

# IFDC *Report*

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*an update on  
the work & progress at  
IFDC—An International Center for Soil  
Fertility and Agricultural Development*

## IFDC Launches Newly Redesigned Web Site

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SOME SAY WE INHERIT THE EARTH FROM OUR ANCESTORS... IFDC SAYS WE BORROW IT FROM OUR CHILDREN.

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**Welcome to IFDC....**

"IFDC is a public, nonprofit, international organization, which was founded in 1974 to assist in the quest for global food security. The Center's goal is to increase agricultural productivity in a sustainable manner through the development and transfer of effective, environmentally sound plant nutrient technology and agricultural marketing expertise. IFDC conducts its work independently and on a scientifically sound basis."

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**IFDC-Albania's Chief of Party, Claude Freeman Receives Golden Award from Government of Albania**

IFDC launched its newly redesigned web site during International Centers' Week and the IFDC Board meeting in Washington, D.C., recently. This enhanced version of our web site at <http://www.ifdc.org>, offers electronic commerce capabilities that allow visitors to the site to either download PDF versions of

publications or order paperback or CD-ROM versions online, register online for training programs, etc. Another interactive feature of the new site permits visitors to sign up to receive our newsletters by email. Our new site allows for easy navigation from one section to another. We hope that you will find IFDC.org to be a valuable storehouse of all essential information regarding IFDC's programs and projects, services available from IFDC, publications, events, news releases, corporate annual reports, newsletters, free fertilizer statistics, etc. We plan to incorporate additional enhancements in the near future so visit [www.ifdc.org](http://www.ifdc.org) often to see what is new.

## IFDC Report

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IFDC is a public, international organization, 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 Restructures to Accommodate Expanded Mandate

"IFDC began operation in 1974 as the International Fertilizer Development Center. After more than a quarter of a century's progress as a world renowned fertilizer research and development center, IFDC's programs have evolved to address a wide range of agricultural research and development issues in addition to those identified exclusively with fertilizer. Beginning immediately, IFDC is implementing operations within a new organizational structure and is promoting its new image as an International Center for Soil Fertility and Agricultural Development," says Dr. Amit H. Roy, IFDC's President and Chief Executive Officer. "Even though IFDC has been working for more than a decade in almost all phases of agricultural development, its name did not accurately signify the Center's true nature and created a limited view of its broad capabilities."

Since the early 1990s IFDC's mission has been "to increase agricultural productivity in a sustainable manner through the development and transfer of effective, environmentally sound plant nutrient technology and agricultural marketing expertise." Although the Center focuses primarily on the developing countries and countries in transition, the scope of the organization is truly global. During its history, IFDC has conducted projects in more than 120 countries and has hosted approximately 8,000 participants from more than 150 countries in its numerous training programs and workshops.

IFDC takes a truly holistic approach to agricultural development in its work. The Center's work involves a wide range of activities including agronomic research, resource management, carbon sequestration, policy and market development, the development of decision support tools, crop modeling, the development and dissemination of soil fertility management practices, climate change research, the development of national action plans for developing agricultural input supply systems, national agribusiness development programs, and the development of input and output markets through the private sector.

Under the new organizational structure, which becomes effective on January 2, 2002, IFDC's wide range of research and development programs will be administered by two global divisions—Resource Development and Market Development—and two regional divisions—Africa and Asia.

The Resource Development Division will be comprised of two programs: (1) Fertilizer Materials Program, which will continue to conduct research and development projects that characterize and identify the most efficient use of fertilizer raw materials and develop processes to convert these raw materials into effective products; and (2) the Soil and Nutrient Dynamics Program, which will identify mechanisms to foster the adoption of agronomic technologies and socioeconomic measures to enhance the efficiency of nutrient use by crops in developing-country agriculture. A Technical Support Unit will provide the laboratory, greenhouse, and pilot plant services as needed.

The Market Development Division will be comprised of two programs: (1) Institutional Development Program, which will carry out overseas development projects that develop competitive agricultural markets and increase agricultural production; and (2) the Economics and Policy Development Program, which will focus on the assessment of market development opportunities, multilateral trade agreements, and economic policies in the context of both the global economy and on-going development projects.

The Africa Division, based in Lome, Togo, is comprised of the (1) Integrated Intensification Program, which focuses on optimizing the use of inputs to reduce nutrient losses that are detrimental both from the financial and environmental viewpoints; (2) Input Accessibility Program, which concentrates on ensuring supply, empowerment, and gender differentiation; and (3) Policy and Market Program, which aims to promote a policy environment capable of influencing producers' decisions positively regarding sustainable land management.

# Project to Develop Agricultural Inputs Markets in Nigeria Takes Off



O. A. Edache, Director of Agriculture in Nigeria, Shoals farmer Neal Isbell, and Mallam Adamu Bello, Nigeria's Minister of Agriculture, discuss cotton-growing methods used on Isbell's farm in Colbert County, Alabama (U.S.A.).

Photo by Marie K. Thompson

"Africa has no reason to be poor since it has such fertile land," says the Honorable Minister of Agriculture for Nigeria, Mallam Adamu Bello. Even though sub-Saharan Africa uses less than 1% of the world's total fertilizer use, it has many resources that could potentially be used to produce fertilizer.

If the Minister meets his goals for Nigerian agriculture, this situation will be drastically changed. Minister Bello and a Nigerian delegation came to IFDC and the Shoals area during July 27-28 to learn more of IFDC's capabilities and to visit local farms and other agricultural concerns. In addition to the Minister, included in the delegation were: Director of Agriculture, Mr. O. A. Edache; Dr. Lami Lombin, Director of the National Veterinary Research Institute; Dr. Ravi Aulakh and Dr. Andrew Levin, both with the U.S. Agency for International Development (USAID). Previously, when President Olusegun Obasanjo of Nigeria visited with U.S. President George W. Bush in Washington, D.C., in May 2001,

he promised President Bush that he would send his Minister of Agriculture to meet with the U.S. Secretary of State to discuss important agricultural issues. Later U.S. Representative Earl Hilliard, who represents the Seventh Congressional District of Alabama and also serves on the House Agriculture Committee and the Committee on International Relations, visited Nigeria and invited Minister Bello to visit Alabama and Tuskegee University in his district. In addition, U.S. Ambassador to Nigeria, Honorable Howard Jeter, arranged for the Nigerian delegation's visit to Alabama and IFDC.

"The greatest challenges facing Nigerian agriculture today are the declining productivity of the soil, difficulties in accessing farm inputs, and problems associated with post-harvest management since post-harvest losses range from 50% in fruit crops to 20% in grains," Bello says. "My most important goals are to meet Nigeria's food and fiber requirements and to increase export earnings, thereby raising farm in-

come and alleviating the poverty situation."

Previously, USAID/Nigeria's Mission Director Tom Hobgood recognized the importance of the inputs sector and provided the impetus for a new endeavor in Nigeria. With USAID/Nigeria funding, IFDC's new project—Developing Agricultural Inputs Markets in Nigeria—was recently initiated under the direction of Dr. Har B. Singh, Chief of Party. The primary goal of the Nigeria project is to promote private-sector-based agricultural input marketing, with a special focus on fertilizers. The purpose is to nurture and fortify open and competitive markets and dealer networks in the pilot area as the primary mechanisms to improve farmer access to appropriate agricultural technologies.

The project will improve smallholder access to modern production technologies. It will contribute to rural enterprise development, an improved policy setting, natural resource management, new dealer and agro-trade associations, and various partner relationships, including with farmer groups in the pilot area. The project will undertake economic analysis and engage in continual dialogue with the government regarding the range of issues affecting the expansion of marketing in fertilizer and other inputs. The project will identify, train, and organize agri-input dealers to develop a reliable and competitive supply of inputs to farmers. Establishing a solid private-sector marketing system at the state level will form the core of the project in the long run. A

significant concern of farmers, agri-input importers and distributors, government offices, and other stakeholders is the lack of reliable and timely information on which informed decisions can be made. The project will establish a market information system initially concentrated on the agri-input and crop output situation in the pilot zone, including data on crop competitive advantage. The International Institute of Tropical Agriculture (IITA), which is headquartered in Nigeria, will also be participating in this project.

Minister Bello has definite ideas regarding IFDC's potential impact on his country's agriculture sector. "We shall very much appreciate having IFDC to assist us to meet our goals," he says. "We are impressed by what we have seen at IFDC and by what its capabilities are. We hope that IFDC can help in the resolution of the issue of input supplies with the view to improving the supply of plant nutrients and to generally improve soil fertility and productivity. IFDC can also assist in the studies of local raw material deposits for the production of fertilizer. Nigeria's President Obasanjo is keen to seek IFDC's assistance to investigate the issue of using Nigeria's indigenous resources to produce fertilizer. The Center can also contribute to our country's human capacity building in the area of fertilizers both for production and quality control purposes."

While visiting IFDC and the Shoals area of Alabama, the Minister and his delegation toured a local

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## Nigeria Project....

poultry farm, a cotton and maize farm, a cotton gin, and a farm cooperative. The delegation had an opportunity to observe and discuss modern technologies at the farms, especially the use of precision farming—using computers and a global positioning satellite system to create detailed soil fertility maps of farmers' fields. The maps are created after numerous soil samples are collected from the farmers' fields and a computer is used to record the yields as the crops are harvested. The maps help determine where to apply specific soil amendments such as lime and how much fertilizer to use in the different fields. The Minister is eager to determine if it is feasible to use this technology in his country. He hopes to increase the yields of Nigerian farmers' fields while saving money on expensive fertilizers. Minister Bello was shocked to learn that the Alabama farmer he visited will reap 200 bushels (about 6 tons) per acre from his best corn fields—10 times the yield of a typical Nigerian field.

After leaving Alabama, the Nigerian delegation met with the U.S. Secretary of Agriculture, Ann M. Veneman; the World Bank Vice President for the Africa Region, Mr. Callisto Madavo; and the USAID Administrator, Andrew Natsios, in Washington, D.C.



The Chief of Party for IFDC-Albania, Claude C. Freeman, III, has received the Golden Award from the President of the Republic of Albania, the Honorable Rexhep Mejdani. In presenting the award on October 24, 2001, at the Palace of Congress, President Mejdani noted this was the first time the Golden Award has been presented for "long-term and special contribution toward the development of the agricultural private sector, the agroprocessing industry, the private extension service, the organization of agribusiness associations, and

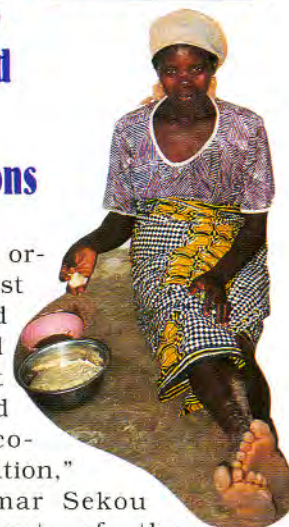
advocacy issues related to Albanian agribusiness."

The award was presented to Freeman during the National Meeting of the Albanian Agribusiness Council (KASH), which included all KASH Board members of 16 agribusiness associations. The Golden Award is reserved for "special civil merits for foreigners in the Republic of Albania." KASH, through the Ministry of Agriculture and Food in Albania, proposed that Freeman receive this award. Also in attendance for the award ceremony was the U.S. Ambassador to Albania, the Honorable Joseph Limprecht.

In accepting the award, Freeman credited the Albanian people themselves as the real recipients of the honor for their tireless efforts in the agricultural development of their country. "Without the genuine spirit of cooperation of our Albanian counterparts, IFDC could not have realized the successes that we have in developing a favorable climate for agricultural entrepreneurs in this country. Our sincere thanks go to the policymakers, entrepreneurs, and others who paved the way for the accomplishment of our goals. This is a truly unique case in the history of development work, and it is justly famous worldwide."

## IFDC-Africa Strengthens Peasant and Farmers' Organizations

Photo by Dr. Thomas R. Hargrove



"A peasant organization must be endowed with a solid management structure and a viable economic foundation," says M. Oumar Sekou Tall, President of the Assemblée Permanente des Chambres d'Agriculture du Mali (APCAM) and first African President of the Fédération Internationale des Producteurs Agricoles (FIPA). "It should also be focused on a single product or a group of commodities and firmly implanted in its area of intervention to be able to provide efficient services to its members."

The Federation President participated in a regional training workshop organized by IFDC's Africa Division in Lome, Togo, during October 23-25, 2001. This program, which was organized within the framework of the Dutch-financed project entitled Favorable Socioeconomic and Policy Environments for Soil Fertility Improvement (FASEPE), brought together more than forty representatives of peasant organizations (PO) and chambers of agriculture (CA) from four West African countries. They met to discuss ways to "strengthen the capacities of leaders of peasant organizations in the area of input supply and distribution systems and marketing of agricultural produce."

In most developing countries after structural adjustment of the economies, peasant and rural organizations must play an increasingly central role in agricultural and rural development. This movement is rapidly expanding in response to the need for a professional agricul-

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### **IFDC-Africa Strengthens....**

ture. Producers must be able to act as enlightened entrepreneurs and to develop their negotiating power. The level and intensity of participation confirm the timeliness and appropriateness of this program offered by the Africa Division. The main objective of the program was to identify problems, needs, and expectations in terms of support and training to plan future actions.

In his opening address on behalf of the Director of the Africa Division, Dr. Arno Maatman, Input Accessibility Program Leader, stressed the need for a participatory approach to reach an integrated agricultural intensification, which implies not only the development of appropriate technologies but also solid policy and institutional frameworks including a sustainable agricultural input distribution system. After welcoming the participants, Dr. Kofi Debrah, Policy and Market Development Program Leader, emphasized the importance of this initiative, which should lead to the strengthening of a vital link in the

agricultural production chain at national and regional levels.

The program included field visits to observe input supply and distribution systems and sites where integrated soil fertility management was being implemented, particularly

in the vegetable-growing sector. An important aspect was a visit to the fertilizer-blending plant at the port of Lomé. This afforded the participants the opportunity to make business contacts for direct purchases of the inputs.

### **Ho Chi Minh City, Vietnam, Site of International Fertilizer Marketing Training Program**

With the cosponsorship of the Ministry of Agriculture and Rural Development, the Government of the Socialist Republic of Vietnam, IFDC organized and conducted a training program in international fertilizer marketing during November 5-16, 2001. Nineteen participants from 12 countries, including Angola, Bangladesh, China, Egypt, India, Malaysia, Nepal, Pakistan, Sri Lanka, Togo, United Arab Emirates, and Vietnam, attended.

Ludwig Schatz, Director of the Training and Workshop Coordination Department, and Feisal Beig, Senior Marketing Specialist, visited Vietnam to conduct the program. In addition, several guest speakers with considerable hands-on experience also led discussions in the training sessions.

The program focused on the challenges in developing countries and transitional economies for marketing fertilizers in liberalized, open, and competitive markets and the development of practical techniques and skills for customer-oriented marketing. Several field visits were organized. The places visited included Bien Dinh II blending plant owned by Southern Fertilizer, a public-sector organization; Japan Vietnam Fertilizer granulation unit; and the privately owned Baria Serece Terminal.

On September 7, 2001, the Alliance of Kosova Agribusinesses (AKA) was officially founded and will be based at the IFDC offices at Fabrika e Plastikes in Pristina. AKA brings together five agricultural associations, representing over 3,000 Kosovar agri-businesses, and will undertake the advocacy of member associations' interests and the promotion of a favorable climate for policy and agribusiness development in Kosovo.

The primary objectives of AKA are to:

- Identify and address common concerns through policy formulation and advocacy;
- Promote and develop relationships with governmental and nongovernmental organizations influencing agricultural policy;
- Coordinate members' activities to further sustainable and profitable agricultural development in Kosovo.

### **Alliance of Kosova Agribusinesses Officially Established**



IFDC-Kosovo photo

The foundation ceremony opened with an overview by staff from IFDC's Kosovo Agribusiness Development Program (KADP). IFDC, sponsored by USAID, has been working to establish and develop sustainable private sector agribusiness associations and assisting the viability of their members through extension and technology transfer activities, financial services, business planning, and policy formulation and advocacy. AKA will work closely with IFDC to continue and expand this policy development and advocacy role.

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## Alliance of Kosova...

The founding member associations of AKA proceeded to elect Muhamet Farizi, President of SHMK and Director of the Fushë Kosovë flourmill, as AKA president and Mentor Thaqi, Deputy Chief of Party of IFDC's KADP as AKA's Executive Director.

"AKA will act as a partner to Kosovo departments active in the formulation of agricultural policy and as a mouthpiece for the small private businessmen whose voices would otherwise go unheard," said Muhamet Farizi, AKA President.

Director of the USAID Mission in Montenegro and Kosovo, Craig Buck, in his opening remarks to the association, emphasized that USAID is committed to the promotion of private sector development in the agricultural sector in Kosovo and strongly supports the IFDC initiative to organize such interest groups and assist them in advocating for policy reforms.

Founding member associations:

- Kosova Agricultural Input Dealers Association (KODAA)
- Kosova Poultry Producers and Feed Millers Association (SHPUK)
- Kosova Flour Millers Association (SHMK)
- Drini Valley Vegetable Producers Association (Anadrini)
- Kosova Beekeepers Association (LBK)

## IFDC's Africa Division Strengthens Trade Associations Involved in Fertilizer, Seeds and Plant Protection Sectors

"The private sector participation is the real engine of growth for cost effectiveness, timely responses to changing circumstances, efficiency, and sustainability. African nations cannot go on living on public funding and international aid." This lucid remark came from Dr. A. Joshua, Managing Director of Premier Seed Nigeria LTD. Dr. Joshua participated in the first meeting of trade associations of the agricultural input sector organized by IFDC's Africa Division in Lomé, Togo, during December 11-13, 2001.

Following the Regional Training Program for Peasant and Farmers' Organizations, the meeting of trade associations involved in the fertilizer, seeds and plant protection sectors confirms the Africa Division's commitment to help the private sector to be equal to its role as a driving force of the economies in sub-Saharan Africa. The number and diversity of countries and associations represented show the importance of this meeting that brought together more than sixty participants from fourteen countries: Albania, Benin, Burkina Faso, Cameroon, Ivory Coast, France, Ghana, Guinea, Kenya, Mali, Niger, Nigeria, Senegal, and Togo.

The objectives were to provide a forum for these associations to share ideas and experiences, to reinforce their organizational and fi-

nancial capacities at national and subregional levels, and to discuss the need and possibility for regional collaboration. "Agricultural policies are to be developed with the participation of all stakeholders. Trade associations are mushrooming, but they often do not have the level of organization that would enable them to impact the behavior and decisions of national authorities," noted Marc Atouga, who represented the West African Economic and Monetary Union (UEMOA). "The initiative of IFDC's Africa Division is in line with UEMOA's efforts, which led to the elaboration of the Common Agricultural Policy," he concluded.

In his opening address on behalf of the Director of the IFDC Africa Division, Dr. Kofi Debrah, leader of the Policy and Market Program, stressed "the emergence of new players on the national economic stage, especially farmers' organizations, chambers of agriculture, and private input dealers that are called to work with the public sector to meet the challenges of liberalization and privatization of the agricultural markets." Ayassor, on behalf of the Minister of Agriculture, Livestock and Fisheries focused attention on the vision of the Director of the Food and Agriculture Organization of the United Nations. "Sustainable agricultural intensification is the key to free the world from hunger," Ayassor said.

Sustainable agricultural intensification and effective production input markets go hand in hand. These are the two pillars around which the IFDC Africa Division articulates its programs and activities. The meeting highlighted the crucial importance of securing input supply for agricultural development and food security. "This includes not only technological packages but also and, particularly, improved seeds," emphasized another participant, Amadou Djigo, President of the Union

Nationale Interprofessionnelle des Semences (UNIS). According to Djigo, "Sixty percent of production constraints are linked to seed-related problems. Without improved varieties and certified seeds, all agricultural development efforts are doomed to fail."

The workshop began with the presentation of IFDC capacities and domains of expertise focusing on fertilizer technology and engineering, integrated plant nutrient and soil fertility management, agricultural input accessibility and policy and market development. Emphasis was also placed on IFDC involvement in facilitating cooperation between the public sector, the private sector, and farmer organizations. The papers presented covered various topics including: the African input market in crisis, a strategic framework for the development of input supply and distribution developed by IFDC, and the situation of the input market in sub-Saharan Africa. Several presentations focused on the new players in the agricultural sector, the Common Agricultural Policy elaborated by UEMOA, and market information systems. Three working groups were formed to further the reflection on the organization and creation of trade association networks, funding associations, and their activities at the national and regional levels.

The impact of this program was well summarized by Djigo. "I was impressed by the atmosphere that prevailed throughout the meeting, which was characterized by the spontaneity of collaboration, the sense of complementarity, and the will to articulate efforts to move forward together. From a more subjective point of view, the meeting allowed me to broaden my personal horizon and to assess the value of my organization in comparison with others," Djigo said.

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## The Kyrgyz Agro-Input Enterprise Development Project

The USAID Regional Mission to Central Asia provided a grant to IFDC in October 2001 to undertake a 2-year pilot project aimed at improving productivity of agriculture and the competitiveness of agro-enterprises in the Fergana Valley of Kyrgyzstan. The project will expand use of appropriate technologies and increase the growth of private sector enterprises and investment in agro-input supply and marketing, and thus increase access by farmers to critical inputs needed to boost agricultural production.

The project, called Kyrgyz Agro-input Enterprise Development (KAED), will establish viable private sector agro-input marketers and identify the policies and mechanisms required to support them and potential counterparts throughout the country and region. KAED will establish an agro-input network for the spring 2002 planting season and set the stage for a trade association, seed production, information systems, and policy reform. IFDC's Chief of Party for the Kyrgyzstan project is Chan Sieben.

There is great need in Kyrgyzstan for agribusinesses to provide a reliable supply of modern inputs and the technology they embody. Fertil-

izer nutrient use fell from 130 kg per hectare in 1990 to 10 kg in 1995 and has remained below 30 kg. The Kyrgyz seed industry remains mired in pre-transition patterns that are poorly adapted to the new farming structure. The inefficient delivery mechanisms for inputs, technologies, and outputs have a depressive impact on jobs and welfare in the rural areas.

KAED will draw on and complement USAID projects in the region and can serve as a pilot and model for the proposed significant World Bank project to support agricultural marketing. The primary result of the KAED after 2 years will be a regional trade association of agro-input dealers with access to credit, business planning, trade oppor-

tunities, policy advocacy, extension and value-added training, and other beneficial services.

The IFDC approach, as successfully applied in Albania, Bangladesh, and Kosovo, is to develop value chains by keying on agro-input dealers and agro-processors. The projects organize agro-enterprises into trade associations, which, along with selected progressive agro-entrepreneurs, become the vectors for change. IFDC forges backward linkages to farmer suppliers and forward linkages to output markets. The implementation plan flows from the USAID strategic objectives and best practices for private sector-led growth and enterprise development.

## IFDC Conducts Workshop on Phosphate Rock in Malaysia

"A large proportion of the arable land in the tropics and subtropics is moderate to strongly acid," says Dr. S. H. Chien, IFDC Senior Soil Chemist. "Such soils tend to be deficient in phosphorus, an essential macronutrient for plant growth, and frequently possess relatively high phosphorus-fixing capacity that can reduce the recovery rate of applied conventional water-soluble phosphate fertilizers, especially for long-term crops. Unless the problem of phosphorus deficiency is solved, these soils will continue to present a serious constraint to increased crop productivity and sustainable agricultural development."

Chien served as program manager of a 1-week international meeting on the use of phosphate rock for direct application and related appropriate technology that was held in Kuala Lumpur, Malaysia, during July 16-20, 2001. IFDC—in collaboration with the Malaysian Society of Soil Science (MSSS), the Potash and Phosphate Institute (PPI) and the Potash and Phosphate Institute of Canada (PPIC), East and Southeast Asia Program (ESEAP)—conducted the workshop.



Photo by  
Upendra Singh

Attending the meeting were 89 delegates from 33 countries, including Algeria, Australia, Austria, Belgium, Brazil, China, Egypt, England, Ethiopia, France, Ghana, Guinea, India, Indonesia, Iran, Israel, Jordan, Kenya, Korea, Laos, Malaysia, Morocco, New Zealand, Saudi Arabia, Singapore, Spain, Tanzania, Thailand, Tunisia, Uganda, Venezuela, Vietnam, Zambia, and Zimbabwe.

The Director General of the International Fertilizer Industry Association (IFA)—Mr. Luc M. Maene—presented the keynote address. In his summary, Maene remarked, "The use of phosphate rock is established in Brazil, Colombia, New Zealand, Malaysia, Indonesia, India, Sri Lanka, and

certain other countries. This demonstrates that the product can find a niche where it has proved to be agronomically effective and economically attractive."

Thirty-four eminent national/international researchers made presentations and shared their experiences.

The workshop met its objectives, which included the following:

- To present and discuss the latest agronomic research results on the use of natural phosphate rocks and modified products as influenced by sources of phosphate rock, types of soil, management practices, and cropping systems.
- To gain updated information on the production and the agronomic use of phosphate rock from the phosphate rock producers, dealers, and users in different countries.
- To provide an international forum for an objective discussion on the potential use of either indigenous or imported phosphate rocks for direct application to increase crop production or lower crop production costs in the future.

One alternative solution to the use of expensive water-soluble phosphate fertilizer is to directly apply suitable sources of phosphate rock, either indigenous or imported, that can be effective—both agronomically and economically—for crop production under certain soil, crop, and climatic conditions. Although low-cost direct application of phosphate rock has been commercially used in only a few countries, e.g., Malaysia, Indonesia, Brazil, Colombia, and New Zealand among

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## IFDC Conducts Workshop....

others, much interest has been generated on the agronomic use of phosphate rock during the past 15-20 years. Despite hundreds of published research papers and several national/international conferences, there is still lacking a general consensus on the agronomic use of phosphate rock because conflicting results are still being reported.

It is now recognized that effective use of phosphate rock for direct application requires a better understanding of the complex cropping systems involving interactions among variables of phosphate rock sources, soil properties, crop species, and management practices. It is also known that under certain conditions, e.g., reactivity of phosphate rock too low, soil pH too high, etc., direct application of phosphate rock does not give satisfactory results. Modification of phosphate rock such as partial acidulation or dry compaction/wet granulation of phosphate rock with water-soluble phosphate fertilizers has also been suggested as alternative means of producing economically and agronomically effective phosphate fertilizers from indigenous phosphate rock resources that may otherwise be unsuitable for direct application.

IFDC plans to publish proceedings of this workshop; the publication will be announced in the *IFDC Report* and on the IFDC web site.

## Announcements

**Daniel T.L. Themen** joined IFDC in June 2001, as Policy Advisor—Kosovo Agricultural Development Project (KADP). Prior to his association with IFDC, Themen worked for H. Clarkson & Co., PLC, London, England; The World Bank Group—International Finance Corporation's Land Privatization and Farm Reorganization Project in the Ukraine; and the European Union.

**Dr. Charles F. Yamoah** joined IFDC in June 2001, as Project Leader, Sustainable Integrated Soil Fertility Management Project of the Africa Division. Prior to his employment by IFDC, Yamoah worked with the Soil Research Institute of the Council for Scientific and Industrial Research in Ghana; University of Nebraska-Lincoln as a research agronomist; USAID's Senegal Natural Resources-Based Agricultural Research Project; and Soils/Agroforestry Specialist with the International Institute for Tropical Agriculture.

**Gregory P. Olson** joined IFDC in July 2001, as Agribusiness Advisor, KADP. Prior to his association with IFDC, Olson served as Regional Director for the USAID-funded Firm Level Assistance Group as a representative of the MBA Enterprise Corps in Croatia.

**Dr. Har B. Singh** joined IFDC in October 2001, as Chief of Party, Developing Agricultural Inputs Markets in Nigeria Project. Prior to his employment by IFDC, Singh served as Director for Technology Transfer at the African Centre for Fertilizer Development (ACFD), Harare, Zimbabwe. Previously, he was Chief Technical Advisor for the Food and Agricultural Organization of the United Nations in Zambia.