

Dr. Jumpei Ando



Dr. George Cooke



Sir John Crawford



Dr. Robert Wagner

PROFILES

New Board Members

One of the steps in qualifying IFDC as a public international organization was the expansion of the Board to nine members. Three were nominated by the CGIAR; two by the U.S. Government; and four by the Board at large. To bring the Board to full complement, four new members have recently been named.

Dr. Jumpei Ando (Japan)

Dr. Ando is a Professor of Industrial Chemistry at Chuo University, Japan. He has worked as a research chemist at TVA on two separate occasions and now serves as a consultant to the Environmental Protection Agency of the United States. Dr. Ando has published extensively on phosphates, phosphatic fertilizers, compound fertilizers, and pollution control technology.

Dr. George Cooke (United Kingdom)

Dr. Cooke is the Chief Scientific Officer of the United Kingdom's Agricultural Research Council and has considerable international experience including assignments on soil fertility problems in the developing world. Dr. Cooke's research has focused on soil chemistry, soil fertility, and the value and use of fertilizers.

Sir John Crawford (Australia)

Sir John Crawford is a former Vice Chancellor at the Australian National University and Chancellor at the University of Papua, New Guinea. From 1971 to 1976 he served as Chairman of the Technical Advisory Committee (TAC), the group that advises the Consultative Group for International Agricultural Research (CGIAR) on research priorities.

Dr. Robert Wagner (USA)

Dr. Robert Wagner currently serves as President of the Potash Institute located

in Atlanta, Georgia, USA. He is a former Director of the Cooperative Extension Service in Maryland. Dr. Wagner's past research has centered on methods to improve pasture and range conditions for livestock production.

Presidential Signature

INTERNATIONAL STATUS

On March 14, 1977, IFDC was designated as a public international organization upon the signature of President Carter. This designation entitles IFDC ". . . to enjoy the privileges, exemptions, and immunities conferred by the International Organization Immunities Act," a status sought by IFDC since its inception in late 1974. A key to the attainment of this status was an agreement entered into between IFDC, the U.S. Government, and the Consultative Group for International Agricultural Research (CGIAR) in late 1976. The IFDC Board of Directors and Staff appreciate the efforts by those in the U.S. Government and the CGIAR in helping to obtain this valued status.

The Philippines

GRANT TO IFDC

The Philippines becomes the first country in the developing world to contribute financial support to IFDC core budgets. Mr. Arturo R. Tanco, Jr., Secretary of Agriculture, made the grant on behalf of his government for "the continuing assistance IFDC has extended," in support of agricultural development.

The Board of Directors and Staff of IFDC thank The Philippines for their support and pledge to continue to research, develop, and transfer fertilizer technology that can support national efforts to accelerate agricultural development.

Adoption and Demand Research

Most governments in developing countries are seeking to increase fertilizer supplies through either importation or additional production capacity. Increased importation or expansion of capacity, by itself, does not guarantee an accelerated rate of increase in fertilizer use. Knowledge of constraints to increased fertilizer use and policy measures to overcome these constraints are needed to stimulate adoption and demand.

The objective of IFDC adoption and demand research is to thoroughly understand the forces affecting fertilizer adoption and demand in developing countries and how policy action might accelerate the rate of fertilizer use.

A review of the literature reveals the need for an interdisciplinary research focus on the problems affecting fertilizer

adoption and demand. The IFDC approach considers a broad range of economic, social, and physical factors, including the influence of variations in soils and agroclimatic conditions.

IFDC is in the process of establishing collaborative research projects in several countries. An important part of the research program will be farm level studies on the process and pattern of fertilizer adoption and use among small farmers.

The first phase, the development of a methodological framework, is complete. The second phase, with adaptation, field testing, and demonstration of methodology through collaborative projects with national research institutions in 3-5 developing countries, is still being developed.

FERTILIZER POLICIES AND ECONOMIC DEVELOPMENT

Public Policy Research

The goal of public policy research at IFDC is to evaluate the relative effectiveness and impact on economic development of different fertilizer price supports, subsidies, and credit programs. The output of this research is intended to provide guidelines to policymakers for formulating fertilizer policies which are appropriate and more effective in meeting economic development goals.

Many governments pursue policies aimed at expanding the use of fertilizer and/or improving the efficiency of its use. Such policies include: foreign trade regulations, direct participation in manufacturing and distribution, price subsidies and supports, credit programs, and market controls.

Considerable economic research has been carried out on the implications of public policies in foreign trade of fertilizers and the various aspects of agricultural product pricing and marketing. IFDC will supplement past research with information on the relative efficiency and equity implications of alternative fertilizer policies.

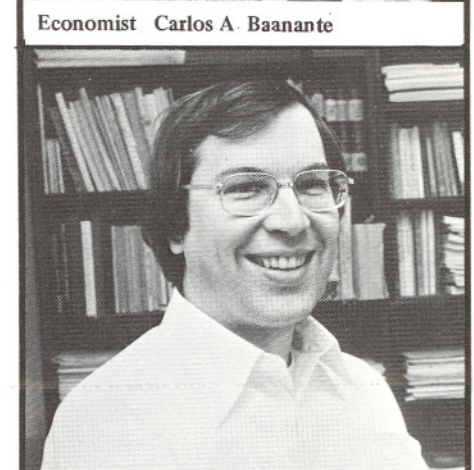
The initial project consists of 3-5 country case studies in Asia, Africa, and Latin America. A network of collaborating social scientists is being established between IFDC and collaborators from participating countries. The empirical analysis will be carried out in participating countries with close collaboration among all network participants.



Economist Surjit S. Sidhu
Team Leader—Adoption and Demand



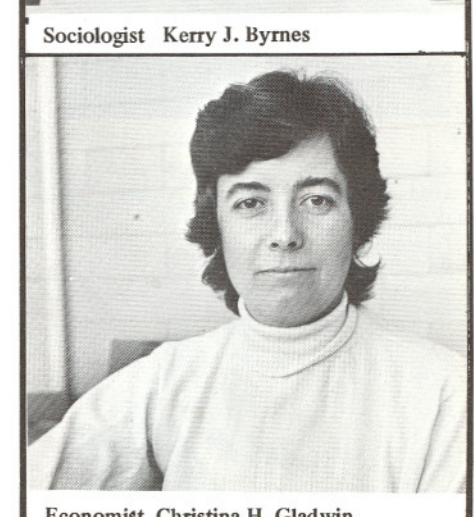
Economist Carlos A. Baanante



Sociologist Kerry J. Byrnes



Economist Mohinder S. Mudahar, Team Leader—Public Policy



Economist Christina H. Gladwin

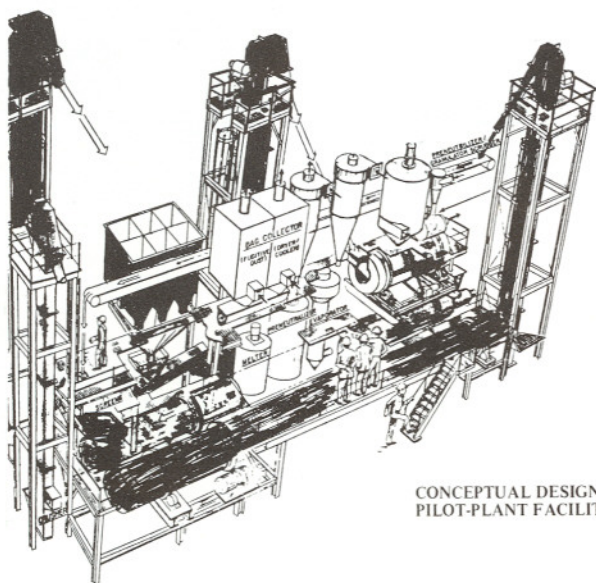
Engineering Research Facility

IFDC's pilot plants will play a key role in the transfer of fertilizer process technology from the laboratory to commercial plants around the world. The new building for engineering research is essentially complete, and when equipped it will greatly expand the research capability in fertilizer technology.

The bulk-blending and granulation pilot-plant units will be ready for operation in early 1978 and will be used for three primary purposes: to research, develop, and demonstrate commercial operating techniques; to prepare traditional and new fertilizer materials for greenhouse and field tests; and to train individuals in the principles of fertilizer production.

The granulation plant will feature equipment large enough to reliably extrapolate process chemistry, operating parameters, and cost data to production-size units. A wide variety of granulation processes will be developed and demonstrated with emphasis on available raw materials and needs in developing countries. In some cases, existing technology will be modified and in others, new technology will be developed in response to producer requirements.

Because most commercial fertilizer manufacturing processes can be closely duplicated in the pilot plant, this facility will also serve as a useful tool for troubleshooting the production problems encountered in commercial-scale plants operating in developing countries.



CONCEPTUAL DESIGN - PILOT-PLANT FACILITY

WORLD FERTILIZER INFORMATION SYSTEM

Plant Investment Analysis Program

The plant investment analysis component of the World Fertilizer Information System is now operational and available for use through IFDC on a request basis.

This package provides estimated cost and return data to enable managers or officials to compare alternative plant locations and assess, on a preliminary basis, the feasibility of investing capital in a fertilizer facility.

Currently, the system has analytical programs with the following capabilities:

1. Estimation of construction costs for a fertilizer plant in over 100 countries. Data are available on seven production processes (ammonia, urea, sulfuric acid, phosphoric acid, normal and triple superphosphates, and

diammonium phosphate).

2. Fertilizer material production cost reports using IFDC data or information specified by the user.
3. Financial analysis internal rate of return calculations on a specified fertilizer investment situation using data supplied by the user.
4. Sensitivity analysis indicating how changes in fertilizer costs and prices affect profitability using data specified by the user.

If the user wishes to use the analytical programs for processes not currently included in the system, this can be accomplished through the option of supplying the system with the specific investment and production cost data needed for the analysis.

Bulk Blending and Market Development MONOMEROS, COLOMBIA

A technical assistance team of Dr. R. T. Smith, IFDC Outreach Coordinator for Latin America, and Mr. J. J. Schultz, IFDC Chemical Engineer in Fertilizer Technology, traveled to Barranquilla, Colombia, to consult with officials at Monomeros Colombo Venezolanos, S.A.

The technical assistance request focused on two subjects: the utilization and installation of recently acquired second-hand bulk-blending machinery and the development of a production and marketing program that would utilize existing MONOMEROS production facilities, as well as the newly acquired equipment.



Dr. R. T. Smith, IFDC Regional Coordinator for Latin America worked with MONOMEROS officials on marketing strategies for new grades of fertilizer materials.

Granular Urea

P. T. PUSRI, INDONESIA

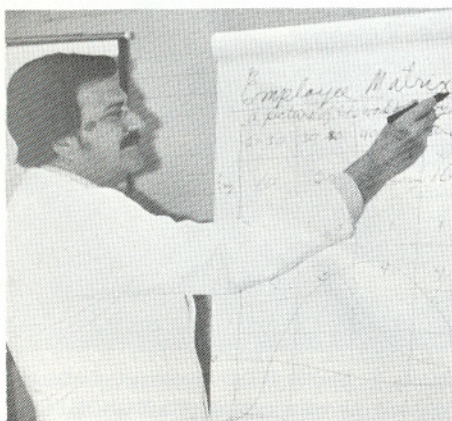
P. T. PUSRI has embarked on a program to modernize the PUSRI I urea fertilizer plant. IFDC, in accordance with its strong interest in the transfer of granular urea technology to developing countries, sent two chemical engineers, Mr. D. R. Waggoner, Outreach Division Director, and Mr. M. T. Frederick, to P. T. PUSRI to provide technical assistance in the conversion from prilled to granular urea.

Anticipated changes call for the conversion of the fertilizer finishing section to the production of granular urea utilizing the pan-granulation process. These changes will improve plant efficiency, lower maintenance costs, reduce air pollution, eliminate the need for rebuilding the prilling tower, and permit production of granular urea which has superior physical properties and can be used in bulk handling and blending NPK-type fertilizers.

Seminars—
ORGANIZATIONAL DEVELOPMENT

Seminars in organizational development form an important part of medium- and long-term training and development programs at IFDC. Such programs are concerned with improving coordination of resources—physical, financial, and human—used by the manager to successfully achieve, on a continuing basis, pre-determined goals and objectives in fertilizer production, distribution, and use.

Organizational development training activities are reviewed on an individual case basis to assure that they are supportive of the mission in each participant's organization. Management by objective procedures are used to keep programs on target. Ways to increase organizational effectiveness through improved communications, better interdepartmental cooperation, and human resource management are pursued.



Mr. Henrique Hopkins, Industrial Relations Manager, NITROVEN, Venezuela, works on an employee matrix as part of organization development planning in the human resource area of his company.

IFDC and FAI to Cosponsor December Seminar

December 1-3, 1977, IFDC will cooperate with FAI (Fertiliser Association of India) in cosponsoring the annual fertilizer seminar to be held in New Delhi.

The main theme of the seminar will be "a critical look at the fertilizer industry today and by 1990." The seminar emphasis will be on boosting the effectiveness of fertilizer used to produce needed food-stuffs, future availability of raw materials for fertilizer production, and recent developments in the production, marketing, and distribution of fertilizers.

The subject matter will be divided roughly into international, regional, and Indian subcontinent categories. IFDC will be largely responsible for the international point of view with FAI responsible for the Indian subcontinent. Both organizations will share responsibility for the regional presentations.

Those wishing more information concerning the seminar can contact Mr. Satya Nand, Executive Director, FAI, New Delhi, 110057, or Dr. Dennis Parish, Regional Coordinator—Asia, IFDC, Florence, Alabama 35630.



Dr. Dennis Parish, Regional Coordinator for Asia (left), Dr. S. K. Mukherjee of India, IFDC Board Member (center), and Mr. Carl Amstrup, Training Coordinator (right), conferred during December 1976 FAO/FAI Seminar in New Delhi, on Strategies for Development of Fertilizer Use by Small Farmers.

PUBLICATIONS AVAILABLE FROM IFDC

"Granular Urea—Advantages and Processes," published by IFDC.

"The Potential for Regional Cooperation in Fertilizer—A Methodology Study of the ASEAN Group," published by IFDC.

"Supplying Fertilizers for Zaire's Agricultural Development," published by TVA.

"West Africa Fertilizer Study (Volumes I - VII)," published by IFDC.

Volume I - Regional Overview

Volume II - Senegal

Volume III - Mali

Volume IV - Upper Volta

"Ghana—Progress in Fertilizer Production, Marketing, Education," published by TVA.



Published Quarterly by the
International Fertilizer Development Center

Christopher Dowswell, Editor

402 First Federal Building
Florence, AL 35630
USA

JOHN A. HANNAH, Chairman
DONALD L. MCCUNE, Managing Director

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