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M. Peter McPherson Named IFDC's New Board Chairman



M. Peter McPherson

IFDC's Board of Directors elected M. Peter McPherson as its new Chairman on October 21, 2004.

In announcing the appointment of McPherson, Dr. E. Travis York, IFDC's outgoing Board Chairman, had this to say: "I am extremely delighted that Peter McPherson has agreed to chair IFDC's Board. I have known and worked with Peter for many years and know he will give outstanding leadership to the Center."

Concerning the announcement, Dr. Amit H. Roy, IFDC's President and Chief Executive Officer, said "On behalf of the management and staff of IFDC, I extend a very hearty welcome to Mr. McPherson. We look forward to his enthusiastic and dynamic leadership of our Board and to many more years of continued progress."

Because McPherson has had such a renowned career in international agricultural development, academia, the financial world, and governmental affairs, it is difficult to summarize his extensive experience in a few pages. Even though he has served three U.S. Presidents in various capacities and is widely respected by politicians of both parties, this down-to-earth, soft-spoken, unassuming man is proud of his roots. "I'm very proud of my family history," McPherson says. "I was born and raised on a farm near Lowell, Michigan, which has been in my family for more than 160 years."

McPherson's career has taken him far from that Michigan farm to the White House as Special Assistant to President Ford and Deputy Director of the Presidential Personnel Office during the mid-1970s. He also served with the Overseas Private Investment Corporation as Chairman of the Board during the 1980s; the U.S. Agency for International Development (USAID) as Administrator during 1981-87; and the U.S. Treasury Department as Deputy Secretary during 1987-89. He served in the Global Debt Restructuring Administration as Executive Vice President during 1989-90 and the Bank of America as the Group Executive Vice President of the Investment Management Group during the early 1990s. His most recent position was as Michigan State University's President from 1993 to early 2005.

Perhaps a venture that brings McPherson the most satisfaction is his service as co-Chairperson of the Partnership to Cut Hunger in Africa, whereby he is leading the effort to bring

together forces to uplift Africa. McPherson understands that "the real resource in the developing world is the desire of people to get ahead." He knows the value of agriculture's contribution to the betterment of human welfare. In his words, "Whenever a prosperous agriculture sector generates a dollar of income in developing countries, three dollars of rural non-farm income are generated." McPherson emphasizes that the "judicious deployment of biotechnology and other improved technologies could lead to an agricultural revolution in Africa even more dramatic than the 'Green Revolution' of the mid-twentieth century."

McPherson serves as the chair of the Board for International Food and Agricultural Development (BIFAD). BIFAD advises the USAID Administrator on agricultural development priorities and issues. Additionally, he chairs the Advisory Board to the Secretary of Energy. He is a director of Dow Jones and Company, the publisher of the *Wall Street Journal*.

After working his way through MSU, McPherson received a B.A. degree in political science in 1963. During the intervening period (1964-65) his interest in fighting world hunger was sparked when he worked as a Peace Corps volunteer in Peru by helping begin a U.S. school feeding program. In 1967 he received an M.B.A. degree from Western Michigan University and in 1969 a Juris Doctorate from the American University Law School. ♦

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IFDC is a public international organization (PIO), governed by an international board of directors with representation from developed and developing countries. The nonprofit Center is supported by various bilateral and multilateral aid agencies, private foundations, and national governments. IFDC focuses on increasing and sustaining food and agricultural productivity in developing countries through the development and transfer of effective and environmentally sound plant nutrient technology and agribusiness expertise.

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IFDC Assists Wildlife Conservation in Malawi

In September 2004 the Wilderness Safaris, a private sector tour company that manages the Liwonde National Game Reserve, approached IFDC for assistance. The Reserve is southern Malawi's most beautiful park, situated on the Shire River. The company was concerned about poaching in the park since it is damaging the park's natural flora and fauna, which in turn is affecting tourism. Tourism is Malawi's second most important foreign exchange earner after tobacco.

The Managing Director of the Wilderness Safaris explained that most poaching is carried out by villagers living near the park's boundary because they are very food insecure and lack income-generating employment. He thought that if IFDC could stimulate profitable agricultural activities near the park, it would substantially reduce poaching.

IFDC staff visited the park in October 2004 to conduct a participatory rural appraisal and to assess the possibility of establishing agricultural activities near the park. A meeting was conducted with staff from the Ministry of Parks and Wildlife and the Ministry of Agriculture and Extension Development, village headmen, and even an ex-poacher who has now become a lead farmer.

The assessment revealed a high incidence of poaching of fish, animals, and vegetation; the intermittent operation of an electric fence surrounding the park; and a lack of teamwork among the park staff, agricultural staff, community development workers, and the general public. The assessment discovered that the main reason for food insecurity was low soil fertility; poor crop production technologies; low crop yields; crop damage by wild animals; lack of credit facilities for farm inputs; low rainfall; and lack of agricultural inputs—seeds, fertilizer, and crop protection products (CPPs). Concerning inadequate income, the assessment revealed a lack of organized markets for cash crops and a lack of credit facilities for income-generating activities.

IFDC proposed several interventions, which are being carried out. IFDC and its partners conducted an on-farm practical training workshop for 37 farmers. Subjects included ridge and plant spacing, planting methods, the importance of hybrid maize seed, basal and top dressing fertilizer types, fertilizer application methods, the importance of weeding, and sourcing of inputs.

Following the field demonstration, input packages were distributed to the farmers. These packets contained 1.5 kg of hybrid maize seed, 10 kg of compound fertilizer as basal fertilizer applied at planting, and 10 kg of urea fertilizer as a top dressing. Illustrated leaflets in the local language showed exactly how to use the inputs. The team recommended that guard rows should be planted along the park fence to create a barrier against elephants and other wildlife.



Costa Mwale, IFDC Agronomist, demonstrates the importance of contour ridging to farmers during a field demonstration.

Photo by IFDC/Malawi

(Continued on page 3)

(Continued from page 2)

The farmers were urged to increase their production of cash crops such as tomatoes, cotton, and onions. The ex-poacher now grows high-quality vegetables. A year's income from this commercial activity has enabled him to buy a radio and a cell phone and to build a small house. It would have been impossible for him to purchase these items on the money he used to earn from poaching.

To provide agricultural inputs near the area, IFDC recommended that prospective inputs dealers be identified nearby so that farmers would not have to travel a great distance to purchase fertilizer and other essential inputs.

This rather unusual activity of IFDC has brought together wildlife conservation, private sector assistance, and agriculture through technology transfer and thus demonstrates the valuable synergies of cooperation among diverse players. As a result, Malawi's environment will be protected, poor people will receive an income, and tourism is ensured a secure future. ♦

Kyrgyz Republic Hosts Major Central Asian Agricultural Event

Osh, Kyrgyzstan was the site of a major Central Asian agricultural event during December 2-4, 2004. The 3-day Ferghana Valley International Agro Expo attracted approximately 3,000 attendees from 14 countries. Participating countries in the Expo included Israel, India, Malaysia, Netherlands, United States, Turkey, Germany, Belarus, Italy, Moldova, Russia, Kazakhstan, Uzbekistan, and Kyrgyzstan. Participants included farmers; dealers; investors; Parliament members; Ministers of Agriculture; ambassadors; manufacturers, distributors, and suppliers of agricultural inputs, machinery and parts, processing equipment, and new technologies and services; international donor representatives, and other officials.

The Expo was cosponsored by the Ministry of Agriculture, Water Resources, and Processing of the Kyrgyz Republic and the Kyrgyz agricultural trade association—the Association of Agri-businessmen of Kyrgyzstan (AAK), consisting of 170 dues-paying members. AAK champions the provision of high-quality and high-yielding seeds, fertilizer, crop protection products and other inputs needed by the agricultural community. The association also provides services and information on modern technologies to farmers, creates conditions for the production of high yields, and promotes an increase of living standards of the population in rural areas of Kyrgyzstan.

The Agro Expo presented a broad range of agricultural products including equipment, seeds, fertilizers, crop protection products, and numerous other supplies needed by the agricultural sector in the region. This event opened marketing opportunities to all companies exhibiting their products. Agro-Expo exhibitors made more than 650 new contacts. For example, a Belarussian tractor company expressed a strong interest in setting up a distributorship in southern Kyrgyzstan. A local exhibitor made an agreement to export 10,000 rose plants to the Netherlands next year. An Israeli drip irrigation company signed a contract with a greenhouse growers' association. In addition to the trade show, eight seminars were conducted by international suppliers and agricultural professionals on a wide variety of topics.

In conjunction with the Agro Expo, the National Seeds Grains Council of Kyrgyzstan hosted a regional seed grain conference. ♦

Photo, IFDC/Kyrgyzstan



Nukok Potato Cooperative (an AAK member) proudly displays their potato seed.

IFDC/Kyrgyzstan Photo



The AgroExpo attracted visitors from 14 countries. Pictured here are: Dr. Amit H. Roy (left), IFDC President and CEO; Ms. Aziza Yuldasheva, IFDC Kyrgyz General Manager and AAK Executive Director; Dr. Ed Runge, IFDC Board Member; and Scott J. Wallace, Chief of Party, IFDC/Kyrgyzstan.

Togolese Farm Family Benefits From Soil Fertility Improvement Project

IFDC's Integrated Soil Fertility Management (ISFM) Project has developed an agribusiness development approach that focuses on agricultural intensification processes and hinges on both institutional and technical innovation. It aims to improve access of farmers and traders at the grassroots to inputs, credit, markets, and information. The ISFM project is being implemented by members of the AISSA network—Agricultural Intensification in Sub-Saharan Africa. The AISSA network covers 7 countries—Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria, and Togo—and involves more than 30 nongovernmental and governmental organizations as support agencies. ISFM farmer-based organizations are established in more than 130 villages.

The article below features a farming family from southern Togo that has benefited from the improved technologies developed in collaboration with a farmer-based organization. The initiatives allowed the family to improve their soils, intensify their production, and diversify the family sources of income.

The soils of southern Togo have become seriously degraded during the past three decades. The conventional fallow method, which allowed the soil to regain its fertility, is no longer possible due to the recent increased demographic pressure, that is, 300 people per square kilometer. Farmers in this region now practice continuous cropping on small plots of about 1 ha; therefore, the soils are becoming increasingly poorer.

One of these farmers is Ametoko Houndadika, who lives in the maritime region of southern Togo. He grows maize, cassava, sweet potato, and cowpea on his 8-ha farm. After hearing about a newly formed farmer association, Ametoko's wife Akossounsi decided to join. Because of its location near a main road, her one-fourth-hectare plot, which she was granted by her husband, was selected as a learning plot for a project that focuses on improving soil fertility, implemented by IFDC in collaboration with local partners' organizations. "To learn more about the improved technologies, I decided to help my wife on her farm," says Ametoko. "I learned about several improved technologies that involved the leguminous plant, mucuna; Togo's phosphate rock; and mineral fertilizers for the production of maize and cassava."

When her field was serving as a learning plot for the project, Akossounsi applied Togolese phosphate rock before sowing her maize seed. During the long rainy season, she tested the combination of maize and *mucuna*, a legume that adds nitrogen to the soil, and also used mineral fertilizer containing nitrogen, phosphate, and potassium. After harvesting the maize, the field was covered with *mucuna*



Ametoko and his family

Photo by Francis Tamelokpo

(Continued on page 5)

(Continued from page 4)

during the short rainy season. During the dry season, the soil was covered with a thin layer of dry *mucuna*. Minimal plowing was done at the beginning of the following rainy season. Later, she introduced cassava in combination with maize and applied mineral fertilizer on both crops on the same field. A crop rotation system was established: maize-*mucuna* in one year and maize-cassava in the other while still applying mineral fertilizer. After 4 years, her maize yield increased from 1 t/ha to 4 t/ha and the cassava yield increased from 3t/ha to 27 t/ha.

After observing his wife's good results, Ametoko started applying mineral fertilizer to his maize crops in association with *mucuna*. "The yield increases on my wife's farm have convinced me that it is better to use *mucuna*," says

Ametoko. "Through the experiences of my wife, I have also learned about the use of household refuse, manure, groundnut and crop residues to improve soil fertility. Before becoming involved in the project, I was planting in no specific pattern, and the crop density was very low. I rarely used fertilizers, and my maize yields were generally below 1 t/ha. By using the new technologies, I now obtain more than 4 t/ha."

Being a member of a farmer association not only helps Akossounsi and other members (men and women) to participate in learning sessions, rural workshops, and field days but also to acquire inputs and have access to output markets. Because access to markets is a main constraint in this region, the association has formed unions that allow the farmers to negotiate with policy makers, input suppliers, and traders.

The unions try to influence decisions regarding input supply and the marketing of agricultural products by lobbying for the interest of producers.

In addition, the association provides a storage facility for all members. With the stored products serving as a guarantee, members can access credit without having prior savings at the local cooperative credit and savings bank. Part of the credit is provided in the form of mineral fertilizer coupons and the other part in cash. The cash is often used for domestic needs and school fees for children. However, the loan must be paid off in 6 months. The stored part of the harvest is only removed from storage and sold when prices become attractive. The association sells the stocks to help pay off the loan, and the rest goes back to the members. The coupons are used to ensure access to fertilizers at the

main supply centers.

Ametoko emphasizes the technologies he uses not only help him to keep the soil fertile but also contribute to increase food production and family incomes. Therefore, in 1 year he can generate about 3,000,000 CFA (US \$5,882.00) from sweet potato and 900,000 CFA (US \$1,765.00) from maize. His income now enables him to meet the demands of his children who are attending school. He owns a nice house in the village, two motorbikes, and a corn mill. His activities ensure a steady income. Recently, he bought a small truck that transports agricultural products to various regional markets. In the future, he plans to open an account at the credit and savings bank to save money and be able to access credit. ♦

Fertilizer International Selects Dr. Norman Chien for Inaugural Pierre Becker Award

Fertilizer International presented its inaugural Pierre Becker Memorial Award to IFDC's Principal Soil Chemist on August 4, 2004. The citation on the award that was made to Chien by John French, Publisher of *Fertilizer International*, read as follows: "In recognition of your outstanding contribution to the understanding, exploitation and

application of phosphate resources, the Publisher, Staff and Editorial Board of *Fertilizer International* magazine honor Dr. Norman S. H. Chien. The quality, originality, and practical application of your research have justly earned the lasting admiration of your many friends in the fertilizer world."

The occasion honored the memory of a man who made an immeasurable contribution to the knowledge of phosphates and the benefits they can provide for mankind. In particular, Pierre Becker enjoyed worldwide renown as the author of the book, *Phosphates and Phosphoric Acid*. This book is acclaimed as the standard volume for all those



Dr. Norman Chien receives the first Pierre Becker award. Pictured from left are: Mr. Mark Evans, Editor of *Fertilizer International*; Mrs. Margaret Chien; Ms. Marie-Louise Becker; Dr. Norman Chien; and Mr. John French, Publisher of *Fertilizer International*.

with an interest in the phosphate sector. It provides the most comprehensive coverage of all aspects of the technology relating to the processing of phosphate rock and the production of downstream phosphate fertilizers.

As French recalled, "Pierre Becker was . . . not only the pre-eminent authority on phosphates and processing but was a tireless advocate

(Continued on page 6)

(Continued from page 5)

on advancing the understanding of phosphates and phosphate fertilizer technology. Above all, he was a man of the deepest humanity who commanded the most profound professional respect and inspired the greatest affection among all those who had the honor to work for him.”

As winner of the first Pierre Becker Memorial Award, Chien very much upholds the values that Pierre Becker had set. Chien is considered by his peers worldwide to be an expert in the use of phosphate rock and modified phosphate products to increase food production. In a career with IFDC that began in 1975, Chien has conducted basic and applied research that involves laboratory studies on the reactions of phosphate rock and modified phosphate products in soil and the evaluation of their agronomic effectiveness as influenced by sources of phosphate rock, soil properties, and crop species. He has conducted numerous projects on the agronomic evaluation of phosphate rocks from Tunisia, Algeria, India, Jordan and Christmas Island. Chien has also conducted valuable research on the issue of cadmium in phosphate fertilizers applied to soils used for crop production. Chien has published more than 100 scientific papers on the use of phosphate fertilizers in crop production and has attended many national and international conferences. ♦

South Africa Workshop on Agricultural-Input Regulatory Systems Has Wide Implications

IFDC organized an international workshop on regulatory issues regarding agricultural inputs during August 16-20, 2004, in Pretoria, South Africa. The main objective of the workshop was to improve understanding of the key issues involved in designing legislation and regulatory systems for fertilizers, seeds, and CPPs. IFDC is a leader in the field of developing agricultural-input regulatory systems at the national and regional levels, including western and southern Africa, the Balkans, and central Asia. The Fertilizer Society of South Africa, the South African National Seed Organization, and CropLife South Africa were co-sponsors of the event.



The program included presentations and discussion on: (1) technical aspects of designing appropriate laws and regulations for fertilizer, seed, and CPPs; (2) critical components of legislation in regional and international harmonization efforts, and the state of regional harmonization efforts underway in Eastern/Central, Western, and Southern Africa; (3) case studies of U.S. and European Union systems; and (4) field trips to fertilizer, seed, and CPP-testing laboratories and observation of sampling and inspection practices. The participants compared the situations in their countries, learned lessons from counterparts, and understood the economics and benefits of effective and harmonized regulatory regimes.

The training workshop was aimed at policy makers, government officials in charge of establishing and implementing agricultural input regulatory regimes, leaders of private sector agricultural input trade associations that have an economic interest in these policies, and representatives of regional organizations charged with harmonizing such regulations and removing barriers to trade.

Thirty-three participants from 12 African countries and Pakistan and Haiti attended the workshop. The main regional sub-Saharan African organizations were represented. Projects funded by USAID, Netherlands Ministry for Development Cooperation (DGIS), the Food and Agriculture Organization (FAO) of the United Nations, and South African Development Community (SADC) sponsored participants.

Recommendations

The participants offered the following conclusions and recommendations:

- National governments and regional organizations should involve the private sector agricultural-input dealers and trade associations throughout the development and implementation process of policies and regulations.

(Continued on page 7)

(Continued from page 6)

- African countries should adapt existing model programs that ensure compatibility with open markets and regional harmonization.
- Regional organizations, with assistance from IFDC, African Seed Trade Association (AFSTA), CropLife and others, should formulate guidelines that can be shared with Ministers of Agriculture to help support the regulatory level.
- The South African experience and the three national agricultural input trade associations represent a great source of help for other countries, and they are willing to help.
- The key country and regional players should encourage government and donor support for technical assistance by IFDC in helping establish effective systems.
- This workshop should be followed with training programs organized along input type and regional lines. National governments and regional organizations should seek a donor to support the development of agricultural input markets and regulatory systems.
- Countries should find a reasonable balance between phytosanitary control and the need for the marketing and timely availability of new seed varieties.
- Countries should capitalize on existing African biodiversity in seed programs, including hybrids and genetically modified organisms. There is a need to learn from traditional technologies, for example, the indigenous bio-pesticides and conservation technologies, which are overlooked.
- More information is needed on making the systems sustainable through fees.
- The various approaches to harmonization being carried out in the three sub-regions of Africa should be documented.
- A forum should be created so that the three sub-regional initiatives could regularly meet to share experiences and report on progress. The forum could also be used at the continental level for the harmonization initiative and should be linked to the New Partnership for Africa's Development (NEPAD).
- Ex-ante and ex-post impact studies should be conducted on the harmonization process. This would strengthen the lobbying efforts for harmonization in the continent.

IFDC will cooperate with the various organizations represented at the workshop to advance the development of agricultural-input markets and regulatory systems that encourage private sector investment, open markets, availability of improved technologies to farmers, and regional harmonization. ♦

Work in Azerbaijan Has Humanitarian Sideline

In addition to its formal activities, the Agro-Input Market Development in Azerbaijan (AMDA) project has a side-line that has produced much good will for the project. AMDA has assisted the Lenkeran orphanage by providing fertilizer, seed, and CPPs for their garden. Vegetables and fruits are grown by the children of the orphanage who learn the basics of agricultural production. The produce is then used in the orphanage

(Continued on page 8)

Photo by Ylli Bicoku, IFDC/AMDA



IFDC/AMDA field coordinator Adalet with dealer Agagul Huseynov checks the germination of potato.

(Continued on page 8)

(Continued from page 7)

kitchen to improve the children's diet. The children have planted trees such as apple, pear, quince, plum, nut, and various citrus varieties. In the vegetable garden they grow cabbage, tomatoes, watermelon, sunflowers, corn, spices, garlic, and beets.

The goal of the 3-year AMDA project is to improve agricultural input marketing and accessibility in Azerbaijan. AMDA has already produced significant results. It has provided business and technical training and access to credit and helped form a trade association of agricultural input dealers. Through this forum, association members are working to improve agricultural input policy, laws, and regulations and to provide information and other support services for members and their farmer clients. In addition, field demonstrations, greenhouse support, and technology transfer programs are being offered to dealers and their farmer clients.

In April 2004, AMDA assisted with the creation of the Agricultural Input Dealer Association (AKTIVTA), which was the first association of its kind to be officially registered in Azerbaijan, and the first organization supported by a USAID project partner. The 92 association members are supplying more than 42,000 Azerbaijani farmers with farm inputs on a regular basis. During the third year, 14 agricultural input dealers received credit amounting to \$81,000, and project clients invested \$152,000 of their own resources to expand business, not only in input chain but also in greenhouses for production of value-added vegetables. Project-organized field days to foster improved apple production, for example, stimulated higher quality production, with the result that 80% of the apples were sold to the Russian market within 2 weeks after harvest.

One of the beneficiaries of the Azerbaijan project was potato farmer Matlab Mamedov, who increased his crop yields by 50% since AMDA taught him how to use new fertilizers and drip irrigation. Mamedov grows potatoes on 15 hectares of land in southern Azerbaijan. During 2003 he participated in an AMDA workshop that introduced farmers to new fertilizers and drip irrigation, helped them organize into associations, and linked them to markets. By using triple super phosphate, which Mamedov learned about in the workshop, he realized a 50% increase in yield, improved his storage practices, and learned how to prevent diseases in potatoes.

AMDA helped the Azeri dealers participate in trade events in Turkey, Israel, and Georgia. In early 2004 the association participated in a large fertilizer trade fair in Moscow.

Although AMDA's main purpose was to inform agricultural input dealers and farmers about the use and quality of available fertilizers, the program also held workshops on managing farm expenses, dealing with financial institutions to access credit, establishing the trade association, evaluating the cultivation of vegetables and the orchard production of apples. The project also promoted the publication of eight best-practices manuals that serve as references for farmers. ♦

Ghana Project Yields Promising Results

IFDC recently completed a 2-year project in Ghana, which was designed to provide technical and business training to agricultural inputs dealers and importers to supply agricultural inputs in a competitive manner. The primary objective was to expand the number of trained dealers and build their capacity to provide extension services to sub-dealers and farmers, to strengthen the infant input dealer trade association formed in July 2003, and to serve as a bridge to the new Mission projects for agricultural development. The secondary objective was to train public sector extension agents to stimulate demand for inputs at the farm level.

During the past 2 years, the Ghana Agri-Input Market Strengthening (GAIMS) project trained 420 agricultural inputs dealers; they included general inputs dealers, seed dealers, and cocoa inputs dealers. Of the total trained dealers, 21% were women. The objective was to equip the dealers with adequate technical and business knowledge to operate their businesses profitably.

The project trained 60 public agricultural extension agents during the past 2 years. The training of extension agents was designed to increase the technical knowledge of extension agents to a level that is equal to that of the dealers so that uniform technical messages will be delivered to farmers.

GAIMS fostered cooperation and collaboration between IFDC and other development agencies. Through the project, IFDC cooperated with the Ministry of Food and Agriculture (MOFA), GTZ, TechnoServe, and the Environmental Protection Agency. The strategy was to share costs, leverage funding, minimize duplication of efforts, and ultimately enhance synergies between development agencies.

The Ghana project supported the building of a strong national association of inputs dealers to safeguard their interests. The project nurtured the formation of the Ghana Agricultural Inputs

(Continued on page 10)

Announcements

Mr. Soumaïla Cisse was appointed to the IFDC Board of Directors during October 2004. He is Chairman of the Commission, West African Economic and Monetary Union (UEMOA). Previously he served as Commissioner of the Department of Fiscal, Customs, and Trade Policies, UEMOA; Minister of Equipment, Land Planning, Environment and Urbanization for the Republic of Mali; Minister of Finance and Trade, Republic of Mali; and Secretary General, Office of the President, Republic of Mali.

Mr. Patrick J. Murphy was appointed to the Board of Directors during the October 2004 meeting. Most recently he served as Senior Bank Advisor, Economic Policy Group, Coalition Provisional Authority in Baghdad, Iraq. Mr. Murphy previously served in various capacities in the Bank of America, including Director and Manager of the International Private Banking Office; Senior Marketing Officer, Global Network Initiative; Senior Loan Syndicator, Latin American Syndications Group; Senior Debt Negotiator, Global Public Debt Management; Country Senior Credit Officer, Republic of Panama; and Credit Administrator, Central America and Caribbean Regional Office.

Dr. Juan M. Estrada joined IFDC in August 2004 as Dealer Development/Training/MIS Specialist for the USAID-funded Malawi Agricultural Input Market Development Project. Dr. Estrada received a Ph.D. degree in international development and the economics of agricultural food systems and an M.S. degree in agricultural economics from Michigan State University. He received a B.S. degree in agronomy from Universidad de San Carlos, Guatemala. Dr. Estrada most recently served as Senior Scientist - Trade Economics with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in Malawi. ♦

IFDC 2005 International Training Calendar

Training Program/Workshop	Dates	Location	Program Fee, US \$	Late Program Fee, US \$
1. Innovative Management Practices for Nitrogen Use Efficiency	February 13-17	Dhaka, Bangladesh	1,000	1,200
2. Integrated Soil Fertility Management	April 11-15	Accra, Ghana	1,000	1,200
3. Market Information Systems	May 9-13	Accra, Ghana	1,000	1,200
4. Nitrogen Fertilizer Production Technology Workshop (on behalf of IFA)	June 13-17	Maastricht, Netherlands	2,100 (IFA Members) 2,200 (non-IFA)	2,200 2,300
5. Fertilizer Marketing Management	September 5-16	Bangkok, Thailand	2,000	2,300
6. Phosphate Fertilizer Production Technology Workshop (on behalf of IFA)	September 26-30	Brussels, Belgium	2,100 (IFA Members) 2,200 (non-IFA)	2,200 2,300
7. Competitive Agricultural Systems and Enterprises (in French)	November 14-18	Ouagadougou, Burkina Faso	1,000	1,200

Note: A non-refundable deposit of \$200 is required with each registration. The deposit will be credited towards the program fee which is due 4 weeks before the program is scheduled. Thereafter, a *late fee* will apply. The program fee, less the deposit, will be refunded for cancellations made 2 weeks before the commencement of the program; thereafter, 90% of the paid fee will be returned and 10%, in addition to the deposit, will be charged to cover administrative costs.

IFDC reserves the right to cancel any program or change the dates and/or venue of any program without liability for compensation.

(Continued from page 8)

Dealers' Association (GAIDA). GAIDA mobilized and registered 308 dues-paying members. Available records indicate that the trained dealers served more than 400,000 farmers with agricultural inputs.

The project has had a profound impact on Ghana's agriculture sector. The private-sector agricultural input markets grew and farmers used more inputs. Imports and use of fertilizer imports for Ghana increased from 31,000 tons in 2002 to 48,000 tons in 2003 to 61,000 tons in 2004. On average the dealers trained by the project increased their sales of fertilizer, CPPs, and seeds from \$89,501 in 2003 to \$124,421 by June 2004. In 2005 farmers will likely purchase an additional \$9 million in inputs from GAIMS-trained dealers. The extension agents trained with the dealers in 2004 will stimulate demand for inputs by providing uniform and accurate technical messages.

Ghanaian farmers increased their purchases of modern inputs in 2004 for maize, rice, and cowpeas by about 11%, 15%, and 26%, respectively, and increased their output by 176%, 155%, and 69% for those crops, respectively, compared with 2003.

Eighty-eight percent of the farmers interviewed now have better access to agricultural inputs. The average distance traveled by farmers during 2003 to purchase inputs was 38.5 km and took 72 minutes. During the 2004 season, the average distance traveled was reduced to 27.6 km and took an average of 58 minutes. ♦

Nigeria Project Produces Significant Impact

Since September 2001 IFDC has been undertaking a 3-year project in Nigeria called the Developing Agricultural Input Markets in Nigeria (DAIMINA) project. The project focused on three main activities of (1) agricultural inputs policy and regulatory reforms, (2) private sector capacity building in agricultural marketing, and (3) strengthening of a market information system. The project funded by USAID is being implemented in collaboration with the Federal Ministry of Agriculture and Rural Development (FMARD) and four state governments.

IFDC has assisted FMARD in the revision and upgrading of the Fertilizer Board Act and the Agricultural Seed Act. DAIMINA organized a national agricultural inputs policy workshop. The project helped organize a national-level Fertilizer Producers' and Suppliers' Association of Nigeria (FEPSAN) and four state-level agricultural dealers' associations to encourage policy dialogue and business development. In addition, DAIMINA introduced the fertilizer voucher scheme on a pilot basis as a substitute for direct subsidy. A 558-member agricultural input and commodity chain—comprising agricultural retailers, wholesale dealers, producers, and importers of agricultural inputs; grain merchants; extension agents; and other key players—has been established in the project area. The DAIMINA team trained 350 dealers, who serve 750,000 farmers. Agricultural dealers trained by DAIMINA staff realized an annual growth of 38% in business turnover, and 40% of them gained access to more than \$500,000 in commercial credit. These dealers registered a 64% increase in fertilizer importation during January-September 2004, as compared with that of the same period in 2003.

The market information regarding supply and prices of agricultural inputs and commodities is being disseminated through print and electronic media. Technical and educational literature has been prepared on several subjects and supplied to agricultural dealers and farmers as reference material. A national-level organization, Nigeria Agricultural Market Information Services (NAMIS), has been promoted jointly with the Project Coordinating Unit (FMARD) and the Special Program on Food Security, executed by FAO, to undertake the functions of collection and dissemination of market information.

Twelve state governments and agricultural development projects have approached IFDC for collaboration in the development of input supply chains and private sector capacity building. ♦

Farmers Earn More and Help the Environment

Rice farmers in Asia have known for many years that only a portion of the urea fertilizer they broadcast on their crop is actually used by the growing plant. For many, a useful rule of thumb is that they lose about two thirds of the nitrogen applied. Such large losses are due primarily to ammonia volatilization, denitrification, and runoff when the urea is broadcast and enters the floodwater. Unfortunately for the environment, the nitrogen compounds that are lost in this way contribute to global warming and the pollution of water bodies. Therefore, broadcasting of urea fertilizer followed by large losses represents not only an economic drain for farmers but also a negative impact on the environment.

For several years now, IFDC has been working with partners in Bangladesh to disseminate an alternative approach to managing urea fertilizer that is based on the deep placement of large urea briquettes into puddled soil shortly after transplanting rice. Known as urea deep placement (UDP), this technology depends on the production of urea briquettes by village entrepreneurs using locally manufactured briquette-making machines. The machine owner buys prilled urea and produces briquettes that are then sold directly to nearby farmers. A nationwide survey during 2004 showed that more than 1,600 machines had been manufactured and sold and that more than 550,000 rice farmers were using UDP technology in their fields.

(Continued on page 11)

(Continued from page 10)

The latest evaluation of 530 on-farm trials comparing UDP technology and the farmers' practice (FP) of broadcasting urea clearly demonstrates how UDP technology can help farmers produce more rice, decrease the amount of urea fertilizer that they are applying, and also increase their profits. During 2000-2004 the UDP technology increased paddy yields by an average of 22%, decreased N use by 47%, and subsequently increased profits by 24%.

The promise of such a large impact on food security, farmer incomes, and the environment is what has driven development of UDP technology in Bangladesh. Interest in UDP technology continues to increase as both the governmental and nongovernmental organizations work with farmer groups and briquette producers to facilitate training, on-farm testing, and wider dissemination of the technology. Affordable briquette-making machines are continually being manufactured and sold in Bangladesh, which is helping to meet new demand as more farmers adopt the technology. As UDP technology continues to spread, it promises to significantly reduce the release of N compounds to the environment while also increasing grain yields and farmer incomes. ♦



MISTOWA Project Awarded to IFDC

In September 2004 USAID awarded IFDC a 4-year project—Strengthening Networks of Regional Market Information Systems and Traders' Organizations in West Africa (MISTOWA), which aims to increase regional agricultural trade and food security through the improvement and linkage of the existing regional efforts to generate, disseminate, and commercially use market information. It will also help regional market information systems (MIS) and trade partners to address other constraints so that strong and dynamic commodity chains emerge that will use the information to enhance production, handling, credit, and trade; and value-added services such as post-harvest, processing, packaging, and quality control. Effective MIS and trader organizations will also heighten farmer awareness of opportunities and technologies to increase production and will facilitate the demand-pull for higher value and quality agricultural products. With significant contributions from other donors and initiatives, the private sector, and other stakeholders, the project will cover all the Economic Community of West African States (ECOWAS) countries.

MISTOWA works in four key areas:

- **Increasing efficiency of Regional MIS.** MISTOWA helps strengthen and link regional MIS so they perform more effectively and are more easily accessible to traders and producers. MISTOWA also helps integrate private MIS and develop value-added commercial market information services for its subscribers.
- **Improving Capacities of Regional Trade Organizations and Producer Organizations.** MISTOWA helps increase the effectiveness and number of regional trader and producer organizations to enable them to become vectors for technology change, commodity chain development, and policy reform advocates.
- **Improving the West African Trade Environment.** MISTOWA helps increase intra-regional trade and address crosscutting issues that can improve trade (grades, standards and reliable data) and welfare (HIV/AIDS, gender issues, and natural resource management).
- **Impacting Nigeria.** MISTOWA assists Nigeria, the largest economy in West Africa, to develop MIS and trade associations, and to be more productively linked to the rest of the region in agricultural trade.

Initial commodities include maize, rice, cassava, onions, tomatoes, and cattle and traded products—cashew nuts, shea nuts/butter, and fertilizer. Focus countries include Benin, Burkina Faso, Ghana, Mali, Nigeria and Senegal. Côte d'Ivoire, Guinea, Niger and Togo will be added after the system is progressing.

Implementation partners include regional MIS, trader and producer organizations. Regional economic and monetary institutions include ECOWAS and the West African Economic and Monetary Union (WAEMU). Technical partners include the Permanent Inter-state Committee for Drought Control in the Sahel. Resource and donor partners include Agriterra (a Dutch NGO), International Development Research Center (Canada), Technical Center for Agricultural and Rural Cooperation (Netherlands), United States Department of Agriculture, and USAID missions in West Africa. At the national level,

(Continued on page 12)

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(Continued from page 11)

partners include Observatory of Agricultural Markets (Mali), Ghana Agricultural Producers and Traders Organizations (Ghana), and the National Agricultural Market Information System (Nigeria). Private sector partners include Manobi in Senegal and BusyLab in Ghana. AMEX International and Geekcorps are sub-contractors.

Stakeholder consultative workshops involving participants from 11 countries and 2 regional workshops of partners have been conducted since October 2003. Commodity-specific stakeholder workshops were conducted for six crops. The process culminated in the selection of focus countries and commodities and modalities for supporting regional and national MIS to make market information available to producer and trader organizations. Consultations were held with partners and collaborators to refine annual work and monitoring and evaluation plans.

The MISTOWA Resource Center, consisting of a portal website, data warehouse, and information center, will be set up during the first year. A platform will be developed to link partners to share information. Baseline surveys will be conducted to establish indicators. Thirty-five national and regional workshops and conferences, one international training program for MIS managers, four regional and eight national technical and commodity-specific training events, including study tours, will be conducted. ♦