrate (CAN). About 56% of these fertilizers were for wheat, 42% for maize, and 2% for other crops such as vegetables, potatoes, and fruit crops. In 2001, it is estimated that fertilizer use increased by 21,000 tons as a result of the KADP. In that year, use of urea, 15-15-15, and CAN

**The key in Kosovo, as in projects in Albania and elsewhere, was transforming private agri-input dealers' association members into extension providers. In a survey after KADP training, three-fourths of dealers considered themselves to have the technical knowledge and extension skills needed to help farmers.**

**TABLE I: IMPACT OF KADP ON FERTILIZER USE**

Year	Fertilizer Use Increase		Used on Wheat					Applied on Maize and Other Crops									
	Fertilizer Product	Total Quantity Supplied to Farmers (tons)	Fertilizer Product		Quantities of Nutrients			Fertilizer Product Used			Quantities of Nutrients						
			Percent Used (%)	Quantity (tons)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Total Nutrient	Maize	Other Crops	Total Used on Maize and Other Crops (tons)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Total Nutrient		
2000	15-15-15 CAN	20,000	60	12,000	1,800	1,800	1,800	5,400	8,000	0	8,000	0	8,000	1,200	180	1,200	2,580
		10,000	50	5,000	1,350	0	1,350	1,350	4,500	5	5,000	5	5,000	1,215	0	1,215	1,215
<b>Total Year 2000</b>		<b>30,000</b>	<b>56</b>	<b>17,000</b>	<b>3,150</b>	<b>1,800</b>	<b>1,800</b>	<b>6,750</b>	<b>12,500</b>	<b>2</b>	<b>13,000</b>	<b>2</b>	<b>13,000</b>	<b>2,415</b>	<b>180</b>	<b>1,200</b>	<b>3,795</b>
							<b>64%</b>										<b>36%</b>
2001	Urea 15-15-15 CAN	8,000	55	4,400	2,024	0	2,024	2,024	3,200	5	3,600	5	3,600	1,472	0	0	1,472
		10,000	50	5,000	750	750	2,250	2,250	4,000	10	5,000	10	5,000	600	600	600	1,800
		3,000	30	900	243	0	243	243	1,500	20	2,100	20	2,100	405	0	0	405
<b>Total Year 2001</b>		<b>21,000</b>	<b>49</b>	<b>10,300</b>	<b>3,017</b>	<b>750</b>	<b>4,517</b>	<b>4,517</b>	<b>8,700</b>	<b>10</b>	<b>10,700</b>	<b>10</b>	<b>10,700</b>	<b>2,477</b>	<b>600</b>	<b>600</b>	<b>3,677</b>
							<b>55%</b>										<b>45%</b>
2002	Urea 15-15-15 CAN	6,000	60	3,600	1,656	0	1,656	1,656	2,100	5	2,400	5	2,400	966	0	0	966
		12,000	50	6,000	900	900	2,700	2,700	4,800	10	6,000	10	6,000	720	720	720	2,160
		2,000	20	400	108	0	108	108	800	40	1,600	40	1,600	216	0	0	216
<b>Total Year 2002</b>		<b>20,000</b>	<b>50</b>	<b>10,000</b>	<b>2,664</b>	<b>900</b>	<b>4,464</b>	<b>4,464</b>	<b>7,700</b>	<b>12</b>	<b>10,000</b>	<b>12</b>	<b>10,000</b>	<b>1,902</b>	<b>720</b>	<b>720</b>	<b>3,342</b>
							<b>57%</b>										<b>43%</b>

Source: Carlos A. Baanante, "An Economic Impact Assessment of the USAID/IFDC Kosovo Agribusiness Development Program (KADP)," February 2003.

increased by 8,000, 10,000, and 3,000 tons, respectively. Most of the increase (10,300 tons) was for wheat (49%)—about 41% or 8,700 tons was used by maize farmers and about 10% or 2,000 tons was used on other crops. In 2002, the impact of KADP on fertilizer use was very similar to that in 2001. Fertilizer use increased by 20,000 tons—6,000 tons of urea, 12,000 tons of 15-15-15, and 2,000 tons of CAN.

#### ***Impact, Problems, and Lessons Learned***

KADP provided the main impetus for technology transfer and extension services in post-1999 Kosovo. The project was highly respected by experts and farmers alike and was given much of the credit for the yield increases. The poultry industry appreciated KADP work in improving the quantity and quality of local feed sources for their layers. One set of feed tests indicated that the local feed was better than imported complete feed obtained from neighboring countries. The project also facilitated communications

between input suppliers and the milling industry by introducing new wheat varieties with grain qualities that met industry flour standards.

Before the project ended, a plan was implemented for sustainability of the technology transfer functions; this plan involved the private sector agri-input dealers and other trade associations as extension providers, MAFRD officials, NGOs, and other donors. IFDC planned to continue the lead in maize, soybeans, and sunflowers under a new feed grain development project, KFPP.

According to an economic impact assessment study of the project prepared in February 2003, the net added returns to land and other factors fixed in the short term amounted to \$15 million. The increased availability of fertilizer meant that 83,000 more hectares were fertilized, and the use of the extra fertilizer generated an additional 216,000 workdays worth \$1.73 million. In addition,

it contributed to the conservation of cropland by preventing the loss of 10,000 tons of plant nutrients. If 50% of the increased use of fertilizer and improved seed is attributed to the project, the benefit/cost ratio is 2.28.

Farmer-participation field trials demonstrated the production potential of adopting modern technology, such as using DAP and urea instead of the traditional fertilizers. Wheat yields increased 69% and produced a \$200 net return/ha; the corresponding figures for maize were 150% and \$726/ha. The project implemented a crop diversification program by introducing soybeans and other forage legume crops suitable for the drylands, thus providing an alternative source of inexpensive protein for the poultry and livestock industries.

The program succeeded because the dedicated and competent project staff quickly built trust with the farmers and the dealers and convinced both that field demonstrations were valuable and that the best practices that KADP was promoting were realistic. Using the media extensively and as a partner helped bring attention to the field demonstrations and real life success stories.

#### **Promotion of Agribusiness and Credit**

##### ***Activities and Accomplishments***

The objectives for this component of the project were to develop feasibility options for selected enterprises, improve business skills and access to technology

**Project business development specialists assisted a consortium of 10 agri-input dealer association members in applying for \$2.3 million in credit for the purchase of over 8,000 tons of fertilizer in the fall of 2001. By successfully servicing their loans, nine consortium members qualified for a second tranche of financing for the import of 15,000 tons of spring fertilizers from Macedonia and Romania. By fall 2002, the association had established a relationship with a fertilizer plant in Macedonia and was able to finance the import of 10,000 tons of fertilizer for the autumn planting with revolving credit from the factory.**

and market information, help clients increase investment and gain access to credit, and encourage diversification into new products.

The project undertook a range of activities to prepare and motivate potential agro-entrepreneurs, again using the trade associations as the base of clients and mechanism for delivering training, technical assistance, and access to credit. In addition to preparing 39 business plans, staff assisted with 15 marketing plans and 5 feasibility studies. Once the Kosovo Business Support project was launched, KADP joined forces in providing business training and advice to the project clients and staff.

The project brought in international specialists on poultry production, greenhouse and irrigation equipment, and cropping technologies to assess needs and to provide practical advice to clients directly and through seminars. For example, project experts concluded that Kosovo had twice as much flour-milling capacity as needed and therefore urged diversification into feed milling and other endeavors.

AKA exposed association members to new business practices and technology through trade missions. In 2002, for example, 11 trips were organized to businesses and trade fairs in the region. As part of the AKA sustainability drive, the delegates paid the full cost of their trips and a 10% organization fee to AKA. The project and AKA staff also

ensured agribusiness representation at five business-to-business events in four territories in the region during the year. More than 50 AKA member businesses were involved.

Credit was critical to the business success of project clients and to the value they perceived in joining the trade associations. Finance for agribusiness was scarce in Kosovo after the conflict, and IFDC therefore quickly forged alliances with donor-funded credit schemes, such as CORDAID, EAR, the Agribusiness Unit (ABU) of EAR, and ABK. The project staff identified credit-worthy clients, helped them prepare business plans and loan applications, introduced them to the project-lending partners, and continued to monitor the loans and provide technical and business advice throughout the duration.

During 2002 the project helped 37 AKA association members prepare business plans and loan applications for the ABK, which provided \$700,000 in loans to 30 of the applicants. Project specialists also helped the flour millers' association obtain \$40,000 in revolving credit from the Canadian Cooperation Support Office (CCSO) for machinery upgrades. As previously noted, the same organization extended a similar \$55,000 to the beekeepers' association to purchase treatment for mites.

As a result of the coordinated program of technical and business

assistance, project clients were able to expand their enterprises.

- Members of the trade association for agri-input dealers, in which KADP assisted 120 dealers, increased the volume of their business from \$11 million in 2000 to \$15 million in 2001 to \$18 million in 2002. Their investments during the project totaled \$4.3 million.
- Wheat miller association members expanded their business from \$6.7 million in 2000 to \$10.7 million in 2001 to \$11.7 million in 2002. Their investment during the project was \$5.3 million. Their work force increased from 460 to 543.
- The poultry producers' and feed millers' association experienced a decline in business in 2001 to \$10 million from \$11.45 million in 2000 due to an influx of subsidized eggs, but they continued to invest nearly \$6 million. The situation improved in 2002 when they achieved \$16.8 million in total sales and increased staff by 40% to 379.

#### ***Impact, Problems, and Lessons Learned***

KADP was the first project of its kind in Kosovo and served as a beacon for private-sector-led agribusiness development. Using a holistic and practical support system centered on the trade associations, the project was able to pioneer paths and demonstrate the opportunities for Kosovar agro-entrepreneurs.

The \$30 million in investment and loans extended to project clients in the first 2 years of reconstruction clearly demonstrate the success of the approach and the implementation. The \$16 million in investment by project clients had a multiplier effect on the economy greater than one. Employment by client firms doubled during the project, increasing to 2000.

#### *Impact on Volume of Business.*

Impacts of the KADP on the volume of business, level of investments, and employment observed in the three-targeted ATAs are shown in Table 2. The volume of business includes sales and purchases of agribusinesses in each association. These data show that the volume of business increased substantially for these agribusinesses during the period 2000-2002. Increases of annual business volume between 2000 and 2002 were approximately (1) 64% or \$7 million for dealers of agri-inputs in KODAA, (2) 74% or \$5 million for flour millers in SHMK, and (3) 47% or \$5.3 million for poultry producers and feed manufacturers in SHPUK. The impact of the KADP on the total volume of direct agribusiness transactions in the three targeted trade associations was about \$17.3 million. That figure is an important contribution of KADP to the economy of Kosovo and represents a substantial impact on the GDP of Kosovo. Because multipliers associated with this type of growth in business activity are usually greater than one, the

actual impact of the growth in volume of business on GDP will be greater than estimated here.

*Impact on Investments.* KADP, through the ATA, also had a significant impact on the investments of the targeted agribusinesses in the refurbishing and improvement of facilities. A summary of the size of these investments for the three targeted trade associations is also presented in Table 2. These results show that during the 3-year life of the project (2000-2002) agri-inputs dealers of KODAA invested \$4.3 million, flour millers in SHMK invested \$5.3 million, and poultry producers and feed manufacturers in SHPUK invested \$5.9 million. For agribusinesses in the three targeted ATAs, these investments amount to a total of \$15.5 million over the 3-year life of the program. Investments of this nature have multipliers that are greater than one in terms of their effects on the GDP and the economy. Therefore, the impact of KADP on the Kosovar GDP, due to these investments, is at least \$16.0 million.

*Impact on Employment.* Another important benefit of KADP, through the development of trade associations, is the direct impact on the level of employment. The direct effect on employment in targeted agribusinesses is presented in terms of increased employment in Table 2. Impact on labor employment was greater in the flour miller agribusinesses (more than 450 persons/year) than among the agri-inputs dealers, the poultry producers, and feed manufacturers. For agribusinesses in the three targeted trade associations, employment increased by about 1,000 persons/year. In terms of the average number of persons per year per member, the level of employment more than doubled.

*Improvement of Human Resource Base.* The human resource base benefited from additional employment in targeted agribusinesses and also through improvement in the skills and knowledge of a number of employees that received training as part of KADP. A total of 308 persons in the three targeted trade associations received training during the 3-year

**At the beginning of the project, domestic egg producers were consistently supplying about 110 million eggs per year. By the end of the project, production had increased to 164 million eggs, with KFPP producer clients accounting for 82% of the increase. However, there remain significant opportunities for growth since this production represents only 40% of reported yearly consumption.**

**TABLE 2: IMPACT OF KADP ON BUSINESS VOLUME, INVESTMENTS, AND EMPLOYMENT OF TRADE ASSOCIATIONS**

Trade Associations	Year	Number of Members	Volume of Business (VB)—Sales and Purchases		Investment in Improvement of Facilities		Employment			
			(million \$/year)	(%)	(million \$/year)	Average (\$/year per member)	Person /Year	Average (persons/year per member)	Percent Using Averages as Reference (%)	Number of Persons Trained
Kosovo Dealers of Agri-Inputs Association (KODAA)	2000	140	11.020	100	1.500	10,714	255	1.82	100	67
	2001	90	15.280	139	1.000	11,111	183	2.03	112	32
	2002	53	18.030	164	1.800	33,962	147	2.77	152	21
	3-year total				4.300					
Increase 2000 to 2002			7.010							
Kosovo Flour Millers Association (SHMK)	2000	85	6.732	100	1.500	17,647	460	5.41	100	0
	2001	42	10.731	159	1.700	40,476	520	12.38	229	20
	2002	45	11.723	174	2.127	47,267	543	12.07	223	34
	3-year total				5.327					
Increase 2000 to 2002			4.991							
Kosovo Association of Poultry Producers and Feed Manufacturers (SHPUK)	2000	120	11.450	100	3.039	25,325	271	2.26	100	57
	2001	54	9.822	86	1.418	26,256	292	5.41	239	33
	2002	61	16.780	147	1.450	23,767	379	6.21	275	44
	3-year total				5.907					
Increase 2000 to 2002			5.330							
<b>Totals</b>	2000	345	29.202	100	6.039	17,504	986	2.86	100	124
	2001	186	35.833	123	4.118	22,139	995	5.35	187	85
	2002	159	46.533	159	5.377	33,816	1,069	6.72	235	99
	3-year total				15.534					
Increase 2000 to 2002			17.331							

Source: Carlos A. Baanante, "An Economic Impact Assessment of the USAID/IFDC Kosovo Agribusiness Development Program (KADP)," February 2003.



MENTOR THAQI, IFDC

**LEFT: Agim Sahiti, SHPUK vice-president and owner of KONI, has become a successful entrepreneur due to his own hard work and assistance and training from the KADP project.**

**After studying economics abroad Agim Sahiti returned to Kosovo in 1989 with no money or prospects. He began selling eggs, one carton at a time. Three years later he formed a company whose sole business was the wholesale distribution of eggs. By 2001 the firm had achieved an annual sales growth of 15% and had eight employees. He joined the Kosovo Association of Poultry Producers and Feed Manufacturers (SHPUK) and asked the KADP project for help in starting his own egg production operation.**

**He rented an idle, socially owned facility, formed a business alliance with a firm in Albania, and purchased 25,000 layers. He doubled the number of layers 4 months later. He then joined with another Kosovar egg company and expanded the operation to 110,000 layers and 60 workers. The joint company now supplies 60% of the eggs for the Pristina market and 15% for the whole of Kosovo.**

**Sahiti has been very active in SHPUK and was elected vice-president. Agim and his staff participated in technical seminars and trade missions to Turkey, Albania, and Hanover. KADP helped him prepare a successful application for a \$50,000 loan in 2002 from the ABK and a more recent one submitted to ABK for \$300,000. His company is now one of the largest agribusiness firms in Kosovo.**

life of the program. Returns to investments in training occur over the life span of the persons receiving the training and are usually high when the economy is growing, and there is need for well-trained personnel to facilitate the rapid transfer and adoption of improved technology, as is the case in Kosovo.

*Saving Due to Economies of Scale.* Trade associations made it possible for agribusinesses to take advantage of larger volume transactions to reduce the prices and costs for inputs and raw materials. Large-scale operations and transactions may also lower operating costs and facilitate access to new markets. The size of operations has a limit because an excessively large size operation may result in increasing costs and diseconomies of scale. The impact of KADP on the saving in costs of input purchases, due to larger volume transactions facilitated by the trade associations, are shown in Table 3 for the three targeted trade associations, KODAA, SHMK, and SHPUK. During 2000-2002, the estimated savings in these costs were approximately \$5.28 million for the dealers of agri-inputs, \$0.51 million for the flour millers, and \$0.53 million for the poultry producers and feed manufacturers. Because of advantages gained in the purchasing of larger quantities of agri-inputs, mainly fertilizers, the amount saved was substantially higher for the agri-input dealers (KODAA). The three targeted trade associations saved a total of

**TABLE 3: IMPACT OF KADP ON SAVING IN TRANSACTIONS OF TRADE ASSOCIATIONS AND AGRIBUSINESSES DUE TO ECONOMIES OF SCALE**

Agribusiness Trade Associations (ATA)	Year	Volume of Business	Estimated Saving in Transactions Due to Economies of Scale	
				Percent of Total Volume of Business
		(million \$/year)	(million \$/year)	(%)
Kosovo Dealers of Agri-Inputs Association (KODAA)	2000	11.02	0	
	2001	15.28	2.40	16
	2002	18.03	2.88	16
	3-year total		5.28	
Increase 2000 to 2002		7.010	2.88	
Kosovo Flour Millers' Association (SHMK)	2000	6.73	0	
	2001	10.73	0.25	2
	2002	11.72	0.26	2
	3-year total		0.51	
Increase 2000 to 2002		4.99	0.26	
Kosovo Association of Poultry Producers and Feed Manufacturers (SHPUK)	2000	11.45	0	
	2001	9.82	0.32	3
	2002	16.78	0.21	1
	3-year total		0.53	
Increase 2000 to 2002		5.33	0.21	
<b>Totals</b>	2000	29.20	0.00	
	2001	35.83	2.97	8
	2002	46.53	3.35	7
	3-year total		6.32	
Increase 2000 to 2002		17.33	3.35	

Source: Carlos A. Baanante, "An Economic Impact Assessment of the USAID/IFDC Kosovo Agribusiness Development Program (KADP)," February 2003.

\$6.32 million during the 3-year program.

As previously noted, credit was one of the main preoccupations of the project—from finding willing lenders for project clients, to identifying and preparing bankable borrowers, to monitoring repayments and dealing with defaulters. Because of the socialist traditions and the influx of humanitarian aid after the conflict, Kosovars initially made little distinction between loans and grants. All donors and financial institutions faced problems of default, especially in the agricultural sector because of the many risk factors involved.

The project was exposed to serious problems and disappointments regarding default by clients in the early phases. For example, of the 12 loans to agri-input dealers by CORDAID in the fall of 2000, only 7 have been repaid in full by the end of KADP. Five dealers defaulted and were expelled from the association. Two of them were repaying, and three were involved in court proceedings. CORDAID provided loans to 13 project-assisted poultry producers, but only 38% of the total has been repaid, with the remaining balance being re-scheduled.

Despite regular monitoring and pressure, there were problems with some borrowers under the ABU loan. Over time, as the project helped the association members understand the nature of loans and obligations and collective responsibility, the record

improved, but outstanding default on loans remains a problem.

### **Kosovo Feed for Poultry Project**

The Kosovo Feed for Poultry Project (KFPP) was funded by USAID and implemented by IFDC under an umbrella grant of Save the Children. KFPP was one component of the Small Farmer Support (SFS) initiative to increase agricultural production and income. By early 2004 agriculture was contributing a significant share to Kosovo's economy. Estimates showed that agriculture-related activities accounted for approximately 50% of employment and contributed 35% of the GDP. Most of the crop farming activity remained subsistence production (primarily wheat and maize), oriented toward household consumption. As a result, little or no grain surplus was generated, profits were low, and the supply of raw materials in the market was inadequate for domestic grain processors (feed mills). This situation forced the domestic mills to purchase imported grains where prices were greatly inflated by high transport costs and taxes (prior to September 2004). Ultimately, the high-cost feed makes it extremely difficult for the domestic poultry industry to compete for the Kosovar market, even in egg production.

At the beginning of the project, domestic egg producers were consistently supplying about 110 million eggs per year. By the end of the project, production had increased to 164 million eggs,

with KFPP producer clients accounting for 82% of the increase. However, significant opportunities for growth remain since this production represents only 40% of reported yearly consumption.

Broiler production had not resumed prior to KFPP initiation. By project end, production had reached 300,000 birds per year and targeted consumers willing to pay a premium for fresh meat of domestic origin. The market potential and opportunities for significant expansion remain unclear because cheap imports of frozen leg quarters from the United States and frozen whole chickens from Brazil are plentiful. Future market penetration by Kosovar poultry meat producers will depend on significantly reducing production costs and increasing the demand for fresh meat products.

The premise of KFPP was if quality raw material production (primarily maize, soybean, sunflower, and some wheat) increased, domestically produced animal feed would be competitively priced on the local market and local production of eggs and poultry products (due to lower feed costs and an improved diet) would receive a substantial boost. Therefore KFPP was designed to achieve four major objectives:

- Promote availability and adoption of improved agri-inputs associated with technology packages proven to significantly increase crop production.

- Promote consistent delivery of high-quality raw materials (grains and oilseeds) for animal feed ingredients from the farms to the feed mills.
- Improve milling practices and lower feed production costs through increased efficiency and facilitating the sourcing of raw materials from the local market.
- Increase production of eggs and poultry products through improved technologies and access to quality lower cost poultry feed.

KFPP developed an integrated value chain based on increased maize and oilseed production and quality by involving backward and forward linkages for farmers, agri-input dealers, feed millers, and egg and poultry producers. The project also provided technical assistance to the three components of the poultry industry; farmers producing grain and oilseed, feed millers, and egg and poultry producers. In some instances, these activities were all vertically integrated under one enterprise, but in most cases it involved working with three sets of clients. Generally, the project promoted sourcing of improved agri-inputs for increased production and import substitution of maize and oilseed in areas surrounding the most promising feed mills and poultry operations. In the end, the project met or exceeded most targets as reflected by the results indicators (Table 4).

### **Input Supply: Increase In Marketed Volumes of Quality Inputs**

#### **Objective**

An important component of the project was working with agri-input suppliers in sourcing, supplying, and promoting new and improved hybrid/varieties of seed (maize, soybeans, sunflowers, and winter wheat), high nutrient analysis fertilizers (mono or diammonium phosphate [MAP/DAP], urea, and a modern formulation of NPK) and efficient types of CPPs for the various crops being promoted by the KFPP project. This objective posed many interesting challenges particularly during the first year, since the agri-input suppliers were reluctant to accept all the risks for importing the new technology packages (e.g., soybean seed). Also, there were concerns that the delayed start-up of KFPP would result in lost opportunities for the 2003 spring planting. However, due to the diligent efforts of the project staff, partner trade associations, and a need for maize silage, the agri-input dealers sold most of the imported seed and high-analysis fertilizer before or immediately following the 2003 winter wheat harvest.

#### **Activities**

At the beginning of the project, KFPP staff contacted 10 members of the Kosovo Dealers of Agri-Inputs Association (KODAA) concerning the project's need for seed (maize, soybeans, and sunflowers) and fertilizer (MAP, DAP, and urea). Two dealers

agreed to import fertilizers in support of the project; one initially imported 25 tons of MAP fertilizer and the other 25 tons of DAP fertilizer. At the time, the project staff members were told there was sufficient urea available in the marketplace due to previous promotion under the KADP project. Two KODAA dealers indicated a willingness to import the necessary seed. One initially imported 40 tons of hybrid maize seed, and the other KODAA dealer imported 25 tons of soybean seed. These inputs proved highly successful and resulted in additional imports of all inputs, including urea in 2003. By the end of the project, based on direct and indirect demand generated by project farmers, KODAA dealers had imported and sold 313 tons of hybrid maize seed, 1,500 tons of hybrid wheat seed, 11,718 tons of high-analysis fertilizers, and 57,240 L and kg (amount represents units of liquid CPPs in liters and dry CPPs in kilograms). A final project survey indicated that KODAA dealers anticipated increasing orders for all inputs for the 2005 planting season.

In reviewing Table 4, one should note that soybean crop production was introduced at the farm level in 2003. The previous project (KADP) had tested soybeans for 2 years, but Kosovar farmers had not grown the crop. As with the introduction of any new crop, there were management and harvesting problems, which resulted in low yields the first

**TABLE 4: SUMMARY OF PROJECT OBJECTIVES, TARGETS, AND ACHIEVEMENTS**

<b>Objectives</b>	<b>Targets</b>		<b>Achievements</b>	
<b>1. Input Supply</b>				
<ul style="list-style-type: none"> <li>■ Increase in marketed volume of quality inputs</li> <li>■ Increase in incomes</li> </ul>	<ul style="list-style-type: none"> <li>■ Fertilizers: 1,500 tons</li> <li>■ Seed: 200 tons</li> <li>■ CPPs: 11,000 L and kg</li> <li>■ \$23,000</li> </ul>		<ul style="list-style-type: none"> <li>11,718 tons</li> <li>1,838 tons</li> <li>57,240 L and kg</li> <li>\$152,000</li> </ul>	
<b>2. Feedgrain Production</b>				
<ul style="list-style-type: none"> <li>■ Increases in productivity</li> <li>■ Increase in quality of marketed production</li> <li>■ Increases in incomes for cluster farmers of \$3.25 m</li> <li>■ Increases in land area sown to quality input packages</li> </ul>	<ul style="list-style-type: none"> <li>■ Maize 4.5 tons/ha</li> <li>■ Soybean 1 tons/ha</li> <li>■ Sunflower seed 1 tons/ha</li> <li>■ Maize 15,750 tons</li> <li>■ Soybean 1,050 tons</li> <li>■ Sunflower seed 1,050 tons</li> <li>■ Maize \$2.5 m</li> <li>■ Soybean \$0.36 m</li> <li>■ Sunflower seed \$0.36 m</li> </ul>		<ul style="list-style-type: none"> <li>6.5 tons/ha</li> <li>0.6 tons/ha</li> <li>1.88 tons/ha</li> <li>20,304 tons</li> <li>166 tons</li> <li>535 tons</li> <li>\$4.3 m</li> <li>\$0.07 m</li> <li>\$0.12 m</li> </ul>	
	<b>October 2003</b>	<b>October 2004</b>	<b>Oct 2003</b>	<b>Oct 2004</b>
	Maize 1,000 ha Soybean 360 ha Sunflower seed 360 ha	Maize 2,500 ha Soybean 720 ha Sunflower seed 720 ha	919 ha 277 ha 449 ha	2,578 ha 0 ha <sup>a</sup> 202 ha <sup>b</sup>
<b>3. Feed Milling</b>				
<ul style="list-style-type: none"> <li>■ Increase in marketed volume of quality feed</li> <li>■ Increases in income</li> <li>■ Increases in productivity</li> <li>■ Increases in investment</li> </ul>	<ul style="list-style-type: none"> <li>■ 30,000 tons</li> <li>■ \$51,000</li> <li>■ Surveyed random feed samples produced in Kosovo for quality</li> <li>■ \$0.7 m</li> </ul>		<ul style="list-style-type: none"> <li>19,600 tons</li> <li>\$141,000</li> <li>International Standards for all feeds tested were met</li> <li>\$0.54 m</li> </ul>	
<b>4. Poultry Production</b>				
<ul style="list-style-type: none"> <li>■ Increase in marketed volume of quality eggs</li> <li>■ Increases in income</li> <li>■ Increase in productivity</li> <li>■ Increases in investment</li> </ul>	<ul style="list-style-type: none"> <li>■ Table eggs increase by 30.3 million</li> <li>■ \$1.3 m</li> <li>■ Haugh unit used to measure random sample of Kosovar eggs (white and brown)—Optimum score &gt;90</li> <li>■ \$0.7</li> </ul>		<ul style="list-style-type: none"> <li>52 m</li> <li>\$2.1 m</li> <li>Scores ranged from 64.10 to 89.60</li> <li>\$1.1 m</li> </ul>	

a. In 2004 no soybean seed available in Kosovo. See text for additional information.

b. In 2004 support for sunflower production removed by ALCON.

**Note:** m = million; L = liters; kg = kilograms

Source: "Kosovo Feed for Poultry Project (KFPP) Final Report," IFDC, January 2005.

year. Additionally, in 2003 there was a regional drought that drastically reduced soybean production south of the Danube River. In 2004, soybean seed was not available in Kosovo despite extensive efforts by IFDC/KFPP to identify a regional supplier. All efforts failed because regional seed companies (e.g., Seed-Imex of Hungary) had limited supplies of soybean seed and were giving first priority to domestic producers. By the time domestic needs were met and the amount of seed available for export identified, the planting window for 2004 soybeans had passed. The regional drought was also partly responsible for the 1,500 tons of hybrid wheat seed that KFPP helped to source in the fall of 2003. As with the soybean seed, the 2003 summer drought caused a wide-

spread shortage of wheat seed. Kosovo farmers were facing a significant shortage of traditional seed and the improved seeds recently added to the National Seed List and certified for import. Thus, KFPP in conjunction with SHPUK and AKA successfully lobbied for a one-time import of several new wheat varieties being tested by KFPP and the Ministry of Agriculture, Forestry and Rural Development (MAFRD), but not yet approved for inclusion on the National Seed List.

**Feedgrain Production: Increase in Land Productivity**

**Objective**

At the beginning of the project, most farmers engaged by the project were using a monocultural cereal-cropping base of wheat or maize with limited rotations. Also,

their farming system was dominated by the use of older technologies including hand planting of traditional varieties, low-analysis fertilizers (e.g., 15:15:15), and little or no use of CPPs. These practices produced the low yields common to subsistence farming throughout Kosovo. These low levels of production had significant impacts on various agribusinesses, particularly the feed millers and poultry producers, since they needed an adequate supply of quality farm outputs to meet their processing and feed needs. In 2002 millers were estimated to be importing 90% of the feed grade maize, 100% of the soybean meal and most of the sunflower used in poultry feed. This resulted in some of the highest prices for poultry feed in the world. Since feed costs represent 50%-80% of the total cost of production, low levels of domestic production of raw material grains and oilseed had significant ramifications for the long-term viability of the Kosovo poultry industry. To meet the objective of promoting consistent delivery of quality raw materials, the project worked directly with 253 farmers and indirectly with an additional 1,164 farmers to increase yields and to generate marketable surpluses of grains and oilseeds.

**Activities**

In an effort to make farming more productive, KFPP transferred technology packages (previously validated by KADP) to increase yields for maize, soybean, and sunflower. All technology packages were based on using im-

**Achievements**  
 Due to the support and collaboration of the agri-input suppliers, the project produced significant achievements including:

- Credit in the amount of \$506,000 was provided to KFPP farmers and smaller agri-input dealers supplying KFPP farmers.
- Sixty-three memoranda of agreement (MOAs) were signed between project farmers and agri-input suppliers for the purchase of needed inputs (seed, fertilizer, and CPPs) in 2003 compared with 205 MOAs in 2004. Total value of MOAs was \$934,000.
- KFPP organized study tours/trade fairs in 2003 and 2004, where participating KODAA dealers signed contracts for seed, fertilizer, CPPs, and other agricultural-related inputs valued at \$1.59 million.
- Agri-input dealers supplying project farmers with agri-inputs generated a profit of \$41,400 in 2003. In 2004, profit directly generated by KFPP activities increased to \$110,500.
- Seven new varieties of high-yielding hybrid maize were added to the National Seed List based on KFPP variety trials.



**LEFT: Kosovo farmer Banush Ramadani of Ferizaj stands in front of his sunflower field with IFDC staff member Musli Musliu. Sunflower yields using the KFPP technology package were double those using traditional practices.**

DR. RAYMOND CLARK, IFDC

- **Sunflower yields obtained by farmers using the KFPP technology package were double those obtained from traditional practices.**
- **In 2003 the net incomes of project farmers using the new technology package increased by US \$792/ha for maize, US \$114/ha for soybean, and US \$120/ha for sunflower. In 2004, net income increased for winter wheat by US \$325/ha and US \$144/ha for sunflower producers. Once the 2004 maize crop is dried and sold, increased net income for maize is expected to be US \$839/ha based on the current price.**

proved varieties, along with high-analysis fertilizers and safe, effective CPPs. This technology transfer also included the introduction of soybean crops at the farm level. Later in the project when wheat producers requested assistance in obtaining improved wheat varieties validated under the former KADP project but not on the National Seed List, KFPP agreed to liaison with MAFRD and seed suppliers. Since wheat

and wheat millings are often used as poultry feed ingredients during periods of maize shortages or high prices, the project linked wheat crop producers to the feed millers during late 2003 and mid-2004 when the domestic corn inventory was depleted. During those periods, feed millers purchased 2,100 tons of wheat and wheat millings valued at \$354,200 to replace some of the maize used in the poultry feed formulations.

The project was successful in promoting the new technologies for maize and wheat among project clients. However, the attempt to establish soybeans as an alternative crop and to increase domestic sunflower production did not meet with the same level of success. There were several reasons and extenuating circumstances that prevented the project from meeting acreage and production goals for the two crops. For

example, the 2003 crop yields were reduced by the drought, weed infestation, and pest damage. In addition, for the new soybean crop there was an additional reduction in yields due to poor management and harvesting techniques. Due to the low price set by ALCON (the only oilseed crushing facility in Kosovo) for the 2003 sunflower crop, many farmers switched to growing barley in 2004 based on a higher contract price being offered by the Peja Beer Factory. As an additional incentive, the beer manufacturer provided seeds and fertilizers to farmers willing to grow barley. For those farmers continuing to grow sunflowers, yields in 2004 were reduced by 25% due to pests (birds). Finally, the lack of soybean seed in Kosovo resulted in zero commercial acreage of soybean in 2004.

#### **Achievements**

Despite the problems associated with these two crops, there were a number of achievements of the KFPP project at the farm level that can be summarized as follows:

- Direct technical assistance provided to 253 farmers and training on the benefits of the new technologies provided to an additional 1,164 farmers through field days, seminars, etc.
- Project clients increased maize acreage under new technologies by nearly three-fold from 919 ha in 2003 to 2,578 ha in 2004.
- On non-irrigated land, maize yields for project clients aver-

aged 6.5 tons/ha, which was more than double the average yield of 3.1 tons/ha for farmers using traditional technologies. For the 24% of KFPP farmer-clients with access to irrigation, average yields were 9 tons/ha.

- Wheat yields generated from the KFPP technologies increased by 43% in 2003 and 53% in 2004, compared with yields produced from traditional practices.
- Soybeans were introduced at the farm level in 2003. Resulting on-farm yields (averaged 0.6 ton/ha) were extremely low due to a number of factors including poor inoculation of the soybean seed with *Rhizobium*, unfavorable weather conditions, and poor harvesting techniques. KFPP's demonstration plots over 2 years averaged 2.4 tons/ha for soybeans.
- Sunflower yields obtained by farmers using the KFPP technology package were double those using traditional practices.
- Project assisted farmer clients in obtaining loans valued at \$506,000.
- In 2003 the net incomes of project farmers using the new technology package increased by US \$792/ha for maize, US \$114/ha for soybean, and US \$120/ha for sunflower. In 2004, net income increased for winter wheat by US \$325/ha and US \$144/ha for sunflower producers. Once the 2004 maize crop was dried and sold, increased net income for maize was US \$839/ha.

Other activities undertaken by KFPP include working with a number of the cluster members to explore the feasibility of purchasing a small crusher/extruder. Although Kosovo has one crushing facility (ALCON), it was dedicated to sunflower processing during 2003 and 2004. In the fall of 2003, a former large soybean producer imported a used extruder. A KFPP-sponsored soybean processing training program was attended by 18 farmers, feed millers, poultry producers, input suppliers, and the media. Because this small extruder was available, 80 tons of soybeans, valued at \$30,700, were processed into full fat soybean meal and sold to KFPP participating feed mills.

Despite problems in the oilseed area, by the end of the project, local production of high-quality feed grains was emerging, and the demand for domestic output was extremely high. All of the grains and oilseed produced in 2003 were purchased by local millers/processors. Based on signed MOAs for 2004 there was high local demand for all crops. Forward contracting between farmers, millers, and poultry producers was evolving although farmers and millers need to recognize the binding nature of a contract and the value of agreeing to a prearranged price (prior to harvest) that allows profitability for both parties. The fact that some maize farmers had not signed MOAs (because they were anticipating a higher price in early 2005 when the maize dried) suggests that the concept of a

contract is being accepted and that some farmers will continue to gamble on a higher price. Farmers are also developing linkages with agri-input suppliers who are responding to farmers' requests for credit to purchase improved varieties; high-analysis, cost-effective fertilizers; and effective CPPs. However, there is a concern that the recent removal of VAT and customs taxes from imported complete animal feeds but not from various feed ingredients (i.e., vitamins, minerals, pre-mixes) used in the domestic production of animal feeds could seriously affect the demand for surplus domestic production of grain and oilseed raw materials. This is especially true if local mills are not able to compete with the price of imported complete feed. Based on past performances,

it is anticipated that advocacy for change by SHPUK and AKA will be successful.

#### **Feed Milling: Increases in Marketed Volumes of Quality Feed**

##### **Objectives**

During the project, feed millers served as the hub for the clusters developed to service Kosovo's poultry industry. Sustainability of the poultry industry at this time depends on an effective production-processing chain with backward and forward linkages between the agri-input suppliers, crop producers, feed millers and the egg/poultry producers. KFPP promoted sustainability by focusing on improving milling efficiency and facilitating the sourcing of grains and oilseeds from local producers to reduce feed cost.

##### **Activities**

Initially the KFPP project planned to work with three feed mills in 2003 and six in 2004. However, at the start of the project it was determined that it would best serve long-term project interest to work in all six cluster areas (Peje, Gjakova, Gjilan, Ferizaj, Vushtri, and Prizren). This strategy helped set the stage for gaining additional land and farmers for the second year of the KFPP project. In 2004, two additional clusters were organized (Lipjan and Shtime) in conjunction with the two feed mills in those areas.

There were 27 cluster meetings conducted during the project. Originally, monthly cluster meetings were planned, but because the cluster concept was new, it took the entire life of the



**LEFT: Serbian farmer Novica Kostic (left) of Gjilan is now growing soybeans as well as his established crop of maize as a part of the KFPP project. He sold his maize (in the background) to an Albanian feed miller with the help of staff member Musli Musliu (right) thus becoming part of bridging the ethnic divide between the Serbs and Albanians.**

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project to demonstrate its value. Several KFPP clients had a feed mill and a poultry production facility integrated under one enterprise. A couple of clients also integrated the crop production unit. However, for the most part the project dealt with different clients in each component of the production-processing chain. Therefore, it was only during the last series of cluster meetings that all the key players in the poultry cluster (crop producers, feed millers, poultry producers, input suppliers, MAFRD personnel, etc.) began to participate, recognize, and discuss common issues.

#### **Achievements**

Despite the time it took for the cluster concept to evolve with project clients, there were numerous accomplishments within the feed milling sub-sector directly related to the project including:

- Participating feed millers entered into MOAs with 63 crop producers in 2003 to grow 919 ha of maize, 277 ha of soybeans, and 449 ha of sunflowers. In 2004, 162 MOAs were signed with 222 crop producers (including minority farmers in Gjilan) to grow 2,578 ha of maize, 202 ha of sunflowers, and 1,305 ha of winter wheat. The MOA stated the feed miller would be willing to purchase the entire quantity of grain and oilseed from the farmers at the current market price at the time of delivery.
- Through linkages identified by KFPP, participating feed mills

purchased 4,095 tons (from 2002 crop) of domestically produced maize, 166 tons of domestically produced soybeans/soybean meal, and 390 tons of domestically produced sunflowers/sunflower meal in 2003. Total value of these purchases was \$1.15 million. During 2004, the feed mills reported domestic purchases of 7,400 tons maize (from the 2003 crop) and 145 tons of domestically produced sunflowers/sunflower meal. No domestic soybean meal was available, but the feed millers did purchase 2,100 tons of domestically produced winter wheat grain/millings from 25 local farmers. Total value of these purchases was \$2.17 million. In addition, millers had signed MOAs (162) to purchase most of the 2004 maize (12,194 tons, valued at \$2.65 million) in early 2005 once the maize was dried.

- During 2003, KFPP-participating feed mills reported selling 10,650 tons of poultry feeds, valued at \$3.34 million compared with their 2002 sales of 6,600 tons, valued at \$2.07 million. During January–October 2004, feed sales totaled 8,950 tons, valued at \$2.92 million. For the life of the project, KFPP-participating feed mills sold 19,600 tons of feed, valued at \$6.26 million.
- Total self-financed investment made by the feed-milling clients was \$542,000.

KFPP staff, in conjunction with SHPUK, helped coordinate joint purchases of raw materials, including an emergency supply of soybean meal. The KFPP-participating feed mills contracted for two emergency shipments of approximately 200 tons each of soybean meal from Slovenia, valued at \$178,313 in early 2004. In addition, KFPP in conjunction with another project—Kosovo Business Support (KBS)—organized meetings with Albanian counterparts to explore the possibility of joint purchases of soybean meal. Unfortunately, a joint purchase did not occur during the project. This was partly because the Kosovar feed millers found quality soybean meal at a cheaper price in Slovenia. Also, there is/was a problem with Kosovar feed millers being able to generate sufficient capital to become a full partner in a joint venture. Many of the KFPP-participating feed mills indicated they could not afford to purchase more than a 3-month supply of raw materials and feed additives at a time.

It is expected that under the best scenario, domestic soybean production would eventually only meet approximately 25% of the demand for high-protein soybean meal required by the Kosovar poultry producers. Therefore, efforts to identify partners that would enable improved “economics of scale” for future purchases should be pursued. Albanian

counterparts seem to be a logical choice for several reasons. First, both parties are and will remain dependent on soybean meal imports for the livestock industry. Second, some business linkages already exist (DAKA broiler production), and parties share a common language and culture. Neither party's market is large enough to be attractive for direct purchases from the main soybean producers—United States and Brazil. Additionally, transport from Durres port in Albania to Kosovo is established and economical. Recently, Albania gained approval under USDA's GSM program, which will allow the U.S. Government to guarantee credit for Albanian businesses seeking direct purchases of commodities for use in Albania.

As previously noted, one primary issue now confronting the feed milling industry is the impact of the VAT removal and customs duty on imported agricultural inputs. In general, this is a very positive move for the overall agriculture sector. However, the VAT and customs taxes were removed on imported complete feeds but not on many of the ingredients (trace mineral salts, vitamins, calcium, soybean meal, and other raw materials) imported to manufacture domestic feeds. If this situation is not addressed, it will seriously affect the long-term viability of the feed mills, domestic production of surplus grains and oilseeds, and the competitiveness of the Kosovar poultry industry. It is possible that the cost of producing the domestic feeds in the near future will be higher than importing

complete feeds from surrounding countries. Likewise, this would result in significant job losses within feed-milling and poultry operations and would reduce the incentive for farmers to produce marketable surpluses.

#### **Poultry Production: Increase in Marketed Volumes of Quality Eggs**

##### **Objective**

Kosovar egg and poultry producers were the final crucial link in the value-added commodity chain. Because of high transport costs and consumer demand for freshness, domestic egg production has traditionally had a competitive advantage in most countries. Despite the large-scale import of eggs from Macedonia immediately following the war, this eventually proved to be true for Kosovo. According to recent KFPP survey data, there are an estimated 485,000 layers producing 164 million eggs per year. Since daily egg consumption is estimated at 1.6 million eggs, opportunities for additional significant growth exist. Also, local demand for fresh meat provides another opportunity for growth. However, growth is dependent on maintaining competitive feed costs, which account for 50%-80% of total production cost. The final objective of KFPP was to increase the competitiveness of Kosovo's poultry industry by promoting technologies that improve egg production efficiencies, including reliable access to a quality low-cost feed source. Access to quality, low-cost feed also served as the foundation for restarting broiler production.

##### **Activities**

Table egg production is generated primarily from flocks producing eggs from single or multiple units of 3,600 layers. However, there are a few large-scale producers including two with flock sizes of 75,000 and 150,000 layers. Through the efforts of KFPP and its predecessor KADP, technologies used in commercial operations are becoming more modern and reflecting typical modes of operation within the global poultry industry. In addition to lower feed costs, overall operational efficiency has reduced the average cost of production by \$0.0090/egg.

Despite efforts by a number of poultry producers, commercial broiler production had failed to restart prior to the KFPP project. Again the primary reason was high feed costs, but there was also a reliance on imported breeds. The restart of local hatcheries, with support from KFPP and the reduction in feed costs, encouraged interest in producing fresh broilers for the domestic market. By the end of KFPP, broiler production numbered 300,000—up from zero at the beginning of the project in 2002. Some of this production was financed by a poultry enterprise (DAKA) in neighboring Albania. More recently, entrepreneurs from Tunisia have made an additional investment in a small broiler operation. Like egg production, broiler production could grow significantly if feed prices stabilize at a competitive rate. Although current broiler production

**KFPP client poultry producers were active participants in the six study tours/trade fairs organized by the KFPP project during 2003/04, and the B2B meeting organized by the Kosovo Business Support Project and supported by KFPP. As a result of their participation, poultry producers signed contracts worth \$211,000 in 2003 and \$1.13 million in 2004. Poultry producers invested \$61,928 in self-financed study tours for costs associated with the trips compared with KFPP's investment of \$9,500.**

is targeting local consumer demand, future opportunities for additional growth and export to Europe may exist. Several European countries are enacting new environmental regulations, which are prompting their respective poultry industries to look to other regions of the world for future investment and expansion of poultry production operations.

**Achievements**

Compared with the baseline year of 2002, KFPP and its participating poultry producers (25) produced significant achievements including:

- Average layer numbers are at 485,000 birds, an increase of 235,000 birds; pullets include 380,000 birds, an increase of 230,000 birds; and broilers include 300,000 birds, increased from zero.
- Local hatcheries reported an increase of 115,200 settling

eggs to a current level of 403,200 eggs.

- Total domestic egg production is estimated to be increased by 52 million to 164 million.
- The average cost of producing an egg has decreased by approximately \$0.007/egg on farms that buy pullets and \$0.01/egg on poultry farms that raise pullets.
- Increased incomes from \$337,500 in 2002 to \$923,000 in 2003 and \$2.45 million in 2004.
- New investments (buildings, equipment, additional layers, etc.) totaling \$1.15 million.
- Eight poultry producers (with KFPP assistance) received loans valued at \$317,000.

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Throughout the project participating poultry producers, in conjunction with SHPUK, were very active in dealing with issues facing this sector of Kosovo's emerging economy. In 2003, the industry confronted the possibility that New Castle disease had entered Kosovo from Serbia. Through SHPUK's advocacy efforts and technical support provided by KFPP, the poultry producers worked with MAFRD and the Border Veterinary Services (BVS) to halt the shipment of spent hens from entering Kosovo and also to increase surveillance efforts at the borders and on local farms. As a result, Kosovo has remained free of New Castle disease. With technical support from KFPP, they have also initiated manure management activities, including the use of the manure to make marketable compost.

By the end of the project, the KFPP poultry producers were experiencing significant growth in their businesses and incomes.

This industry is well on its way to long-term viability if interest continues in developing local supplies of raw materials (including soybean meal to supply the necessary protein in the livestock diet) for low-cost, high-quality feed, disease prevention is diligent, and advocacy-promoting policies are beneficial to the industry.

### **Crosscutting Project Activities**

KFPP staff maintained communication with other USAID-funded projects (e.g., KBS) through monthly coordination meetings and by inviting participation in KFPP-sponsored cluster meetings and training programs (Attachment 1). Also, KFPP staff met regularly with other SFS partners (especially CARE and the Canadian Centre for International Studies [CECI]), NGOs, MAFRD, the Municipal Agricultural Directorates, and the University of Pristina Agricultural Faculty. KFPP staff participated in the majority of MAFRD-sponsored NGO coordination meetings.

One highlight of the project was the ability to disseminate information through the media. KFPP staff participated in 22 television interviews and 12 radio interviews. During the last 2 months of the project, KFPP in conjunction with the media made a final push to disseminate information on the crop production technologies and the benefits of linkages between agri-input suppliers, crop producers, processors/millers, and poultry producers through nine

(TV and radio) media events highlighting project activities, results, and recommendations.

Additional activities to disseminate information involved working with the local print media and publishing two project newspapers (1,000 copies each). All printed information was distributed to clients through meetings, one-on-one visits, and several other sources (MAFRD personnel, agri-input suppliers, feed millers, and poultry producers, the Pristina Agricultural Faculty, other Small Farmer Support Program [SFS] partners, and other NGOs). Staff also distributed more than 4,450 IFDC-produced brochures on maize, sunflower and soybean harvesting, pesticide application and safety, and various diseases affecting poultry.

KFPP maintained constant contact with AKA and its member associations (e.g., SHPUK, KODAA) to deal with the many issues confronting Kosovo farmers, millers and poultry producers. The issues addressed included the lack of available hybrid seed and fertilizer (DAP/MAP) inputs; high prices for raw materials (maize and soybean meal) for the feed milling sector; land privatization; and the continuing issue of monetary and fiscal policies affecting farmers, feed millers, and poultry producers.

Regarding land privatization, KFPP staff communicated regularly with Kosovo Trust Agency (KTA) on the privatization of

agricultural-related, state-owned enterprises (SOEs). KFPP staff served as the conduit for bringing field crop producers, feed millers, and poultry producers interested in purchasing land from some of the agricultural SOEs, together with appropriate KTA staff. During the life of the project, 18 informal meetings on land privatization were held with 55 KFPP clients participating in the discussions. In addition, KFPP staff helped KTA organize two large meetings that had 190 participants in attendance.

### **Conclusions, Lessons Learned, and Future Sustainability**

KFPP promoted adoption of the KADP-identified technologies by producers in the feed grain, milling, and poultry sub-sectors to achieve marketable production of quality feed grains, poultry feed, eggs, and other poultry products. To achieve these objectives, KFPP facilitated linkages that promoted access to improved agri-inputs to produce the consistent delivery of high-quality feed grains and oilseed surpluses by farmers to agri-processors for conversion to feed to be used by the poultry producers.

Ultimately, the project met or exceeded most targets and results indicators by promoting activities necessary to energize the various components of the production-processing chain required for a successful poultry industry. The marketable surpluses of quality grain at the farm level produced a “domino effect” for the feed mills

**The legacy of KFPP will be that by linking small farmers, agri-input suppliers, feed millers, and poultry producers, it created a production-processing chain that promotes sustained economic growth. The foundation is now in place for the Kosovo poultry industry to experience development into a significant agribusiness cluster. It is anticipated that continued technical support through the Kosovo Cluster Business Support (KCBS) and advocacy by the trade associations on relevant policy issues will help the industry reach this goal. Lessons learned from the cluster-based development approach of KFPP will prove valuable as the poultry industry partners seek to become a major agribusiness cluster in poultry products.**

and egg/poultry industry. By sourcing quality grains and oilseeds from local suppliers, feed millers realized a cost saving. This saving, in addition to increased availability of improved balanced feed formulations based on technical assistance provided to the millers, was passed on to the egg and/or poultry producers. In turn, access to quality feeds at stable prices and technical assistance from KFPP resulted in significant gains in local market share for the domestic poultry industry.

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**Key lessons learned from KFPP** include:

- It takes time to convince all parties of the benefits of a cluster development approach, particularly when emerging from a civil conflict.
- Trade associations are effective channels through which to develop value-added commodity chains, organize advocacy for policy reform, and provide training and dissemination of information. They are also valuable partners in successful project implementation.
- Study tours designed to integrate activities and interests of all project clients enhanced the development of the commodity chain and cluster by building business linkages, promoting joint advocacy positions, and providing access to and understanding of beneficial technologies (Attachment 2).
- Media and organized seminars presenting project results and consultants' recommendations play an important role in bringing participants together, promoting new technologies, and expanding markets for outputs.
- Small focused teams can achieve substantial results.
- Collaboration and cooperation between development organizations in Kosovo minimized duplication of efforts.

- Limited access to credit continues to be a significant constraint to agribusiness growth.

One current issue that will seriously affect the project's impact on sustainability of the Kosovar poultry industry is the recent removal of border taxes (customs and VAT) from imported complete feeds but not from maize premixes, vitamins, and supplements required by the domestic feed industry. The position of KFPP and its clients is that all imported feed ingredients must be exempt from border taxes to "level the playing field." Based on previous performances and a good working relationship between the trade associations (AKA, SHPUK, KODAA, etc.) and MAFRD, we anticipate that policy changes to address this situation will be successful.

Kosovo will continue to face many challenges as it seeks to identify areas where it is a competitive player in the local, regional, and global agricultural scene. As a result of KFPP, the Kosovo poultry industry and its "cluster" partners are better equipped to meet these challenges.

The USAID/EGAT (Economic Growth, Agriculture, and Trade) Report of 2004 praised IFDC's efforts in Kosovo as follows:

**"The IFDC concerted effort in Kosovo helped spur the removal of VAT on all inputs including animal feed and, thus, helped farmers become more competitive. As a result, over 3,000 farmers began using hybrid seeds on 9,000 ha for the first time and doubled their yields, and poultry producers increased egg production by 200,000 eggs per day."**

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## ATTACHMENT I: TRAINING AND FIELD DAYS CONDUCTED BY KFPP

Activity	No. of Participants <sup>a</sup>	
	2003	2004
Pesticide safety	71	110
Farm machinery mechanization	91	148
Results of KFPP field demonstrations	70	76
Field days—maize, soybean, and sunflower planting and management	158	526
Prevention of poultry disease	8	13
Reducing poultry feed costs	---	29
Poultry manure management	---	16
Status of Kosovar Poultry Industry (EOP Seminar on Poultry)	---	54
Cluster Group Meetings (various topics focused on crop production, milling efficiency, joint purchases, feed formulations, etc.)	61	149
Financial aspects of farm management	8	96
Mechanical extraction of soya	12	---
Multi-cropping experiences in Albania	35	---
<b>Total</b>	<b>514</b>	<b>1,217</b>

a. Participants included agri-input suppliers, farmers, feed millers, poultry, MAFRD personnel, municipal agricultural staff, other SFS program partners, NGOs (CARE, CECL, SC), KBS staff, and USAID and other donors.

Source: "Kosovo Feed for Poultry Project (KFPP) Final Report," IFDC, January 2005.

**ATTACHMENT 2: TRADE FAIRS AND STUDY  
TOURS ORGANIZED BY KFPP**

<b>Activity</b>	<b>No. of Participants</b>
Poultry Study Tour to Albania (June 6-11, 2003)	10
Seed Production and Processing Study Tour to Hungary and Serbia (June 23-27, 2003)	9
VIV Europe 2003 International Trade Fair (Utrecht, The Netherlands, October 29-November 3, 2003)	26
AGROTICA Trade Fair (Thessalonica, Greece, January 28-February 1, 2004)	22
Business-to-Business (B2B) (Tirana, Albania, April 2004)	9
RESALE Trade Fair (Karsruhe, Germany, April 26-28, 2004)	15
Novi Sad Agricultural Trade Fair (Novi Sad, Serbia, May 18-20, 2004)	18

KFPP covered participating KFPP staff costs and provided land transportation, assistance (non-financial) in obtaining visas, and organized program agenda and associated logistics. Participants assumed all costs (lodging, meals, airfare, etc.).

Source: "Kosovo Feed for Poultry Project (KFPP) Final Report," IFDC, January 2005.

# Acronyms and Abbreviations

<b>ABK</b>	American Bank of Kosovo
<b>ABU</b>	Agribusiness Unit (part of EAR)
<b>AKA</b>	Alliance of Kosovo Agribusinesses
<b>ALCON</b>	Oilseed Crushing Plant in Ferizaj
<b>ATA</b>	Agribusiness Trade Association
<b>BVS</b>	Border Veterinary Services
<b>CAN</b>	calcium ammonium nitrate
<b>CCSO</b>	Canadian Cooperation Support Office
<b>CECI</b>	Canadian Centre for International Studies
<b>CORDAID</b>	Catholic Organization for Relief and Development
<b>CPPs</b>	crop protection products
<b>DAI</b>	Development Alternatives, Inc.
<b>DAP</b>	diammonium phosphate
<b>EAR</b>	European Agency for Reconstruction
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>GDP</b>	gross domestic product
<b>ha</b>	hectares
<b>HYV</b>	high yielding variety
<b>IFDC</b>	An International Center for Soil Fertility and Agricultural Development
<b>IR</b>	Intermediate Result
<b>KADP</b>	Kosovo Agribusiness Development Program
<b>KBS</b>	Kosovo Business Support
<b>KCBS</b>	Kosovo Cluster Business Support Project
<b>KFPP</b>	Kosovo Feed for Poultry Project
<b>kg</b>	kilogram
<b>KODAA</b>	Kosovo Dealers of Agri-Inputs Association
<b>KTA</b>	Kosovo Trust Agency
<b>L</b>	liter
<b>MAFRD</b>	Ministry of Agriculture, Forestry and Rural Development
<b>MOA</b>	memorandum of agreement
<b>NATO</b>	North Atlantic Treaty Organization
<b>NGO</b>	non-governmental organization
<b>RTK</b>	Radio Television Kosovo
<b>SC</b>	Save the Children
<b>SFS</b>	Small Farmer Support Program
<b>SHMK</b>	Kosovo Flour Millers Association
<b>SO</b>	Strategic Objective
<b>SOE</b>	State-Owned Enterprise
<b>SHPUK</b>	Kosovo Association of Poultry Producers and Feed Manufacturers
<b>SRSP</b>	Seed Regulatory Services Project (EAR)
<b>UMCOR</b>	United Methodist Committee on Relief
<b>UNMIK</b>	United Nations Mission in Kosovo
<b>USAID</b>	United States Agency for International Development
<b>VAT</b>	Value-Added Tax







**Paper Series IFDC—P-34  
January 2006  
2C**

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Muscle Shoals, Alabama 35662 (U.S.A.)**

**ISBN 0-88090-151-9**