

PD-ABS-520

1 0632

# **Sustaining the Restructured Fertilizer Sub-Sector in Albania: A Private-Sector Success**

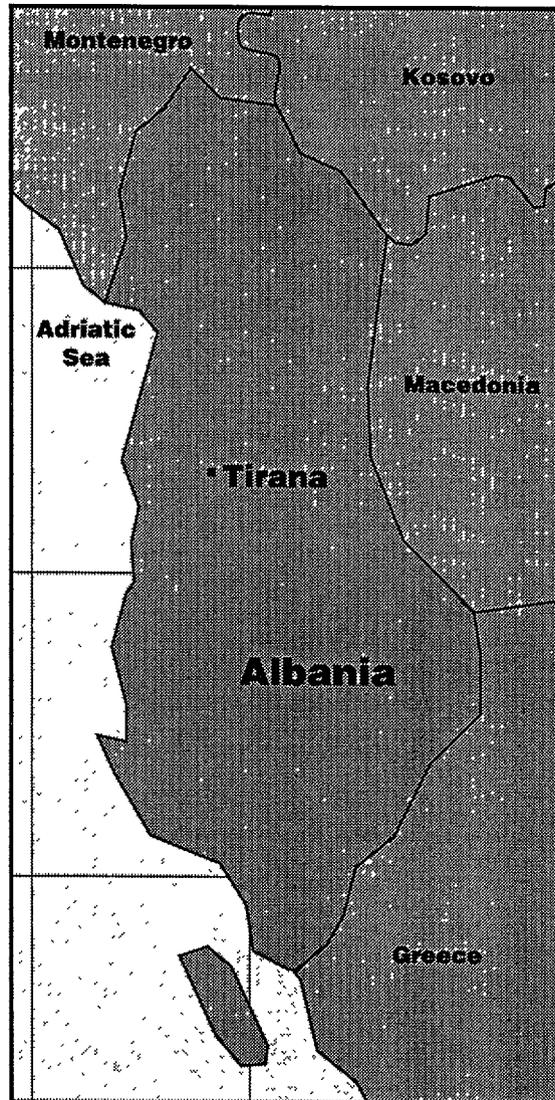
**Submitted to the  
United States Agency for  
International Development**

**by the  
International Fertilizer Development Center**

**Funded by the  
United States Agency for International Development  
under Grant No. EPE-G-00-95-00114-00**

**March 2000**

# Sustaining the Restructured Fertilizer Sub-Sector in Albania: A Private-Sector Success



March 2000

## Acknowledgments

The International Fertilizer Development Center (IFDC) acknowledges the partnership and support of the United States Agency for International Development (USAID) in the joint effort to create a private agricultural sector in Albania.

The professional contributions and support of Dianne Blane, Steve Haynes, Phil Warren, Norm Sheldon, Howard Sumka, Joe Pastic, and more recently, Abdel Moustafa, are especially noteworthy and appreciated. Their collective wisdom and guidance was invaluable to the Chiefs-of-Party who served in Albania since 1991. Ray Diamond, Claude Freeman, and Chan Sieben gratefully acknowledge the beneficial relationships with the USAID mission in Tirana, which ultimately benefited the citizens of Albania.

Dan Waterman, IFDC Development Officer, authored this report with the able and timely assistance of Thomas P. Thompson, Donna Venable, and other support staff at IFDC Headquarters. Ray Diamond, Claude Freeman, Channing Sieben, and Lisa Tripodi also contributed to the report. Ian Gregory, Agribusiness Coordinator, worked closely with the SRFSA project and provided useful and instructive advice and guidance throughout this endeavor.

This publication was made possible through support provided by the Office of EE/EMI/AG, Bureau for Europe and Eurasia, U.S. Agency for International Development, under the terms of Grant No. EPE-G-00-95-00114-00. The opinions expressed herein are those of IFDC and do not necessarily reflect the views of the U.S. Agency for International Development.

## Table of Contents

List of Acronyms .....	ii
Acknowledgments .....	iii
Background .....	1
Executive Summary .....	3
Objectives and Results .....	6
Increasing the Availability of Fertilizer and Other Agricultural Inputs .....	9
Impact .....	11
The National Impact of AFADA .....	13
Access to Credit and Business Planning .....	18
Media and Technical Information .....	21
Technical Publications .....	23
Market Information .....	24
Technical Training and Private-Sector Extension .....	24
Technology Transfer Centers .....	25
Private-Sector Extension Services .....	26
Policy Reform and Public-Sector Institutions .....	29
Policy Reform .....	29
National Seed Institute .....	30
National Soil Institute .....	30
Agricultural Statistics and Surveys .....	31
Agribusiness and Commercial Investments .....	32
Foreign Business Ties .....	34
Conclusion .....	36

## **List of Abbreviations and Acronyms**

<b>AAATA</b>	<b>Assistance to Albanian Agricultural Trade Associations</b>
<b>AFADA</b>	<b>Albanian Fertilizer and Agribusiness Dealer's Association</b>
<b>BB</b>	<b>Biznesi Bujqesor (Agricultural business magazine)</b>
<b>AISIU</b>	<b>Ag-Inputs Supply Information Unit</b>
<b>CPC</b>	<b>Crop Protection Chemical</b>
<b>GOA</b>	<b>Government of Albania</b>
<b>IFDC</b>	<b>International Fertilizer Development Center</b>
<b>K</b>	<b>Potassium</b>
<b>N</b>	<b>Nitrogen</b>
<b>P</b>	<b>Phosphorus</b>
<b>MOAF</b>	<b>Ministry of Agriculture and Food</b>
<b>mt</b>	<b>metric tonne</b>
<b>SARA</b>	<b>Support for Agricultural Restructuring in Albania</b>
<b>SFRSA</b>	<b>Sustaining the Restructured Fertilizer Sub-Sector in Albania</b>
<b>TTC</b>	<b>Technology Transfer Center</b>
<b>USAID</b>	<b>United States Agency for International Development</b>

# **Sustaining the Restructured Fertilizer Sub-Sector in Albania: A Private-Sector Success**

## **Background**

The United States Agency for International Development (USAID) provided funding for the International Fertilizer Development Center (IFDC) to work in Albania through a series of grants from late 1991 through 1999. This document is a report on programs and performance under grant number EPE-G-00-95-00114-00 that supported continued funding from September 29, 1995 until December 31, 1999. The title of the grant is *Sustaining the Restructured Fertilizer Sub-Sector in Albania* (SRFSA). The activities of IFDC under this grant are within the purview of the USAID Mission Strategic Objective 1.3, *Accelerated Development and Growth of Private Enterprises*.

The SRFSA project evolved from and built on the earlier USAID/IFDC work in Albania. The nature and significance of those activities were described in the Project Completion Reports submitted to USAID in July and December of 1995. The 9-month project in 1995 titled "Support to Restructuring Albania's Fertilizer Sub-Sector" was the immediate predecessor for the SRFSA grant. This document does not review earlier reports. To provide background and context, a brief historical summary is included in Appendix 1, as is a copy of the mid-1998 publication "If It Can Work in Albania." An account of IFDC work with the Directorate of Statistics, a function under a different project that was transferred to SRFSA in 1998, is also attached as an appendix.

This Project Completion Report summarizes overall performance and achievements of the goals of the SRFSA project. The report is structured to address the five primary program emphases established and amended by USAID for the project and focuses on measurable results and lessons learned. Regular quarterly reports to USAID throughout the life of the project describe in detail the implementation process and specific activities.

The project was implemented during an especially unstable period in which Albania emerged from totalitarian rule. That period included an extended breakdown of law and order in 1997. Credit goes to project managers at USAID and the dedicated IFDC staff who wisely designed, monitored, and maintained a program rooted in the private sector. A loyal and competent cadre of Albanian staff managed the project twice for a total of 15 months while the evacuated IFDC staff provided daily direction from nearby countries.

## Executive Summary

During well-publicized ceremonies on December 9, 1999, marking the completion of the project, the U.S. Ambassador and USAID Mission Director cited the IFDC effort as a prime example of how U.S. foreign assistance can stimulate private-sector development and public-private partnership. The Albanian Minister of Agriculture praised the project for establishing a private-sector system to supply agricultural inputs and providing a model for the development of the agribusiness sector.

As its name suggests – Sustaining the Restructured Fertilizer Sub-Sector in Albania (SRFSA) – the project was begun in October 1995 and aimed to build on the previous work of IFDC in establishing an effective private market to supply fertilizer for Albanian farmers. The four-year, \$8.6 million USAID grant called on IFDC to:

- Provide support, including access to credit and training, for importers and dealers.
- Strengthen the Albanian Fertilizer and Agribusiness Dealers Association (AFADA).
- Develop the domestic seed and crop protection chemicals (CPC) subsectors.
- Transfer technology to farmers so their yields would increase.
- Assist the Government of Albania (GOA) in improving agro-input policies, regulatory systems, and a market information system (MIS).

Despite the uncertainty and crises that plagued Albania, the project accomplished those objectives and produced measurable results. The success bears testimony to the wisdom of the USAID/IFDC approach, the entrepreneurial spirit of the private sector, and the skilled and dedicated staff. Achievements of the project include:

- A working and vibrant agricultural input market. Fertilizer imports rose from 32,000 mt in 1995 to an average of 75,000 mt in 1998 and 1999. Private enterprises now supply 100% of national fertilizer requirements, 95% of the CPC, and 80% of certified imported and domestic seed.

- Over \$17 million in loans to AFADA members for the purchase of inputs. Based on outstanding credit ratings, dealers now self finance 74% of their imports and use supplier credits (over \$5 million in 1999) rather than institutional loans (under \$1 million).
- Financial independence for AFADA on January 1, 1999. With membership in the range of 125 and assets of \$100,000, AFADA has an annual budget of \$30,000 and a reputable public image. Business turnover for AFADA members was \$23 million in 1999.
- Resurrection of the seed industry from a \$18,500 business in certified seed in 1995 to \$3.8 million in 1999. Albanian farmers now produce 5,000 mt of certified seed. CPC imports increased from nil in 1995 to \$5.3 million in 1999.
- Adoption of fertilizer use by four-fifths of all farmers and use of improved seed by nearly half. The 75,000 regular customers of AFADA, about 20% of total farmers, are using modern inputs. Yields of wheat and maize have increased by 22%, and many farmers are shifting to more high-value horticultural crops.
- Improved fertilizer and seed laws, and reduction in tariff and other impediments to agro-input and agribusiness development. The project provided tools and training for the public sector Seed and Soil Institutes and the Statistics Directorate. During 1999 the two institutes tripled revenue from tests and services, thus supporting their sustainability and reducing the costs for the Ministry of Agriculture.

Given the prevailing uncertain investment climate and periodic disruptions, it made more sense to purchase blended fertilizer from regional suppliers than proceed with a domestic industry as originally envisioned. IFDC provided sound analyses and marketing efforts in an effort to revive the domestic fertilizer plants, but the GOA and foreign companies were unable to reach an investment agreement. The situation did not allow establishment of joint ventures in seed and CPC production, though production contracts and supplier arrangements were made with large multinationals, including some with U.S. ties.

The objectively verifiable accomplishments of SRFSA exceeded the initial expectations and the results indicators. The project generated a multiplier effect and set an example of private-sector

development. By demonstrating the power of market forces, the project and AFADA offered socio-economic counterpoint to the disillusionment generated by the pyramid schemes and government-centered solutions.

The widely recognized successes of the project include:

- The creation of seven new agriculturally based trade associations similar to AFADA.
- A model for democratic, effective trade association-based agribusiness development.
- Private field demonstrations and extension services that deliver practical technology.
- The vital role and possibilities for credit to fuel agribusiness growth.
- Appreciation of the value of generating customer trust and using mass media.

The project produced enduring results because USAID, through its grant mechanism, allowed IFDC the flexibility to respond to changing situations and to demonstrate its unique capabilities in private-sector development in Albania. Success in implementing the USAID vision of a private-sector network for delivering inputs and technology in Albania offers a model for work in other countries and provides a base for future work in fostering economic growth and agricultural development.

By working one-on-one with clients, solving problems, and producing tangible results early, the SRFSA staff was able to build trust with AFADA dealers and agribusinessmen. They in turn, through effective and honest business practices, earned the confidence of farmers and encouraged the adoption of improved inputs and techniques.

Other lessons include:

- Pursue clear and consistent goals over sufficient time.
- Orchestrate and integrate the sequencing of activities to reinforce progress.
- Use private sector and market demand to target and spearhead agribusiness growth.

Although the SRFSA project represents a breakthrough, transformation of Albanian agriculture and rural development will require rather a long-term coordinated program that addresses land

consolidation, rural credit, irrigation, infrastructure, and a more conducive and stable investment climate. The key is to concentrate on the 75,000 progressive farmers who are adopting the agricultural technology being delivered by AFADA.

## Objectives and Results

The original grant for the SRFSA project was signed on September 29, 1995, for the amount of \$6.544 million for 2¾ years. Because of the turmoil in Albania in 1997 and the achievements of the project despite the disruptions, USAID extended the time and the funding until December 31, 1999, for a total of \$8.626 million.

Project amendments also assigned additional tasks and performance indicators to IFDC. Below is a categorical summary of the final scope of work and the expected results for the project where actual accomplishments at the end of the project are compared.

**A. Assist in fertilizer development including: support for private-sector fertilizer importation, training and development for private dealers, improvements in balanced fertilizer use, the domestic fertilizer production sector, and bulk-blending facilities.**

Performance Indicators	Actual Project Results
Fertilizer consumption increases to about 65,000 mt per year.	Consumption averaged 75,000 mt in 1998 and 1999.
Wheat and maize yields will increase by 15% due to better input supply.	From 1995 to 1998, wheat and maize yields rose by 22% for the 75,000 AFADA clients.
Develop fertilizer bulk-blending capability. U.S. firms will be linked with Albanian enterprises to facilitate bulk-blending and the domestic fertilizer plants.	Feasibility studies/marketing provided, but investments were not forthcoming. Feasibility studies and recommendations were prepared on the two plants, but foreign investment did not occur. Sales of U.S. fertilizer exceed \$10 million. Use of blended fertilizers is increasing.

**B. Assist AFADA in achieving self-sufficiency, strengthen the Agricultural Input Supply Information Unit (AISIU), expand international procurement linkages, facilitate credit support to agricultural input dealers, and develop private-sector credit for crop production for farmers.**

Performance Indicators	Actual Project Results
AFADA will become financially viable by December 1998, and the AISIU will be institutionalized.	AFADA did become financially viable and independent at the end of December 1998. The AISIU is now incorporated into AFADA.
Four-five importers become independent.	Six AFADA members are now independent importers.
Bank financing for fertilizer importers will be increased – greater quantities and better terms. At least one importer will obtain supplier credit.	Institutional credit did not increase because the dealers were able to obtain supplier credit (\$5 million in 1999 versus \$2 million in 96) and began to self-finance (70% of total).
Continue the AFADA affiliates center and integrate the SARA project ABC staff into the new project.	Both programs were integrated into SRFSA and then into the assistance to Albanian Agricultural Trade Associations (AAATA) project.

**C. Develop the seed sub-sector, including a national seed testing laboratory and a germplasm conservation unit. Conduct variety testing, including computer simulations for crop modeling, and foster imports of quality seed. Strengthen the crop protection chemicals sub-sector and improve marketing and safe and environmental use.**

Performance Indicators	Actual Project Results
Number of dealers selling seed will increase by 25% and two private-sector seed production units will be assisted.	The number of dealers selling seeds increased from 15 to 40 or 260%. Four private seed production units were created.
National seed inspection unit and a germplasm unit will be established.	Both are established and operational.
U.S.-based industries will be linked with Albanian enterprises to facilitate development of seed and CPC production.	There are two production contracts for wheat and potato seed with foreign firms. CPCs are purchased from U.S. affiliates.
Extend training of AFADA dealers in effective and safe use of CPCs.	Project provided series of training programs. Over 30 broadcasts on national television. AFADA dealers practice safety and are well informed about proper CPC use.

(continued)

Performance Indicators	Actual Project Results
Assist in developing maize foundation seed and variety testing capabilities.	Attempt to develop maize foundation seed did not succeed. In 1999, over 71 varieties, including 39 new submissions, were tested. Variety screening through IFDC computer simulations introduced 10 new varieties.
Facilitate growth of feedgrain industry.	The feedgrain industry is developing well, particularly for the poultry industry. In 1999 the poultry farmers' association imported 18,000 mt of poultry feed. In 1998/99, AFADA dealers imported 22,600 mt of maize. About 18,000 mt of that imported maize was used for poultry feed.

**D. Facilitate diversification of agro-input dealers into agro-processing and marketing. Increase technology transfer to farmers through the private sector. Collaborate with the mass media to facilitate education and technology transfer.**

Performance Indicators	Actual Project Results
Full service agri-input centers expected to increase by 10.	AFADA dealers providing full service are now 50 compared to 15 in 1995.
Establish six regional technology transfer demonstration fields. Develop private-sector extension services using AFADA dealers.	Seven were established, 4 by AFADA. Core of 50 dealers trained in extension and working as technology transfer agents. Seed sales increased 40% near technology transfer centers.
Employment in the agro-inputs subsector will grow by 15%.	Employment has more than quadrupled and now exceeds 400.
Shift publication of the agribusiness magazine <i>Biznesi Bujqesor</i> (BB) to the private sector.	BB was melded into a new agribusiness magazine with the new project.

**E. Assist the Government of Albania in developing an agricultural inputs policy, including quality control legislation. Expand agricultural statistics surveys and analytical capability. Monitor environmental impact of project activities.**

Performance Indicators	Actual Project Results
Support the Directorate of Statistics in the Ministry as continuation of SARA.	Support continued under SRFSA.
Provide technical assistance and training to the two national laboratories.	The two laboratories are well established.
Establish and implement an appropriate fertilizer regulatory system.	System approximately 75% complete; the GOA has yet to enact fertilizer regulations and appoint regulatory personnel to enable full completion.
Draft proposals for seed legislation.	Legislation was drafted and enacted.
Pay International Seed Trade Association (ISTA) dues and support attendance.	Both tasks completed for the Seed Institute.
Monitor environmental impact.	There was no adverse environmental impact from project activities.

### **Increasing the Availability of Fertilizer and Other Agricultural Inputs**

Accounting for 60% of GDP, agriculture is a vital engine of growth in Albania. For the potential to be realized, progress must be made throughout the sector in policies, land tenure, irrigation, infrastructure, credit, inputs, production techniques, and marketing.

The SRFSA project focused on one aspect of the total system – namely, to improve the availability and adoption of modern agro-inputs. The USAID/IFDC strategy centered on developing a reliable private-sector distribution network that would make supplies available to farmers and work through input dealers to transfer technology.

The goal was to increase yields per hectare and help set the stage for when other constraints to overall production could be eased. The primary measures of project performance would be the increase in the amount of fertilizer, certified seeds, and crop protection chemicals in the market.

The following table highlights the dramatic increase in the supply of these commodities by AFADA dealers during the project life.

**Table 1. Sales of Agricultural Inputs in Albania, 1995-99**

Input	1995	1996	1997	1998	1999
Fertilizer (mt)	32,000	43,329	47,327	86,665	65,652
Total Seed (mt)	90	2,777	3,667	4,099	6,500
Imports	90	1,377	1,732	1,394	1,500
Domestic	—	1,400	1,935	2,705	5,000
CPCs (in '000 US \$)	—	\$133.5	\$389.3	\$1,048	\$5,331

AFADA dealers were the only source of imported fertilizer, with a total value exceeding \$30 million, during the life of the project. The AFADA system supplied farmers nearly \$8 million in imported seed and over \$3 million in certified seed from domestic sources. Pesticides and other CPCs imported during the period of the project total \$6.9 million.

Many components of the SRFSA project contributed to the achievements noted above, which occurred during periods of major instability and economic crises. The predecessor work by IFDC had laid the foundation for a strong, resilient AFADA network. Subsequent sections of this report will describe the process of assisting AFADA members to gain access to credit and to build name recognition, cohesion, and clientele.

In addition, project assistance in procurement played a critical role in obtaining agro-inputs for Albanian farmers. The procurement unit helped AFADA dealers make contacts and negotiate with foreign suppliers and intervened with banks and ports. It trained dealers on how to handle imports independently, including supplier credit. Market information generated by the project also served a valuable function. The project supported AFADA dealers by monitoring the input stocks and market needs, providing updates on prices, identifying market constraints, and providing data analysis.

## Impact

The increased availability of inputs contributed directly to improved yields and income for Albanian small farmers, particularly those 75,000 who are loyal AFADA clients. Because the majority of farmers practice subsistence agriculture and work from an uneconomic base, it is especially important for agricultural development that a corps of “progressive farmers” is emerging with AFADA assistance and support. Table 2 highlights progress in stimulating higher crop yields and income.

**Table 2. Farmer Income, Input Use, and Crop Yields in Albania, 1995-99**

Category	1995	1996	1997	1998	1999
Farm income (lek)	23,400	38,900	52,000	57,800	62,000
Farms using fertilizer (%)	60.0	81.0	81.0	81.0	88.0
Farms buying seed (%)	58.0	36.0	46.0	47.0	50.0
Farms using CPCs (%)	40.0	41.0	45.0	46.0	53.0
Wheat (mt/ha)	2.6	2.4	2.9	2.9	2.7
Maize (mt/ha)	1.7	2.9	2.9	3.4	3.7
Alfalfa (mt/ha)	24.0	30.0	28.2	31.2	32.3

Other illustrative data provided by MOAF surveys, which the USAID/IFDC project supported, show differences in yield between crops with and without inputs. For example, wheat yields with premium seeds and other inputs were 3.22 mt/ha compared with 2.56 without. Maize yields were 4.61 mt/ha with and only 1.81 without. Alfalfa yielded 49 mt/ha with the modern inputs and only 26.7 without.

The results for the 75,000 farmer customers of AFADA are even more dramatic because of their increasing use of modern inputs and technology made available by dealers. For example, according to a sample survey in December 1999, of 115 farmers using AFADA services between 1993 and 1999 they increased yields of wheat by 53%; maize by 70%; potatoes by 100%; tomatoes by 241%; and alfalfa by 103%.

Despite upheavals and social anarchy, the 115 AFADA client farmers in the survey had increased their farm size by 31% and their greenhouse area by 837%. As a result, 83% of those surveyed said they were much better off economically, and 63% directly attributed their improved situation to AFADA. These data demonstrate the benefits and impact of the SRFSA project for the citizens of Albania.

### Shefki Haxhiu: A Farmer's Story

Shefki Haxhiu is from Vora, 20 km west of Tirana, capital of Albania. The land in this commune belonged to a former state agricultural enterprise, which provided Tirana with milk, fruits, and olives. The political changes of 1991 led to the rapid partition of the land to farmers. Haxhiu received 1,000 m<sup>2</sup> in the plains and 40 olive trees. His father's property, about 4,300 m<sup>2</sup>, was a piece of hilly land.

Shefki Haxhiu worked hard to provide for his family and to save money. By 1994, he had managed to accumulate savings and decided to use it to set up a 500 m<sup>2</sup> greenhouse. He built the greenhouse, planted tomatoes and cucumbers, and harvested the first crop in June of 1995. He then expanded the greenhouse to 700 m<sup>2</sup> with the money he earned by selling produce.

He used the rest of the net earnings to develop a vineyard of about 3,000 m<sup>2</sup> in the hilly lands of his father. Mr. Haxhiu harvested 1,000 kg of grapes, worth about 100,000 leks (approximately US \$800) in year two and 1,500 kg the third year. During 1999, the harvest increased to 2,000 kg of grapes. He expects to harvest about 5,000 kg for the year 2000. Mr. Haxhiu also worked on his olive grove.

Haxhiu obtained all agricultural inputs from the local agro-input store of AFADA dealer, Fiqiri Ismaili, and was very pleased. Haxhiu said that he has seen IFDC television spots and



learned many things on how and where to get the best inputs. The project publications have been of a great help to him, in particular the two titled *Fertilization* and *Manual of Pesticide Use*. The AFADA dealer provided technical assistance through IFDC published leaflets on olive cultivation. The leaflets taught him how and when to use pesticide and fertilizer, like urea and SSP, on the olive trees to boost productivity. In 1998 he harvested 4 kg per tree and in 1999 15 kg per tree.

## **The National Impact of AFADA**

“AFADA is not only the basis for Albania’s modern, competitive agricultural economy, but it provides the foundation for Albania’s faith in the free market. Its impact spreads far beyond agriculture itself and will influence growth throughout the economy.”

– U.S. Ambassador to Albania, December 9, 1999

The accomplishments of the AFADA are all the more remarkable in view of the challenging environment in which it was developed and prospered. Created in 1993 as the first such private-sector institution to emerge from 50 years of totalitarian rule and communist isolation, AFADA faced formidable obstacles to deliver valuable services to its members. Advocacy for policy reform was difficult because of weak and changing governments starved for revenue. There were eight different Ministers of Agriculture between 1993 and 1999. Illegal and corrupt business activity continued to plague the country and jeopardize profits for honest firms. Credit of any type for agribusiness was scarce at best, and banks were extremely skeptical about credit for agricultural inputs.

Given the situation, USAID set daunting objectives for AFADA, in particular, and for the SRFSA project, in general. The objectives included financial self-sufficiency, greatly expanded and diversified distribution of agricultural inputs, and increased supplier credits. USAID and IFDC were confident and optimistic in AFADA because of its private-sector roots and a regime of careful nurturing and guidance. The strategy of intensive training, concerted media advertising, solid foundations in procurement and credit, and building on trust and bonds among members through frequent meetings and trade missions helped the young association survive the crisis of 1997 and prosper.

The economic upheaval that wracked Albania in the spring of 1997 following the collapse of the pyramid schemes in which most Albanians had invested their life savings was astounding. AFADA’s ability to continue supplying vital agricultural inputs to the 400,000 farm families when little else was functioning provided a valuable service, timely inspiration, and proof that the model used to develop AFADA was valid and sustainable. While maintaining distribution lines, often using armed convoys, AFADA dealers also gathered valuable information on food

prices, and road and safety conditions that enabled USAID and others to gauge food and relief needs accurately.

The strength and performance of AFADA in passing that test set the stage for the project to meet or surpass the indicated targets and more broadly to provide an example of what could be accomplished even under the trying circumstances. As indicated by the data in previous sections and in the American Ambassador's description of AFADA, the project more than fulfilled the expectations. For example:

- AFADA achieved financial independence on schedule at the end of 1998. The project helped the association establish a scheme of dues and service charges, such as a check-off fee of 0.3% on all AFADA-sponsored imports. By project end, AFADA had a new office, permanent staff, assets of over \$100,000, and an annual budget of \$30,000.
- AFADA expanded and diversified the supply of critical agricultural inputs. As shown in Table 1, there was a dramatic increase in total inputs supplied through the AFADA network and the diversification into seed, CPCs, and other inputs. In 1999, for example, less than half of the \$23 million business turnover by AFADA dealers was fertilizer. In addition to handling almost all the growth in seed and CPCs, AFADA now supplies animal feed, greenhouse equipment, and agro-machinery.
- AFADA shifted from institutional to supplier credits and self financing. From 1992 to 1995 AFADA dealers relied exclusively on credit institutions and mercantile credit. Because of their excellent reputation, the dealers were able to switch increasingly to supplier credits. For example, in 1999 the members obtained over \$5 million in supplier credits versus less than \$1 million from banks. More importantly, they shifted to using their own resources to finance business. By 1998, about 70% of AFADA's total \$12.63 million in imports were dealer-financed. In 1999 the self-financed share grew to 74% of an estimated \$23 million in business turnover.

AFADA's success inspired other agribusinesses to form trade associations along industry lines. Seven groups of budding entrepreneurs representing such diverse fields as poultry, horticulture, flour, and fishing sought assistance from the project. Beginning in 1998 at the request of USAID, the SRFSA project assumed new responsibilities – helping enterprises to organize themselves into workable associations as AFADA affiliates; and providing tailored business and technical assistance to selected firms under the auspices of an agribusiness development center. The promising results of these endeavors led USAID to design a new project centered on trade association and finance development in order to stimulate policy, marketing, and technical improvements to stimulate agribusiness.

The SRFSA project enabled the trade association to provide the real value and services necessary to attract and retain skeptical and individualistic Albanian agro-entrepreneurs. There were several elements in the approach to develop AFADA so that it could emerge as a symbol of the effectiveness of the private sector. The key components of the SRFSA effort to strengthen the trade association include:

- Ensuring that AFADA offered **benefits for membership** by providing valuable services such as identifying suppliers, combining import orders to gain economies of scale, opening letters of credit, drafting business plans, and intervening with lenders. Most important for the dealers was that membership in AFADA opened doors to **financing**.
- Developing a capacity of AFADA to generate **market information and marketing tools**. The project established an information gathering unit on stocks, prices, and related market information that was eventually incorporated into AFADA. The project enabled AFADA members to distribute leaflets and a valuable magazine to farmers, thus promoting their services and filling a vacuum in a country whose public extension service remains hobbled. The message was to add value and expand markets by **transferring technology** to farmers.

- Continual, practical, and reinforcing **training** of AFADA dealers in efficient business practices, marketing techniques, and value-added service to farmers. The majority of AFADA members have backgrounds in agronomy and other technical fields, but they had no experience in how to develop and manage a business, much less engage in international trade. Staff provided hands-on assistance in solving AFADA problems.
- Convening **regular AFADA meetings** to educate members in the basics of association procedure and democratic process, share information, and encourage mutual cooperation and benefits.
- The close relationship and the guarding of commercial intelligence built a critical **trust** between AFADA members and the project staff, which in turn spread between the distributors and their retailers and customers.
- By orchestrating an intensive **media campaign** that made AFADA a household name and helped its members multiply the market for agro-inputs and by demonstrating the power of group **advocacy**, the project leadership further convinced the dealers of the benefits of association and promoted their effectiveness in the market and in lobbying.
- Another significant benefit that AFADA membership provided was participation in **trade missions and exposure** to global commerce and linkages with specific foreign suppliers. During its four years of operation, the SRFSA project sponsored: 21 trade missions involving 230 Albanians to European countries, mainly Greece, Italy, and Yugoslavia; 15 international training seminars; and 14 study tours to the United States for over 60 businessmen and staff.

Subsequent sections of this report will provide the rationale and description of project activities. The point here is that IFDC designed and implemented a coherent strategic approach to build a strong, successful AFADA in an extremely challenging environment.

The association in turn helped members deliver goods, services, and indirect benefits to farmers, especially to the 75,000 who became regular AFADA customers. According to a recent survey of 115 members, AFADA dealers were very important sources for 89% of new products and 84% of new technologies that the farmers adopted. Nearly all those surveyed (96%) responded that AFADA dealers provided useful advice and information.

### **Case Study: An AFADA Member**

Since its beginning, about 135 agro-input dealers representing all regions of Albania have joined AFADA. Starting with barely enough capital to purchase 50 mt of fertilizer, many dealers are now transacting business worth over \$500,000 a year. They have diversified into seed, CPCs, greenhouse plastic covers, spray pumps, animal feed, agriculture, and agro-processing machinery.

Engjell Jazxhi was one of the first dealers to join AFADA, and his experience is typical in the way members progressed and diversified. After graduating from Korça Agricultural University as a general agronomist in 1985, he worked in the Devolli cooperative farm as a seed specialist. Mr. Jazxhi faced a difficult decision in 1991 when all the cooperative farms collapsed along with the old regime. He could either escape to a possibly better life in Greece or stay and build a new life and business in the emerging free market economy of Albania.

He chose the latter path and participated in the first auction of fertilizer organized by IFDC for USAID in May 1992. Jazxhi bought 22 mt of DAP using a small inheritance as leverage. He was very successful in distributing and selling fertilizer in 5 villages in his area covering 7 retailers at Pogradec and Korça in eastern Albania. He purchased fertilizer from the local fertilizer factories when they were operating. Because of IFDC/AFADA training seminars, Jazxhi has diversified his business into other agro-inputs, like seeds and CPCs, and he continues to learn more about new businesses and new technologies.

Growth of his business resulted in an increase of his income, which allowed him to finance his import requirements. His service to farmers and business ethics has built a solid reputation and significant expansion of his business. With 80 sub-dealers, 8 large warehouses, and 40 smaller sales points, Jazxhi's turnover in 1999 far exceeded \$1 million. Over half his business is in seeds.

Jazxhi is now operating his own seed production industry and is on his way to becoming a major producer. He plants wheat hybrid seeds, and his business has greatly grown to reproduction of elite seeds, cleaning, processing, and bagging. Locally hired qualified specialists and farmers carry out all the seed operations under his direction. Thus, he and other AFADA dealers are greatly helping expand employment in rural areas.

Jazxhi was a recent winner of two FAO international tenders organized last summer in Rome to provide maize and wheat seeds for Kosovo during the 1999 crises. He exemplifies the goals and success of the project and independent AFADA.

## **Access to Credit and Business Planning**

“The most important benefit from AFADA membership in the mid-1990s was access to credit for our imported products.”

– an AFADA dealer in the Fier area, December 1999

As an integral part of the priority to restructure the Albanian fertilizer supply system, IFDC played a crucial role in assisting the development of the Albanian banking system. The ability of the new dealers to obtain financing to import fertilizer was obviously critical. Neither SRFSA nor predecessor projects included funding for making loans. Because of a tightly controlled and under-capitalized financial system, thin monetary markets, and lack of experience in risk and credit management, it was very difficult to establish a viable credit program and help private-sector agribusiness obtain loans from Albanian banks.

By late 1995 when the SRFSA project began, there were six banks operating in Albania. In addition to three state-controlled banks – Rural Commercial Bank, Savings Bank of Albania, and National Commercial Bank – three private banks opened for business in 1995 – Dardania Bank, Banco Italo-Shiptare, and Arab-Islamic Bank. Dardania Bank supported the business activities of Kosovars in Albania, and the Arab-Islamic Bank assisted members of the Arab community. Banco Italo-Shiptare addressed needs of the Italian business community. None of the private banks offered loans to Albanians.

During the next four years the Rural Commercial Bank was closed, and six additional private commercial banks were authorized to operate in Albania: Tirana Bank, National Bank of Greece, and International Commercial Bank (all in 1996), Foundation for Enterprise Financing and Developing (FEFAD), American Bank of Albania, and Alpha Kredit Bank (all in 1998). Although establishment of these banks was welcome, all were restricted in their lending capacity due to the credit ceilings and collateral requirements imposed on them by the Bank of Albania.

IFDC established a Credit Unit as a key component of the SRFSA project to assist AFADA members in obtaining financing for imports. Its functions included:

- Credit facilitation and financial counseling.
- Business planning and management advice.
- Credit eligibility and repayment monitoring.

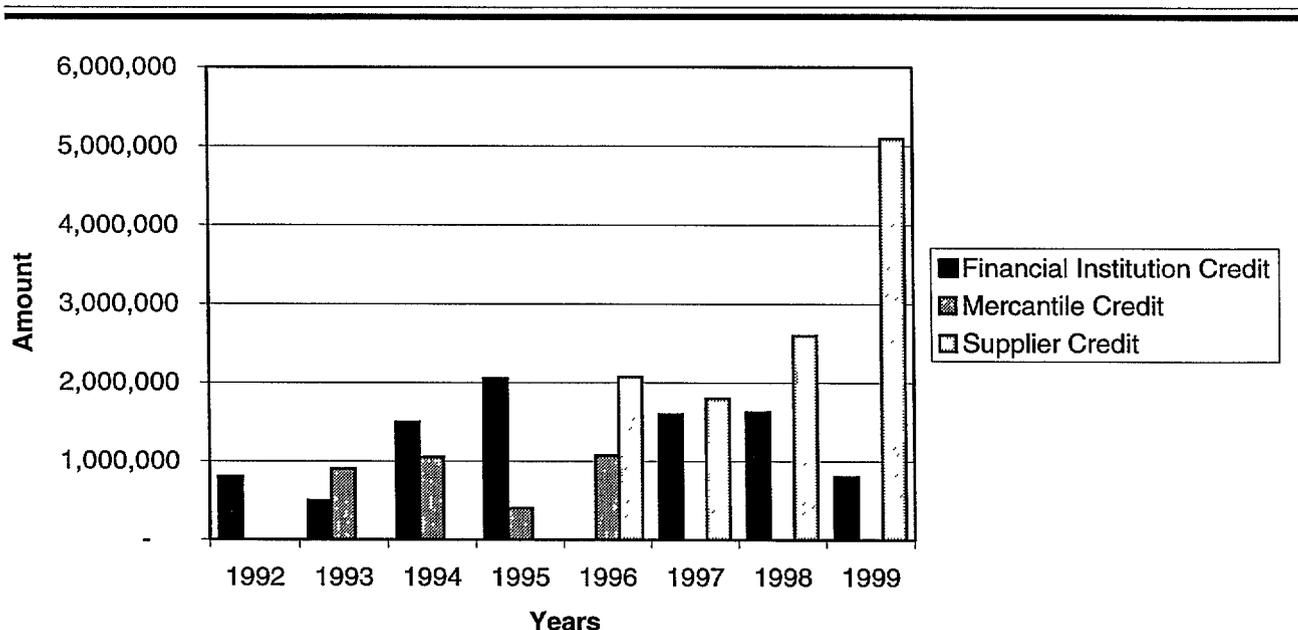
The pervasive domestic credit constraint of the banking system was exacerbated in 1996 by massive diversions of individual savings into pyramid schemes and by the end of mercantile credit from the two local fertilizer factories in 1995. Moreover, by 1995 the needs of AFADA dealers had evolved beyond simple letter of credit financing. They required larger loans for longer periods to handle the growth in business. The new SRFSA project therefore was given the objective of expanding the sources of financing, in particular, to generate credit from the foreign suppliers of fertilizer and other agricultural inputs and pursuing credit aggressively from financial institutions.

This new objective to obtain supplier credit worked because the AFADA dealers, with SRFSA supervision, developed a high credit rating and international track record. Although loan recovery rates in Albania were generally abysmal, AFADA dealers in 1996 were repaying 98.5% of their loans. None were in default. The SRFSA credit-monitoring unit verified collateral and eligibility and reviewed the use and timely repayment of member loans. Because of the excellent record-keeping and reporting on all project-assisted loans, AFADA members were able to gain access to credit even after state bank records were destroyed in the general turmoil of spring 1997.

The new project targeted donor credit programs administered by Albanian state banks and private institutions. For example, the unit secured \$1.8 million in revolving credit from the Albanian-American Enterprise Fund for 19 AFADA importers of agro-inputs.

To help the state banks better understand the nature of agribusiness lending, SRFSA staff provided regular training on relevant topics over a two-year period to 80 bank staff. The project organized a banking study tour to the United States in 1996 for 14 managers.

The first supplier credits were arranged in 1996 and totaled \$2.1 million. As Figure 1 shows, supplier credits reached \$5 million in 1999, despite the trauma in the country in spring 1997 and 1999. Bank short-term lending became less necessary but still averaged \$1.2 million per year during the project.



**Figure 1. Credit Statistics – AFADA Members, 1992-99**

By 1999 the four largest AFADA importers were financing the majority of their business from their own resources and supplier credit. As noted previously, the dealers themselves financed over 70% of estimated AFADA turnover during the last two years. That portion reached \$17 million in 1999. AFADA and its members had graduated and no longer required project assistance for credit and finance. To direct SRFSA funds where needed, the credit unit was closed in June 1999.

The project provided AFADA members business planning services that were critical to their gaining access to credit. The project staff visited the business sites of the dealers, collected market

intelligence, provided advice, and prepared professional and bankable business plans. During the 3.5 years of operation, the project:

- Produced 154 complete business plans for AFADA dealers and agro-processors of which 108 were used to garner \$3.525 million in bank lending.
- Updated 28 previous business plans.
- Counseled 338 dealers in business management, negotiations with banks, accounting.
- Assisted dealers when loans had to be restructured following the chaos of 1997.
- Assisted with 66 loan applications.

### **Case Study: An AFADA "Old Timer"**

A founding member of AFADA, Burhan Çaçá has been a dealer of agro-inputs since the first USAID/IFDC fertilizer auctions in 1992. Çaçá began with an initial stake of only 3,000 lek in savings. He was able to mobilize an additional 15,000 lek in short-term (30 day) credit.

IFDC staff supported him through 1994 in negotiations with State Banks to finance his business. Çaçá obtained two loans with a value of \$40,000 in those early years. Under the SRFSA project, the Business Planning Unit helped him develop a full business plan. As a result of project assistance with the plan, financial advice, and intervention with the banks, he was able to borrow a total of \$1.214 million through 11 short-term loans. He obtained the credit from former State Banks and the Albanian American Enterprise Fund.

As his business prospered, Çaçá began to use increasing amounts of his own financial capital. In 1998, for example, he matched a bank credit of \$200,000 with \$400,000 of his own money to cover the costs of imports. His success story is typical of AFADA dealers.

### **Media and Technical Information**

The SRFSA project launched a unique, creative, and highly effective media campaign to boost the reputation, membership, and name recognition of AFADA. The message was that AFADA represented an Albanian institution and market economics. USAID support was always mentioned, thus burnishing the U.S. image as a good partner.

State media and the private news bureaus as they emerged became project collaborators. Despite the poverty in Albania, television and radio were widely available in the rural areas by late 1995. The orchestrated public information effort was aimed primarily at potential dealer members and

farmer customers. For example, five television spots in early 1996 explained that AFADA dealers had diversified into certified seeds and agro-machinery. At critical times the project targeted decisionmakers and opinionmakers to reinforce the wisdom of shifting from central control to private enterprise and markets.

In 1996 IFDC produced a series of 18 professional advertisements for national television that explained to farmers the benefits of using three major inputs – fertilizer, improved seed, and CPCs. There were also special features on the safe use of CPCs. These advertisements were reinforced by continual radio and print media and brochures.

The project media staff also organized roundtable sessions on timely agricultural information that was targeted for television and radio in early morning to match the schedules of farmers. Paid advertisements and working contacts were highly leveraged to generate regular gratis news coverage of AFADA events and accomplishments.

When farmers began selling livestock and abandoning fields to “get rich quick” through pyramid schemes, the project in early 1997 developed a media campaign to convince rural Albanians to stay on the farms and do spring planting. The effort helped to keep agricultural production on track that year. After the crisis, the media strategy was to highlight the power, reliability, and independence of AFADA, whose dealers kept the inputs flowing that spring. Farmers understood the message, namely that AFADA meant reliability and quality and that agribusiness held promise.

In 1998 the media emphasis moved in parallel with the project activities to demonstrate that AFADA members were not just dealers but also providers of extension services. The public extension program had collapsed, so the media became a partner in technology transfer directly and by advertising dealer expertise and extension services. The new, independent media outlets that appeared were also eager to broadcast the AFADA message.

The project generated over 100 television spots in the peak year of 1998 and helped AFADA participate in national agricultural fairs. Even the most remote rural villagers recognized AFADA and its message to use improved inputs and farm techniques. In a recent survey, 91% of progressive farmers said they knew of AFADA “very well.”

## Technical Publications

During the project period (1995-99) the government was not able to produce printed materials on improved techniques for farmers. This information deficiency was especially serious because there were so many new farmers as a result of the land distribution. IFDC filled the void by providing basic information on modern agricultural practices and by producing the technical studies necessary to encourage shifting into higher value crops.

In addition to a regular stream of educational messages via pamphlets and radio, the project produced a series of 20 special publications on particular crops such as vegetables, maize, olive trees, wheat seed, and strawberries; and on broader topics such as extension methodology and business communications. AFADA dealers depend on these and other titles in the series, such as Farm Management, Mixed and Compound Fertilizers, and Ways to Combat Wheat’s Main Diseases. A senior Albanian staff member, who is a recognized expert on the subject, authored the main source book on extension. The project commissioned local experts to write relevant and practical books in Albanian.

IFDC technical staff developed brochures for farmers and re-oriented the agribusiness periodical, *Biznesi Bujqesor* (BB), to serve farmers. AFADA dealers purchased multiple copies of the 26 issues of BB and applied their own advertising labels. With 100 sales points, circulation of the popular magazine increased, and the hope was to make it commercially viable. The chaos that wracked Albania in the spring of 1997, however, disrupted the distribution network. The pre-eminent BB also faced the problem of trying in one magazine to address the interests of four

different constituencies (farmers, agribusiness, government, and university). Therefore, it was decided in 1998 to merge BB with a project agribusiness newsletter to form *AFADA Njofton: For You Farmers*, a commercial publication currently owned by AFADA.

## **Market Information**

In addition to assisting AFADA with technical publications for their use and the use of their customers, the project sponsored marketing materials and employed an information support unit to generate timely market intelligence for the dealers. Those staff, now employed by AFADA, completed the following tasks:

- Collected and analyzed data on domestic fertilizer stocks.
- Assessed the needs for N, P, and K.
- Identified international suppliers and prices of agri-inputs.
- Analyzed the market for primary types of seed and catalogued appropriate varieties.
- Secured improvements in seed legislation and pesticide regulations.
- Conducted exchanges with crop research institutes, e.g., wheat and sugar beets.
- Assessed dealers' capability to import CPCs and provided training in safe handling.
- Collected business information for monitoring and USAID indicators.

## **Technical Training and Private-Sector Extension**

In developing and elaborating the role and place of AFADA, the project ingrained in dealers an appreciation of serving customers and providing added value as vital tools for marketing and business growth. Recognizing the degree of technical skills of the dealers, project staff strived to transform them into agents of technology transfer to farmers.

According to a survey of all AFADA members in 1998, 64% were university graduates and a total of 85% had training in agronomy and other technical agricultural fields. Moreover, by 1998, AFADA dealers were employing more skilled employees in their shops and reaching more customers. For example, the same survey revealed that 57% of dealers had more than one outlet for agricultural inputs, and 44% were employing university-trained agriculturalists.

Because the public extension service was ineffective, IFDC and USAID decided to undertake a systematic program designed to improve the skills and input use of progressive AFADA clients. The goal was to draw on the technical abilities and improved business skills of AFADA dealers to transfer technology and leverage the limited but improvable resources of the public extension agents.

Providing value-added service and creating customer loyalty also indirectly served to help counter the lower prices of illegal traders. The strategy involved:

- Demonstration fields that eventually could be accompanied by training centers and attract other sponsors; and
- Transforming through training the AFADA dealers into serving farmers by providing input-oriented extension services that supplement the public system.

## **Technology Transfer Centers**

In 1997 the project began to support volunteer dealers and farmer partners on a cost-sharing basis to set aside plots of land to demonstrate the results of seed varieties, fertilizer, and pesticide combinations. Farmers in surrounding areas were invited to observe the differences and to choose varieties and inputs. The idea was that self-sustaining Technology Transfer Centers (TTCs) would emerge. AFADA dealers provide the inputs in exchange for the multiplier effect on sales from the demonstrations, and the farmer provides the labor in exchange for owning the harvest. AFADA dealers established seven such centers—four with project support and three independently.

To enhance the strategy, the project organized field days at TTCs in collaboration with other public and private entities. The field days offered organizations such as the national seed and soils laboratories and public extension system an opportunity to learn and to promote their services. The association of agricultural machinery and tool retailers and a foreign private firm contributed funds in exchange for the opportunity to demonstrate their equipment.

The first field day in 1998 attracted 500 farmers and was supported by FAO and the German aid program. AFADA dealers attributed a subsequent 20% increase in the use of modern inputs in that area directly to the field day.

The TTCs clearly showed farmers the potential increases in yield and net income. For example, the demonstration farmers, using optimum inputs and techniques, produced 70% greater harvests than nonusers. Such increases had indirect benefits as well. For example, the improved maize yields and corollary lower costs for feed were a catalyst for the poultry industry. Farmers did not just observe results but learned how to prepare seedbeds properly, harvest efficiently, and use pesticides and herbicides safely.

As a result of such events, 44 in 1999, for example, that reached thousands of farmers:

- Sales of certified seeds in the seven TTC areas increased by 40%.
- Yields increased – 20% for cereals, 35% for vegetables, and 100% for potatoes.
- 71 varieties of seed, including 38 vegetable and potato, were tested on-farm.
- When surveyed, 90% of AFADA customers said that field demonstrations were a “very important” source of information about new products and technologies.

### **Private-Sector Extension Services**

As a natural outgrowth and companion to the Technology Transfer Centers, the project increasingly worked to convert AFADA dealers and their agricultural staff into extension agents. The

project provided training in extension methodology and produced leaflets and technical publications (22 in 1999, for example) and television programs (16 in 1999) to assist in outreach. Project staff worked with the dealers one on one to ensure that accurate information was being transmitted to the farmers, especially on high-value crops. A recent two-phase workshop involving 60 dealers dealt with such topics as the marketing of value-added products and a practical demonstration on how to use seed cleaning equipment that was imported and then auctioned by the project.

The SRFSA staff always invited the public extension service to participate in field days and training. In some cases, the Ministry of Agriculture shared in the cost. Ministry officials and specialists benefited from the multitude of training opportunities and exposure to new ways of thinking. For example, a training seminar on seed quality and certification conducted by an American consultant included staff from government research centers and the National Seeds Institute.

In providing extension services where there is potential tangible gain, AFADA dealers became a vital and effective complement to the traditional government extension service. The interest of the dealers in transferring technology as a way to increase business combined with the training they received in the substance and techniques of doing it have demonstrated an effective and cost-free way to help farmers.

Private-sector involvement in extension is not a new concept. Producers of seed and other inputs in the United States and elsewhere have long provided information along with their products. In Albania the AFADA dealers have an interest in identifying the most efficient product mixes and then conveying that information to their customers. As farmer knowledge advances, market demand and competition are working to improve the process and the yields. Success of the private-sector extension function in Albania is clearly reflected in the dramatic increases in use of modern inputs and the subsequent improvement in production.

## Case Study: A Demonstration Farmer

The technology demonstration plot in Kruja district was created in 1997 and is functioning very well as part of Sherif Memoçi's farm. The IFDC/Albania center helped establish the model plot to provide technical assistance and input testing for farmers in the region.

With the privatization of land in 1991, Memoçi received 1.4 hectares (about 3 acres) and provided income for his family by selling a few surplus agricultural products. His average income from 1991 till 1996 was about 100,000 leks (or \$800) per year.

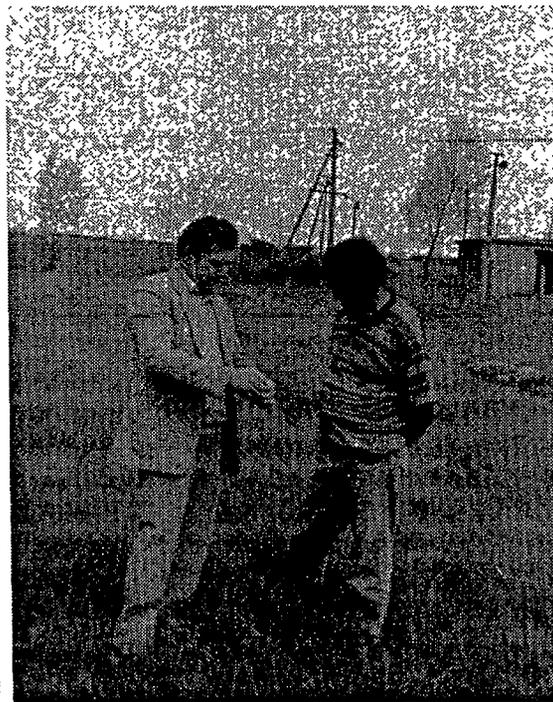
In 1997 he decided to set up a solar greenhouse (1,000 m<sup>2</sup> in size) to raise higher value crops. His brother, an AFADA dealer, inspired Memoçi to make this investment and loaned him 350,000 leks to purchase the materials. Due to hard work and profitable results, Memoçi was able to pay off his brother within a year. In return, he agreed to allow the greenhouse to be used as a model for demonstration purposes.

As part of the technology transfer program and with guidance from project staff, Memoçi planted his greenhouse and part of his farm with new varieties of seed to help farmers in the area compare results. Memoçi's brother and other AFADA dealers supply fertilizer as well as top quality seeds and pesticides to boost production. The farm is easily accessible and well situated near a national highway and the Forage Research Institute.

Memoçi says that his agricultural knowledge has increased considerably by working closely with the technical unit of the project over the past 3 years. He also benefited from exchanging experience and work methods with other farmers in the area that visit his farm and greenhouse "school." In addition to agricultural techniques, the farmers also use the gatherings to discuss reforms in agricultural policy that would benefit them.

During the Kosovo Crisis in 1999, Memoçi's family provided food and shelter for a Kosovar family of 9 persons for a period of 7 months. Memoçi reports that he gained new ideas from the Kosovar type of agriculture, for example, using herbicides on wheat to combat weeds. He maintains a fruitful contact with the returned refugees.

Farmer Memoçi is pleased with the returns on the greenhouse and the improved harvests on his land, which are now producing for him four times the average annual income he earned in 1996. He plans to use his savings to expand the size of the greenhouse. Memoçi is proud to be a demonstration farmer and is committed to continuing working with AFADA to show other farmers the potential results from better inputs and practices.



## **Policy Reform and Public-Sector Institutions**

“As a result of the work of this project, we currently have a model for the development of the agribusiness sector.”

– Albanian Minister of Agriculture and Food, December 9, 1999

The emphasis of the SRFSA project was to develop sustainable private-sector business, services, and institutions. It was always recognized, however, that the Government of Albania had an important role to play in establishing a conducive policy environment and in providing supportive public goods. The project helped the Ministry of Agriculture by:

- Advocating policy reforms and drafting legislation.
- Training government staff and involving representatives in technology transfer.
- Re-building the national seed and soils testing laboratories.
- Creating a national fertilizer regulatory laboratory.
- Establishing a reliable agricultural statistics and survey capacity.

### **Policy Reform**

The project staff and IFDC consultants offered position papers that convinced the Government of Albania (GOA) to remove constraints to increased use of modern inputs and create regulatory systems to ensure the quality of seed and fertilizer. For example, despite dire financial straits, the GOA in 1996 reduced customs taxes on agricultural inputs to 5%, less than half of previous rates and passed new legislation in 1999 to regulate fertilizer and improve legislation dealing on seed certification.

Key to success was the ability of SRFSA to:

- Create an alliance of AFADA and 10 other agricultural trade associations.
- Organize joint trade associations meetings with government policymakers.
- Use the media to educate and influence key constituencies.

Representing over 70% of their respective industries, the apex group of association leaders had political leverage for advocacy. The project exposed 40 Ministry officials to training abroad and networked throughout the public agricultural structure, including the Parliamentary Agricul-

ture Committee. The project helped educate decisionmakers during what the Minister of Agriculture recently called the country's most difficult period—the transition from a centralized economy to a free market.

### **National Seed Institute**

Few farmers were using improved seed in Albania prior to 1995. At the recommendation of donors, the GOA began to privatize the seed sector as a means to introduce high-yielding varieties. A corollary decision was made to establish a seed-testing laboratory to ensure quality control and a unit to conserve germplasm.

Because the laboratory and conservation units would complement the SRFSA project objectives of improving access to modern inputs, USAID provided \$600,000 to IFDC to manage this endeavor. Mississippi State University was contracted to provide assistance in renovating the building and establishing the new laboratory units.

The institute is now positioned to issue international certification on seed purity and has trained staff to conduct analyses and tests. For example, the staff analyzed samples from 5,600 mt of seed in 1999, double the amount of 1998. In the 2½ years of operation, the seed laboratory tripled the income from the services and now covers over half of its operational costs. The gene bank has reported over 3,700 accessions of seed samples, mainly wheat, for conservation. The project also assisted the institute to gain a membership in the International Seed Testing Association.

### **National Soil Institute**

In 1996, the GOA asked USAID to support the establishment of a quality control system for fertilizer because there never had been one, and the private sector was now handling all fertilizer imports. To help improve soil nutrient efficiency, the GOA also asked for a soil testing facility.

Given the complementary nature of these tasks with the IFDC-managed project, USAID turned over responsibility and funding of \$600,000 to IFDC.

The project equipped two laboratories, renovated the building, and trained staff in testing. The interest of farmers in analyzing soils has increased significantly, especially among greenhouse owners. For example, the laboratory performed more soil tests (5,320) in the last quarter of 1999 than in 9 months of operation in 1998. As a result, the institute was able to triple the revenue generated from services. Although analytical tests are being conducted on fertilizer samples, government regulators are yet to inspect fertilizer and administer the law (see Appendix 3).

The investment in the soil institute has directly contributed to improved agricultural production, especially in greenhouses, where soil tests have led to the use of more efficient blended fertilizer. The testing capability also enabled scientific resolution of a 40-year-old debate by demonstrating that Albanian soils are potassium deficient.

## **Agricultural Statistics and Surveys**

IFDC had been providing technical assistance to the MOA statistics and survey division since 1994 under a different USAID project. When it ended in December 1998, the statistics support component was transferred to the SRFSA project. The purpose of this effort was to help Albania develop capability to conduct semi-annual surveys of agriculture and agro-industry in order to gain information for better policies.

The SRFSA project staff and consultants during 1999 carried on the previous work of ensuring that:

- Sampling surveys were undertaken.
- Data was processed and disseminated.
- Staff was trained and equipped.

The objective was to enable Ministry staff to continue to produce desired information, on the understanding that sufficient government funds would be available to support them. Because of its separate history and complexity, the statistics portion of the project is described in detail in Appendix 2.

The statistical and survey support component produced solid accomplishments that enabled government, donors, and the private sector to understand the situation better. The achievements include:

- Successful agricultural sampling surveys and useful analysis.
- Training on the job for hundreds of enumerators and data base managers.
- Short- and long-term training overseas for 14 Ministry staff.
- Re-organization and decentralization of the functions.
- Provision of computing and GIS equipment; leveraging of World Bank funds.
- Over 35 technical and survey publications.

## **Agribusiness and Commercial Investments**

The widespread publicity about the benefits of membership in AFADA motivated other aspiring agribusinessmen to form similar agricultural trade associations and seek SRFSA assistance. The project established an AFADA Affiliates Development Center as a mechanism to assist six emerging industrial and two professional groups to organize associations. To strengthen this effort, in 1998 the USAID Mission transferred staff from another agricultural project to the Center.

Through this mechanism, SRFSA project staff worked with groups representing such industries as flour milling, edible oil production, meat processing, and agricultural machinery. The objectives were to develop the associations and to provide business and technical training to the members. The staff identified ten leading entrepreneurs for special attention as successful models of private agro-enterprises. Project staff collaborated with other USAID partners, such as VOCA

and Land O' Lakes. The new agribusiness specialists also assisted six AFADA dealers to diversify into new ventures such as fruit and vegetable processing, poultry, and fish processing.

The project took on a broader agribusiness development approach and provided a wider range of assistance to AFADA dealers and the new association partners and members. Services included:

- Feasibility studies for new and expanded operations.
- Financial and business planning and credit application.
- Marketing information and training.
- Specialized technical assistance in agro-processing.
- Guidance on procuring and installing equipment.
- Trade promotion activities and establishing foreign commercial contacts.

As an example, the Credit and Finance Unit sponsored a conference in Ohrid, Macedonia in late 1998 on financing options for agro-processing industries. The 41 participants included representatives from the major private financial institutions operating in Albania, 17 business clients of the project, and technical experts from a World Bank project and the Polytechnic University in Tirana.

The integrated support by project staff spurred new investment and the growth of agribusiness in a challenging and unstable environment. The success of these agro-processing ventures provided a more reliable supply of basic and new domestic food products, generated employment, served as a demand-pull on higher-value agricultural production, and demonstrated confidence in and by the private sector. Mireli dairy is an example of the success. As a result of the achievements, USAID funded a new project that began in January 1999 aimed at capitalizing on the potential of agricultural trade associations as a means to improve agribusiness and private sector development. IFDC won the competition to manage the new project, called Assistance to Albanian Agricultural Trade Associations (AAATA).

## Foreign Business Ties

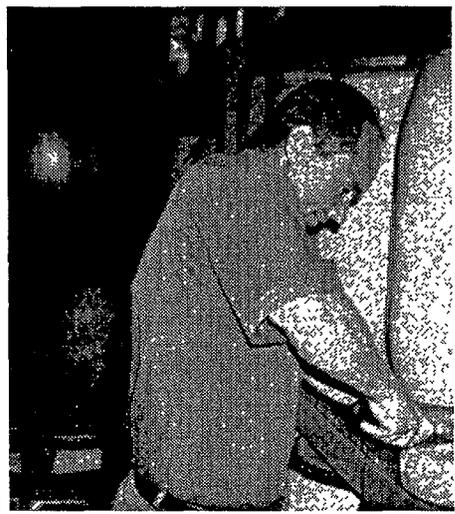
The macro-economic reforms, considerable donor interest, and rapid progress of the earlier IFDC activities generated hope that during the second half of the 1990s the country would be able to attract foreign investment to accelerate agribusiness development. Due to the disillusionment and chaos in the wake of the collapse of the pyramid schemes in 1997, instability and security concerns during 1998, and the Kosovo crisis of 1999, both foreign and domestic firms remained reluctant to invest in long-term ventures.

The uncertain investment climate in Albania adversely affected some of the hopes that USAID and IFDC had for the SRFSA project. For example, IFDC had earlier prepared a feasibility study for the government-owned Fier nitrogen fertilizer factory. The SRFSA project hired a consulting engineer and conducted an aggressive marketing campaign on behalf of the government to identify a foreign investor to take over operations and modernize the plant, which closed in 1995. For example, in 1998 the project organized a national seminar on the fate of the two domestic fertilizer factories and invited overseas investors. Three foreign companies, including major U.S. and European firms and the Chinese group that had built the factory, made a number of trips to explore possibilities. Despite the best effort of project leaders to broker a deal, mutually agreeable terms and conditions could not be negotiated.

The project also prepared a feasibility study for an AFADA dealer hoping to find a joint venture partner to build a bulk-blending fertilizer operation at the port of Durrës. A U.S. equipment supplier was identified and a bank was interested. Given the economic situation and the small market, however, the plan did not materialize. The rapid growth of greenhouse farming is generating demand for blended fertilizer imports and may make local production more likely in the coming years.

The project also envisioned growing ties with U.S. investors and suppliers. Although joint ventures have yet to be realized, U.S. firms have benefited from the sale of \$10 million in fertilizer

and seed. Moreover, Albanian firms have entered production contracts and supplier arrangements with subsidiaries and partners of U.S. firms for seed and CPCs.



## Profiles of Economic Growth in Eastern Europe: A Case Study

Agif Caça faced a difficult decision when the state-owned factory where he was employed closed at the demise of Albania's centrally planned economy. He could either escape to a possibly better life in Italy or stay and build a new life and business in the emerging free-market economy. Using only a \$350 inheritance from his father, Caça bought some bricks and mortar and built his own milk and cheese plant.

The young Mireli plant faced many difficulties, such as electric power interruptions and spoiled milk. With assistance from the staff of the IFDC Agribusiness Center, the Mireli plant procured and installed a power generator and pasteurizer and purchased three new refrigerated trucks. Since 1992 the Mireli factory has doubled in size and the amount of milk processed has increased from 500 liters/day to 10,000 liters/day. Today Mireli is the largest liquid milk supplier in Tirana and delivers to over 100 shops every day. The factory produces four dairy products: pasteurized milk, thin yogurt, curd, and soft white cheese.

"My collection system is well established because of my reasonable price; the price I offer is higher than any price offered by other milk collectors," Caça says. "By doing so, I am providing the community with income of approximately 4 million lek/month (US \$30,000/month). I have sought the advice of IFDC specialists based in Tirana to assist me in business plan development, in locating equipment suppliers, and in receiving quotations for the needed technology. The Agribusiness Center has provided me with technical assistance in selecting the most profitable products to manufacture, finding financing, and locating information on machinery and equipment sources."

With funding from USAID, the IFDC project in Albania, which began in 1992, has established that the open market system will work in Albania. The impact of the overall project is that it has assisted in increasing food productivity, promoted agribusiness development, and demonstrated the potential for agricultural development.

## Conclusion

“The IFDC project is one of the most successful examples of U.S. assistance.”

– The U.S. Ambassador to Albania, December 9, 1999

“Successes of this project were the fruit of its qualified and persistent work...The objectives were adjusted to the conditions of Albanian agriculture.”

– Albania’s Minister of Agriculture, December 9, 1999

The most useful and instructive lesson from the SRFSA project is that the private-sector responds rapidly and efficiently to opportunities offered by progressive policy reform. To realize the potential of the response, entrepreneurs need hands-on technical assistance and training on an individual basis and guidance to organize trade associations.

The project demonstrated that it is possible to harness the energy of the private sector to foster sustainable agribusiness development even in the most challenging situations. Success requires a complex combination of policy reform, technical and business training, trade associations, activities tailored to needs of progressive individuals, and a demand-driven, results-oriented dedication. By stimulating backward and forward linkages with farmers and other clients, the focus on agribusiness traders and processors provides an effective means to transfer technology to farmers and promote agricultural and rural development.

A primary theme woven in the fabric of the project is building of confidence and trust. It was critical to demonstrate to AFADA dealers a commitment to solving their problems and to helping them achieve early tangible results, so they would continue to take risks and invest in an expanding supply network. The project staff similarly gained the confidence of domestic financial institutions and overseas suppliers, which “primed the pump” of vital credit and a trusting relationship with the dealers. Recognizing the importance to good business, AFADA members mutually protected their solid reputation and ethical service to farmers.

Other themes that characterize the project are:

- Continual innovation and flexibility.
- Mutually beneficial collaboration when practical and efficient with GOA agencies.

- Strategic use of the media.
- Concentration of resources on a limited subsector.
- Demand-driven training and support.
- Public-private partnerships.
- A well-selected, trained, and dedicated local staff capable of managing with direction from a distance.
- Solid and senior headquarters support to deal effectively with the many challenges.
- Continuity of effort and relationships to maintain momentum and trust.
- Convincing the public sector to support, not frustrate, private enterprise.

Even the most successful projects experience disappointments as they push into frontiers. In contrast to the remarkable advances made by AFADA and its agribusiness cohorts, the public sector did not progress as rapidly as hoped in terms of promoting a sound and stable investment climate and of taking advantage of training and institutional capacity building.

For example:

- Illegal trade remains a serious problem, and if unchecked will undermine the benefits of trade association membership and the quality and service they provide.
- The uncertain investment climate and government attitudes frustrated the efforts to resuscitate local fertilizer factories.
- Failure to provide sufficient budgetary support could undermine continued effectiveness of the MOA's monitoring capability and efforts to ensure the quality of fertilizer.

There is no question, however, that the SRFSA project has established a base and example for further agricultural development in Albania. The successor project it spawned is well underway and exceeding the objectives set for it in early 1999. Seven more trade associations are replicating AFADA's success, and their members are dramatically increasing investment in value-added agricultural production and processing.

Moreover, the project has produced a network for future agricultural development that centers on the members of trade associations and the 75,000 progressive farmers who are regular clients of AFADA input suppliers. Sustainable agricultural development, however, will be a long-term process. More progress is needed in such areas as rural infrastructure and irrigation, land tenure and markets, credit, supportive government policies and services.

The “AFADA Strategy” can work in other countries. An IFDC emergency input supply effort in Kosovo is modeled after SRFSA. IFDC plans to collaborate with USAID in sub-Saharan Africa to introduce a cohesive program in selected countries that reforms policies obstructing private-sector input suppliers, provides training and marketing support for input dealers and other agribusinessmen, and transfers integrated nutrient technology packages to farmers. In Albania, for example, the project convinced the Japanese to auction over 6,000 mt of fertilizer aid and use the private sector to monetize and market the donated materials. Similar changes in Africa would strengthen the nascent input dealers and help them and their downstream retailers to evolve into agents of technology change.

The SRFSA project has clearly shown that private-sector agribusiness can function in Albania. IFDC intends to reinforce the progress in Albania to Kosovo and to work with USAID and other donors to bring about similar success in other countries and regions.

# Appendix 1

## Project Background

IFDC's USAID-funded work in Albania started with the assignment of one fertilizer expert to the Initial Assessment Team in October 1991. The team decided that fertilizer supply to the new private farmers, as well as the cooperative and state farms, was a critical issue that needed to be addressed. The World Bank and the European Union had agreed to address the issues of supply of other agricultural inputs. IFDC was provided grant funding to perform an agricultural situation analysis and to make recommendations for USAID funding of an Albanian Agricultural Adjustment Project.

During December 1991 to February 1992 IFDC fielded a team of specialists in marketing, dealer development, credit, finance, socioeconomic surveys, and chemical engineering that analyzed the Albanian fertilizer situation in terms of production, financing, marketing, distribution and use. Also, the team investigated the potential possibilities of beginning activities to support a private delivery system. It was determined that the nitrogen and phosphate fertilizer factories were not operating because of lack of raw materials, could not produce supplies for the 1992 spring season and there was very little fertilizer in Albania. The team learned that the state distribution system for agricultural inputs was inoperative and trucks were old and 90% still held by the state transport enterprises. A few individuals had begun to purchase fertilizer from parastatal district agri-input suppliers but the government mandated retail price to private farmers was less than the book price charged the parastatal (to be subsidized) and banks had only recently provided credit to individuals for farming, but their funds were depleted. Thus, the possibilities for a commercial private sector entry into the fertilizer market were questionable because of uncertainties of how the subsidy would be handled and about the purchasing power of the potential consumers of fertilizer. In mid-January 1992 the distribution of agricultural land held by categories was 48% by 200,000 private farmers, 29% by collectives and 23% by state farms. Fertilizer use during 1991 was 30% of that of 1985-90 average and area of wheat cultivation in 1991-92 was about 50% of the area that was normally seeded.

Initially, attempts were made to identify potential dealers by trying to meet anyone that might have sufficient interest and capacity to market fertilizer provided by USAID. That process conducted by word of mouth and contacts through local "Chamber of Commerce" was unproductive. It was time to begin the use of the mass media that proved to be extremely useful throughout IFDC work in Albania. Subsequent to an interview of IFDC team members on Albanian National Television in January 1992, the team met with 31 individuals who responded to a televised invitation to explore the possibilities of becoming fertilizer dealers. Those "Dajti Hotel Discussions" centered on the prospective USAID-IFDC project and an assessment of participants' backgrounds, interests, commercial experiences and assets. Also, principles of a free market and how it should work were discussed. The participants expressed many fears and reservations about such a project and unrealistic expectations about assistance that could be provided.

Managers at the Bank of Agriculture and Development expressed interest in supporting a private sector in supplying fertilizer to private farmers and thought that a method could be arranged to do so. The team concluded that an emergency supply of fertilizer could be supplied to Albanian farmers via competitive marketing channels.

The IFDC team's recommendation in February 1992 included USAID funding for a project to "Reform Albanian Agricultural Inputs Marketing System". The project would have two objectives.

1. "Provide fertilizer to farmers in sufficient time to topdress wheat and fertilize spring seeded crops.
2. "Establish early private participation in fertilizer distribution."

The activities of the project would include:

1. IFDC's importation of 20,000 mt of urea fertilizer with USAID funding, sell it at auction, support private enterprises and assist them in distribution and marketing in Albania.
2. IFDC's importation of trucks with USAID funding, to be dedicated to fertilizer transport during the emergency phase. IFDC would operate the fleet on a commercial basis and sell the trucks to private transport operators and/or private fertilizer dealers when no longer needed by the project.
3. Financing of fertilizer distributors to be provided by the Bank of Agriculture and Development on a commercial basis with IFDC assistance for monitoring and recovering of funds.
4. Cash receipts for fertilizer sales and truck rental and loan recovery plus interest to be deposited into a blocked joint (GOA-USAID) account with use of the funds to be determined jointly by GOA and USAID in the future.
5. Policy dialogue with government officials to liberalize retail prices and subsidies, privatize truck transports, reestablish production at the Fier Nitrogen Fertilizer Factory and permit export of crops which are produced in excess of domestic requirements.

IFDC with the following USAID grant funding has built a sustainable private agricultural input distribution system that is a model for such development assistance.

#### USAID Grants, IFDC-Albania

Title	Contract No.	Effective Dates	Amount, \$
Expert Consultancy	MD1182543	Sept. 18. 1991-Oct. 30. 1991	24.700
Baseline Assessment	180-0024-3-262-2235	Dec. 10. 1991-Mar. 10. 1992	200.000
Bridging Grant	180-0024-G-00-2001	Mar. 6. 1992-Mar. 23. 1993	800.000
Truck Procurement	180-0024-G-00-2002	Mar. 6. 1992-Mar. 23. 1993	2.250.000
Fertilizer Procurement	180-0024-G-00-2003	Mar. 6. 1992- Mar. 23. 1993	8.700.000
Restructuring Albania Fertilizer Subsector	180-0046-G-00-2491-00	Jan. 1. 1993-Dec. 31. 1994	4.316.530
Restructuring Albania Fertilizer Subsector	180-0046-G-00-5087-02	Jan. 1. 1995-Sept. 31. 1995	1.299.250
Sustaining the Restructured Fertilizer Subsector in Albania	EPE-0046-G-00-5114-00	Oct. 1. 1995-Dec. 31. 1999	8.625.790
		<b>TOTAL</b>	<b>26.216,270</b>

## **Fertilizer Sector Restructuring**

### **March 1992-September 1995**

Using grant funding provided by USAID in March 1992, IFDC provided an emergency supply of 30,000 metric tonnes of fertilizer to Albanian farmers, created a national network of 300 private fertilizer dealers, catalyzed the development of a national credit program for fertilizer dealers and assisted in convincing the GOA to liberalize prices of farm commodities and rationalize tax rates on fertilizer. Also, IFDC began developing a market information system, focusing national attention on commercialization of input supplies via media controversy, and commercially operated a fleet of 30 trucks to supplement other available transport. To accomplish those activities during April to June 1992 the following staff was mobilized: 3 resident expatriates, 27 short-term expatriates and 242 Albanians. After the auctions of the emergency supply of fertilizer, in 1993 the focus was toward improving dealer's marketing and financial management capabilities, assisting dealers to diversify by marketing other inputs and making foreign contacts. providing marketing information, commercialization of fertilizer factories' activities and developing fertilizer production and import strategies.

#### **Emergency Supply of Fertilizer**

IFDC procured 20,000 mt of urea and 10,000 mt of diammonium phosphate (DAP), arranged bulk shipment and bagging at Port Durres. Thirty 10-ton capacity trucks were purchased and shipped with the urea fertilizer. Auction procedures were established in close collaboration with the Bank of Agriculture and Development. Two 3-day orientation sessions were carried out in April 1992 after a widely publicized media campaign. The first day was devoted to formal presentations and the following two days reserved for individual consultations. The presentations explained project objectives, auction terms and procedures, credit and financial guaranty arrangements with the Bank of Agriculture and Development, transport arrangements for coordinating and authorizing fertilizer pickup by winning bidders and notification that IFDC would be conducting a monitoring survey. Auctions by sealed bids were held prior to the date of ship arrival at announced venues, dates and times; again explaining the exact procedures that must be followed. Bid documents consisted of a copy of the auction terms signed as accepting, a statement from a bank listing the amount of funds in a blocked account and the amount that the bank would guarantee for payment and a bidding form showing bidders name, address, number of 50-ton lots of urea fertilizer desiring to purchase and amount of the bid. DAP was initially sold in 25-ton lots and from February 1993 in 10-ton lots. Bids were opened in view of all present and checked for accuracy and compliance. They were then arranged in descending order of price that was bid and number of lots were tabulated from highest to lowest bid price. Winners were those who bid the highest price for the number of lots that were for sale during a particular bid session.

Of the 150 purchasers, 115 private individuals or firms purchased 62% of the urea and 112 (out of 124 total) private sector purchasers bought 88% of the DAP. During the urea auctions the private sector serviced 15 of the 26 administrative districts and 17 during the DAP auctions. There was no minimum price for accepting a bid during the urea auctions and the purchase price averaged 2.42 lek (\$0.05) per kg as compared to about \$0.20 per kg for commercially landed urea at that time. For DAP auctions the minimum accepted bid was set at the equivalent of \$0.15 per kg which was about 80% of the commercially landed price in September 1992 (import date). That resulted in sales of only about 3,500 mt during the fall of 1992, even though media was widely to introduce the rural population to DAP a new fertilizer in Albania. But due to price decreases on the world market, the price was equivalent to commercially landed price in August 1993 when the last DAP was sold. This set the stage for private sector import of fertilizer that was first made in April 1994.

Trucks arrived with the urea, drivers and maintenance crews were hired and trained. The trucks were used to make 249 deliveries (2,478 mt) to dealers. During DAP auctions trucks were used to make 78 deliveries (675 mt) to dealers. However, 7,223 mt of DAP was transported by the trucks to rented warehouses where it was stored for future sales.

In December 1994 USAID transferred the fertilizer counterpart fund, equivalent of \$2.0 million to the GOA. About 75% of the funds was allocated for land tenure work and the remainder for improving irrigation systems. After repeated attempts failed to sell the trucks imported by IFDC for emergency transportation assistance, four trucks were donated to the Fier Nitrogen Fertilizer Factory and the 24 remaining trucks were donated to the State Reserve. Two were damaged beyond repair in accidents during delivery of auctioned urea.

### **Use of Media**

An important and beneficial achievement of the projects concerns public awareness and distribution of information about the development of a competitive market. The Albanian media were very supportive of the efforts of IFDC, USAID, and the GOA. Observing the responses of aspirant fertilizer dealers to the use of television, radio, and newspapers initially to inform the public about auctions in particular and competitive, free-market economics in general, convinced the project leaders of the benefits of the use of media. By September 1995, dealers with IFDC assistance developed mass media advertisements for their own products. IFDC participated in an eight-part television series on marketing and contributed to television spots on fertilizer use recommendations that were viewed throughout Albania. One journalist was training in journalism in the U. S.

IFDC was also instrumental in creating the preeminent agriculture business newsletter, *Biznesi Bujqesor*. As of September 1995, 20 issues in Albanian and English were published and distributed. The newsletter focuses on current agricultural events and issues; fertilizer supply, demand, use recommendations and prices; crop protection chemicals and their appropriate use; agricultural output prices; research results; agribusiness strategies and tips; marketing and related topics. The circulation is 3,000 copies in Albanian and 500 in English for parliamentarians, national and district governmental officials, agricultural universities, bankers, farmers, members of Albanian Fertilizer and Agribusiness Dealers Association (AFADA) and managers of other donor assisted projects.

### **Market Development**

Privatization was achieved in a remarkably short time, and the marketing of fertilizers and crop protection chemicals was totally under the auspices and control of private dealers by September 1995. This resulted from IFDC guiding the development of a market structure comprising of importers, distributors/wholesalers and retailers. The introduction of marketing policies, with IFDC assistance, by the two domestic fertilizer factories including a variable pricing system, seasonal and volume discounts and mercantile credit, contributed significantly to the development of the fertilizer market. Guiding the creation of AFADA and providing leadership training and other technical assistance to private dealers enhanced market development further. Additionally, IFDC assisted the development by facilitating dealers' contacts with international suppliers of agricultural inputs and aiding dealer diversification into other rural business activities. Four of IFDC staff participated in marketing training programs in the U. S. to prepare them to better offer assistance to dealers. Additionally, 13 GOA specialists attended training programs and study

tours in order to better understand privatization policies, agribusiness, trade associations and computer simulation, marketing of agricultural inputs.

As further assistance in market development IFDC started collecting marketing information and transferred most of that responsibility to the Statistical Services Directorate, Ministry of Agricultural and Food.

**AFADA**--Recognizing that there are many problems the individual dealers could not solve by themselves, dealers decided to unite in a trade association. The Albanian Fertilizer and Agribusiness Dealers Association was formally registered with the GOA in March 1993. Some of the objectives of AFADA are:

- 1) to provide a professional association that will foster professional development of its membership, business and technical education and relevant research and information development.
- 2) to represent and act on behalf of its membership before all branches and agencies of government.
- 3) to establish high standards of business ethics and professionalism and to develop and promote equitable trade practices,
- 4) to provide a forum that will facilitate positive action on professional, business, environmental and legislative issues.

Through September 1995, AFADA had held three annual general meetings including democratic election of officers. held monthly regional meetings in six regions and increased dues to cover reasonable association costs. Membership had reached 154, including all major suppliers of agricultural inputs in Albania. AFADA sponsored training programs, seminars and conferences and pursued an active lobbying agenda.

**Marketing Information**--Collection and distribution of agricultural related information began during the emergency supply phase of IFDC's work in Albania. During the spring of 1992 an area sampling frame based upon four strata was designed by Agricultural Assessments International Corporation. A survey was made within the two more intensive agricultural strata to determine the area of each major crop to be harvested in Albania in 1992, prepare a forecast of winter wheat production and determine types and quantities of fertilizer used for crop production. Twenty-three interviewers and supervisors were trained. The first national cropping survey was performed during May 15-June 13, 1992 on pre-harvested crops. The sampling frame was expanded to five strata and the second national survey was performed in 1993 in cooperation with the Ministry of Agriculture and Food. Collecting agricultural data by sampling based upon an area frame was transferred to the USAID-funded SARA Project that continued refinement of the frame and institutionalizing the activity within the Ministry of Agriculture and Food. Training in the U. S. was provided for 8 persons in data collection and analysis.

Also, IFDC conducted a baseline social economic survey, based upon the sampling frame, by 35 trained interviewers, data coders and entry clerks. The interviewers worked independently from but alongside the crop production interviewers. A second social economic survey, based upon the refined sampling frame, was carried out in 1994 in cooperation with the Ministry of Agriculture and Food.

Twenty trained interviewers to determine the destination, retail price and use of the urea that was auctioned performed an additional survey. The urea was observed in 26 of the 27 districts. farmers paid from 4.0 leks to 5.0 leks/kg and was principally used for wheat and vegetable production. Also, because of the low selling price at auction, checks were made in Greece near

the Albanian border near several crossing points and at Greek dealers' shops. Only the border crossing checks were carried out during the DAP auctions. Discovered evidence indicated that very small amounts of urea crossed into Greece, but no such evidence was found for DAP crossing the border.

Finally, a survey was initiated in May 1992 to record prices of farm produced commodities that were sold in retail markets. Results were passed to the Ministry of Agriculture and Food at the beginning and then published in *Biznesi Bujqesor* during their concurrent time. That survey was continued by IFDC until it was institutionalized within the Statistical Services Directorate, Ministry of Agriculture and Food in August 1993.

IFDC with dealer partners generated data and demonstrated results by establishing test plots in farmers' fields, comparing crop varieties, fertilizer applications and crop protection chemicals. To show the benefits of DAP test plots were established around the country within dealers market areas during the fall of 1992. Farmers, dealers and agricultural officials gathered at field days held at the demonstration sites to observe and discuss results. Computer simulation and crop modeling was introduced to dealers and researchers as a substitute for expensive field experimentation to make fertilizer use recommendations and to provide forecasts for crop production. Six specialists attended training programs in the U. S. on computer simulation of crop growth and a crop modeling training program was conducted for 25 specialists in Albania in 1994.

IFDC also sponsored field research and supplied climate-recording equipment for four research institutes to validate crop models for maize and wheat. Support was provided for two series of sampling and describing a total of 32 soil profiles in principle agricultural zones of Albania. The work was done in collaboration with the Albanian Soil Science Institute and the World Soils Resource Unit of the United States Department of Agriculture.

**Assistance to Fertilizer Factories--**In 1993 IFDC provided a study tour for one engineer from FNFF to learn how similar factories were managed and operated in the U. S. In addition to the marketing assistance previously mentioned, IFDC provided transport from November 21, 1992 to February 11, 1993 for 9,511 mt of fertilizer that had accumulated and was stored outside on the FNFF grounds. The fertilizer had not been sold because the production began during the summer, when gas became available, after nitrogen fertilizer application season. Also, FNFF failed to begin IFDC's suggestions for a revised marketing strategy that was mentioned before. In addition IFDC paid rent for State Reserve warehouses that were used for dry storage.

Also extensive technical, economic and environmental assessments of the Fier Nitrogen Fertilizer Factory (FNFF) and the Lac Superphosphate Factory, the only fertilizer production facilities in Albania, were performed by IFDC during this reporting period. The most important issues facing the FNFF were the lack of a reliable supply of natural gas, insufficient funds for spare parts, frequent production interruptions due to inadequate maintenance and the control of effluents. The most important conclusion of the IFDC assessments is that, with a minimal investment, the FNFF can be profitable and environmentally safe provided the natural gas supply issue could be solved. Services of Chevron were obtained for an evaluation of the Delvina gas deposits during late 1993. They concluded that there was a high probability that acid fracturing of two wells would provide sufficient gas for the operation of one of the ammonia plants at FNFF. In August 1995 IFDC prepared documents consisting of planning information for privatization of joint venture assistance for FNFF and for Albpetrol's Delvina gas field. Copies were given to the enterprises and to the Enterprise Restructuring Agency and IFDC assisted the individual enterprises to make

contacts with potential investors in the U. S. and Europe. Only a few companies showed enough interest to visit and discuss possibilities of investment.

The superphosphate factory at Lac was aged and in poor condition, even in 1991. A complete restoration of the factory was estimated to cost US \$24 million. Because of the great cost, IFDC recommended that domestic phosphate fertilizer continue until the inventory of imported rock phosphate is consumed. The domestic source of rock was investigated by IFDC and found to be of very poor quality, in addition to having high cost for mining and transport to the factory. Continued production of fertilizer based upon domestically produced sulfuric acid and imported rock phosphate may be feasible in the future only if the cost of imported DAP is in excess of about US \$250/mt, c.i.f. Durres. The factory has continued to produce small quantities of superphosphate, primarily through a tolling arrangement with a French trading company. The finance director participated in a study tour to the U. S. concerning procurement procedures and import financing.

**Dealer Development**--In addition to development activities mentioned in the AFADA section of this report, IFDC has provided continual counseling and advice to individual, as well as groups of dealers. Also, during this reporting period IFDC has arranged for 50 AFADA dealers to participate in five study tours in the U. S. Topics included agribusiness, trade organization management, procurement procedures, import financing and ag-inputs business planning and finance. AFADA-IFDC arranged three trade missions for 38 dealers to Italy, Bulgaria and Romania to make business contacts and learn how business is done in other countries. Individual dealers paid their expenses for those trade missions. Dealer involvement in the fertilizer factories' experimental commercial marketing, encouraged by IFDC, was a good learning experience. Also, IFDC's assistance in diversification of their business activities has aided in developing dealers' skills and abilities.

**Policy Reform**--Reform of government policies and procedures was also an important part of the initiative of USAID and IFDC. The most notable achievements in this area, involving collaboration with the Albanian Government, were 1) liberalizing fertilizer prices, 2) removing the circulation or turnover tax on fertilizer (effective April 15, 1995) and 3) decreasing customs duties on imported fertilizer from 30% to 5% (effective July 1, 1995). IFDC and AFADA worked together with many government agencies to implement these changes in policy. These achievements show that the government is committed to a relatively liberal policy environment to allow a competitive market to develop and prosper. Association law and business regulations. Also, IFDC in cooperation with the MOAF drafted a law and regulations to establish standards for fertilizers and to create a fertilizer inspection service.

**Private Sector Imports**--With IFDC assistance the first private sector import of fertilizer was achieved in April 1994. A group of 15 dealers with an agreed leader imported 5,000 mt of ammonium nitrate in two shipments. Between April 1994 and September 30, 1995 fertilizer was imported only by the private sector; 55,800 mt of nitrogenous fertilizer and 2,000 mt of phosphate fertilizers. Dealers covered all costs with the assistance of commercial credit from Albanian banks.

During this reporting period several dealers imported alfalfa seed from Italy and potato and watermelon seeds from Bulgaria. As of September 1995, plans have been developed for dealers to collaborate with FAO III in obtaining wheat seeds at concessional prices from Italian seed companies. Planned collaboration with an International Fund for Agricultural Development project will permit dealers to obtain seed potatoes from the Netherlands.

## Credit and Finance

The establishment of commercial credit during the early stages of market reform came about due in large part to IFDC's international training of key Albanian bankers, workshops on commercial lending to the agricultural sector, and the introduction and use of international irrevocable letters of credit for fertilizer importation. Extensive in-country training of Albanian state bankers took place throughout the life of the project. During the March 1992-September 1995 period, training programs on banking and finance were held throughout Albania with 346 bankers in attendance countrywide.

The first banking study tour to the United States was organized for 10 state bankers in 1993. An extensive study tour took place in spring, 1994, with 4 key state banking personnel visiting the United States, Thailand, and Bangladesh. An additional study tour to the United States including 4 bankers was made in summer, 1995. One banker participated in a workshop on deregulation and privatization policies in the U. S. in 1993.

The purpose of the study tours was to augment the in-country training of key Albanian bankers with the practical applications of the study topics, as well as provide in-sight into agricultural lending. For instance, time was spent in the L/C and collection departments of a commercial bank so that the Albanian bankers could witness first hand how these activities were managed in private banks. Extensive bank operation tours were conducted of U.S. commercial and agricultural banks, and numerous discussions were held with international and agriculture bankers on topics of risk evaluation, loan administration, credit policy, general bank management etc.

The IFDC credit story began during the March-June 1992 period when a commercial credit program was established by the Bank of Agriculture and Development, the state agricultural bank, to support IFDC's auction of urea fertilizer in two separate auctions. All proceeds from the sale of urea and revenues generated from the operation of donated trucks constituted a "Counterpart Fund".

During the first auction, 68 of 84 buyers purchased fertilizer using credit (90 days) from branch offices of the Bank of Agriculture and Development; in the second auction, 91 of 115 buyers were partially covered by credit, resulting in 80% of the buyers using credit for fertilizer sales. Credit from the Bank of Agriculture and Development totaled 15,593,125 lek (US\$ 115,505) for both auctions. The bank also mobilized a cash deposit of 31,322,708 lek (US\$ 232,020) through the credit program as equity participation by the dealers in both auctions. Additionally, unsuccessful bidders made cash deposits. The fund continued to support further auctions of urea and DAP throughout 1992 and early 1993. As of December 8, 1992, the balance in the Counterpart Fund totaled 44,915,833 lek (US\$ 332,710). In December 1994, the balance in the Counterpart Fund amounted to approximately US\$ 2 million, and was transferred to the Government of Albania.

In 1992, IFDC convinced the Albanian Nitrogen Fertilizer Factory to initiate disbursement of mercantile credit as part of a factory marketing policy. A total of approximately \$200,000 was made available for factory purchases during the year. Purchases of super phosphate and nitrogen fertilizers from Albanian factories continued throughout 1993 with total mercantile credit amounting to \$ 873,822 by 1993 year-end.

The first private commercial importation of 5,000 MT of nitrogen fertilizer took place in March 1994. As more AFADA members became involved in private importing, the credit needs of the membership began to widen. Also at this time, two large donor funded credit schemes were

established and administered by Rural Commercial Bank (formerly the Bank for Agriculture and Development) and the National Commercial Bank, in addition to the PHARE credit program already in existence at the Savings Bank of Albania. However, none of these programs were earmarked for agricultural lending.

International contracts for fertilizer dealers expanded to Italy, Bulgaria, and Romania in mid-1994. IFDC was successful in convincing the state controlled banks to open irrevocable letters of credit to facilitate fertilizer importation. In addition, IFDC convinced state bankers to disburse credit from the recently established donor-funded credit schemes administered by their respective banks. Short-term credit (3 months) for fertilizer importation was provided by Rural Commercial Bank and the Savings Bank of Albania, and amounted to a little over \$ 1.4 million in 1994. In addition, another \$ 1 million in mercantile credit was disbursed during the year by Albanian factories. The repayment rate for institutional credit was 95.3% at year-end 1994, while mercantile credit repayment stood at 37% for the Lac factory and 57% for the Fier Nitrogen Fertilizer Factory (FNFF).

Credit disbursements to AFADA members rose to \$ 2 million in short-term commercial lending in 1995 with an expansion of loan tenors from three to six months. The year-end 1995 repayment rate for commercial loans was 95.6%. Mercantile credit amounted to \$ 438,118 for the year, a 59% decline from the previous year, with total mercantile repayment standing at 77% at year-end. The drop in mercantile credit and poor repayment rate was reflective of the burgeoning problems experienced by the Albanian fertilizer factories due to erratic fertilizer production, inconsistent pricing policies, disputes with dealers regarding loan agreements, and overall weak factory management.

### **Environmental Impacts**

There have been three areas in which the activities of these projects could have impacted the environment.

One possible impact concerns the operation of the two domestic fertilizer production factories. However, after detailed assessments of those facilities IFDC recommended that the Lac Superphosphate Factory be closed and that the site is put into an environmentally safe condition. During the short intermittent periods of production, polluting effluents were emitted from the facility, but no measurements were made to estimate the extent of those. The FNFF also operated very little, but presented much less of a pollution problem from effluents. IFDC helped to prevent possible serious problems of surface and ground water pollution when the factory accumulated large quantities of urea, stored in uncovered areas on the factory grounds. The transport of the fertilizer to warehouses and payment of rent provided environmentally safe storage.

The imported fertilizers brought to Albania by IFDC posed little hazard to the environment. Urea was sold almost immediately and moved to farmers and DAP not sold quickly was stored in covered warehouses. Spilled fertilizer at the port was bagged and delivered to dealers. The last portion of fertilizers at warehouses was sold at discount from auction prices under term of quick cleaning of the warehouses. IFDC supervised the dealers cleaning of the warehouse and surrounding area, bagging and loading. Imports by dealers was less supervised, but their concern for recovering as much as possible of their product, resulted in satisfactory cleaning of the unloading area and storing the products safely in warehouses.

Another environmental concern might involve the level of use of fertilizer by farmers and contamination of water through. This is not likely to be a problem because the fertilizer use during the reporting period reached only about 15% of the level used in 1990.

## **Appendix 2**

### **Agricultural Statistics Component**

#### **Introduction**

The International Fertilizer Development Center (IFDC) first began support in the area of agricultural statistics just after the Project's inception. In 1992 IFDC began a limited price survey designed to provide prices for agricultural commodities in selected districts/major markets. In 1993, at the request of USAID/Albania, the Project expanded its activities in this area to include the conduct of objective yield surveys for major crops (primarily wheat) to provide estimates of grain production in the country. As part of this latter activity, an area frame was developed (in liaison with the Agricultural Assessments International Corporation) for use with this and subsequent farm level surveys.<sup>1</sup> In 1994 the Project conducted a second objective yield survey using the developed area frame and also conducted a socio-economic survey during March of that year.<sup>2</sup>

In early 1994, IFDC joined a consortium of contractors in providing support for the Support for Agricultural Restructuring in Albania (SARA) Project. Among its other responsibilities, IFDC provided technical support for the Agricultural Statistics and Management Information Systems (MIS) Component under this latter project. Under the SARA Project, the Agricultural Statistics and Management Information Systems (MIS) Component was responsible for assisting and upgrading skills in data collection, processing, and information dissemination within the Government of Albania/Ministry of Agriculture and Food (GOA/MOAF). In the SARA workplan specific outputs were outlined for use in measuring progress under this component. These included:

- Output 7: Implementation of agricultural sampling surveys three times annually beginning in year 2 (1995);**
- Output 8: Design and implementation by year 2 of a cost-effective agriculture market information system;**
- Output 9a: On-the-job training of at least 100 enumerators and data-base managers;**
- Output 9b: (Applies to the Agricultural Policy and Research (APR) as well as the Agricultural Statistics Components) Short term U.S. and third country training of at least 8 MOAF analysts; and**
- Output 9c: (Applies to both the APR and Agricultural Statistics Components) Long term training of at least 6 MOAF analysts.**

---

<sup>1</sup> See: Henao, Julio, Summary Report. Area Sampling Frame and Crop Yield Surveys in Albania – 1993, International Fertilizer Development Center in Cooperation with the Ministry of Agriculture and Food, January 1994.

<sup>2</sup> See: Henao, Julio, Agricultural Production in Albania – Socioeconomic Survey, 1993-94, International Fertilizer Development Center (IFDC) and Directorate of Statistics and Information/Ministry of Agriculture and Food (MOAF), Republic of Albania, September 1994.

From 1994 through 1996, IFDC provided a long-term resident MIS Advisor under the SARA Project, and, from 1997 through 1998, it continued to provide short term technical support in an effort to ensure sustainability of this activity after the project's end. As part of this latter effort, the IFDC Project assumed complete responsibility for the technical support provided. Finally, with the conclusion of the SARA Project in December 1998, the IFDC Project, as part of its one year extension, assumed all responsibility for providing all support – technical, supplies, monies for collecting data/providing enumerator training, etc. -- for the Ministry of Agriculture and Food/Directorate of Statistics and Information (MOAF/DSI)

### Accomplishments to Date

In order to attain these outputs, the MIS Component, first under the SARA Project and later under the IFDC Project, provided a number of inputs, only a portion of which were specifically identified as needed in the initial workplan. The majority of these needs were identified by the MIS Advisor in conjunction with the then Director of the Directorate of Statistics and Information (DSI) during an initial review of the re-organization/support requirements for the Directorate to meet its data needs.<sup>3</sup> In this review, the present/planned data gathering activities of the DSI were outlined, recommendations on the required re-organization for the Directorate were provided, the technical support requirements were reviewed, and the training support requirements were adjusted based on the wishes of the MOAF in this area. A brief summary of the findings/accomplishments to date in each of these areas under the MIS Component is provided below.<sup>4</sup>

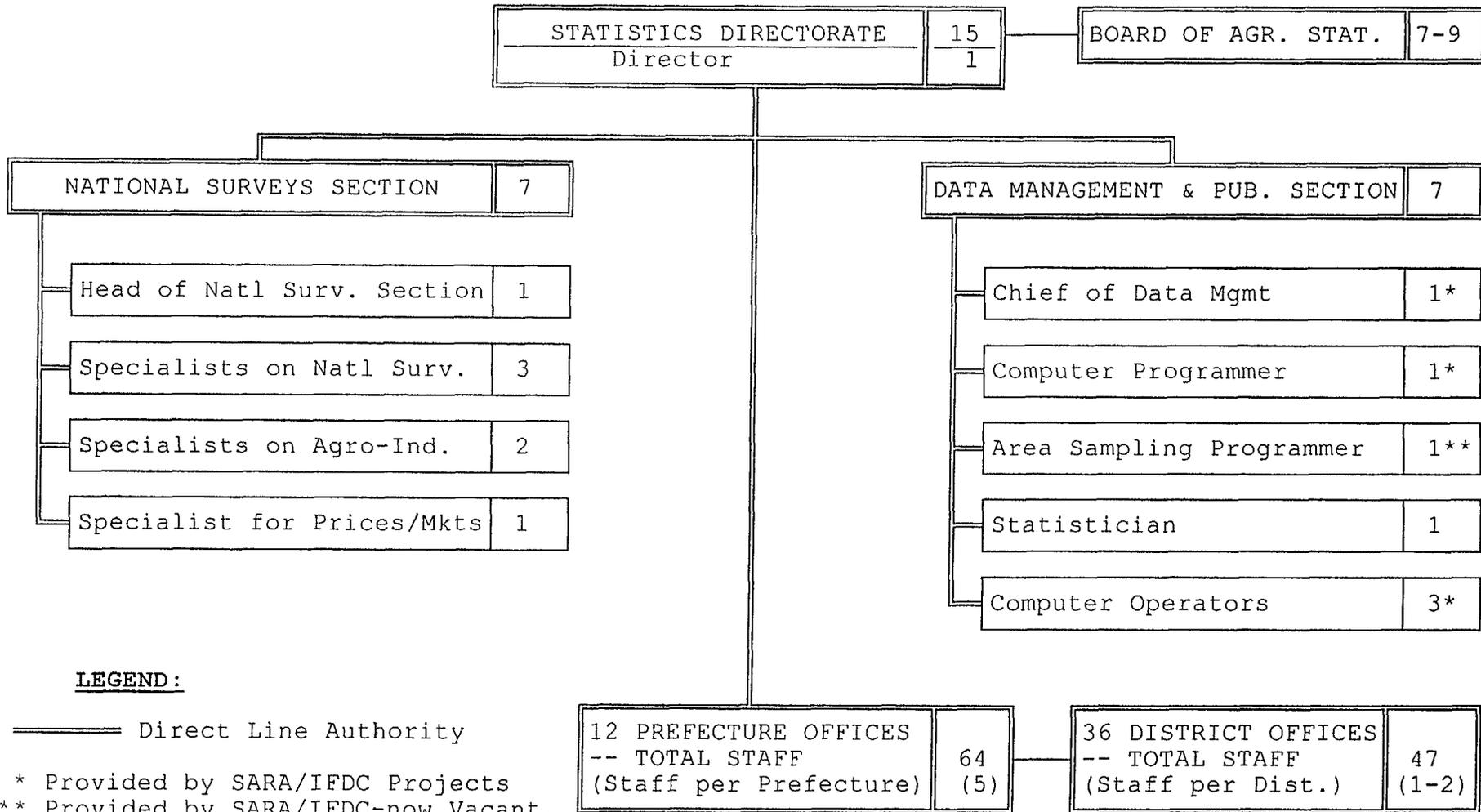
1. Re-Organization of DSI/MOAF – In 1994 it was recommended that the central office of DSI be reorganized to include two units – one for implementing sampling and other surveys, and a second responsible for the development of data management/processing/information systems. It was also recommended that 12 prefecture offices be established, each with five persons, to ensure closer coordination between the central and field offices. The re-organization of the DSI was completed in October 1995 (Figure 1), and, with the exception of fewer district staff, it followed almost exactly that recommended in 1994. Since 1994, first the SARA and then the IFDC Projects have provided the funding for staffing the Data Processing and Management Section of DSI. Thus, in addition to the long term technical assistance provided through IFDC (30 person months from April 1994 through September 1996), a significant amount of Albanian personnel has been provided under the component.

---

<sup>3</sup> Agollic, Shkelqim, John Litschauer and others, Re-Organization/Objectives/Support Requirements for the Service of Statistics to Meet Its Data Gathering Responsibilities, Service of Statistics and Information, Ministry of Agriculture and Food. June 1994.

<sup>4</sup> For a complete coverage of these findings/accomplishments during the early periods of the Project, see: Litschauer, John, End of Tour Report, SARA Project, August 1996.

Figure 1: Organizational Structure of the Directorate of Statistics and Information in 1999.



This includes:

- a. Chief of Data Management – 98 person months;
  - b. GIS Specialist – 91 person months;
  - c. Computer Operators – 225 person months;
  - d. Statistical Management Assistant – 92 person months
2. Data Collection Activities Initiated – At the time of the re-organization review, DSI was engaged in a significant number of survey activities, all of which were being conducted using purposive sampling or the census approach to data collection. Due to the breadth of data collection activities which were underway/planned, it was decided to place primary emphasis during the early stages of the project on the conduct of an annual agricultural survey. Using this approach would allow the provision of on-the-job-training in questionnaire design, enumerator training, data processing and data summarization. It was also recognized that a user friendly computer data entry/edit/ summarization system would be required if the data collected under the planned surveys were to be processed in an efficient manner and that the technical skills in sampling theory for the DSI staff needed upgrading prior to beginning sampling activities with other surveys – especially the agro-industry surveys. Finally, the Director of DSI requested that a new area frame be developed which would allow estimates of the agricultural sector to be provided at the prefecture level.

The annual agricultural surveys were initiated in November 1994 and have continued to the present. In 1995, this survey was expanded to two data collection efforts – in July and November. However, from 1996 through 1998, the survey was scaled back to a single year effort which was conducted in November.<sup>5</sup> In 1999, DSI re-initiated the collection of data under the annual agricultural surveys twice a year – in July and November. At present, the following information is being collected under these surveys:

- a. 1999 Annual Agricultural Survey – survey 1 – Timing: June/July. Data collected on farm household demographic characteristics, crop planting for the first cropping cycle, winter wheat production/expected production, milk production and milk/milk product sales/prices received, input usage for land preparation activities.
- b. 1999 Annual Agricultural Survey – survey 2 – Timing: November. Data to be collected on second plantings of crops, crop production/sales/prices received, livestock numbers/sales/prices received, milk production and milk/milk product sales/prices received, crop input usages during the crop season, etc.

In addition, four other survey efforts have been/are about to be initiated since the inception of the project. A description of these efforts/timing of their initiation are provided below.

- a. The Weekly Price Survey – The Agricultural Policy and Research Advisor under the SARA Project, with assistance provided by FAO (and later funded through SARA) began a weekly

---

<sup>5</sup> There were two reasons for this “scaling back” of the survey effort during these years. First, in 1996 and 1998 the Institute of Statistics (INSTAT) was planning to conduct an agricultural census in Albania (which was finally completed in 1998). As a result, DSI was not allowed to collect data during the June/July period. Second, as a result of the unrest which occurred in early 1997 in Albania, only the November survey could be completed.

price survey in selected cities in the country to provide rapid reconnaissance price information through television, radio and newspapers. Although limited in scope, the information continues to be collected and is widely accepted and used in marketing activities in the country. These activities were initiated in September 1994, and responsibility for conducting them was assumed by DSI in early 1996.

- b. Agro-Industry Surveys – At the time of the re-organization review, DSI was collecting data quarterly from a list frame of state owned industries. In April 1996, data under the agro-industry survey began to be collected under a new format based on sampling by type of industry. With the exception of 1997, when the unrest occurred in the country, data has continued to be collected on a quarterly basis.<sup>6</sup> At present, information is being collected on: (1) operational status and reasons for non-operation; (2) legal form of ownership; (3) employment by category and sex; (4) labor usage and costs; (5) quarterly revenue from sales; (6) quarterly expenditures on materials, fuels, and services; (6) quarterly investment on buildings and equipment; (7) quarterly quantities of agro-industry products produced and sold and prices received. As might be expected, the information collected is provided to the MOAF and the Institute of Statistics on a quarterly basis.
- c. The Greenhouse Survey – The greenhouse survey was initiated in July 1998 and was initially planned for conduct twice a year – in July and January of the following year. In 1998, the survey was only conducted once due to funding constraints. The survey is based on list frame sampling with stratification by size (area under the greenhouse). Information is collected on vegetable production, sales and prices received, labor and other costs, investment, etc.
- d. The “Outlier” Survey – DSI is planning to conduct the first outlier survey in October 1999. The survey is designed to obtain production levels and costs for large scale farm enterprises by type of farm – crops, cattle, sheep/goats, pigs, poultry operations, egg producers, etc. As with the agro-industry survey, sampling with stratification by type of operation using a list frame will be used to conduct the survey.

Finally, beginning in April 1993, DSI began collecting retail prices for selected agricultural products (in both fresh and processed forms) in all 36 districts of Albania on a monthly basis. This data collection effort has continued using essentially the same format as that utilized during its development. Although not initiated during the support period for DSI, Albanian staff employed by SARA/IFDC in support of the MIS Component have assisted the directorate in “streamlining” the data processing/summarization of the information collected under this survey.<sup>7</sup>

- 3. Short Term U.S. (and Other) Technical Support – At the time of the re-organization review, it was also recognized that short term technical support would be required in each of the four areas specified as needed in that plan -- development of a "user friendly" computer data entry/editing/summarization program, development of a new area frame for use with the annual agricultural surveys, the provision of training in sampling theory, and the development of a revised agro-industrial survey. Also, as outlined earlier, IFDC continued to provide short term technical

<sup>6</sup> In 1997, an annual survey was conducted at the end of the year to collect the information for the entire year.

<sup>7</sup> Partly as a result of the initiation of this survey, IFDC passed its responsibility for collecting these types of data to the MOAF in August 1993.

support after the long term MIS Advisor departed post in September 1996. A summary of the support/ training provided in each of these areas is provided below and in Table 1.

- a. Data Entry/Edit Program Specialist – 8 1/2 person months provided – The services of this specialist began in August 1994, and an initial package was developed for use with the 1994 Special Agricultural Survey by October 1994. After testing through use with the 1994 Survey, the package continued to be expanded and tested for use with subsequent surveys. Initially, as part of this testing, the Chief of Data Management trained 10 DSI central staff in its use and began the training of prefecture staff. In 1996, with the placement of computers at the prefecture level, the data processing of the annual surveys began to be decentralized. As part of this decentralization process, an additional 20 persons – two in each prefecture – were trained.<sup>8</sup> A users manual has been developed for the package, which is extremely user friendly, and relevant portions of it have been translated in Albanian.
- b. Area Frame Development Specialist(s) -- 2 1/2 person months were provided through a SARA Project contract with the U.S. Department of Agriculture (USDA)/National Agricultural Statistics Service (NASS). The support began in January 1995 and was completed in October 1996. All central staff (9 persons) received training in strata/Primary Sampling Unit (PSU) boundary identification using map overlays and satellite photos. During the initial sample development process, completed in September 1996, the sample size was expanded to 400 segments which allowed summarization of the annual agricultural survey data at the prefecture level. In 1998, this sample size was expanded to 600 segments.
- c. Sampling Theory Specialist -- 3 person months provided – The services of this specialist began in July 1995 and was completed in October 1995. During the first portion of the contract period, the specialist developed the required training materials which were then translated into Albanian. Once the training materials were completed, intensive training was provided to DSI (and other selected) staff over a three week period in a "training of trainers" mode. A total of 12 persons received this training. Once the central staff had received the training, selected individuals began training district staff. A total of 69 district staff received this training.<sup>9</sup>
- d. Agro-Industry Survey Specialist – Beginning in 1995, a series of short term contracts were signed with this consultant to upgrade the agro-industry survey. The consultant obtained had had considerable previous experience in analyzing industrial survey data in Canada prior to coming to Albania. The services of this consultant began in July 1995 and continued to July 1996. Services provided during the consultancies included: (1) an evaluation report on the

<sup>8</sup> At the time of this writing, the processing of the data collected under the annual agricultural surveys is being conducted in nine of the 12 prefectures. Data collected in Kukes and Dibre prefectures continue to be processed in the central offices due to the recent events which occurred in Kosovo. In addition, during the 1997 unrest in the country, the offices of the Directorate of Statistics located in Berat prefecture were destroyed and activities in this area are coordinated out of the prefecture director's house.

<sup>9</sup> Training materials developed under this consultancy include:  
 Beller, Norman D., Applied Sampling Techniques. Text and Study Assignments, SARA Project, September 1995; and  
 Beller, Norman D., Applied Sampling Techniques. Lesson Plans and Problem Solutions, SARA Project, September 1995.

survey methods then being used with the agro-industry survey with recommendations for its improvement;<sup>10</sup> (2) the development of a new list frame for use with the 1996 survey; (3) the design and testing of the questionnaires for use with the survey which meet European Community (E.C.) product code specification requirements; (4) assisting in the training of enumerators in March 1996; and (5) assisting in the data processing/summarization of the data collected under the April survey.

**Table 1: Short Term U.S. (and Other) Technical Support Provided by the Statistics Component.**

Type of Specialist	Support Provided	Length of Contract	Period of Contract	No. Persons Trained
1.Data Entry/Edit Program Specialist	Develop/provide training in customized computer data entry/edit/summari- zation program.	8.5 months	8/94-10/96	30
2.Area Frame Development Spec.	Develop new area frame for sampling purposes.	2.5 months	2/95-5/96	9
3.Sampling Theory Specialist	Develop Course/Provide Training in Sampling Theory	3 months	7/95-10/96	81 a/
4.Agro-Industrial Survey Specialist	Upgrade Agro-Industrial Survey	11 months	8/95-7/96	38 b/
5.Statistical Consultant	Provide on-the-job training on all facets of data collection/ etc., assist in develoment of new surveys, conduct analyses.	8.5 months	10/96-5/98	See next section.
Total		33.5 months		158

a/ Includes 12 central and 69 prefecture staff.

<sup>10</sup> See: Moores, Margaret E., Agro-Industry Survey. An Evaluation Report with Recommendations for Expanding and Improving the Survey in 1996, MOAF/DSI. October 1995.

b/ Includes 2 central office staff and 36 enumerators.

e. Statistical Consultant – After departing Albania, the long term MIS Advisor, an IFDC consultant, provided a series of short term consultancies to better ensure the transition of technical skills to DSI central staff between 1996 and 1998. Through this series of five consultancies, the services provided during this period included: (1) the completion of a report summarizing the procedures used with the annual agricultural surveys; (2) reinforcing technical skills for DSI central office staff in the areas of data processing, the calculation of expansion factors and coefficients of variation, data summarization, etc.; (3) assisting in the conduct of the annual agricultural and agro-industry surveys; (4) assisting in the expansion of DSI's survey activities to include a livestock and greenhouse survey in 1998; (5) the provision of training in methods available for selecting sample sizes to attain a desired level of precision using stratification; and (6) completing two studies which evaluated Albania's agricultural sector.<sup>11</sup>

4. On-the-Job Training -- When conducting a statistically valid survey of any type, certain inter-related activities must be completed if the survey is to be conducted efficiently. The major activities needed with any survey include: (a) sample design; (b) questionnaire design and enumerator training; (c) data collection; (d) data processing; and (e) data summarization. Over the life of the statistics component, a considerable amount of training was provided in these areas through on-the-job training, especially when conducting the annual agricultural surveys. The approach used was to phase in the training on a "step-by-step" basis. For example, during the 1994 annual agricultural survey effort, the development of the questionnaire and enumerator training manual, as well as the actual enumerator training provided, was the responsibility of the MIS Advisor with the DSI central staff acting primarily as observers. In 1995, the relevant central staff assumed these responsibilities and conducted all of the training. More recently, the central staff have been training prefecture district staff to assume this responsibility. Similarly, in 1995, the MIS Advisor was responsible for calculating the expansion

<sup>11</sup> Publications completed during this series of consultancies included:

Litschauer, John G., Workplan for/Procedures Used with the Annual Agricultural Surveys, SARA Project, Statistics Component, December 1996.

2. Litschauer, John G., An Evaluation of the Transition in Albania's Agricultural Sector, Ministry of Agriculture and Food/Directorate of Statistics and Information, November 1997.

3. Litschauer, John G., Selecting Sample Sizes to Attain a Desired Level of Precision Using Stratification (A Case Study – the Greenhouse Survey), Ministry of Agriculture and Food/ Directorate of Statistics and Information, May 1998.

4. Litschauer, John G., An Evaluation of the Performance of Albania's Agricultural Sector in 1997, Ministry of Agriculture and Food/Directorate of Statistics, July 1998.

**Table 2: A Partial List of On-the-Job Training Provided Under the Annual Agricultural Surveys, 1994 – 1998.**

Training Description	Trainer(s)	Recipients	Timing	Number Trained	Staff Now Responsible
1. Sample Design	MIS Advisor	Cent. Off. Staff	1994/95	9	Cent. Off. Staff
2. Questionnaire Development	MIS Advisor	Cent. Off. Staff	1994/95	9	Cent. Off. Staff
3. Dev. Enumerator Manual	MIS Advisor	Cent. Off. Staff	1994/95	9	Cent. Off. Staff
4. Enumerator Training	4a. MIS Advisor	Enumerators	1994	200	Cent. Off. Staff/Pref./
	4b. Cent. Off. Staff	Enumerators	1995/96/97/98	1,000	Dist. Staff
	4c. Cent. Off. Staff	Pref./Dist. Staff	1999	100	
	4d. Pref./Dist. Staff	Enumerators	1999	250	
5. Data Quality Control	MIS Advisor	Cent. Off. Staff	1994/95	9	Cent. Off. Staff
6. Data Management	6a. MIS Advisor	Cent. Off. Staff	1994	2	Cent. Off. Staff
	6b. Cent. Off. Staff	Pref. Staff	1997/98/99	24	
7. Manual Edits	7a. MIS Advisor	Cent. Off. Staff	1994	9	Cent. Off./Pref. Staff
	7b. Cent. Off. Staff	Dist. Staff	1995/96	36	
8. Data Entry	8a. Computer Spec.	Cent. Off. Staff	1994/95	1	Cent. Off./Pref. Staff
	8b. Chief of Data Mngmt.	Pref. Staff	1996/97/98	24	
9. Computer Editing	9a. MIS Advisor	Cent. Off. Staff	1994/95/96	9	Cent. Off./Pref. Staff
	9b. Cent. Off. Staff	Pref. Staff	1997/98	24	
10. Calc. Expansion Factors/ Coefficients of Variation	MIS Advisor/Stat. Consultant	Cent. Off. Staff	1996/97	9	Cent. Off. Staff
11. Table Specification	MIS Advisor/Stat. Consultant	Cent. Off. Staff	1995/96/97	9	Cent. Off. Staff
TOTAL				1,696 a/	

a./ Includes multiple counts of trainees.

factors use with/coefficients for the data collected under the annual agricultural survey. In 1996, the central staff assumed this responsibility with reinforcement of skills in these areas provided by the short term statistical consultant. A partial list of the on-the-job training provided in the conduct of the annual agricultural surveys (only) are briefly summarized in Table 2 by type of training provided and the timing of this training. As can be seen from this summary, on-the-job training has been significant over the life of the project. Nearly 1,700 persons have received this type of training since 1994, and the movement towards the decentralization of responsibilities for conducting the surveys has been significant.

5. Special/English Training -- In addition to the technical and on-the-job training provided to DSI staff under the MIS Component, in-country training was also provided in two other areas -- training in the use of "canned" programs as computers are moved to the prefecture offices, and training in English to upgrade the skills of SSI staff prior to receiving U.S. training. Training provided in each of areas is outlined in Table 3.
- a. Training in "Canned" Programs -- During the re-organization review completed in 1994, it was recognized that prefecture personnel would require training in the use of "canned" computer programs (i.e., word processing and the use of spreadsheets) if they were to become computer literate as data processing activities were assumed by this group. This training was provided through the Institute of Informatics in 1995 (one month) and, later, through the University of Tirane. A total of 21 persons were trained in this effort.
- b. English Training -- From 1994 to late 1996, the Agricultural Statistics Component provided English training to MOAF personnel to upgrade their skills in this area. The Project also provided the necessary texts and workbooks required to conduct this training. Training was provided at three levels -- beginning, intermediate, and advanced. A total of 102 person years of training was provided during this period.

**Table 3: Special/English Training Provided Under the Statistics Component.**

Type of Training	Recipients	Number of Courses	Length of Training	Timing of Training	No. Trained
1. Training in Basis Comp. Usage	Cent. Off/ Pref. Staff	2	First-1 mo. Second-2 weeks	1995/96 1996	21
2. ENGLISH:					
a. Beginning	MOAF pers.	4	1 year	1994/95/96	34
b. Intermediate	MOAF pers.	6	1 year	1994/95/96	54
c. Advanced	MOAF pers.	3	1 year	1994/95/96	14
Subtotal					102 a/
TOTAL					123

a./ Includes multiple counts of trainees.

6. Long/Short Term Training in the U.S. – During the life of the MIS Component, the "mix" of external training in the U.S. was adjusted as part of the reorganization review which was completed in 1994. At the request of the then Director of DIS, the mix of training to be provided was moved towards the provision of more short term training from the original mix of six long term and eight short term persons (including the training to be provided to Agricultural Policy and Research –APR – personnel). This change in the mix of training was approved by USAID in 1996. The training provided, as well as the timing of this training, is outlined in Table 4. During the life of the project, a total of 17 persons (including interpreters) received training in the U.S. – one long term and 16 short term. Emphasis was placed on providing training to the central office staff in the areas in which they were engaged in the Directorate. Thus, one person received long term training in computer programming and has returned to head the data processing section of DSI; the persons engaged in conducting the agro-industry surveys received short term training in this area at Kansas State University and the Bureau of Census; etc. All training was completed by 1997.

**Table 4: Long/Short Term Training in the U.S. Provided Under the Statistics Component.**

Training Description	Training Venue	Timing of Training	Number Trained	Length of Training
FAMILIARIZATION IN U.S. DATA PROCESSING	NASS	10/94	4 a/	3 weeks
<b>LONG TERM TRAINING:</b>				
1. Computer Programming	VPI&SU	9/95-8/97	1	24 months
<b>SHORT TERM TRAINING:</b>				
1. Agro-Industry Training	KSU/Bureau of Census	6/96-7/96	4 a/	5 weeks
2. Mgmt/Leader Training	NASS & USDA/ FAS/ICD	6/96-7/96	2a/	5 weeks
3. Basic Stat. Training	NASS	9/96-10/96	6 a/	4 weeks
Subtotal			12	
TOTAL			17	

a./ Includes one interpreter.

7. Equipment Support -- During the re-organization review conducted in 1994, certain equipment requirements were identified if the Directorate of Statistics was to conduct agricultural and other surveys efficiently. This included: (a) 150 calculators to be provided to districts; (b) five computers, printers and UPS systems to be provided to the central office; (c) a high speed photocopier with sorting and double sided printing capability and support equipment to be provided to the central office; (d) a GIS system, plotting board, digitizer and computer support equipment to the central office; and (e) 12 computers and printers to be provided to the prefectures to allow decentralization of the data processing activities. It was also recognized that the

SARA Project might not be able to provide all of this equipment since all of the needs outlined had not been recognized in the SARA Workplan.

Since it was expected that a considerable lag time would occur between the time the equipment was required and the time it was expected to be received from the prime contractor, initial equipment needs were met through leasing. A summary of the types of equipment provided, timing of provision to the Service, and sources of the equipment is shown in Table 5 by equipment type. As can be seen from this equipment provision summary, the Statistics Component has more than met its responsibilities in the planned equipment to DSI central staff and prefecture personnel, either through the Project or utilizing other sources. A brief summary of the equipment requirements identified/equipment provided since the SARA Project's inception is given below by equipment location and equipment type. As can be seen from this summary, the component was able to source considerably more equipment to provide to DSI than was specified in the initial SARA workplan (which called for only five computers and peripheral equipment to be provided). However, most of this equipment was provided prior to 1997, and one would expect that a significant portion of it is now not operating.

Central Office:

- a. Computers -- 5 required; 11 provided through contractor or lease.
- b. Printers -- 5 required; 5 provided.
- c. UPS Systems -- 5 required; 10 provided plus 2 line voltage regulators.
- d. Photocopier -- 1 required; 1 provided (not operating).
- e. GIS System -- all peripheral equipment provided through contractor or other sources.

Prefecture Offices:

- a. Computers -- 12 required; 2 provided by MOAF, 2 provided by Project, 8 provided by World Bank.
- b. Printers -- 12 required; 4 provided by Project, an additional 8 provided by World Bank.
- c. UPS Systems -- 12 required; 8 provided by World Bank.

### **Sustainability**

As is obvious from the previous discussions, the Directorate of Statistics has moved a considerable distance in attaining sustainability in its survey activities. A transfer of technical skills to the central staff has been accomplished, at least with respect to most facets of data collection, processing and summarization. However, the decentralization of data processing will take an additional year to complete. In addition, it will require more time to phase in the final formats for the conduct of the greenhouse and "outlier" surveys. Also, although the central DSI staff are well qualified to continue their survey activities, they have little or no training in the conduct of analyses using the data collected. Finally, given the present situation in Albania, it is doubtful that DSI will be able to provide the necessary positions that are needed to efficiently process and summarize the data presently being collected. Since

**Table 5: Equipment Requirements of/Equipment Provided to DSI Under the Sara/IFDC Statistics Component.**

EQUIPMENT REQUIREMENTS		EQUIPMENT PROVIDED			
Location/ Description	Number Required	Equipment Description	Number Provided	Time Provided	Source
<b>CENTRAL OFFICE:</b>					
1. <u>Data Proc. Section:</u>					
a. Computers (486)	5	1. Computers (486)	5	9/94	Lease
		2. Comp. (pentium)	2	7/95	Contractor
b. Printers (WDM)	5	1. Printer (WDM)	1	9/94	Lease
		2. Printer (Lazer)	1	9/94	Contractor
		3. Printers (Desk J)	2	7/95	Lease/Cont.
c. UPS Systems	5	1. UPS Systems	5	9/94	Lease/Cont.
		2. Line Regulators	2	9/94	Lease/Cont.
d. GIS Equipment	--	1. Comp. (pentium)	1	1/96	Contractor
		2. UPS System	1	1/96	Contractor
		3. GIS Program	1	2/96	IFDC
		4. Plotting Board	1	3/96	MOAF
		5. Digitizer	1	3/96	MOAF
2. <u>Nat'l Sampling Section:</u>					
a. Computers (486)	--	Computers (486)	2	1/96	Lease
b. Printers (WDM)	--	Printers (WDM)	1	1/96	Lease
c. UPS Systems	--	UPS Systems	2	1/96	Lease
3. <u>Other Central Office:</u>					
a. Computer (486)	--	Computer (486)	1	7/95	Lease
b. UPS System	--	UPS System	1	7/95	Lease
c. Photocopier	--	Photocopier	1	10/94	Lease
<b>PREFECTURE OFFICES:</b>					
a. Calculators	150	Calculators	120	11/94	Contractor
b. Computers (486)	12	1. Computers (386)	2	3/96	MOAF
		2. Computers (486)	2	4/96	Contractor
		3. Computers (486)	8	6/96	World Bank
c. Printers (WDM)	12	1. Printers (DM)	2	3/96	Contractor
		2. Printers (WDM)	2	10/97	Contractor
		3. Printers (Desk J)	2	6/96	World Bank
		4. Printers (WDM)	6	6/96	World Bank
d. UPS Systems	12	UPS Systems	8	6/96	World Bank

assuming the responsibilities for providing funding for the statistics component, IFDC has made available funding to support six positions the Data Management and Publications Section – The head of the section, the area sampling programmer, a component business manager and three computer operators. The MOAF is providing two staff – a statistician and a computer programmer. However, the computer programmer was only hired in September 1999 and will be expected to fill both the head of the section's position and the area sampling (GIS) programmer position. This transfer of technical skills will require more "overlap" time with the present head of the section (say four months) as well as the provision of training in GIS operations (using ArcInfo) over an extended period to the person filling the computer programmer position.<sup>12</sup> It is also doubtful that MOAF will be able to retain the present computer operators due to a lack of funding. Finally, it is doubtful that the MOAF will be able to continue the present survey activities without additional funding support.

In an earlier report forwarded to IFDC, the author provided estimates of the costs of continuing support to the statistics component through the year 2000.<sup>13</sup> The estimates provided in this report would indicate that approximately \$115,000 would be required to ensure sustainability of the survey activities of DSI. The majority of this would be required to fund the survey activities themselves with most of the remainder being required for local staff salaries. However, it is absolutely essential that the MOAF recognize its responsibilities if it wishes to continue to obtain high quality information on the agricultural and related sectors. Staffing patterns need adjustment, and funding is required if the survey activities are to be continued. Without this support, it is highly probable that the present system will collapse.

### Publications Under the Statistics Component

During the life of the Statistics Component, both formal and on-the-job training has been provided under the SARA/IFDC Projects in sampling theory/design; on-the-job training has been provided on all facets of data collection/processing/summarization; and activities have begun using the data for analysis. A partial list of the publications/consultant reports generated when conducting these activities is provided below.

1. Agolli, Shkelqim, John Litschauer and others, Re-Organization/Objectives/Support Requirements for the Service of Statistics to Meet its Data Gathering Responsibilities, Service of Statistics and Information, Ministry of Agriculture and Food, June 1994.
2. Litschauer, John G. and others, 1994 Special Agricultural Survey – Enumerators Manual, Service of Statistics and Information, MOAF, November 1994.
3. Blackwook, Paul, Area Sampling Frame, NASS/USDA, February 1995.

<sup>12</sup> It might be possible to provide this training in-country through the National Geographic Institute (or some other similar organization). However, it is doubtful that MOAF can provide the funding required to provide it.

<sup>13</sup> See: Litschauer, John G., An Assessment of Progress by/Near Future Support Requirements for the Service of Statistics and Information/Ministry of Agriculture and Food, International Fertilizer Development Center, January 1999.

## References

4. Litschauer, John G. and others, Results of the 1994 Special Agricultural Survey, Service of Statistics and Information, MOAF, April 1995.
5. Litschauer, John G. and others, 1995 Annual Agricultural Survey – Enumerators Manual (Form 1), Service of Statistics and Information, MOAF, June 1995.
6. Beller, Norman, Applied Sampling Techniques. Text and Study Assignments, Virginia Polytechnic Institute, September 1995.
7. Beller, Norman, Applied Sampling Techniques. Text and Study Assignments, Virginia Polytechnic Institute, September 1995.
8. Snyder, Joe W., User Guide – Agricultural Survey Reporting System, October 1995.
9. Moores, Margaret, Agro-Industrial Survey – An Evaluation Report with Recommendations for Expanding and Improving the Survey for 1996, October 1995.
10. Litschauer, John G. and others, 1995 Annual Agricultural Survey – Enumerators Manual (Form 2), Service of Statistics and Information, MOAF, October 1995.
11. Blackwood, Paul. Area Frame Construction and Use, NASS/USDA, November 1995.
12. Moores, Margaret, The 1996 Agro-Industry Survey – Enumerators Manual, March 1996.
13. Litschauer, John G. and others, Results of the 1995 Annual Agricultural Survey, Service of Statistics and Information, MOAF, May 1996.
14. Blackwood, Paul and Steven Kellogg, Instructions/Procedures for Mapping Segments, NASS/USDA, May 1996.
15. Litschauer, John G., Macroeconomic Theory, Service of Statistics and Information, MOAF, June 1996.
16. Litschauer, John G., Marketing Economics Seminar, SARA Project, July 1996.
17. Litschauer, John G., End of Tour Report, SARA Project, August 1999.
18. Litschauer, John G., 1996 Annual Agricultural Survey – Enumerators Manual, Service of Statistics and Information, MOAF, October, 1996.
19. Litschauer, John G., Work Plan for/Procedures Used with the Annual Agricultural Surveys, SARA Project/Statistics Component, December 1996.
20. Agro-industry staff/DSI, Agro-Industry Survey Results – 1996, Quarter 1, 2, 3 &4, Directorate of Statistics and Information, MOAF, May/July/November 1996 and February 1997.

21. Litschauer, John G. and others, Results of the 1996 Annual Agricultural Survey, Service of Statistics and Information, MOAF, August, 1997.
22. Central Office Staff/DSI, 1997 Annual Agricultural Survey – Enumerators Manual, Directorate of Statistics and Information, MOAF, October, 1997.
23. Litschauer, John G., An Evaluation of the Transition in Albania's Agricultural Sector, Ministry of Agriculture and Food/Service of Statistics and Information, November 1997.
24. Litschauer, John G., An Assessment of Near Future Support Requirements for the Service of Statistics and Information/Ministry of Agriculture and Food, SARA Project, November 1997.
25. Agro-industry staff/DSI, Agro-Industry Survey Results – Annual Report, Directorate of Service and Statistics, MOAF, February 1998.
26. Litschauer, John G. and others, Results of the 1997 Annual Agricultural Survey, Directorate of Statistics and Information, MOAF, March 1998.
27. Litschauer, John G., Support Requirements for the Service of Statistics and Information (SSI)/Ministry of Agriculture and Food (MOAF) During 1998, SARA Project, March 1998.
28. Litschauer, John G., An Assessment of Long Term Support Requirements for the Service of Statistics ad Information (SSI)/Ministry of Agriculture and Food (MOAF), SARA Project, March 1998.
29. Litschauer, John G., Selecting Sample Sizes to Attain a Desired Level of Precision Using Stratification (A Case Study – the Greenhouse Survey), Directorate of Statistics and Information, MOAF, May 1998.
30. Litschauer, John G., An Evaluation of the Performance of Albania's Agricultural Sector in 1997, Ministry of Agriculture and Food/Service of Statistics and Information, July 1998.
31. Central office staff/DSI, 1998 Annual Agricultural Survey – Enumerators Manual, Directorate of Statistics and Information, MOAF, November 1998.
32. Litschauer, John G., An Assessment of Progress by/Near Future Support Requirements for the Service of Statistics and Information/Ministry of Agriculture and Food, IFDC, January 1999.
33. Agro-industry staff/DSI, Agro-Industry Survey Results – Quarters 1. 2. 3 & 4, Directorate of Service and Statistics, MOAF, February 1999.
34. Central office staff/DSI, Results of the 1998 Annual Agricultural Survey, Directorate of Statistics, MOAF, March 1999.

## **Appendix 3**

### **Fertilizer Regulatory System**

An intricate part of the USAID/IFDC project, Sustaining the Restructured Fertilizer Subsector in Albania, was to assist the Government of Albania in establishing and implementing a fertilizer regulatory system.

The principle objective of establishing a fertilizer regulatory system is to provide a mechanism to protect the consumer, not restrict the market opportunities for fertilizer. The system would mainly protect against nutrient deficiencies, adulteration, and short weight bags. The system would also provide other benefits, including:

1. Protection for the honest fertilizer businessman.
2. Promotion of further agricultural development in Albania.
3. Ensuring continued improvement in fertilizer quality.
4. Access to valid and reliable data by farmers, extension workers, marketing specialists, and other agricultural specialists concerned with the use of fertilizers.
5. Financial protection for the Government of Albania by minimizing any shortfalls in food staples due to deficient and/or adulterated fertilizers.

Early in the project, an IFDC regulatory specialist traveled to Albania to conduct an assessment of the activities, methodology, and funding requirements to establish a fertilizer regulatory system. As a result of this consultancy, a report was prepared detailing the required activities, recommended methodology, and funding needs. Following is a list of the required activities:

1. Draft and formulate an Albanian Fertilizer Law.
2. Draft and formulate Albanian Fertilizer Regulations.
3. Recommend an organizational structure to implement and administer the proposed law and regulations.
4. Prepare job descriptions for fertilizer administrators, inspectors, analysts, and technicians.
5. Develop a Fertilizer Inspection Manual.
6. Develop a Fertilizer Analytical Manual.
7. Develop report forms corresponding to action procedures in the Law and Regulations and in the Inspection and Analytical Manuals.
8. Design the layout of the fertilizer analytical laboratories, and prepare specifications for the refurbishment of the Soil Science Institute building, which will house the analytical labs.
9. Specific equipment requirements.
10. Prepare specification list for procurement of laboratory equipment/apparati; chemicals and reagents; safety equipment; inspection and sampling tools and supplies; administrative equipment and computers; and furniture.
11. Procure and ship all equipment.

12. Organize and conduct a study tour to United States fertilizer regulatory agencies for the key administrative, inspection, and analytical staff.
13. Organize and conduct a training program in Albania for all administrative staff, inspectors, chemist, and technicians.
14. Provide assistance in the fertilizer laboratory start-up; initial inspection visits in Albania; and initial registration requirements and other administrative responsibilities.
15. Review implementation of Albania fertilizer regulatory system after 1 and 2 years or as required by the Albania regulatory authority.

It was estimated by the consultant that these activities, barring any unforeseen obstacles, could be completed in about 18 months and would cost about US \$512,000 in technical assistance, training, and equipment. Unfortunately, due to the internal problems in Albania during the life of the project, it was impossible to adhere to this estimated timeframe for accomplishing these activities. Additionally, completion of these activities, particularly the study tour and training activities, was contingent upon the Government of Albania enacting the Law and Regulations and identifying and appointing the regulatory staff. At the completion of the project, only the Analytical Supervisor and chemists had been identified.

Of the 15 major activities identified by the consultant, numbers 1-11 were successfully completed. Because only the Analytical Supervisor and chemists were ever identified during the project, a combination study tour and training program was prepared and conducted for the Analytical Supervisor. This program was conducted entirely in the United States. Therefore, activities 12 and 13 were only partially completed because there was no one identified to participate in the study tour and receive training in inspection and sampling and administration and enforcement. For the same reasons, activities 14 and 15 were not undertaken.

To summarize, all activities were completed except (1) a U.S. study tour for the Inspection Supervisor and the Fertilizer Administrator, (2) an in-country training program for the fertilizer inspectors and administrative staff, (3) fertilizer regulatory system start-up including laboratory, inspection program, and registration/administrative program, and (4) review of system implementation.

The objective of the United States study tour would have been to expose the Fertilizer Administrator and Inspection Supervisor to state fertilizer regulatory systems and how they function in terms of the (1) relationship between inspectors, analysts, and administrators; (2) responsibilities of the inspectors, analysts, and administrators; (3) flow of paperwork and the use of various forms to administer and enforce the law and regulations; and (4) relationship between the regulatory personnel and the fertilizer manufacturers and dealers.

The in-country training program for the inspectors would have included training in (1) theories of sampling and sample preparation; (2) the rationale for sampling and sample preparation techniques; (3) the rationale for the design of sampling and sample preparation equipment; (4) hands-on training in fertilizer inspection and sampling; (5) hands-on training in sample preparation; (6) inspector responsibilities and professionalism; and (6) safety in fertilizer inspection and sampling.

The in-country training for the Fertilizer Administrator and the administrative staff would have included training in (1) registration and licensing procedures; (2) fee collection procedures; (3) types of violations and the appropriate fines/punishments; (4) interpretation of analytical report forms; (5) use of investigational allowances and penalty system; and (6) label interpretation and approval.

The start-up of the regulatory system, including laboratory start-up, initial inspection visits, and initial registration of fertilizer dealers would have taken place concurrently with the in-country training.

The review of system implementation would have taken place at intervals of 1 and 2 years after the completion of activities 1-14 and would have coincided with the last 12 months of the project.

It is hoped that when the Government of Albania eventually enacts the fertilizer regulations and identifies a Fertilizer Administrator, administrative staff, Inspection Supervisor, and inspectors that USAID will give consideration to funding these unfinished activities.

## **Appendix 4**

### **Dealer Development, Training and Technology Transfer**

#### **Study Tours to the United States**

#### **October 1995 - December 1999**

A good working knowledge of fertilizers and proper use are essential for dealers to be effective in sales promotion, market development and offering improved customer services. Educating government officials, fertilizer dealers, and bankers is also considered essential for creating and maintaining an efficient fertilizer market. To satisfy this need, IFDC-Albania considers the following objectives to be important components of the Albania project:

- To increase knowledge about fertilizer products and use to enable dealers to provide better services to farmers.
- To strengthen the skills of dealers in fertilizer sales and market development to promote fertilizer use.
- To enhance fertilizer marketing management skills among dealers as a means to improve efficiency and profitability so that they devote more time and effort to marketing fertilizers.
- To educate policymakers about the benefits of a free, competitive marketing system, enabling them to identify obstacles impeding the development of a free market and remove those obstacles.
- To strengthen the capacities of lending institutions to increase financing for fertilizer trading.
- To establish contacts, build relationships, and secure agreements with U.S. firms.

Albanian candidates for participation in tours organized by IFDC were selected based upon demonstrated competence in their field and capacity for transferring skills and knowledge back to Albanian colleagues and customers. In addition to formal training, participants had ample opportunity to interact with key personnel at many U.S. based corporations, banks, institutes, laboratories, and universities.

**Agribusiness Management, Investment, and Promotion Internships  
Albanian-American Trade Association (AATA), Washington, D.C.  
Albanian-American Cultural Foundation (AACF), New York, NY**

The purposes of the internships for 9 participants were to:

**Albanian-American Trade Association (AATA)**

a) Create and facilitate an information exchange network among the Albanian American community; b) inform the Albanian-American community and other potential investors about the opportunities for agribusiness investment in Albania; c) assist the AATA to broaden its membership base focusing on trade and investment linkages in the agribusiness sector in Albania; d) plan and implement with AATA a trade, investment and training promotion conference in conjunction with the AACF, focusing on agribusiness trade and investment opportunities in Albania; e) work with AATA to expand and integrate its relationships and activities with other trade and investment promotion organizations and Albanian-American organizations.

**Albanian-American Cultural Foundation (AACF)**

a) Create and facilitate information exchange between AACF, other Albanian organizations, and American universities and foundations to promote financing of agribusiness training and education for Albanians in America; b) inform the Albanian-American community and other potential contributors about Albanian training and educational needs, particularly in the agribusiness sector; c) assist AACF to broaden its base of sponsorship within the U.S. to expand the agricultural training and educational opportunities for Albanians in the U.S.; d) work with AACF to expand and integrate its relationships and activities with human resource development institutions and other Albanian-American organizations; e) plan and implement a trade, investment and training promotion conference in conjunction with the AATA.

The internship experience prepared the participants to more effectively promote future agricultural development through trade, investment and training linkages between Albania and the United States.

**May 27-June 7, 1996**  
**Computer Simulation of Crop Growth and Management Responses**  
**University of Georgia, Athens, GA**  
**Participants: 3**

Participants were trained in DSSAT software and simulations. Case studies allowed the participants to observe application of the methods introduced during the workshop. The training was instrumental in preparing Albanian staff for the implementation and use of DSSAT in the Albanian context, thus providing a more detailed and scientific approach to crop growth and management responses.

**July 8-August 2, 1996**  
**International Training Program/Study Tour on Fertilizer Marketing Challenges**  
**Tampa, FL; Muscle Shoals, AL; St. Louis, MO; Chicago, IL; Kansas City, MO**  
**Participants: 2**

During the tour, participants received an overview of the U.S. fertilizer industry, commercial operations and information automation in relation to international marketing of fertilizer and agricultural inputs. Additional topics included new fertilizer production technology, and the roles of promotion, distribution and pricing in fertilizer marketing.

The participants attended the training program to learn concepts and practices of open, free and competitive marketing. The program included lectures and field trips. The participants exchanged ideas and experiences with Americans and participants from other countries representing both private and publicly owned agricultural input organizations. One of the participants, an agricultural radio journalist, will be significantly better versed in fertilizer marketing and as a result provide more comprehensive and accurate analysis of the sector for Albanian state radio.

The following sites were visited during the course of the study tour:

- IMC-Agrico, Lakeland, FL
- Florida Department of Citrus
- CF Industries, Plant City, FL
- Servico Cotton Ginning Company, Courtland, AL
- Leighton Tractor Supply Company, Leighton, AL
- Lange-Stegmann Company, St. Louis, MO
- Monsanto Company Research Center, Chesterfield, IL
- Farmland Industries, Kansas City, MO
- Clayton Point Fertilizer Company, Franklin, IL
- Sieben Hybrids, Geneseo, IL
- The Chicago Board of Trade

**August 3-17, 1996**

**Agribusiness Study Tour for AFADA Dealers and Bankers  
Alabama, Tennessee, Mississippi, Washington, D.C.**

**Participants: 14**

The study tour consisted of presentations and discussions in the IFDC Training Center, plus field visits and presentations with selected agribusiness firms, banks, USAID, staff of Mississippi State University, and the University of Tennessee.

The first day's presentations in the IFDC Training Center included an overview of fertilizer marketing in the United States and an agronomic presentation on principles of fertilizer use. In addition, participants held discussions on fertilizer and agricultural credit with a fertilizer company credit manager and a commercial banker.

"Classroom presentations" and discussions the second day focused on characteristics of successful fertilizer dealers, an introduction to marketing, and development of a business plan for dealers. Field visits were conducted the remainder of the days, providing a "hands on" experience for participants.

Sites visited during the tour included:

- Colonial Bank, Muscle Shoals, AL
- Lauderdale County Cooperative, Lauderdale County, AL
- Clemmons and Hamner Seed Company, Killen, AL
- Alabama Farmers Cooperative, Decatur, AL
- Dixie Agricultural Supply, Moulton, AL
- Classic Fruits Farm, Moulton, AL
- Golden Poultry Company, Russellville, AL
- Mississippi State University Seed Technology Laboratory
- West Tennessee Agricultural Experiment Station, Jackson, TN
- Hutson Agricultural Service, Jackson, TN
- Helm Fertilizer Terminal, Memphis, TN
- A&L Laboratories, Memphis, TN
- The Fertilizer Institute (TFI), Washington, D.C.
- American Feed Industry Association, Arlington, VA
- Transcontinental Fertilizer Company

**August 24-31, 1996**  
**Study Tour**  
**New York, NY, Washington, D.C.**  
**Participant: 1**

The participant visited the following organizations to identify opportunities for Albanian agriculture, and served as representative for the Albanian Ministry of Agriculture and Food. Contacts initiated will further promote trade and cooperation between Albania and the United States. The participant returned to his position in the Ministry of Agriculture and Food (MOAF), sharing the experience with other MOAF staff.

- Albanian-American Cultural Foundation
- Republic of Albania Mission to the United Nations, (meeting with Mr. Pellumb Kulla, Ambassador)
- Albanian-American Enterprise Fund
- Albanian-American National Council
- United Nations General Assembly
- Illyria Newspaper Headquarters
- Albanian Embassy
- USAID
- Albanian-American Trade Association

**October 4-12, 1996**  
**Soil Testing and Plant Analysis**  
**Kentucky and Alabama**  
**Participant: 1**

During the tour, visits were made to the Kentucky State Soil Testing Laboratory and the Auburn University Soil Testing and Plant Analysis facilities. Consultations with Kentucky fertilizer regulatory officials and Alabama fertilizer regulatory officials were also conducted during the week. The participant, director of the Albanian Soil Science Institute, acquired an understanding of modern soil testing procedures and technology. As a result, the Soil Science Institute will be positioned to develop and promote effective soil testing services at the IFDC/USAID sponsored analytical laboratory.

**October 18-25, 1996**

**Banking Study Tour**

**New York, NY**

**Participants: 14**

Participants in the Banking Study Tour to New York visited the following institutions to observe operations and consult with officials. The tour provided an overview of the U.S. banking industry, procedures and key institutions.

- U.S. Federal Reserve
- World Trade Center
- LBS Bank
- New York Stock Exchange
- Albanian American Cultural Foundation

**October 26-November 16, 1996**

**Soil Testing and Plant Analysis**

**Alabama, Arkansas, Washington, D.C.**

**Participants: 2**

During the study tour, participants met with various officials to discuss soil testing procedures and plant analysis, fertilizer recommendations, maintaining viable soil testing services, calibration and correlation work and synopses development.

Participants also observed laboratory procedures, operations, and computer systems. The participants, as a result of training, will be better equipped for the installation of new laboratory equipment and the development of soil testing procedures at the Albanian Soil Science Institute.

The following sites were visited during the course of the tour:

- IFDC Laboratory facilities, Muscle Shoals, AL
- Auburn University
- Arkansas State Delta Soil Testing Laboratory
- A&L Laboratories
- Milan Experiment Station
- USDA World Soil Resources, Washington, D.C.

**November 25-December 7, 1996**

**AFADA Trade Mission**

**New York, NY**

**Participants: 7**

The purpose of the trade mission was to acquaint key business leaders in the Albanian-American community with investment, trade and joint venture opportunities in Albania. Participants received an overview of the U.S. economy with a specific emphasis on banking, debt financing, fund raising, and capital markets.

The following organizations and institutions were visited during the mission:

- Albanian American Enterprise Fund
- Albanian American Cultural Foundation
- LBS Bank
- Former U.S. Ambassador to Albania, William Reyerson
- Vatra Group
- Albanian-American Civic League
- Key Congressional Representatives from New York
- New York Stock Exchange
- Merrill Lynch
- ACE Hardware
- Two Albanian Newspapers

The mission is most notable in that the participants, all AFADA dealers, were responsible for paying their own travel expenses. IFDC provided organizational and logistical support for the mission.

**November 15-23, 1997**

**Parliamentarian Study Tour**

**Alabama, Missouri, Illinois, Washington, D.C.**

**Participants: 7**

The ultimate goal of the training was to enable participants, members of the Albanian Parliamentary Commission on Agriculture, to gain a comprehensive understanding of how legislation supports private sector development and free market principles in agriculture. A primary focus included assessment of how legislation creates opportunity and establishes guidelines. Participants reviewed legislation on standards, health and safety regulations, and more sector specific legislation. To this end, training included consultations with members of agricultural committees in

American state legislatures, briefings with agricultural bankers, meetings with congressional members of the Albanian caucus and private farmers and agribusiness entrepreneurs. All activities in the training were intended to familiarize participants with and promote free market policies in agriculture. Public and private institutions visited included: The headquarters of the International Fertilizer Development Center, Muscle Shoals, AL; Lauderdale Farmers Co-op, Lauderdale County, AL; Goldkist Poultry, Russelville, AL; Co-Bank National Bank, St. Louis MO; the office of Senator Seiben, Springfield, IL; the Illinois State Legislature and Department of Agriculture, Springfield, IL; the Albanian Caucus, Washington D.C.; and The Fertilizer Institute (TFI), Washington D.C.

**July 1994-December 1997**  
**USDA/Soil Conservation Service**  
**Washington, D.C.**  
**Participant: 1**

Participant was responsible for the development and refinement of soil maps for Albania. Maps were produced using the U.S. Soil Taxonomy System of classification. The Benchmark Soils of Albania, Volume 1: Resource Assessment for Sustainable Land Use, and Benchmark Soils of Albania, Volume 2: Soil and Site Characteristics, were two of the major accomplishments of this project.

**May 10-22, 1998**  
**Various locations in Europe and the United States**  
**Germplasm Study Tour**  
**Participants: 4**

The Germplasm study tour took the participants to a number of locations in Europe (France, Switzerland) and the US (Colorado, Maryland), in an effort to become acquainted with new methods of seed conservation, documentation, and distribution of information. Additional focus was placed on potato seed, fruit trees and efforts to combat viruses.

**May 21-June 26, 1999**  
**Fertilizer Analysis Training**  
**Muscle Shoals, AL; West Lafayette, IN; Lexington, KY**  
**Participant: 1**

Intensive training for the participant in the laboratories of the International Fertilizer Development Center and other institutions, on analytical training for fertilizer regulatory systems was provided. The trainee obtained extensive knowledge of

regulatory laboratory functions within a regulatory system ( receipt and logging of samples, sample preparation, sample storage systems, sample flow through a laboratory, reporting procedures, laboratory quality control procedures, checks and re- checks etc.).

**July 25-August 2, 1999**

**Chicago**

**Food System Functionality (FSF) Conference**

**Participants: 2**

During the conference the following was discussed:

Functionality Methods (practical methods to assess physicochemical attributes of ingredients).

Whey Gelation. Whey Based Ingredient Functionality

Bioactive Foods

Food Product Functionality

Physicochemical Functionality

**September 4-18, 1999**

**Mississippi State University**

**Foundation Seed Training**

**Participants: 3**

Intensive training, through the IFDC sub-contract with Mississippi State University, was provided to participants by IFDC and other institutions, focusing primarily on foundation seed, both for wheat and maize. Participants were selected due to their involvement in both breeding and commercial production of seed in the private sector. The public sector representative was selected based on active participation in the field. The training contributed to the development of existing private seed sector businesses and will have a beneficial residual impact on the governmental seed institutes. The trainees obtained extensive knowledge from the training, all of which will benefit the private seed sector.

**Appendix 5**  
**Dealer Development, Training and Technology Transfer**  
**Trade Missions in Europe**  
**October 1995 - December 1999**

IFDC-Albania has been instrumental in supporting a number of trade missions to Europe. IFDC aims to expand the trade relations, knowledge and international experience of AFADA association leaders and key members. The missions are seen as vital to the rapid professional development of the association and also serve to complement the numerous IFDC sponsored trade missions and study tours to the United States. IFDC has extended its impact on the agricultural sector of Albania by also providing assistance to promising individuals and groups not directly related to AFADA.

**November 3-11, 1995**  
**Third AFADA Trade Mission to Italy**  
**Bologna**  
**Participants: 17**

Fifteen AFADA dealers, the AFADA Marketing Manager, and the AFADA Foreign Relations Specialist participated in trade mission. The purpose of the trip included initiating business contacts and visiting the Bologna Agricultural Fair. Meetings were held with representatives of the following firms: Enoagricola Rossi Peralisi (Agricultural Technology), Omas (Flour), BM2, SIAL, Polylux (greenhouse material), Nardi, Ferbi, Caprari (pumps). During the trip, AFADA dealers gave a press conference in conjunction with FAO. The company Produttori sementi Bologna provided 1800 kv of elite wheat seed including Centaur, Eridano and Idra. AFADA made an agreement with the Emilseme company to provide seed for demonstration plots in Albania. Also, The ISI Sementi company awarded four AFADA dealers with exclusive rights to purchase and distribute vegetable seed.

**November 1995**  
**Second AFADA Trade Mission to Bulgaria**  
**Sofia**  
**Participants: 12**

Eleven AFADA dealers and one AFADA Technical Development Specialist participated in the trade mission. Participants followed up on contacts from the previous mission, and continued to investigate additional opportunities for business. Veliko Terno Nova and Defko were among the companies contacted. A contract for the importation of potato and watermelon seed was signed.

**January 1996**  
**Green Week Fair**  
**Berlin, Germany**  
**Participants: 4**

The AFADA Executive Director, one AFADA dealer and two television journalists participated in the fair. Participants became better acquainted with agricultural input products, particularly those of AGRO-EVO. Participants established a trading relationship for the importation of pesticides, and were invited to provide fresh produce for consumption outside Albania. As a result of AFADA participation in the fair, contracts were signed between AFADA dealers and AGRO-EVO for the importation of crop protection chemicals. Importation of CPC's continued through 1996-1997. Furthermore, AGRO-EVO representatives scheduled a visit to Tirana, Albania for the specific purpose of meeting with and developing relations with AFADA dealers. The meetings were mutually beneficial established a basis of trust and understanding for future business.

**February 3-8, 1996**  
**Agricultural Trade Fair**  
**Thessaloniki, Greece**  
**Participants: 20**

Participants attending the Agricultural Trade Fair included seventeen AFADA dealers, the AFADA Marketing Specialist, one AFADA Technical Development Specialist and a translator. During the course of the fair, contacts were made with the following firms: Fruitere Dragoumanos (saplings), Eftimiodhis (fertilizer), Evrotris (seed), and Pro-Seed (seed, pesticides, fertilizer). As a result of AFADA participation in the fair, a number of AFADA dealers imported saplings and several dealers from the Korca region imported vegetable seed and fertilizer.

**May 1996**  
**AFADA Trade Mission to Turkey**  
**Istanbul, Anatolia, Izmir**  
**Participants: 15**

Twelve AFADA dealers, the AFADA Procurement Coordinator, the AFADA Procurement Consultant and a translator participated in the mission. The mission focused on acquainting AFADA dealers with Agri-processing companies operating in Turkey. Participants consulted with representatives from various milk, meat and biscuit processing companies.

**May 8-16, 1996**  
**Fourth AFADA Trade Mission to Italy**  
**Cezena, Milan, Torino**  
**Participants: 15**

Thirteen AFADA dealers, the AFADA Marketing Specialist, and the AFADA Foreign Relations Specialist participated in the trade mission. The primary purpose of the mission was participation in the Cezena Agricultural Fair. In addition, participants visited following firms to establish relations for future business: Framo Verona, Giada S.A.S. Milan, Merlo & Foca Torino, Furlani.

**June 25-July 5, 1996**  
**AFADA Trade Mission to Israel**  
**Haifa, Beer-Shevd, Tel-Aviv, Eliot, Jerusalem**  
**Participants: 15**

Six AFADA dealers, the AFADA Marketing Manager, the Marketing Consultant and a translator traveled to Israel in order to get acquainted with Israeli agriculture. AFADA dealers acquired seed samples for testing in Albania, and participated in a survey on greenhouse opportunities which assisted in the preparation of AFADA business planning. The following firms or institutions were contacted by the participants: Israeli Import-Export Institute, Haifa Chemicals Ltd., Bromide Group Co., Dead Sea Works Co., Makteshim Agan Co., Zeraim Gedera Co, and Kibbutz Co.

**September 1996**  
**Trade Mission, Serbia**  
**Belgrade**  
**Participants: 10**

Eight AFADA dealers, the IFDC Chief of Party, and the AFADA Technical Development Unit Manager participated in the trade mission. Participants attended a maize seed workshop and sought new suppliers of vegetable seed. AFADA dealers contacted the Zemun Polje Institute and the Smederevska Palanka Institute.

**December 16-18, 1996**  
**Trade Mission, Serbia**  
**Belgrade, Palanka**  
**Participants: 7**

The seven participants included five AFADA dealers, the Marketing Manager, and the IFDC Chief of Party. The group traveled to the Zemun Polje Institute in Serbia to sign a contract for 300 tons of maize seed. In addition, a number of vegetable seed samples were taken for testing in demonstration plots throughout Albania.

**January 18-24, 1997**  
**Green Week Fair, Germany**  
**Berlin**  
**Participants: 4**

Three AFADA dealers and the AFADA Executive Director attended the "Grüne Woche" Fair. The purpose of the trip was to initiate and develop trade contacts with importers from industrialized nations. The fair attracted a wide range of western firms. Contacts were made with the following: Bayer, Solo, Agrevo. The Solo company invited the Albanian participants to visit a store in Berlin, for consideration of truck purchases.

**January 28-February 7, 1997**  
**Agrotica Trade Fair, Greece**  
**Thessaloniki**  
**Participants: 19**

Seventeen AFADA dealers, the AFADA Procurement Specialist and the AFADA Technical Development Specialist attended the Agrotica '97 fair. AFADA dealers further acquainted themselves with new agricultural technologies,

machinery, and procedures. General Chemical Industries of Northern Greece, Pioneer, AgroEvo and Hellaseed were contacted during the trip.

**February 15-22, 1997**

**Business Development and Agri-Input Fair, France and The Netherlands**

**Paris, Amsterdam**

**Participants: 10**

Eight AFADA dealers, the AFADA Executive Director and a television journalist participated in the trip. The participants held meetings with representatives of the Xiras shipping company as well as the Hetema company, discovering additional sources of seed, equipment and fertilizer. Participants arranged visits to milk processing facilities, greenhouse producers and a delivery truck production company. Three thousand Mt of fertilizer was imported as a direct result of AFADA participation in the fair.

**February 22-March 2, 1997**

**Trade Mission, Serbia**

**Belgrade, Aleksinac, Guca, Kragujevac, Palanka**

**Participants: 7**

Five AFADA dealers, an AFADA Technical Development Specialist and an interpreter traveled to Serbia to finalize a contract for sugar beet and fodder beet seed. The participants were also actively looking for additional opportunities for trade and cooperation. The following firms or institutions were contacted: Zemun Polje Institute, Hybrid Institute, Grains Research Center, Smederevska Palanka, and the Agricultural Research Institute of Serbia.

**July 26-August 2, 1997**

**Trade Mission, France, Germany**

**Paris, Hamburg**

**Participants: 4**

Three AFADA dealers and the AFADA Procurement Specialist traveled to France and Germany. The purpose of the trip was to better acquaint the dealers with chemical companies and build a foundation for future trade relations. Meetings and discussions with senior representatives from the following firms were held: EverTrade, Intracom, and Helm.

**September 1-6, 1997**  
**European Seminar on Agricultural Extension Education**  
**Dublin, Ireland**  
**Participants: 2**

Albanian participants attended the 13th annual *European Seminar on Agricultural Extension Education*. The theme of the seminar was "Challenges for Extension Education in a Changing Rural World." More than 62 participants from Europe, the United States, and Africa attended the Seminar. IFDC's participants presented a speech entitled "Albanian Private Sector Extension Services." The unique and innovative role of AFADA dealers in Albanian Agriculture was highlighted and met with much interest by seminar attendees. The IFDC technical development advisor was afforded the opportunity to visit a number of dairy farms, agri-tourism directors in Clare County, and several rural extension services to better understand the practices of agricultural extension services in Ireland.

**September 1997**  
**Trade Mission**  
**Padova, Italy**  
**Participants: 9**

Five AFADA dealers, three members of the Albanian Horticulture Association and a pedagogue from the Agricultural University of Tirana attended the Flor Mart 1997 Fair. Participants had consultations with representatives from pesticide, seed, greenhouse, olive and grape sapling companies. A significant amount of time was spent in discussions with greenhouse material manufacturers, discussing Albania specific needs and constraints. Price, quality and other logistical matters were discussed at length. A diskette with information and company profiles was obtained for the AFADA library and is accessible to all interested AFADA dealers.

**September 14-21, 1997**  
**Trade Mission**  
**Serbia**  
**Participants: 6**

AFADA members continued development of relations with various research institutes, became better acquainted with products, and evaluated the characteristics of varieties based on compatibility with Albanian climatic and market conditions. The following research institutes were visited by the Albanian delegation: Institute for Sugar and Fodder Beet Seed, Aleksinac; Maize Research Institute, Zemun Polje; Fruit and Wine Seed and Sapling Center, Cacak; Potato Research Center, Guca; Small Grains Research Institute,

Kragujevac; Vegetable Research Center, Smederevska Palanka. The Albanian delegation had the opportunity to attend an agricultural fair during the mission, and scheduled follow-up meetings with Serbian businessmen for an upcoming Seed and Sapling fair " Realitet " to be held in Albania in early October.

**September 1997**  
**World Fertilizer Congress Attendance**  
**Ghent, Belgium**  
**Participant: 1**

The participant, a professor at the Agricultural Faculty of the University of Korca, attended the congress, which addressed the theme "Fertilization for Sustainable Plant Production and Soil Fertility". The congress focused on the quality and adequate use of fertilizer. The participant attended the congress in the capacity of official country representative for Albania, distributing brochures and answering questions from other delegates on the topic of agriculture and fertilizer use in Albania.

**September 22, 1997**  
**Embassy of Israel**  
**Rome, Italy**  
**Participant: 1**

The visit included meetings with Mr. Raphael Marov, Economic Advisor of the Israeli Embassy in Rome. Mr. Marov also serves as the Israeli representative in FAO. The aim of the meetings included articulating AFADA's interest in developing relations with analogous associations in Israel, including Chambers of Commerce, institutes and private businesses. Efforts were made to present the case for direct investment in the Albanian agricultural sector. Previously established relations with the Israeli Export Institute and AFADA were rekindled during the consultations, with Israeli representatives expressing an eagerness to continue relations.

**January 5-12, 1998**  
**Berlin, Germany**  
**Green Week Fair**  
**Participants: 6**  
**Expenses covered by AFADA Dealers**

The Ministry of Agriculture had a pavilion at the Fair. The AFADA dealers visited all pavilions at the fair, inquiring about seed, CPC's and pumps. Many foreign firms were contacted, with some contracts signed. The firms were from Italy, Germany and Holland. The visit of the Albanian participants was published in newspapers and broadcast on both local and international television.

**January 14-18, 1998**  
**Berlin, Germany**  
**Participant: 1**  
**Meeting of the Executive Committee of Agricultural Journalists**

The Albanian participant, as a member of the Executive Committee of the International Federation of Agricultural Journalists, attended the meeting, providing information on the Albanian experience. Upon return, the delegate reported the experience to Albanian media.

**March 1998**  
**Czech Republic**  
**International Communication Forum Workshop**  
**Participant: 1**

The workshop, attended by an Albanian agricultural journalist, focused on the role of media in freedom and democracy. The trip was covered extensively by Albanian media upon the participant's return.

**April 12-May 2, 1998**  
**International Seed Testing Association (ISTA) Congress**  
**Pretoria, South Africa**  
**Participants: 3**

Attendance at the congress aimed primarily to familiarize the Albanians with procedures related to the adoption, and publishing of standard procedures for sampling and testing seed. The participation of the Albanian delegates was of special interest in that they had the opportunity to demonstrate the progress that Albania has made in the rehabilitation of the seed industry over past years through the support of IFDC and its sub-contractor, Mississippi State University.

**May 8-12, 1998**  
**Prague, Czech Republic**  
**Workshop on "The Role of Media in Democracy: Freedom and Responsibilities"**  
**Participants: 3**

Training focused on the role of media in newly democratic states. Participants joined approximately 100 additional journalists from around the world, engaging in discussions and lectures on topics related to media influence. Costs associated with the workshop were paid by an Albanian company, IFDC provided organizational and logistical support.

**May 10-22, 1998**  
**Various locations in Europe and the United States**  
**Germplasm Study Tour**  
**Participants: 4**

The Germplasm study tour took the participants to a number of locations in Europe (France, Switzerland) and the US (Colorado, Maryland), in an effort to become acquainted with new methods of seed conservation, documentation, and distribution of information. Additional focus was placed on potato seed, fruit trees and efforts to combat viruses.

**June 3-5, 1998**  
**Birmingham, England**  
**Sixth European Conference on Social Economy**  
**Participant: 1**

The conference focused on the role of cooperatives, associations and foundations in a market economy. The Albanian participant was able to meet with delegates from Greece, Germany, France, Italy, Belgium, Sweden and England, discussing the Albanian experience. He presented the model of AFADA as a potential example of replication in other countries.

**July 3-8, 1998**  
**Berlin, Germany**  
**42nd Congress of the International Federation of Agricultural Journalists**  
**Participants: 5**

The Albanian delegation, the only representatives from the Balkans, delivered papers on agricultural journalism in Albania, noting that approximately 60 % of Albanians are to some extent involved in agriculture. Upon return to Albania,

the participants conducted several interviews on Radio Tirana and television to share lessons learned at the congress with the Albanian public.

**July 10-18, 1998**  
**Thessaloniki, Greece**  
**Trade Mission for AFADA Dealers**

AFADA dealers traveled to Thessaloniki to visit wholesale agribusiness dealers as well as various factories. The program included a 4 day visit to Athens to discuss opportunities with various fertilizer, CPC, irrigation and seed companies including Zeneca, Agro-Evo and Spirou-Spirou. The tour aimed at diversifying AFADA dealers' businesses, and resulted in an extensive dialogue with other dealers at the conclusion of the mission.

**September 1998**  
**Fiera Del Levante**  
**7 Albanian Participants**  
**Expenses covered by AFADA Dealers**

The fair aimed at establishing business contacts and new relations with various European companies involved in the agricultural sector.

**September 19-24, 1998**  
**Moscow, Russia**  
**Fourth European Conference on Higher Agricultural Education**  
**Participants: 2**

The IFDC Coordinator for Technology Transfer and a Short Term Consultant participate in the conference, where both presented a paper Continuing Extension Education of Agricultural Input Dealers in Albania. During the conference, the participants also distributed promotional literature for the Albanian Fertilizer and Agribusiness Dealers Association (AFADA).

**December 1998**  
**Vienna, Austria**  
**International Conference on Biotechnology, organized by UNIDO**  
**Participant: 1**

One Albanian journalist attended the conference, which focused on biotechnology and the role of media in presenting data to researchers and the public.

**January 1999  
Berlin, Germany  
International Federation of Agricultural Journalists Meeting  
Albanian Participant: 1**

The participant attended the meeting as Albania's representative. A presentation of Albania's situation was made, with much interest shown by other international participants. Contacts for further collaboration between Albania and other countries were made.

**January 26-31, 1999  
Thessaloniki, Greece  
15th International Fair for Agricultural Machinery Equipment and Supplies  
AFADA Members: 14  
Expenses covered by AFADA Dealers**

The AFADA/IFDC, Ministry of Agriculture and PHARE Program shared the same pavilion at the fair. The AFADA dealers visited all pavilions the fair and were most interested in fertilizer, seed, CPC's, irrigation and pumps systems. Many foreign firms were contacted and some contracts were signed. The firms were from Bulgaria, Greece, Italy, German and Holland. The press conference and the visit of the Albanian participants were published in newspapers, local and international television.

**March 15-19, 1999  
Brussels, Belgium and Milan, Italy  
Trade Mission  
2 Albanian AFADA Members  
Expenses are covered by AFADA Dealers**

The visit was made to the "Trade Inn" company in Brussels to contact and discuss relations in the fields of chemical fertilizers, CPC's and seed. The trip to Italy included visiting various cities and several companies selling pumps, seed, CPC's and polyethylene for greenhouses. After discussions with company representatives, some agreements were signed.

**August 26-September 6, 1999**  
**Krakow, Poland**  
**14th Annual European Seminar on Extension Education**  
**Four Participants**

The 14th European Seminar on Extension Education, titled " The Role of Extension Education in a Global World", was held at the Agricultural University of Krakow, Poland, from August 29 to September 4.

Four chosen topics follow:

- The role and challenges for agricultural extension services in implementing common agricultural policies and rural development-recommendations for Middle East and Eastern countries based on EU country experiences
- Agricultural extension in management of natural resources in a global context.
- Agricultural Extension in education, extension work and rural community leaders (the principles, strategies, management vs. leadership, development of curriculum and training courses, modern extension methods and techniques).
- Changes in agricultural extension systems (national institutions, current status, ownership, staff, sources of financing, goals and objectives, privatization process, and extension model approach).

**August 1999 (Tentative)**  
**Hamburg, Germany**  
**Trade Mission**  
**AFADA Members: 2**  
**Expenses covered by AFADA Dealers**

The visit intends to provide additional contacts for fertilizer and CPC's.

**September 1999 (Tentative)**  
**Thessaloniki, Athens, Greece**  
**Trade Mission**  
**AFADA Members: 2**  
**Expenses covered by AFADA Dealers**

The visit provided additional contacts for the purchase of fertilizer, seed, pumps, irrigation systems, greenhouse equipment, and CPC.

## Appendix 6

### Project Papers, Monographs, and Reports

0. "Supply, Distribution, and Marketing of Fertilizer and Other Key Agricultural Inputs" (October 28, 1991).
1. "Fertilizers in Albania: Situation, Analysis, and Recommendations" (February 1992).
2. *Rebuilding Albania's Fertilizer Sector: An IFDC/USAID Undertaking* (March 1993).
3. *Summary Report--Area Sampling Frame Survey in Albania* (March 26-June 25, 1992).
4. *The Socioeconomic Dimensions of Agricultural Production in Albania: A National Survey* (December 1992).
5. "Summary Report: Area Frame and Wheat Yield Surveys in Albania, 1993" (September 1993).
6. "Monitoring of Urea After Auction Sales in Albania" (December 1992).
7. "Albania--USAID/IFDC Emergency Fertilizer Import Program, April- June 1992."
8. "Assessment of Best Approaches for Disposal of USAID Trucks in Albania" (March 1993).
9. "Truck Operations: Emergency Supply of Urea Fertilizer in Albania" (August 1993).
10. "Truck Operations: Emergency Supply of Diammonium Phosphate (DAP) Fertilizer in Albania" (August 1993).
11. "Assistance to Fier Nitrogen Fertilizer Factory With Truck and Warehouse Operations" (September 1993).
12. "Financial Analysis in Support of the Proposed Disposal of USAID Trucks in Albania" (October 1993).
13. "Finance, Credit, Auction Sales, and Environmental Impact Phase One--Emergency Supply of Fertilizer to Albania" (December 1992).

14. "Executive Summary - Technical and Economic Evaluation of the Fier Nitrogen Fertilizer Factory in Albania" (May 1993).
15. "Technical and Economic Evaluation of the Fier Nitrogen Fertilizer Factory in Albania" (July 1993).
16. "Executive Summary - Technical and Economic Evaluation of the Lac Single Superphosphate Factory in Albania" (October 1993).
17. "Technical and Economic Evaluation of the Lac Single Superphosphate Factory in Albania" (December 1993).
18. "Briefing Notes - USAID-Funded Albania Fertilizer Subsector Restructuring Project" (November 1993).
19. "Technical and Financial Proposal - Support for Agriculture Restructuring in Albania (SARA)" (March 1993).
20. "Reinventing Albania's Fertilizer Sector" (June 1993).
21. "Entrepreneurial Development in Albania: IFDC's Experience in Establishing a Fertilizer Dealer Network in Post-Reform Albania" (December 1992).
22. "IFDC/Albania Project (Report to IFDC Board of Directors) - January 1991-October 1993" (November 1993).
23. "Quarterly Reports (October-December 1995 – October-December 1999)."
24. *Biznesi Bujqesor* (October 1995 – December 1999).
25. Project Completion Report, January-September 1995.
26. Slides for Southeast Europe Conference in Washington, D.C. (JJS), 1995.
27. Request for Grant--Sustaining the Restructured Fertilizer Subsector in Albania (October 1995-December 1997).
28. SARA Project--Scope and Impact of SARA Agribusiness (D. Wahlberg and G. Metcalfe).
29. Report on Visits to Fertilizer Plants at Dnieprodzenzhinsk and Severodonetsk in Ukraine, March 11, 1996 (J. W. Foster).
30. Trip Report--Short-Term Consultancy, Albania, January 6-February 16, 1996 (Ian Gregory).

31. Fier Nitrogen Fertilizer Factory (FNFF) Investment Analysis and Privatization Potential (Ian Gregory, March 12, 1996).
32. Trip Report--Tirana, Albania, February 11-March 2, 1996 (Tom Thompson).
33. Establishment of the Albanian National Seed Testing Laboratory (Mississippi State University), October 18-November 15, 1995, March 1996, and September 7-October 5, 1996.
34. The Burning of Sulfur in the Roasting Layer Furnace (January 1996).
35. Fertilizer Analytical Manual.
36. Fertilizer Inspection Manual.
37. Work of IFDC in Albania: 1991 Through March 1996.
38. Module I and II Manuscripts.
39. Nothing.
40. Assessment of the Seed Sector in Albania Private Sector Development - Report 1 (W. C. Couvillion, Mississippi State) (May 1996).
41. Analysis and Recommendations for Growth and Stability of the Albanian Fertilizer and Agro-Business Dealer Association (Channing A. Sieben) October 7, 1996.
42. SARA Project—Third Quarterly Report (July-September 1996).
43. Interim Evaluation of the Support for Agricultural Restructuring in Albania (SARA) Project (October 1996).
44. Case Study - Albanian Agriculture Adjustment Project (May 28, 1996).
45. Pandi Zdruli Monthly Reports.
46. Albanian Egg Industry Survey and Roundtable Report (David Hamblin) (February 1997).
47. Exit Report From Albania (Chan Sieben), February 28-March 16, 1997.
48. Albania - Progress and Pyramids: At the Crossroads, February 14-March 16, 1997 (John Currelly).
49. Strategic Planning - Exit report, February 28-March 16, 1997 (Chan Sieben).

50. Privatization or Joint Venture Assistance - Fier Nitrogen Fertilizer Factory (J. W. Foster, 1995)
51. Privatization or Joint Venture Assistance - Albpetrol Delvina Gas Field (J. W. Foster, 1995)
52. AFADA Njofton, Nos. 9, 10, 12, 13, 15, 16.
53. Albania: Agriculture Adjustment Project (I. Gregory, IFDC Web Page)
54. The Establishment and Development of an Agribusiness Trade Association - AFADA (I. Gregory, 1997).
55. "Land Resources of Albania" (Pandi Zdruli, November 1997)
56. "Establishment of the Albanian National Germplasm Conservation and Electrophoresis Laboratories, Phase IV, November 5-December 14, 1997 (Bennie C. Keith, MSU).
57. "Setup, Calibration, and Operation of the Albanian Electrophoresis Program for Crop Varietal Identification/Verification and Cataloguing of Germplasm - Phase 1 (November 25-December 18, 1997) and Phase II (January 15-26, 1998) (E. Brent Turnipseed, South Dakota State University).
58. "Rural Associations in the Face of Development Changes," AFADA publication (April 1998).
59. The Assessment of Perceived Training Needs of AFADA Dealers, June 1998, (Stavros Androulidakis, Ylli Bicoku, and Sabah Sena).
60. If It can Work in Albania . . . . Lessons of the IFDC Program (Waterman, August 1998).
61. An Evaluation of the Performance of Albania's Agricultural Sector in 1997 (J. Litschauer, July 1998).
62. Field Day brochure, Albania, June 22, 1998.
63. Overview of Activities and Achievements, 1992-1998.
64. IFDC dhe AFADA, Seminar Pune (in Albanian), Tetor 26-30, 1998.
65. Fara dhe Teknologjia e Saj (Book in Albanian, 1997).
66. Probleme te Transferimit te Teknologjise ne Ferme (Book in Albanian, 1997).

67. Aspekte te Drejtimit Financiar te Agrobiznesit (Book in Albanian, 1997).
68. Drejtimi i Fermes (Book in Albanian, 1997).
69. Pleherimi (Book in Albanian, 1997).
70. Role i Kimikateve dhe Pleherave ne Bujqesi (Brochure in Albanian, 1997).
71. Kultivimi i Pjeprit (Book in Albanian, 1998).
72. Katalogu Zyrtar i Farerave dhe Fidaneve (Book in Albanian, 1998).
73. Teknologji e Kultivimit te Perimeve – Shembulli i Lushnjes (Book in Albanian, 1998).
74. Pleherat e Perbera dhe te Perziera (Book in Albanian, 1998).
75. Semundjet Kryesore te Grurit dhe Luftimi i Tyre (Book in Albanian, 1998).
76. Jonxha ne Shqiperi (Book in Albanian, 1998).
77. Modelimet Bimore dhe Aplikimi i Tyre ne Shqiperi (Book in Albanian, 1998) Dr. Hiqmet Demiri.
78. Vezhgimi Bujqesor Vjetor (Book in Albanian, 1998) Ministry of Agriculture and Food, IFDC.
79. Manuali i Intervistuesit (Book in Albanian, 1998).
80. Vjetari Statistikor 1997, (Book in Albanian, 1998) Ministry of Agriculture and Food and IFDC.
81. Uji ne Kontinuitetin Toke-Atmosfere-Bime, (Book in Albanian, 1998).
82. Teknologjia e Kultivimit te grurit, (Book in Albanian, 1999).
83. Keshillimi Bujqesor, (Book in Albanian, 1999), Dr. Sabah Sena.
84. Teknologjia e Kultivimit te Luleshtrydhes, (Book in Albanian, 1999).
85. Teknologjia e Kultivimit dhe Perpunimit te Ullirit, (Book in Albanian, 1999).
86. Vezhgimi Bujqesor Vjetor (Book in Albanian, 1999) Ministry of Agriculture and Food, IFDC.
87. Manuali i Intervistuesit (Book in Albanian, 1999).

### *Brochures*

88. Laboratori i ri analitik i Institutit te Studimit te Tokave (Albanian, 1997).
89. Vezhgim Financiar i AFADA-s, (Albanian, 1998).
90. Instituti i Kerkimeve Ushqimore (Albanian, 1998).
91. Instituti i Kerkimeve Veterinare (Albanian, 1998).
92. Broshure e Arritjeve te IFDC-se ne Shqiperi, (Albanian, 1999).

### *Leaflets*

93. Germplasm Conservation Unit; (Both English and Albanian Versions).
94. Research Center for Rural Development; (Both English and Albanian Versions).
95. Field Demonstration Day at Technology Transfer Center in Fushe-Kruje.
96. How to Make an Efficient Use of Fertilizers.
97. AFADA Mission (Albanian and English versions).
98. DAP Usage.
99. Centauro Wheat Variety.
100. Bordeaux Mixture and Its Use.
101. Soil Testing Sampling.
102. New Wheat Varieties.
103. Maize and Rice Institute Maize Varieties.
104. Practical Agri-Technology of Wheat.
105. Analytical Lab of the Soil Science Institute; (Both English and Albanian Versions).
106. Germplasm Conservation Unit; (Both English and Albanian Versions).

107. Horticulture Albanian Businessmen's Association; (Both English and Albanian Versions).

108. Flour Producers' Union (Both English and Albanian Versions).

109. Albanian Oil Associations (Both English and Albanian Versions).

110. Albanian Meat Producers' Association (Both English and Albanian Versions).

111. Albanian Professional Beekeepers' Association (Both English and Albanian Versions).

112. Albanian Agricultural Mechanization Association (Both English and Albanian Versions).

113. Field Demonstration Day at Shkoder, Fier, Korçe, and Fushe-Kruje (Albanian).

114. Lander and Winner Maize Variety Cultivation Technology (Albanian).