

# Report

*an update on  
the work & progress at the  
International Fertilizer Development Center*

## Dr. Paul J. Stangel: a profile

On July 8, 1992, an outstanding international development official, researcher, and friend to the International Fertilizer Development Center—Dr. Paul J. Stangel—retired as President and Chief Executive Officer of IFDC. Since 1990, Dr. Stangel has been responsible for the overall operation of IFDC with specific emphasis on corporate policy ensuring financial stability, strategic planning, new program development and growth, and special projects.

During his tenure as President, IFDC's operations and its programs were redirected to ensure that fertilizer is considered part of an integrated nutrient management program that is economic for the small farmer, environmentally sound, and sustainable. In addition, the Center established a program dealing with agribusiness.

Prior to being appointed to that position, Stangel served as IFDC's Deputy Managing Director from 1975 until October 1990.

He has left an indelible mark on the agricultural development of developing countries around the world. His influence has been especially realized in the Asian and Middle East countries, particularly Indonesia, Philippines, Pakistan, Burma, Bangladesh, and more recently Nepal and Egypt. His contributions to the fertilizer world are having and will continue to have an impact on the developing countries' abilities to increase their food production capacities and to improve the quality of life of their people.

The effectiveness of his efforts in research and development can be seen in his advances in increasing the efficiency of nitrogen fertilizer, which have reached fruition in developing countries, including the Philippines, Indonesia, and Bangladesh, to name a few.

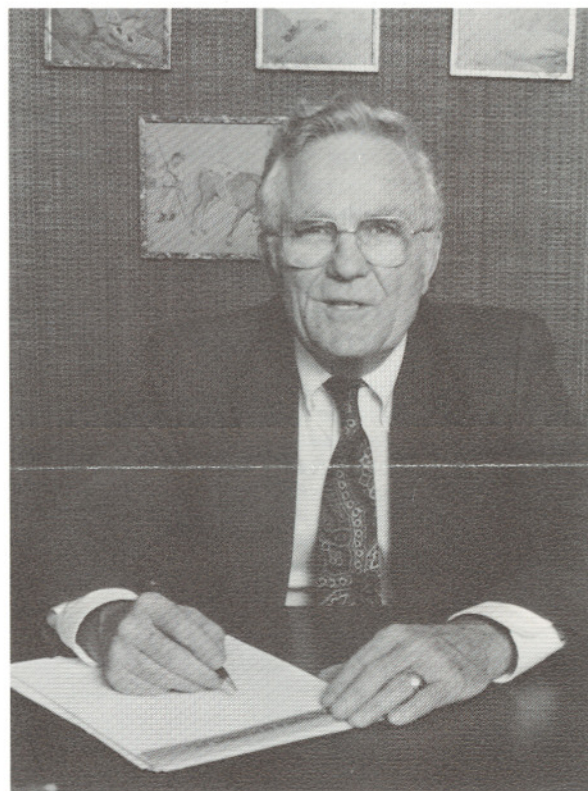
Prior to joining IFDC, Stangel worked as an agronomist on the International Fertilizer Development Staff of the Tennessee Valley Authority during 1969-75. His primary duties included development, evaluation, and marketing of new and/or more efficient fertilizers for developing countries and resulted in short-term consultancies to 25 countries and a 3-year stay in Indonesia.

On loan to the Indonesian Government through USAID, he was instrumental in convincing Indonesian authorities to build a major fertilizer industry. He gained experience in the fertilizer industry during 1967-69 as an industrial agronomist with the International Minerals and Chemical Corporation.

He taught at the University of Wisconsin as an assistant professor of soils, 1964-67, where he also supervised and guided research students toward their Ph.D. degrees. Stangel holds a Ph.D. degree in soils and plant physiology from the University of Wisconsin.

Among his honors is a Superior Honor Award from the U.S. Agency for International Development for sustained superior technical assistance to the development of a fertilizer sector in Indonesia.

In addition to being an effective leader, an international development specialist, scientist, and teacher, he also is an effective communicator, with more than 100 publications to his credit.



*(Photo by Charles E. Butler)*

## IFDC Report

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IFDC is a public, international, nonprofit organization, governed by an international board of directors with representation from developed and developing countries. The Center is supported by various bilateral and multilateral aid agencies, private foundations, and national governments. IFDC focuses on creating sustainable agricultural productivity and food production in the tropics and subtropics through the development and use of improved and environmentally sound fertilizers and fertilization practices.

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## Dr. Amit H. Roy named Acting President

On July 8, 1992, the Executive Committee of the IFDC Board of Directors selected Dr. Amit H. Roy as Acting President and Chief Executive Officer until the meeting of the full Board in October 1992. Dr. Roy previously served as IFDC's Executive Vice President and Chief Operating Officer.

In announcing Roy's appointment, the Chairman of the Executive Committee, Dr. W. David Hopper, assured the IFDC staff that the Center will continue to fulfill its original mandate of working for the agricultural development of the poor nations of the developing world. He stated that: "new research dimensions and findings made by IFDC staff in sustainable agriculture and environmental and resource management will benefit farmers and peoples of developing countries and particularly the poorest nations of the developing world. This has been and will remain the central core of the Center's work in accordance with its founding mandate."

Dr. Roy, a native of India, has been with IFDC since 1978. Initially, he served as a Chemical Engineer in the Fertilizer Technology Division; he was later named Special Project Engineer. In October 1989 he was promoted to Acting Director of the Division, and in January 1990 he became the Director.

The new Acting President has a strong background in fertilizer production. His areas of specialty include process and product development as related to fertilizer, with emphasis on energy efficiency and conservation.

At IFDC Roy has been involved in a wide array of projects, including research and development of new or modified fertilizer materials and processes applicable to indigenous raw



(Photo by Charles E. Butler)

materials, especially phosphate rock. He has assisted in team studies to rationalize fertilizer industries in several developing countries and has periodically provided technical assistance in fertilizer technology to developing countries. In addition, he has participated in the development and execution of engineering and pollution-oriented technical assistance assignments usually to assess the process, energy, and environmental problems.

Besides the research and technical assistance activities, Roy has managed and participated in individual and group training programs designed to improve the skills of technical personnel in the developing countries. He has more than 80 publications including project reports to his credit.

Roy received a B.S. degree in chemical engineering from the Indian Institute of Technology in 1970. At the Georgia Institute of Technology, he received a Ph.D. in chemical engineering in 1976.

## IFDC initiates privatized fertilizer marketing system

An IFDC team recently laid the foundations of a free fertilizer marketing system in Albania. In this East European country, which was previously accustomed to total central control, with no private enterprise of any kind, a system of private fertilizer dealers has been created.

IFDC's involvement began in October 1991 with the participation of Dr. W. E. Clayton, Transportation/Distribution Specialist, in a project design team, sponsored by the U.S. Agency for International Development (USAID). This led to the emergency fertilizer import and marketing privatization initiative funded by USAID. The IFDC technical assistance team was in Albania during April-June 1992. The team leader was Dr. Ray B. Diamond, who is also Fertilizer Evaluation Unit Coordinator; Dr. W. E. Clayton, Transportation/Distribution Specialist; H. N. Majumder, Credit Specialist; Dr. Thomas P. Thompson, Rural Sociologist; Xia Wan, Visiting Scientist (Data Analysis Specialist); James M. Kelly, Purchasing Agent; Claude Freeman, Marketing Consultant; and Harry Nielsen, Truck Transport Consultant. The

overall project is under the direction of Kenneth L. Moots, Director, IFDC-Asia.

In April to June 1992 the free marketing system was instituted to ensure the effective marketing and distribution of 20,000 tons of urea fertilizer imported by IFDC with funding from USAID. In addition to the fertilizer, 30 10-ton trucks were also imported from the United States with financing from USAID. These trucks were available for hire by dealers for fertilizer transport to the districts. The fertilizer was supplied in bulk and shipped to the main port of Durres, where it was bagged next to the ship. The fertilizer was then auctioned through competitive bids to dealers, who, in turn, sold the fertilizer to farmers.

"Part of my duties consisted of setting up the IFDC port operation, dealer and truck documentation systems and port warehousing inside the port," says Clayton. "Any fertilizer that IFDC could not load directly to dealers' trucks was placed in the warehouse. The port of Durres is well managed but lacks modern facilities. It was an interesting challenge set-

ting up a large "private" operation within a system only accustomed to working totally under Government direction."

One of the first activities of the IFDC marketing team was to inform the Albanian people of the emergency fertilizer import. This was done with the active support of the local newspapers, radio, and television stations. The team members also arranged meetings and made direct contacts to advise potential dealers of the necessary arrangements and procedures. For the first time, private fertilizer dealers were created in Albania. Another first for the country was the establishment of credit arrangements by the team within the newly established banking system. Auction procedures for the sale of fertilizer by competitive sealed bids were also developed. According to USAID the IFDC project was effective both in distributing the fertilizer and in introducing free market mechanisms to Albania's agricultural sector.

In addition to port arrangements, the team also operated a truck fleet for distribution of the fertilizer and

**Bulk urea is lifted by crane from the ship's hold into one of the bagging machines. From the bagging machine, the bagged fertilizer is lifted by conveyor into waiting trucks and transported throughout Albania.**

*(Photo by  
Dr. W. E. Clayton)*



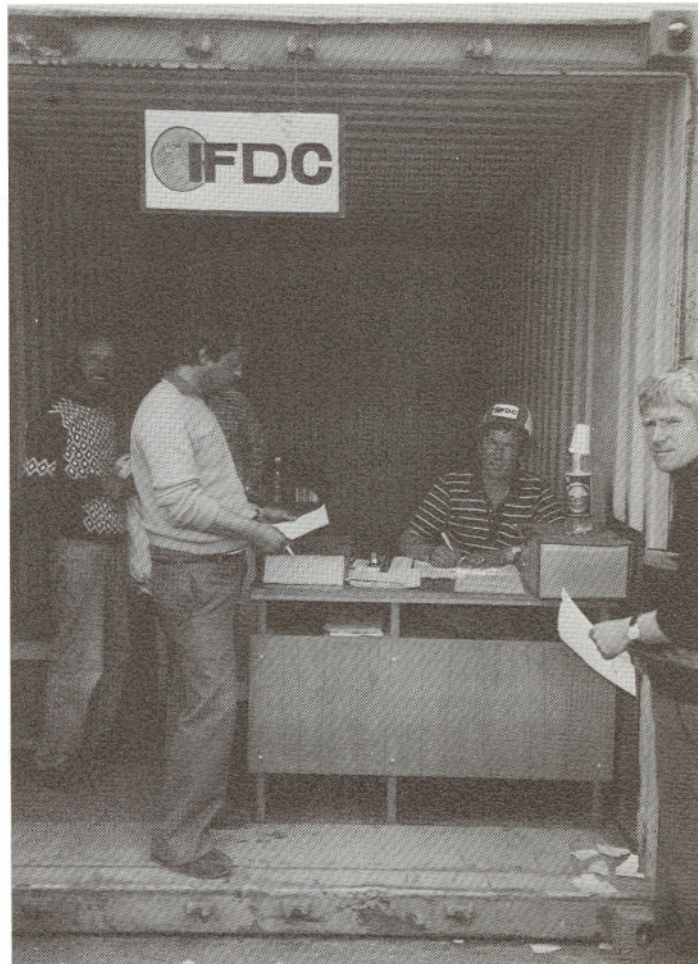
assisted dealers in procuring transport and in delivery to the districts. The marketing consultant, Claude Freeman, handled the marketing and promotional aspects of the project, along with dealer training. Freeman says that 115 new private fertilizer dealers were created by the project.

IFDC's Rural Sociologist Dr. Thomas P. Thompson oversaw the socioeconomic aspects of this project. In that capacity he monitored the destination and use of the fertilizer and employed teams of enumerators to collect data using dealer and farmer questionnaires. "A total of 542 farmers were interviewed in the farm survey," Thompson says. "There were 877 interviews conducted for the fertilizer monitoring survey, of which 172 were dealers, state farms, and state enterprises and 705 were customers. A total of 12 major cities and 26 markets were surveyed."

IFDC Visiting Scientist Xia Wan performed the statistical analyses of the data from the farm surveys, fertilizer monitoring surveys, and marketing surveys. "This information is vital in guiding the establishment of an effective free marketing system and will prove beneficial in increasing agricultural production in Albania," Wan says.

Mr. H. N. Majumder, Credit Specialist, worked with the banks in Albania to set up a credit system that allowed the fertilizer dealers to obtain loans for purchase of fertilizers on a commercial basis.

"This project has established the idea that the free marketing system will work in Albania," Dr. Ray B. Diamond, Team Leader, says. "The impact of the overall project is that it will assist in increasing food output and restoring the agricultural sector to its previous level. The agricultural sector is capable of feeding the country's people and also has export potential. Albania presently depends on major food aid imports of wheat, olive oil, sugar, etc., through the port of Durres."



(Photo by Dr. W. E. Clayton)

**In the control "office" next to the ship in Durres port, IFDC clerks issue loading documents to the dealers collecting their fertilizer.**

## **Togo—West Africa**

# **Kellogg grant to IFDC-Africa to aid technology transfer**

A project initiated by the Africa Division of IFDC should ultimately help African farmers to improve their standard of living by placing more food on their tables. The project, which began on August 1, 1992, and extends through July 31, 1993, is being funded by a grant from the W. K. Kellogg Foundation.

"This project will focus on developing better ways of adapting and transferring technologies that are developed by international agricultural research scientists to national scientists, then to extension agents, and finally to the farmers who need to benefit from the use of the technologies," says Dr. Uzo Mokwunye, Director of IFDC-Africa.

"This project is especially critical and timely when one considers the present food situation in sub-Saharan Africa. It has been predicted that if present trends continue, the food deficit by the year 2000 will be approximately 100 million tons. More than half of this deficit will occur in West Africa. Since the year 2000 is only 8 years away, it is urgent that steps be taken now to move toward greater food self-sufficiency through the widespread promotion and adoption of more productive

technologies based on the sustainable restoration and maintenance of soil fertility throughout the region."

One of the objectives of the project is to develop an extension capability in IFDC-Africa to enable the national systems to strengthen their own programs. By testing and adapting model extension programs, this project should help to enhance the effectiveness of extension systems in West Africa.

The principals of the project will include scientists from IFDC-Africa, extension personnel from Ghana and Togo, resource professionals representing African national agricultural research systems, and individuals from other IARCs, who have developed improved methods of transferring technology to developing-country farmers. Scientists at IFDC-Africa will develop ways to adapt the methods that have been used in other developing regions to better meet the needs of African countries for improved and more widespread technology transfer and adoption among rural communities.

The W. K. Kellogg Foundation was established in 1930 to "help people help themselves." As a private grantmaking foundation, it provides seed money to organizations and

institutions that have identified problems and have designed constructive action programs aimed at solutions. A majority of the Foundation's grantmaking is focused on the areas of youth; leadership; philanthropy and volunteerism; community-based, problem-focused health services; higher education; food systems; rural

development; groundwater resources (in the Great Lakes area); and economic development (in Michigan). Programming priorities concentrate grants in the United States, Latin America and the Caribbean, and southern Africa.

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## STAFF CHANGES—RETIREMENTS AND APPOINTMENTS

### Retirements

#### IFDC Administration Division Director retires

After a tenure of 18 years, Marjorie R. Brashier retired as Director of the Administration Division and Secretary/Treasurer of the Board of Directors on July 31, 1992.

The second person to be employed at IFDC, Brashier was responsible for all work of the Administration Division. This Division included the departments of accounting services, personnel and special services, word processing and graphics, and library services.

Prior to joining IFDC in 1974, Brashier held a similar position during the period, 1969-74, on the International Fertilizer Development Staff of the National Fertilizer Development Center (now called the National Fertilizer and Environmental Research Center) of the Tennessee Valley Authority.

As for her background, Brashier attended Larimore Business College in Florence, Alabama (U.S.A.), where she concentrated on office management and business law.



*(Photo by Tommy L. Wright)*



#### Soil Science Specialist retires

Dr. Luis A. León, an IFDC Soil Science Specialist stationed at Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia, retired September 30, 1992.

Dr. León was responsible for training in fertilizer use and recommendations for crops such as cassava, rice, beans, and tropical pastures. He was head of the IFDC/CIAT Phosphorus Project and coordinator of the IFDC/CIAT Soil Fertility Studies Project. After earning a B.S. degree in chemistry from the Colombian National University (UN) and M.S. and Ph.D. degrees from the University of California, León was associated with the national soils program of the Instituto Colombiano Agropecuario (ICA) for 20 years. He worked first as head of the program's soil testing laboratory at Palmira, Colombia; later as head of the program, involved in research on soil chemistry, fertility, and improvement, and on responses of tropical crops to fertilizers; and then on the ICA-UN graduate faculty as professor of soil chemistry, soil fertility, and saline and alkaline soils. León served three terms as president of the Colombian Society of Soil Science and is former president of the Latin American Society of Soil Science.

## New Employees

### Dr. Walter T. Bowen joins modeling group

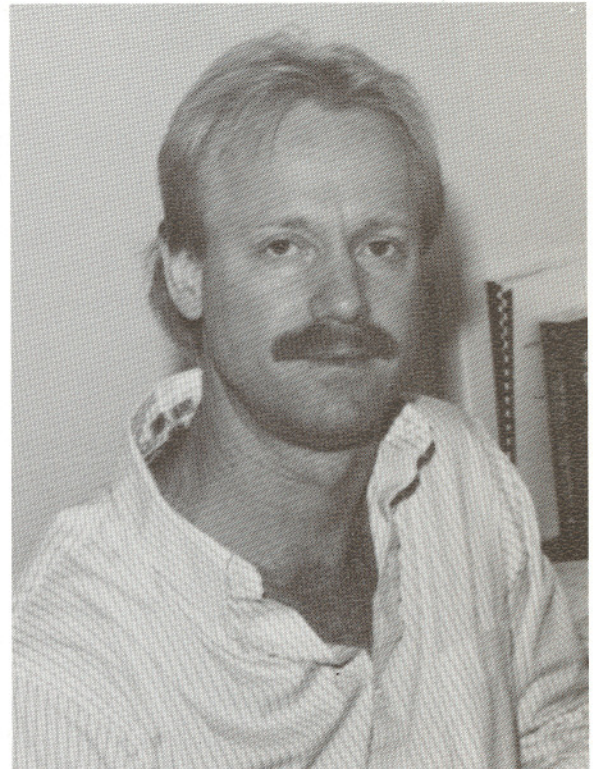
On August 17, 1992, Dr. Walter T. Bowen, formerly with the University of Florida, joined the Resources Management Research and Development Division as a Systems Modeler.

As a postdoctoral associate at the University of Florida, Bowen participated in a multidisciplinary team developing crop simulation models, tested and improved a plant and soil nitrogen model, and developed crop model linkages for simulating long-term cropping sequences.

Besides his research activities, Bowen also taught in crop modeling workshops held at the Universities of Florida and Hawaii, in the Philippines, and at IFDC.

Prior to his appointment at Florida, Bowen served as a senior research associate at Cornell University. While associated with Cornell he coordinated several soil management Collaborative Research Support Program (CRSP) activities in the Amazon and Cerrado regions of Brazil.

Bowen holds a B.S. degree in agronomy from Clemson University and M.S. and Ph.D. degrees in soil science from Cornell University.



*(Photo by Charles E. Butler)*



*(Photo by M. O. Klein)*

### Claude C. Freeman III joins as marketing specialist

On September 1, 1992, Claude C. Freeman III joined IFDC as a marketing specialist posted in Tirana, Albania. Freeman has worked with IFDC on a consultancy basis on several projects, most recently on a short-term project in Albania. During 1991 Freeman also worked as an agricultural credit consultant on an IFDC project in Ghana, which focused on privatizing the Ghanaian seed and fertilizer sectors. Prior to this project, he served as manager (joint secretary for projects) of a nonprofit charitable organization in India called Sri Vidya Samiti.

For approximately 5 years, Freeman worked as a marketing consultant in Nigeria for several organizations and agencies, including the National Fertilizer Company of Nigeria and the Federal Ministry of Agriculture.

Freeman acquired a B.S. degree in business from the University of Texas and a Master of Professional Studies from Cornell University.

**Headquarters—**

# Training program on "Efficient Marketing Management of Fertilizers and Other Agri-Inputs" attracts 19 representatives from 9 countries

"In India the availability of land is going down as the population and food production needs are going up. The solution is to get the maximum productivity per unit of cultivated area; the key inputs necessary to achieve this goal are seeds, pesticides, credit, fertilizer, extension, and irrigation."

This statement by Dr. R. V. Misra, Senior Manager (Marketing) of the Krishak Bharati Cooperative, Ltd. (KRIBHCO) illustrates that he understands the necessity of all of the key inputs in producing a sustainable growth of agriculture. As Senior Manager for Marketing of KRIBHCO, one of the largest cooperatives in India and possibly in Asia, Misra is responsible for planning the marketing activities, formulating marketing strategy and plans, their implementation, and monitoring and providing marketing information.

During August 3-September 4, 1992, Misra participated in a train-

ing program on the "Efficient Marketing Management of Fertilizers and Other Agri-Inputs" at IFDC Headquarters. Nineteen participants from Bangladesh, Burkina Faso, Ethiopia, India, Kenya, Nigeria, Pakistan, Republic of China, and Togo attended this program. The program was under the direction of Gene T. Harris, IFDC Economist; handling all of the administrative details was R. S. Giroti, Program Manager, Human Resource Development.

Misra found the training program to be quite comprehensive since it covered all of the "theoretical and practical aspects of marketing." In addition, the program included field visits to various U.S. agribusinesses where the participants saw marketing in practice. The Indian participant appreciated the fact that the program covered the "basic principles of marketing as well as presenting an overview of what is happening in the

world." A highlight of the program for him was the information on privatization and its impact.

Another participant, Abba Ahmed Auchan, Principal Agricultural Officer with Nigeria's Federal Ministry of Agriculture, also gained specific information that can assist him in his position.

"This training program was helpful to me in a number of areas," says Auchan. "But most timely is the information on privatization since Nigeria is presently considering privatization of its fertilizer sector. This program was very rich and rewarding to me since it afforded me many new experiences and ideas, which—with some fine tuning—can be borrowed and applied in my country."

In Nigeria Auchan is responsible for arranging for the receipt of fertilizer from the ports and distributing it throughout his country. His work involves followup to ensure that fertilizer gets to the farmer through the states.

## INTERNATIONAL FERTILIZER DEVELOPMENT CENTER Training Calendar

Program	Dates	Location	Fees (US \$)
Data Collection, Analysis, and Projections for Agri-Inputs Studies	March 29-April 16, 1993	Muscle Shoals, Alabama; Mundelein, Illinois; Orlando, Florida; Washington, D.C., U.S.A.	1,800
Deregulation and Privatization Policies to Reform Agribusiness Markets <sup>a,b</sup>	April 19-30, 1993	Muscle Shoals, Alabama; Washington, D.C., U.S.A.	1,200
Computer Simulation for Crop Growth and Nutrient Management	May 10-21, 1993	Muscle Shoals, Alabama, U.S.A.	1,400
Nitric Acid-Based Fertilizers and the Environment <sup>a,b</sup>	June 14-18, 1993	Brussels, Belgium	700
Modern Techniques in Fertilizer Distribution and Handling (Traveling Program)	June 21-July 9, 1993	England, Ireland, Holland, Belgium, Germany	1,800

a. New program.

b. Workshop.

Program dates and locations are subject to change.

Fees do not include travel expenses or living expenses.

For more information regarding these programs, please contact the Director, IFDC Outreach Division, P.O. Box 2040, Muscle Shoals, AL 35662.



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