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# Albanian Spice Trader Realizes Lifetime Dream

Albanian spice trader, Mehmet Guga, is not as famous as his counterpart Marco Polo, but the Albanian entrepreneur has a similar enterprising spirit as that of the famed Venetian spice trader. While Albania was under Communism, Guga worked as an accountant for a state trading organization. After privatization he started his own commercial firm, Gurra Sh.p.k., to collect, process, and trade spices, especially sage. Guga has benefited from a USAID-sponsored project conducted by IFDC in his country.

Albanian spice trader Mehmet Guga

*Photos, courtesy of Peter Furth*

Since he is from Tepelene, Albania, an area that is lush with sage and other herbs and spices, Guga was a natural to enter the spice-trading business as a small entrepreneur. The Albanian businessman worked hard and did a good job in spite of the fact that his capital was scarce and transporting his product was problematic because of difficult road conditions. Guga was determined to sell his products—especially sage—on the U.S. market.

Guga's dream came true last fall when he succeeded in selling 12 containers of sage (worth US $300,000) on the U.S. market. Traveling with his daughter, who served as his interpreter, Guga was introduced to U.S. spice importers by FFF Associates, Inc., of Stamford, CT., a subcontractor to the Albania project. With the help of the U.S. firm, he made his first direct sales on the U.S. market, learned how to execute his sales properly, followed through on the sales, and worked through some difficult Albanian transportation problems.

Guga comes from a long line of Albanian spice traders. In fact, the herb and spice industry is a traditional one in Albania, dating back at least 50 years. In the late 1980s, at the end of the Communist era, exports of all herbs, spices, and essential oils from Albania exceeded US $30 million per year. The sector was very well organized. A cooperative structure utilized gatherers in several regions, with regional collection centers and warehouses. A state-owned and operated export trading organization—AgroExport—handled the sales of all herbs and spices.

With their long tradition in this sector and some infrastructure in place, the herb and spice industry was an area of great activity during the early 1990s. However, by 2000, the exports of these products had dropped below US $10 million. Nevertheless, several young and growing companies in the industry have enormous potential.

The herb and spice supply chain is generally organized as follows:

- *Gatherers or Harvesters*—those who harvest the products, usually from the wild or in the mountains—sometimes from cultivated land.
- *Accumulators*—those who buy the products from the smaller gatherers or harvesters and accumulate enough quantity to sell to the processors or dealers.
- P*rocessors or Dealers*—those who take possession of the products and clean the products.
- *Exporters*—those who actually export the products from Albania.

*(Continued on page 2)*

## IFDC Report

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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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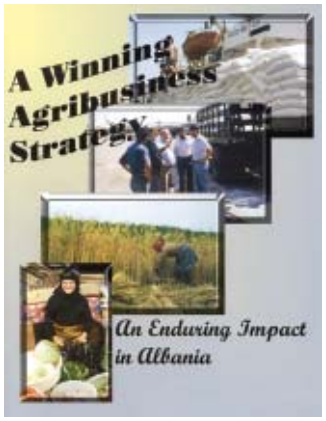
The spice industry offers a tremendous opportunity for Albania to improve its economy since it provides a large source of employment, particularly for rural women. Rural women are heavily involved in the gathering and initial cleaning and processing of herbs and spices. In total, some 15,000 Albanian incomes are derived from this business.

Sage represents the largest volume of the Albanian spice business—it accounts for at least one-third of the total exports of herbs and spices. Albania is currently exporting approximately 2,500 tons of sage (with a US import value of over $4 million) per year. Most of this sage is ultimately used in the United States, primarily for poultry and pork sausage seasoning. However, most of the Albanian industry is not realizing the value of direct sales of their products to international buyers. Currently most of the herbs and spices collected in Albania are sold to middlemen in Turkey, Germany or other European nations where the value of the herbs and spices is increased considerably, often through final processing prior to export to the United States or other nations.

Guga is only one beneficiary of the Albania project. Working with partners such as the U.S. Department of Agriculture (USDA) Forest Service and FFF Associates, IFDC promoted the environmental aspects of harvesting native herbs and spices to ensure




the sustainability of the sector and maintenance of biodiversity in forest areas. With funding from United States Agency for International Development (USAID) and USDA, the Assistance to Albanian Agricultural Trade Associations (AAATA) project and FFF Associates, Inc., were able to implement environmental protection activities including training on endangered species in collaboration with Albafor. Albafor is an existing trade association composed of collectors and smaller dealers with a significant interest in herbal and medicinal plants.

The AAATA project and its collaborator FFF Associates, Inc., also established the Albanian Spice and Herbal Trade Association (ASHTA). ASHTA's activities have included training and educational seminars and the development of conservation-oriented educational materials for widespread distribution in Albania. In support of conservation and overall sustainability, the project successfully tested the economic feasibility of domestically cultivating four important herbs and spices as a means to supplement and, in some cases, substitute for collection from the wild.

**For more information on the Albania project click on www.ifdc.org and read this brochure.**

As for the next steps in revitalizing the Albanian spice industry, the focus will be on the continued education on cleanliness and quality control issues from the grower/harvester to the exporter. A certification and testing system will likely be instituted. The issues of quality control, pricing and marketing, and endangered species will be considered.

"The future looks bright for the Albanian spice industry," says Peter Furth of FFF Associates, Inc. "With improved collection, processing and marketing methods implemented, a flourishing business can exist there. We have every reason to believe that over time and with the right efforts, a meaningful impact of US $30-50+ million can be realized for the Albanian economy."

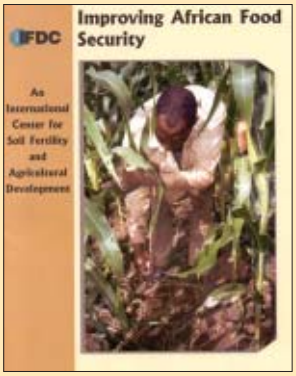
Furth sees the road to this success paved with hard work, sufficient capital, and doing the job right. ♦

# Improving African Food Security

**IFDC recently released a new publication, Improving African Food Security, by Dr. Henk Breman, Principal Scientist and Resident Representative, Belgium, and Dr. Kofi Debrah, Program Leader, Policy and Market Program. Johns Hopkins University Press previously published this paper as part of its School of Advanced International Studies (SAIS) Review, Volume XXIII, No. 1, Winter/Spring 2003.**

**According to Breman and Debrah, Africa's food production problems are rooted in that continent's poor agricultural resource base, which makes the use of external inputs such as inorganic fertilizers unprofitable. The socioeconomic and policy environments create further obstacles. Exceptions to the general trend at the country, region, and crop level underline the importance of the factors causing stagnation elsewhere and help to identify technologies and strategies for change. Integrated Soil Fertility Management (ISFM) can improve African food security. The synergism of locally available soil amendments, such as animal manures and crop residues, can make inorganic fertilizer use more economically attractive. Combining technology with an enabling environment for farmers to invest in their soils and for the private sector to invest in agricultural input and output market development further improves the economic feasibility of using fertilizer. Strategies that support farmers' organizations and private sector associations and their effective cooperation with the public sector can help create this enabling environment.**

**Copies of this publication (Paper Series, P-31) can be ordered from the Purchasing Department by e-mailing purchasing@ifdc.org. ♦**




# Kyrgyz Trade Association Achieves Remarkable Lobbying Feat

*IFDC/Kyrgyzstan Photo*

Participants in the Kyrgyz VAT Elimination Roundtable

The Association of Agribusinessmen of Kyrgyzstan (AAK), an IFDC-supported trade association (through funding from USAID), has accomplished an historical feat for the agricultural sector in the Kyrgyz Republic by successfully spearheading a lobbying and advocacy effort toward the elimination of the value-added tax (VAT) on fertilizer and crop protection products (CPPs). The removal of this tax translates into millions of dollars saved for small and large farmers, fertilizer dealers, and CPP suppliers. Ultimately this saving will result in production of food for the Kyrgyz consumer at lower prices while at the same time discouraging the supply of low-quality contraband products.

After only 2 years, AAK has developed into the leading agricultural association in Kyrgyzstan. The organization now counts on its roster more than 150 dues-paying members, including large and small dealers of fertilizer, CPPs, seeds and other farm supplies.

During the AAK General Assembly meeting last August, the members voted unanimously to address this issue with their elected leaders in the Kyrgyz Government. After several months of research, they held a round table discussion of the issue in the city of Osh with six members of the Kyrgyz Legislative Assembly and representatives from processing companies, international organizations, and farmers. After the round table meeting, a formal proposal was submitted to the President, Prime Minister, Parliamentarians, and members of the Ministry of Agriculture of the Kyrgyz Republic. During the past few months members of the trade association have been actively involved with the Presidential Task Force on developing the new tax code.

The decree, which was signed by the Honorable Prime Minister, N. Tanayev on May 13, 2004, reduces the rate of the VAT from 20% to 0% for the importation and supply of mineral fertilizers and CPPs to rural commodity producers. The decree came into effect on May 14, 2004, and stated that the control over the execution of the given decree would be handled by the Ministry of Finance of the Kyrgyz Republic. ♦

# IFDC and CILSS Formalize Their Cooperation

IFDC and the International Committee for Drought Control in the Sahel—Comité Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS)—signed a memorandum of understanding (MOU) on May 1, 2004, in Ougadougou, Burkina Faso.

The two organizations thereby formalized their commitment to consult each other and strengthen their cooperation in areas of common interest. Musa S. Mbenga, Executive Secretary of CILSS, and J.J. Robert Groot, Director of the Africa Division, representing their respective organizations, signed the document.

In a short address, Mbenga stressed the relevance and importance of the event in light of the common principles underlying the programs of CILSS and IFDC. "Our two organizations aim to promote agricultural development to ensure food security and reduce poverty in our countries while protecting the natural resources for the sake of the present and future generations," he said.

*IFDC/Africa Division Photo*

**The Executive Secretary of CILSS, Musa S. Mbenga, and J. J. Robert (Rob) Groot formalize their cooperation.**

The cooperation between the two organizations focuses on key issues related to food security, agricultural development and environmental protection. These issues include integrated soil fertility management, agricultural policy reform, information systems on agricultural markets, development of agricultural input and output markets, and institutional development for the private sector and farmer organizations.

In his address, Groot highlighted the mutual advantages of this cooperation, which is based on a win-win situation. "The synergy that will be created will enable our two organizations to better avail themselves of new opportunities in the international development arena," he said. "The document we signed has no significance in itself if we don't breathe life into it through the implementation of common initiatives aiming at improving the working and living conditions in the rural world," he noted. ♦

# Entrepreneur Benefits from Project in Azerbaijan

Because of the information on best farming practices that he learned during IFDC seminars, Agagulu Huseynov increased his potato yield in 2003 by 20% over that of 2002 and earned an income of US $20,000 from his potato production.

Huseynov, his wife, and three children cultivate a 12-ha farm near Goytepe (Jalilabad), Azerbaijan. He is involved in not only potato production but also the sale of fertilizers, seeds, CPPs, and food through his shop. "Although I have been involved in potato production for 5 years, I learned much valuable information during the seminars," he said. "Through these activities I learned that I was not applying the fertilizer properly, and the distance between the rows was not correct."

*Photo by Nizami Garayev*

**Azeri dealer Agagulu Huseynov checks his potato crop being grown under plastic tunnels.**

*(Continued on page 5)*

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"During the past few years I have been buying ammonium nitrate that was not well received by my clients," says the Azeri entrepreneur. "Project staff helped me to understand that the active matter of the product was lower than what was indicated on the bag labels. After that I ordered fertilizers of good quality from Russia, and my sales have increased by 16% during 2003."

The project provided him with more information regarding the various types of fertilizer products available. "Project staff encouraged me to offer triple superphosphate (TSP) to my clients," Huseynov said. "With their help we found a source for TSP. Furthermore, the demonstrations on the use of TSP conducted by staff helped me sell several tons of the product. My clients are asking for more; during 2003 I sold 30 mt of TSP. I gained much information on marketing during the seminars, and I now know that market research is needed before any activity is started."

During 2003 the Azeri entrepreneur realized a total income of US $2,500 from the sale of fertilizers; $7,000 from seeds; $1,500 from CPPs; $20,000 from potato production, and $4,000 from his food store. "Our living standard has improved because we have had more income during the past 2 years, since we have gained assistance in conducting our business activities through the Agro-Input Market Development in Azerbaijan (AMDA) project."

During 2002/03 the entrepreneur owned an automobile, bicycle, tractor, truck, potato harvester, and a plow. The family was also able to purchase a radio and a television.

"The AMDA project has improved my standard of living and that of my clients," Husenov said. "The introduction of TSP on wheat and potato production produced good results, and the farmers are satisfied with the results because their incomes have increased." ♦

# Ghana and IFDC Sign Agreement on Agricultural Development

*IFDC Africa Division Photos*

Director of the Africa Division, J. J. Robert (Rob) Groot and Ghana's Minister of Food and Agriculture, Major Courage Quashigah, seal their collaborative agreement with a handshake.

Ghana's Minister of Food and Agriculture, Major Courage Quashigah, says that the Government of Ghana is keen on improving agriculture and recognizes IFDC as a suitable partner in that regard. The occasion for his comment was the signing on April 15, 2004, of a memorandum of understanding between the Government of Ghana and IFDC.

The two parties agreed to cooperate in several areas of agricultural development including: ISFM, access to agricultural inputs, agricultural intensification, agricultural policy reform, agricultural input supply systems, agricultural market development, market information systems, private sector capacity building, and capacity building of farmers' organizations.

The Director of the Africa Division, J. J. (Rob) Groot, signed the agreement on behalf of IFDC. Quashigah signed the agreement on behalf of the Government of Ghana. ♦

# International Training Program on ISFM Held in Lomé, Togo

Over the past 6 years, IFDC and its partners have been improving agricultural productivity and soil fertility through ISFM. They have developed innovative approaches capable of helping small-scale farmers to secure food production and economic growth. To encourage the use of the technology, an international training program on ISFM was conducted in French in Lomé, Togo, during April 19-23, 2004.

The training program assembled about 15 participants from West Africa. They learned about various soil fertility enhancing methods, such as improved crop management practices, measures to control erosion and leaching, and measures to improve soil organic matter maintenance. ISFM strategies (the key to raising productivity levels while maintaining the natural resource base) include the combined use of soil amendments, organic materials, and mineral fertilizers to replenish soil nutrient pools and improve the efficiency of external inputs.

During the training program, a field visit was conducted to a phosphate mine and to one of the villages in which the ISFM project is operating. The stakeholders in this village shared their experiences in developing and using learning tools through action research and in linking farmers to input dealers and credit institutes.

The training participants also discussed the need for a holistic approach to promote ISFM-based agricultural intensification. This approach fosters alternative institutional arrangements, links farmers to input and output markets and to rural credit structures, strengthens farmers' organizations and traders' networks, and improves collaboration between research and extension institutions. The program participants developed a regional-scale action plan to promote ISFM-based intensification processes accounting for the agro-ecological, socio-economic and policy contexts of the region.

All participants and organizers were satisfied with the achievements of the training program. Participants pledged to implement in their various countries what they had learned during the program. Next year another ISFM training program will be conducted in English. Information on this program and other activities can be found on the websites, www.ifdc.org and www.aissa.org. ♦

***Photo by Willem-Albert Toose***

**Participants in the ISFM training program and farmers in the Village of Djaka Kopé, Togo.**

# IFDC Collaborates on DSSAT Training Program

Cultivating crops on a computer may sound like a far-fetched idea to some, but that is in essence what a group of international scientists have done. The team has developed a computer program that models the entire crop cycle—from planting to harvesting—all in the blink of an eye.

*Photo courtesy of the University of Georgia*

**Participants in the DSSAT Workshop at the University of Georgia.**

The new Version 4 of the Decision Support System for Agrotechnology Transfer (DSSAT) software program mimics a crop's growth, yield, water and nutrient requirements, and the environmental impact on agricultural production. Scientists from IFDC, Universities of Georgia, Florida, Hawaii, Guelph, and Iowa State helped create this model.

Fifty researchers and graduate students from around the world met at the University of Georgia's Griffin campus to test this program. Dr. Paul Wilkens, IFDC Programmer, served on the faculty for the training workshop entitled "Assessing Crop Production, Nutrient Management, Climatic Risk and Environmental Sustainability with Simulation Models, during May 17-May 26, 2004. The International Consortium for Agricultural Systems Applications (ICASA) collaborated on this workshop.

The developers of the new DSSAT software are quick to point out that the program is by no means meant to be a substitute for actual field experimentation. They concede that experimental data are needed to establish credibility for models like DSSAT. Nevertheless, the computer model can have great value to researchers, educators, extension agents, and consultants and should be viewed as another valuable tool in the researcher's arsenal.

"Computer models allow us to make quick and easy comparisons of many different crop management scenarios, and we can study the interaction with weather and soil conditions," Wilkens says.

The new DSSAT model simulates the growth of crops such as peanuts, sunflowers, sugarcane, wheat, soybeans, rice, tomatoes, sorghum, millet, barley, potatoes, corn, peas, and beans. The next version of DSSAT, scheduled for release in 2 years, will include cotton as one of its crops.

The ultimate beneficiaries of the DSSAT research are farmers because extension agents will transfer to them the information gained from the model. DSSAT has been used on food security projects in African countries and other regions. ♦

# IFDC Participates in International Nitrogen Initiative

Nitrogen is essential to the survival of all life forms yet the natural abundance of usable nitrogen is so low that massive human alteration of the nitrogen cycle has been required to sustain the feeding of the world's population. The alteration has been made even greater by the release of nitrogen oxides to the atmosphere during fossil fuel combustion. These changes in the nitrogen cycle have exacerbated a number of environmental issues, including smog, acid deposition, climate change, coastal eutrophication and stratospheric ozone depletion, all of which have impacts on people and ecosystems on a regional or global basis.

In light of this, the Scientific Committee on Problems of the Environment (SCOPE) and the United Nations Environment Programme (UNEP) jointly formed the International Nitrogen Unit. Three international conferences have been organized to focus on this issue.

The goals of the international nitrogen initiative (INI) are to develop a sustainable approach to manage nitrogen and to provide food and energy to the world, yet minimize the release of nitrogen to the environment. Phase I of the initiative will consist of an assessment of the knowledge on N flows and problems; Phase II , the development of region-specific solutions; and Phase III, the implementation of scientific, engineering, and policy tools to solve problems.

The objectives of Phase I are to organize around crosscutting themes: natural processes, agriculture (fertilizers), animal production, human waste, and energy production/use; and to integrate the regional assessments to create an overall global assessment. The objective of Phase II is to propose region-specific solutions toward problems identified in Phase I. The objective of Phase III is to direct activities primarily toward working with critical groups to implement identified solutions.

Dr. Lawrence L. Hammond, Director of IFDC's Resource Development Division, participated in the Nitrogen Fertilizer Rapid Assessment Project Workshop in Kampala, Uganda, during January 12-16, 2004. This workshop was one of the activities of the INI; the project has the goal of completing publication of a book on nitrogen prior to the third international INI conference to be conducted in China in October 2004. ♦

# CTA/IFDC Workshop Strengthens Market Information Systems in West Africa

The Centre for Agricultural and Rural Cooperation (CTA) and IFDC organized a workshop on Market Information Systems (MIS) with logistical support from the Computer Community Center of the Economic Community of West African States (ECOWAS). This workshop was conducted in Lomé, Togo, during May 3 -7, 2004. Twenty MIS professionals from Benin, Burkina Faso, Cote d'Ivoire, Guinea, Mali, Niger, Senegal and Togo attended the workshop to strengthen their capacities in data collection and dissemination.

In his opening remarks, Rodger Obubo, who represented CTA's Director, stressed the role of information in market development. "Market liberalization has exposed small producers to externalities induced by other agents and factors influencing the system," he said. "There is also a lack of communication between producers and markets while importers and exporters operate in an opaque environment. Improving information flow and overall management of information systems is necessary to facilitate market supply and to reduce market distortions due to the lack of transparency."

Togolese Government officials appreciate IFDC's contribution toward the advancement of MIS in the region. "Togo doesn't have a structured market information system (MIS)," said David Lawson of the Office of Agricultural Statistics, Togolese Ministry of Agriculture. "We work with the African Agricultural Market Information Network (AFAMIN), an IFDC-managed network that deals with inputs. We are grateful for this opportunity to participate in a program on agricultural product markets. This will enable us to catch up with the other countries that are ahead of us."

Mr. Gaston Dossouhoui of the National Support Service for Food Security, Benin, was impressed by the overall approach. "We are pleased with IFDC's approach, which shows a certain dynamics and consistency: from the diagnosis of the MIS situation to assistance to countries in designing their market information systems to the present workshop," he said. "We believe that dealing with such a reliable and faithful partner will enable us to contribute more effectively to the development of our sub-region."

Successful cases were presented; among them was that of Manobi, a private system that provides information services to add value to the fruit and vegetable sector in Senegal. "Valorizing productions will increase farmers' self-financing capacities," said David Boggio of Manobi. "The real challenge is to reduce transmission delays to provide fresh information in real time for market players so that they can make effective business decisions. Our experience also shows that one can break the local dimension of trading channels. Producers can look for markets at the other end of their country or abroad. This will enhance competition among suppliers and increase exchange flow within the sub-region."

In his concluding remarks, Elly Wotoko, representing the Executive Secretary of ECOWAS, outlined the follow-up to this initiative. "These joint activities are the beginning of a long series of training programs that we are planning to implement," Wotoko said. "I am convinced that our partnership with CTA and IFDC will bear sustainable fruits in the whole sub-region." ♦

# IFDC Collaborates on Paper Published by Center for Development Research (ZEF) Bonn


Dr. Julio Henao, IFDC Senior Biometrics Scientist, recently contributed to a major paper published by ZEF Bonn entitled *Nutrient Flows in Agricultural Production and International Trade: Ecological and Policy Issues*. Other contributing authors included Dr. Eric T. Craswell, Ulrike Grote, and Dr. Paul L.G. Vlek, all of ZEF Bonn.

The paper addresses the issue of environmental and ecological impacts of nutrient flows within and between countries by reviewing and presenting data on nutrient balances and global nutrient movements. The results for nutrient depletion in agricultural soils during 1996-99 show that in most countries in Africa and Latin America and the Caribbean rates of depletion are so high that current land use is not sustainable. At the other end of the scale, nutrient surplus derived from agriculture is most serious in the United States and industrialized countries of Europe but also occurs in some densely populated areas of countries such as India and China.

International net flows of NPK in traded agricultural commodities were estimated to total 4.8 million tons in 1997

*(Continued on page 10)*

# Announcements

***Dr. Mustapha Naimi*** began employment with IFDC on March 1, 2004, as Agricultural Systems Modeler with the International Fund for Agricultural Development (IFAD)-funded project "Development and Implementation of an Information and Decision Support System for Cereal Production in the Near East and North Africa (NENA) Region: Improving Agricultural Input Efficiency and Reducing Production Risks" with posting to Settat, Morocco. Dr. Naimi received his Ph.D. degree in agronomy from the University of Minnesota. He most recently served as Professor in the Department of Soil Science, Hassan II Institute of Agronomy & Veterinary Medicine, Rabat, Morocco.

***J.J. Robert "Rob" Groot*** joined IFDC March 6, 2004, with posting to Lomé, Togo, and assumed the duties of Director, Africa Division, on March 15, 2004. Mr. Groot previously served as Executive Secretary of the Plant Sciences Group of Wageningen University in the Netherlands.

***Dr. Henk Breman*** transferred from Lomé, Togo, to Brussels, Belgium**,** on March 20, 2004. In Brussels, Dr. Breman serves as Resident Representative and Principal Scientist. He is focusing on developing and expanding IFDC's program in the area of soil fertility in Africa in consultation with the European universities, donor community, regional associations, and the private sector.

***M. Feisal Beig*** transferred from Headquarters on April 9, 2004, and was posted in Kabul, Afghanistan, as Chief of Party—Dealer Development for the Rebuilding Agricultural Markets in Afghanistan Program (RAMP).

***Dr. Walter T. Bowen*** transferred from Headquarters on April 14, 2004, and was posted in Dhaka, Bangladesh, as Resident Project Coordinator - ANMAT II "Mitigating Poverty and Environmental Degradation Through Nutrient Management in South and Southeast Asia" project. He also serves as the Resident Representative for the Asia Division.

***Dr. Ray B. Diamond***, former Resident Project Coordinator—ANMAT II, retired from long-term overseas assignments on April 30, 2004.

***Dr. S. H. (Norman) Chien***, Principal Scientist—Soil Chemist, has been named winner of the inaugural Pierre Becker Memorial Award, being given by British Sulphur Publishing. The award will be made each year for work that has produced an "outstanding contribution to the understanding, exploitation, and application of phosphate resources." In announcing the award, British Sulphur stated, "Chien is considered by his peers to be an expert in the use of phosphate rock and modified phosphate products to increase food production."

# IFDC
# 2004 International Training Calendar

| | Training Program/Workshop | Dates | Location | Program Fee, US $ | Late Program Fee, US $ |
|---|---|---|---|---|---|
| 1. | Agricultural Input Regulatory Systems | August 16-20 | Pretoria, South Africa | 1,000 | 1,200 |
| 2. | Fertilizer Marketing Management | November 22 – December 3 | Dubai, UAE | 2,000 | 2,300 |

**(Register online at www.ifdc.org)**

**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.***

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and predicted to increase to 8.8 million tons in 2020. Flows vary widely across regions. The main net importers of NPK are West Asia/ North Africa and China. Although it is widely known that soils in countries of sub-Saharan Africa are heavily degraded due to nutrient depletion, this region is nevertheless a net importer of NPK in agricultural commodities. However, the nutrients imported in food and feed commodities to sub-Saharan countries are commonly concentrated in the cities creating waste disposal problems rather than alleviating deficiencies in rural soils. Countries with a net loss of NPK in agricultural commodities are the main food exporting countries—the United States, Australia, and some countries of Latin America.

A wide range of policy measures influence agricultural trade, nutrient flows, and balances. The effects of agricultural trade liberalization and the reduction of production subsidies are briefly described, as well as more direct environmental policies like nutrient accounting schemes, eco-labeling, and nutrient trading. This study highlights the need for environmental costs to be factored into the debate on nutrient management and advocates more interdisciplinary research on these important problems.

A copy of this paper can be downloaded at www.zef.de/publications.htm. ♦

# Breman and Groot Publish Article on the Role of Fertilizers in Agricultural Development in Sub-Saharan Africa

Dr. Henk Breman, former Director of the Africa Division—now Principal Scientist and Resident Representative, Belgium, and J. J. Robert (Rob) Groot, new Director of the Africa Division, recently coauthored an article entitled "The Role of Fertilizers in Agricultural Development in Sub-Saharan Africa," published in the May/June 2004 issue of *Fertilizer Focus*. The following is an excerpt from that article.

**"Increasing Profitability of Fertilizers"**

The primary factor needed to change fertilizer demand is the profitability of its use. IFDC and its partners have developed ISFM technologies, which improve both fertilizer use efficiency (percentage recovered by the crops) and the economic returns of its use. ISFM aims to use most efficiently the inherent soil nutrient stocks, locally available soil amendments, and mineral fertilizers to increase land productivity, while maintaining or enhancing soil fertility. It was demonstrated that ISFM enhanced soil fertility, fertilizer use efficiency, productivity and farmer income. Maize yields, for instance, can increase by 1,000 – 2,000 kg/ha through ISFM practices, with value-cost ratios well above 2 and returns to labor 2 - 6 times higher than average returns to family labor. In several regions farm-level incomes have increased by 20%-50%, depending on the degree of adoption. ISFM is considered a key technology to increase agricultural productivity and to make fertilizer more affordable.

To sustain the process of agricultural intensification in Sub-Saharan Africa, the capacities of farmers, local entrepreneurs and service providers should be strengthened. With this objective in mind, IFDC has developed the Competitive Agricultural Systems and Enterprises (CASE) approach. The approach involves all stakeholders of the agribusiness system at the grassroots level, including smallholder farmers, local entrepreneurs, traders and bankers. The approach fosters both technological and institutional change. ISFM and Commodity Chain Development are basic concepts of the approach which fosters empowerment and strengthenening of the innovative capacities of local stakeholders. CASE links farmers and villages with urban retailers, traders and consumers. Primary emphasis is placed on testing and developing alternative institutional arrangements, building dynamic and business-oriented farmer organizations with clear economic or advocacy roles, networks of credit structures, and platforms to negotiate land use contracts.

After 5 years of experience, entrepreneurship has developed at various levels and the impact becomes measurable. In all of the 16 pilot areas, about 60,000 farmers have been reached, and 200 local entrepreneurs —input dealers and traders— have participated in round table meetings and training programs, and worked directly with the ISFM farmer groups. Fertilizer consumption on these farms has increased by 100 kg/ha on average and is still increasing. ♦

# Nigerian Workshop Summarized in Proceedings Publication

The Federal Ministry of Agriculture and Rural Development (FMARD) conducted a National Agricultural Inputs Policy workshop in collaboration with IFDC and USAID during August 26-27, 2003, in Abuja. Attending the workshop were 152 participants, including key players and stakeholders involved in production, importation, and distribution of fertilizer, seeds, and CPPs.

Chief Audu Ogbeh, the National Chairman of the Ruling Peoples' Democratic Party and Honorary Adviser on Agriculture to the President, delivered the keynote address. The workshop focused on three issues:

- Commercialization of Nigerian agriculture.
- Agricultural input marketing systems.
- Policy reforms.

Dr. O. E. Edache, Permanent Secretary of FMARD, presented the opening address. "Agriculture is a very vital sector in Nigeria's economic development because it contributes 40% of the national gross domestic product, provides the staple foods of Nigerians, and employs about 70% of the populace," he said. "The government is trying to turn agriculture around and requires the collaborative effort of all stakeholders. The dependable and timely supply of agricultural input supplies such as fertilizers, seeds, and crop protection products (CPPs) is essential for increased production."

During the workshop Dr. Amit H. Roy, IFDC President and Chief Executive Officer, discussed the Developing Agri-Input Markets in Nigeria (DAIMINA) project and emphasized the Center's policy reform projects. "By applying innovative agricultural technologies in an agribusiness setting, we are laying the groundwork for improved global food security and the alleviation of poverty," Roy said. "In Albania, Bangladesh, and Kosovo, we have effectively linked agricultural production with economic development through the design and implementation of economic policies that promote the free market system and lead to economic efficiency, increased employment, and overall economic growth."

Earlier IFDC conducted a study of the fertilizer market in Nigeria, including the subsidies from the federal and state governments. Roy summarized the most significant findings of the study:

- Fertilizer use is profitable on the main crops.
- Fertilizer price is not the only significant constraint; poor quality and non-availability of fertilizer products are significant constraints. Inadequate access to credit is also a constraint, especially for smallholders.
- More often, subsidized fertilizers were not reaching the intended beneficiaries.
- The dual pricing system is inefficient and leads to distortion of the marketing system.
- Nigeria is using only 100,000–150,000 nutrient tons (less than 10% of economic potential and less than 4% of the agronomic potential).
- By not realizing its economic potential for nutrient use, Nigeria incurred a foregone loss of 3 million tons of maize in 2000. Similar losses were incurred for other crops. The total economic loss could be staggering.

The study recommended:

- Fertilizer subsidies and government distribution should be reassessed.
- Lowering transaction costs through improvements in procurement, transportation, port handling, dealer networks, and regulation should reduce fertilizer prices.
- For resource-poor farmers, targeted subsidies should be introduced through the voucher system, which proved successful in Afghanistan.

Dr. H. B. Singh, Chief of Party of the DAIMINA project, explained that the Federal Government of Nigeria (FGN) and USAID joined forces with the project in an initiative to improve farmers' access to quality inputs through active participation of the private sector in rural agricultural markets in Nigeria. The main project activities include policy dialogue, private sector capacity building, and an MIS.

The project is working with several agencies in Nigeria including the following:

- National Special Food Security (United Nations Food and Agriculture Organization [FAO] and FGN).
- Special Program for Food Security (SPFS).
- Seed Resource Project (the International Institute of Tropical Agriculture [IITA] and USAID).
- Seed Association of Nigeria (SEEDAN).
- Agrochemical Association of Nigeria (AAN).
- All Farmers Apex Association of Nigeria (ALFAAN).
- Nigerian Agricultural Cooperatives and Rural Development Bank (NACRDB).

Chief Ogbeh, National Chairman of the Peoples' Democratic Party, has a clear concept of what needs to occur in Nigerian agriculture. "Nigeria must redirect, re-engineer, and accelerate its agricultural growth and development strategies to reduce the huge deficit in its food balance sheet," Ogbeh said. "This is a prerequisite for economic growth and stability."

In the near future the proceedings of the Nigerian workshop will be published. This document will be announced in the newsletter and on the website, www.ifdc.org. ♦

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