

PN-AAS-219

IFDC Marketing Development Services



Dear Reader:

A successful fertilizer marketing system can help developing countries to increase food production and at the same time decrease the farmer's fertilizer cost. Successful fertilizer marketing means that the right product is available on a timely basis at the right place and at the right price. Thus, fertilizer marketing involves a series of interrelated steps from the point of production to the farmer. Advertising, agronomics, credit, market research, pricing, projections, storage, transportation, training, wholesaling, and retailing are important aspects of marketing that require attention.

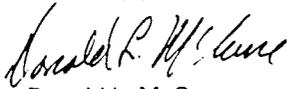
Marketing can be thought of as a chain comprising these links. The marketing system can be no stronger than the weakest link in the chain. We find that in many countries fertilizer is not really marketed; instead, it is distributed or sold through "stockists." The sale of fertilizer is not promoted, and the "stockists" are often not meeting the needs of farmers. Fertilizer marketing costs represent from 30% to 50% of what farmers pay for fertilizer. For every dollar invested in production facilities, approximately \$1 should be invested in marketing facilities such as warehouses, inventory, delivery equipment, retail outlets, credit arrangements, and other facets of the marketing system.

To be efficient a marketing system must be designed to operate within the constraints of a given country's policies including its political, social, agricultural, economic, and environmental policies. Ten years ago developing countries produced about 10% of the world's fertilizer. Today they produce about 25%. We are finding that as production increases, the problem changes from the lack of supply to the lack of an effective system for marketing this increased production. As consumption increases, the opportunities to reduce the cost of fertilizer marketing and to increase the efficiency in serving farmers gain importance in a country's national economy.

IFDC is unique in that we can draw upon a multidisciplinary staff to provide the marketing services needed for a particular project. Our staff includes agronomists, chemists, economists, engineers, geologists, and marketing specialists. There are few, if any, other organizations that have this diverse in-house experience available to assist a country, company, or organization with a particular marketing problem. In addition, we also have personnel with many years of practical experience. Many of our staff members were involved in fertilizer marketing with commercial companies prior to joining IFDC.

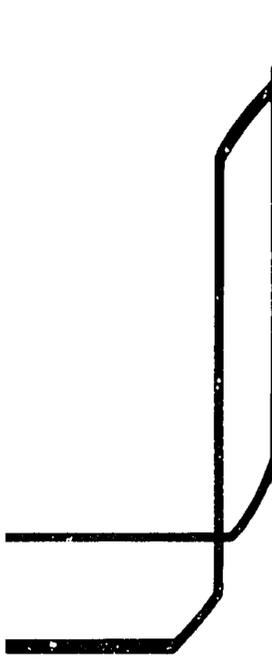
We at IFDC are dedicated to assisting developing countries in improving efficiency of fertilizer use, and we welcome the opportunity to assist national planners and/or marketing organizations in developing cost-effective fertilizer marketing systems. This booklet illustrates a few of the many types of marketing services that IFDC can provide. Please let us know how we can assist your country, company, or organization. If confidentiality is required, we can guarantee this in our contract.

Sincerely yours,



Donald L. McCune
Managing Director





Introduction

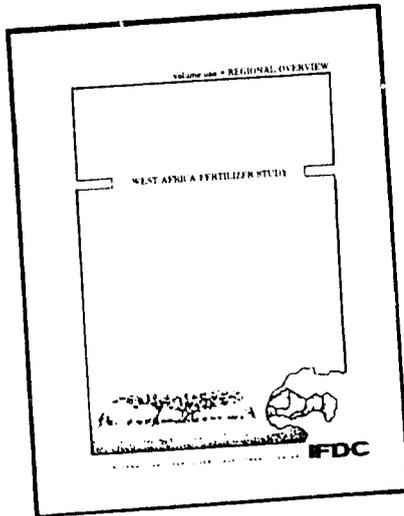
IFDC has conducted fertilizer sector studies for countries and companies throughout the world. In Africa studies have been conducted for many countries including: Madagascar, Nigeria, Senegal, Zambia, and Zimbabwe. On the Asian continent, IFDC has performed market studies for Bangladesh, Indonesia, Nepal, Pakistan, Sri Lanka, and Thailand. On the Latin American scene studies have evolved on Bolivia, the East Caribbean Common Market Countries, Colombia, Ecuador, Mexico, Paraguay, and Venezuela. The marketing services provided by IFDC range from assistance in solving a particular problem to the development of a complete fertilizer marketing plan. The training and experience of IFDC's marketing staff and the expertise and experience available at the local level can provide the impetus to move a country toward improved use of fertilizer and increased food production.

In addition, market prices and supply/demand statistics are gathered from many developing countries. Reports on the world fertilizer supply/demand outlook, the African fertilizer situation, the Asian fertilizer situation, and the Latin American fertilizer situation are compiled on a regular basis.

African Market Studies



West African Fertilizer Study



A series of severe droughts in the late 1960s and the early 1970s greatly reduced agricultural production in the Sahelian countries of West Africa. The human suffering during that time led to an international focus on the region in terms of food aid and development assistance. The U.S. Agency for International Development (USAID) was aware of the contribution of fertilizers to food production and of limited fertilizer use in this region. USAID requested IFDC to determine the current capacity and potential of the Sahelian region to produce, market, and use fertilizers. This series of documents is a result of that assessment. Published and unpublished literature was obtained in each country and from international development agencies. Field-level interviews were also conducted.

Madagascar

*Economic Study of the Madagascar Ammonia/Urea Project **

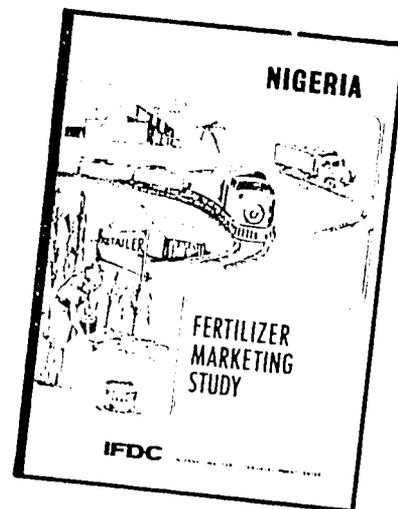
At the request of the Overseas Private Investment Corporation (OPIC), IFDC assessed the economic viability of a proposed project to construct an ammonia/urea plant in Madagascar. The plant was to be an alternative nitrogen fertilizer supply source for the domestic market and for exports. OPIC needed the assessment to make a decision regarding investment insurance on a portion of the project loan.

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Nigeria

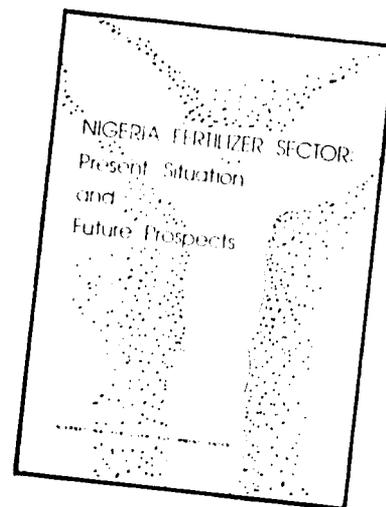
*Fertilizer Marketing Study **

The Federal Republic of Nigeria commissioned IFDC to prepare a fertilizer marketing study for Nigeria within the context of plans for constructing an ammonia/urea and NPK compound fertilizer complex at Port Harcourt. The objectives of this study were to assess the current marketing system and any constraints on it; develop supply and demand projections, as well as plans and detailed investment proposals for a fertilizer marketing system; and make recommendations concerning policies and government action needed to achieve these objectives. Six IFDC staff members visited each of the 19 states in Nigeria before preparing a detailed report and an executive brief. Their report is now being used in developing the marketing plan, and the leader of the study team is serving as an IFDC marketing consultant to the company constructing the plant.



Nigeria Fertilizer Sector: Present Situation and Future Prospects

This publication reviews fully all of the information related to fertilizer use in Nigeria. In addition, it identifies constraints to increased use and recommends action that would accelerate food production through the rational use of fertilizer and its related inputs.



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Senegal

*Senegal Fertilizer Study for Economic Support Grant **

At the request of the U.S. Agency for International Development (USAID), IFDC prepared a study to assist the agency in the design of a fertilizer import program for the Government of Senegal. The report includes an evaluation of the demand, production, and marketing of fertilizers in Senegal and recommendations based on this evaluation.

Zambia

*Fertilizer Sector Overview **

IFDC and Iowa State University made a study of the fertilizer sector in Zambia. The objectives of the study were to analyze the distribution system, evaluate the existing fertilizer supply system, project fertilizer product use to 1992, and develop terms of reference to plan and implement an efficient fertilizer system. The report was used by USAID; the agency proposed to lend the Government of Zambia US \$20 million, with the understanding that foreign exchange provided under this loan be used to procure materials required for the domestic production of fertilizer. This study examined the entire fertilizer marketing system and especially its accessibility to small farmers.

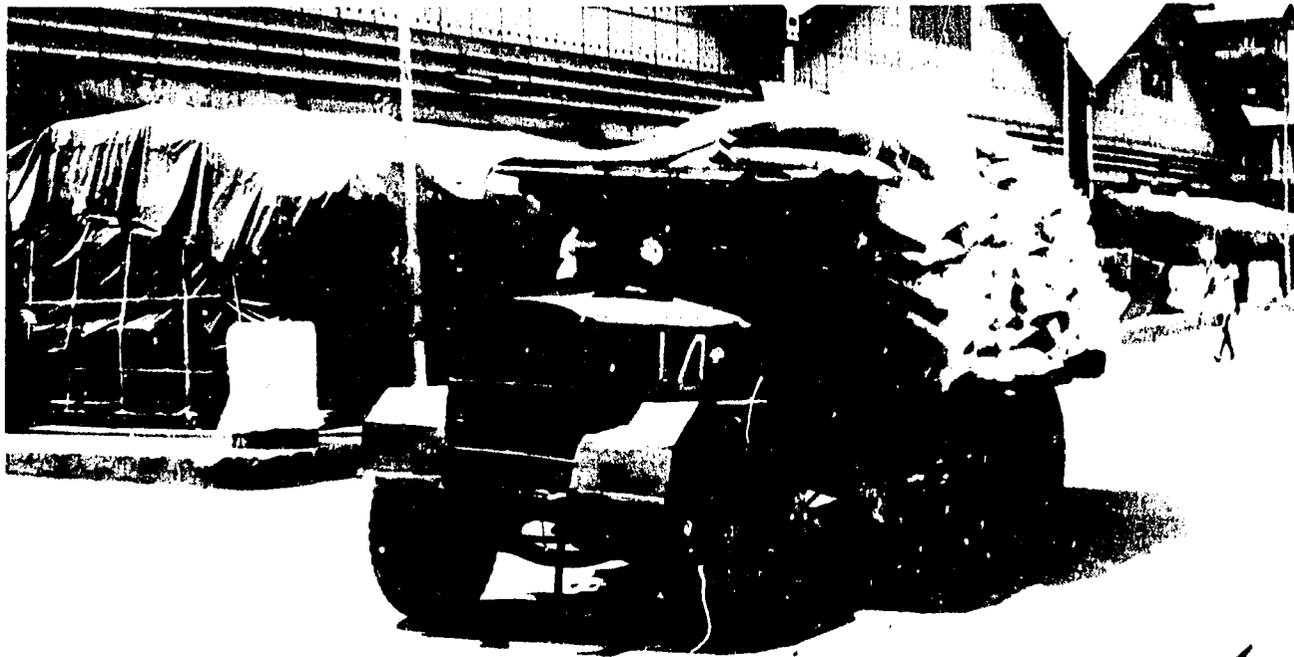
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Zimbabwe

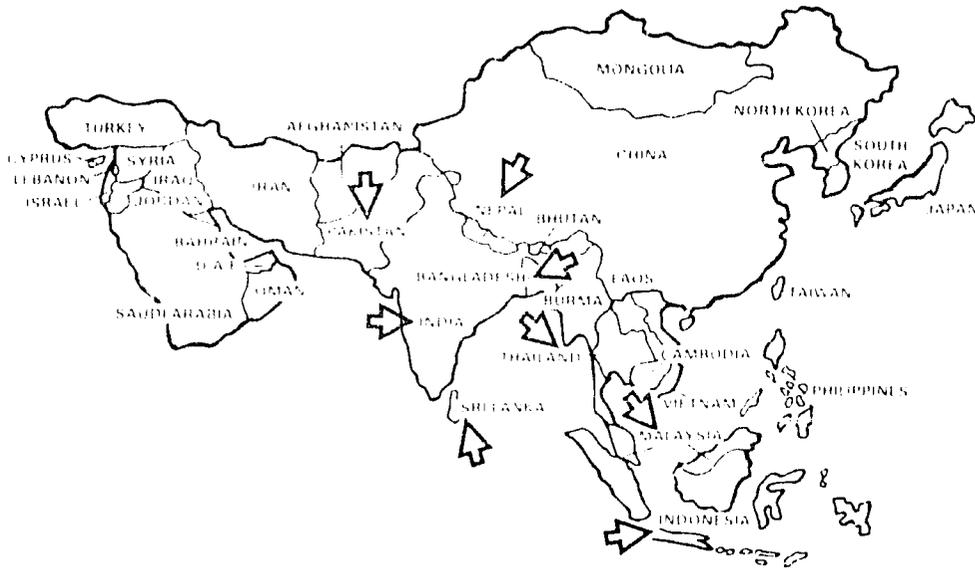
Preliminary Appraisal of the Zimbabwe Fertilizer Sector

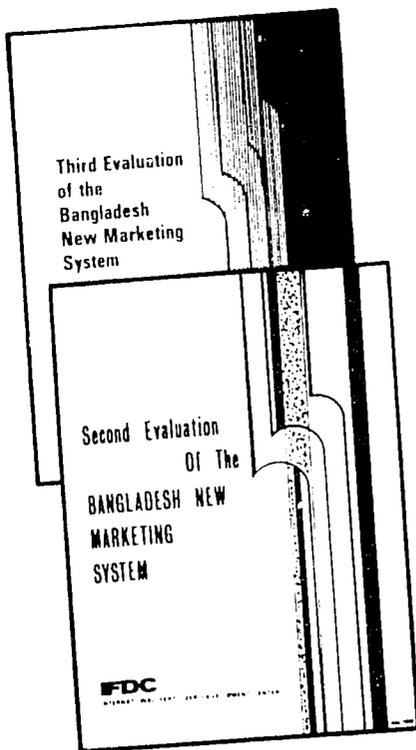
The Industrial Development Corporation (IDC) of Zimbabwe requested IFDC to make a formal appraisal of the country's fertilizer industry. The three-member IFDC team examined Zimbabwe's fertilizer industry and then recommended 13 long-range programs to revitalize the industry.





Asian Market Studies





Bangladesh

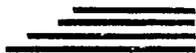
USAID/BADC Marketing System Improvement

IFDC has a contract to assist the Bangladesh Agricultural Development Corporation (BADC) in marketing fertilizer in Bangladesh. This contract is financed by USAID. Since 1978 three full-time resident consultants covering warehousing and distribution, market research, and training have been assisting BADC.

Short-term consultants have been provided for particular areas of the marketing system, and reports on agronomy, training, logistics, socio-economic aspects, fertilizer quality control, and policy options have been prepared and many of the recommendations implemented.

International Fund for Agricultural Development Fertilizer Sector Project

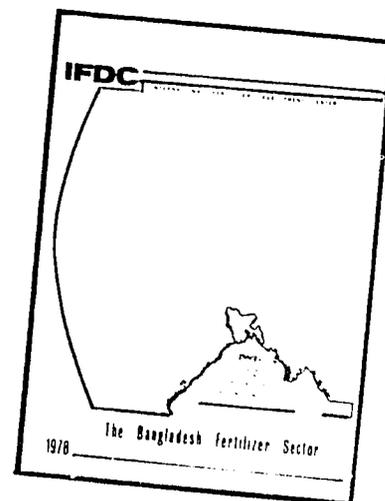
Three IFDC staff members served as consultants for this International Fund for Agricultural Development (IFAD) project. The project was designed to increase the use of fertilizers in the western region of Bangladesh by alleviating supply constraints and by improving supplies, credit, and extension activities. A strong training component that made use of the resources of the fertilizer industry of West Bengal was included.



The Bangladesh Fertilizer Sector

This IFDC publication describes the Bangladesh fertilizer sector, highlights its problems, and recommends actions necessary to strengthen the sector.

The publication provides information on fertilizer production, use, retail dealers, fertilizer subsidies, fertilizer transport, warehousing, and bagging.

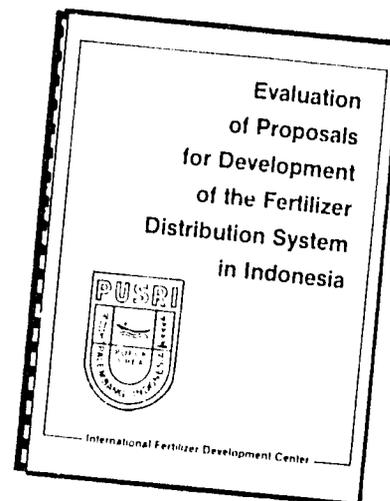


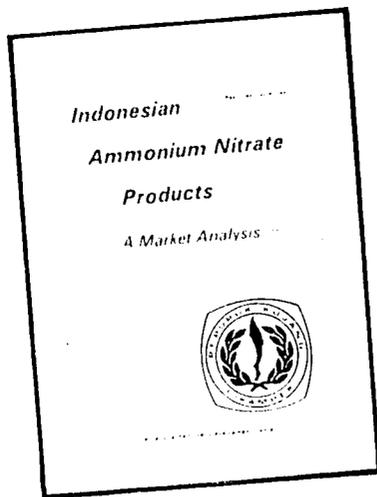
Indonesia

*Evaluation of Proposals for Development of the Fertilizer Distribution System in Indonesia **

P.T. Pupuk Sriwidjaja (PUSRI) contracted with IFDC to evaluate proposals for distribution of fertilizer throughout Indonesia. In evaluating the proposals, IFDC concentrated on the technical and practical aspects of developing a distribution system. The evaluation included a cost analysis.

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*Indonesian Ammonium Nitrate Products—A Market Analysis **

The Indonesian Government requested P.T. Pupuk Kujang to construct facilities to manufacture ammonium nitrate for the domestic commercial explosives market. To be economic in size, the facility also needed to produce fertilizers based on ammonium nitrate. Kujang asked IFDC to determine the appropriate products as well as the size and location of their markets. To accomplish this, IFDC marketing analysts traveled to Indonesia, Malaysia, the Philippines, Thailand, and Australia. They then prepared a detailed report and an executive brief. Their discussion focused on ammonium nitrate, calcium ammonium nitrate, and ammonium nitrate sulfate as the appropriate products and on the Association of Southeast Asian Nations (ASEAN) countries and Australia as the appropriate markets.



*KUJANG II **

IFDC was requested to conduct a prefeasibility study for P.T. KUJANG, an Indonesian fertilizer producer. The study consists of an overall urea fertilizer marketing study with three principal objectives, assuming that the KUJANG expansion becomes a reality. They are:

1. To estimate the market for urea on Java through 1990.
2. To determine whether an expansion of the KUJANG production complex could economically supply the urea market of Java.
3. To identify alternatives including export for marketing the tonnage now received from Palembang.

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Nepal

*Fertilizer Strategy for Nepal **

IFDC made a detailed study of the Agricultural Inputs Corporation (AIC) in Nepal under contract with the World Bank and the United Nations Development Programme (UNDP). The report contained a review of AIC's management structure and recommendations for developing a national fertilizer strategy. It also included recommendations concerning operational efficiency, procurement and marketing practices, operating costs, revenue, long-range planning, coordination with foreign donors, and recruiting and training.

Pakistan *

Under contract with USAID, IFDC joined an agricultural inputs study team participating in an agricultural commodities and equipment project in Pakistan. The purpose of the project was twofold: to increase the availability of yield-increasing fertilizer and agricultural equipment and to strengthen the private sector's role in increasing agricultural production. The report by the study team contains a review of the fertilizer marketing system in Pakistan and projections of future fertilizer use.

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Sri Lanka

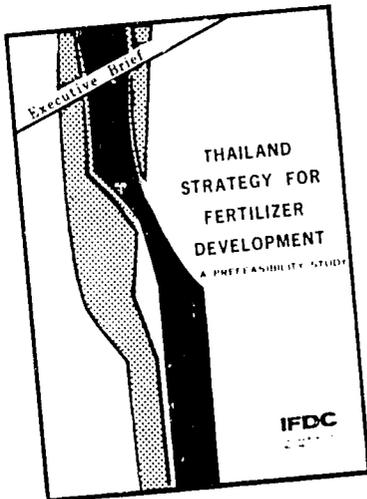
Coconut Fertilizer Study

The Government of Sri Lanka through the Ministry of Coconut Industries and USAID contracted with IFDC to determine how to increase the use of fertilizer on coconut palms and thus improve coconut production. The study objectives were to evaluate fertilizer suitability, to review location and storage capacity of existing warehouses, and to develop a plan for overcoming constraints, reducing marketing costs, and increasing fertilizer consumption on coconuts.

Thailand

Strategy for Fertilizer Development—Executive Brief

With support from the World Bank and the Ministry of Industry, The Royal Government of Thailand, IFDC prepared an updated summary of the report "Thailand - Strategy for Fertilizer Development." In this executive brief IFDC shows how the growing demand for fertilizer can be met by using indigenous raw materials to facilitate domestic production. This report includes projections; an overview of the agricultural sector, including fertilizer supply and demand, marketing and distribution, and policy issues; and recommendations.



*Feasibility Study for Fertilizer Complex **

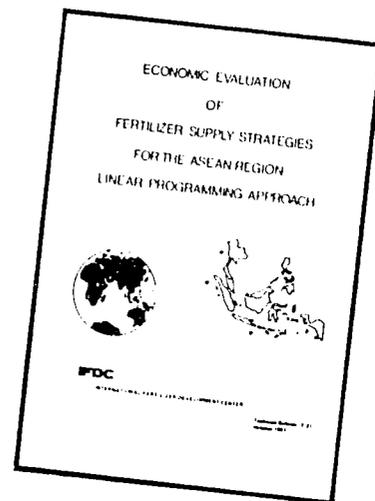
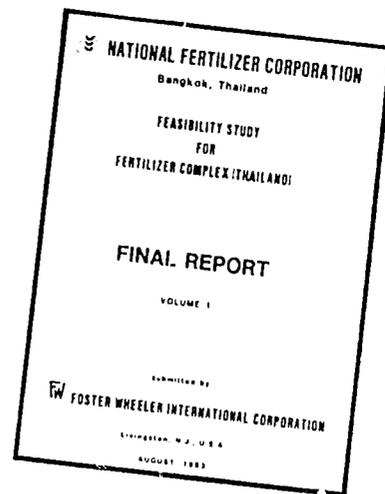
Under subcontract to Foster Wheeler International, IFDC participated in a feasibility study prepared for the National Fertilizer Corporation, Bangkok, Thailand. IFDC completed the agronomic and marketing sections of the study and assisted with other sections. The purpose of the study was to determine the feasibility of constructing a large nitrogen and phosphate fertilizer complex to supply most of Thailand's domestic fertilizer requirements.

Regional Studies

Economic Evaluation of Fertilizer Supply Strategies for the ASEAN Region: Linear Programming Approach

To help plan and develop the fertilizer industry for the ASEAN regional market, IFDC economists formulated a dynamic linear programming model. The model was used to help analyze economic ramifications of alternative supply scenarios for fertilizer, raw materials, intermediates, and final products. The model made it possible to determine optimum production levels by location, optimum transportation patterns, equilibrium prices, and total expenses of different supply schemes. With the model, policy actions, such as self-sufficiency by country, could be evaluated. The report was published by IFDC and the Institut für Landwirtschaftliche Marktforschung (IfLM).

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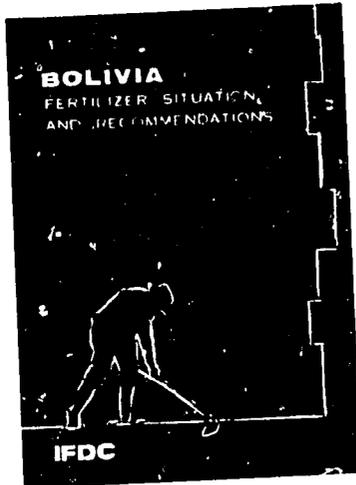


Latin American Market Studies



Bolivia

Bolivia Fertilizer Situation and Recommendations



Under contract with USAID, IFDC was asked to prepare a report on the feasibility of fertilizer bulk-blending facilities in Bolivia. The purpose was to reduce the farmer's costs of using fertilizer. The study examined the small farmer's existing and potential demand for fertilizers and included a fertilizer marketing plan for Bolivia.

Caribbean Countries

*A Fertilizer Supply Study for East Caribbean Common Market Countries **

The World Bank and the Caribbean Development Bank (CDB) undertook a study to analyze the fertilizer sector in the Caribbean Community and Common Market (CARICOM) region. At the request of CDB, IFDC reviewed the regional fertilizer situation and assessed a proposal to establish a regional fertilizer production and supply center. This new system was evaluated against the existing system by which each island imported its own needs from the international market. The report contains an analysis of fertilizer use, marketing, and fertilizer supply schemes.

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Colombia

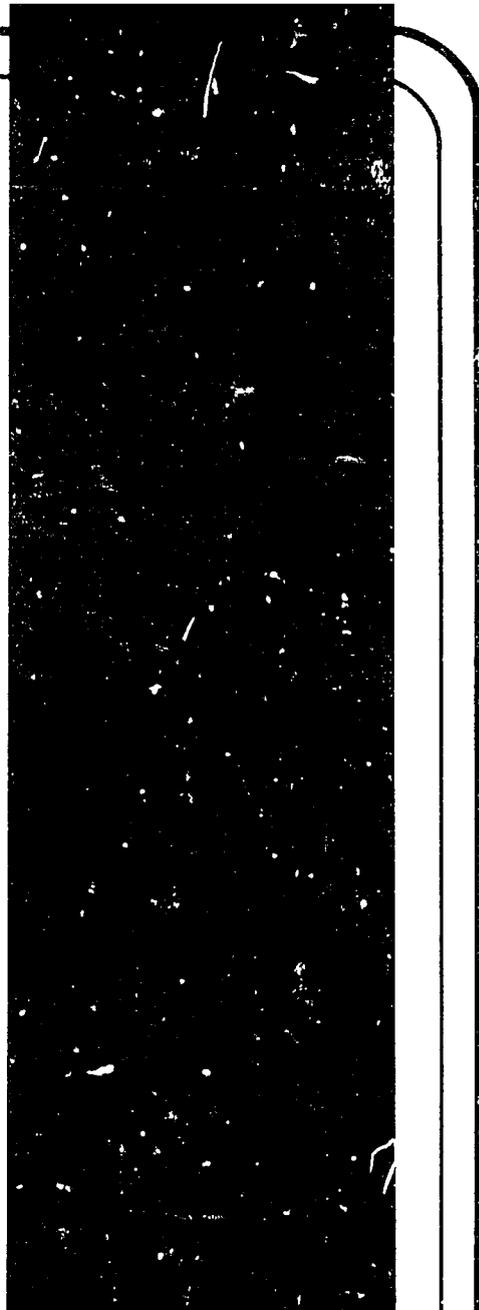
*A Fertilizer Study for MONOMEROS **

The study included fertilizer demand projects for Colombia and fertilizer sales projections for MONOMEROS for 1982-87. The study also provided an analysis of MONOMEROS's manufacturing and supply capabilities with respect to these projections, and it included product cost estimates for the current and alternative supply schemes. Another component of the study was a review and analysis of MONOMEROS's marketing and distribution activities, including a review of its organization. On the basis of this review and analysis, IFDC recommended to MONOMEROS possible ways to improve its fertilizer business with respect to its manufacture, supply, marketing, and distribution.

*Market Survey of Phosphate Fertilizers in Colombia **

The Government of Colombia requested assistance from a consortium of four organizations in an effort to encourage the domestic production of phosphate fertilizers. Singmaster and Breyer, Inc., Hansa Luftbild, Colorado School of Mines Research Institute, and IFDC were asked to determine the feasibility of using indigenous phosphate deposits to manufacture downstream products for domestic use and possibly for exports. The Market Survey, a necessary phase of the feasibility study, is part of IFDC's contribution to the study; it analyzes the present demand for phosphate fertilizers and projects future supply and demand in Colombia.

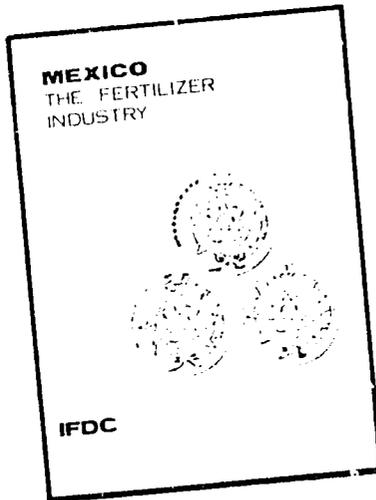
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Ecuador

*A Fertilizer Supply Study **

In this study, requested by Fertilizantes Ecuatorianos, S.A. (FERTISA), IFDC's general objective was to develop a preliminary economic analysis of selected alternative fertilizer supply schemes to enable FERTISA to meet projected sales requirements. Information included projected fertilizer demand for Ecuador and projected FERTISA fertilizer sales.



Mexico

Mexico—The Fertilizer Industry

Published jointly by IFDC and Fertilizantes Mexicanos (FERTIMEX), this report describes briefly the many facets of Mexico's fertilizer sector. It illustrates how one country met its farmers' needs for increasing amounts of fertilizer and in turn expanded the national supply of food and fiber and improved the economic well being of the rural population.

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Paraguay

At the request of the U. S. Ambassador to Paraguay, USAID contracted with IFDC to analyze the fertilizer sector in Paraguay and to design a program to increase crop production through the expanded use of fertilizer. The program would promote fertilizer use in Paraguay to the point where in-country manufacture of nitrogen fertilizer would be feasible. IFDC presented its recommended program to the Ministry of Agriculture.

Venezuela

*Fertilizer Supply Strategy, 1981-90 **

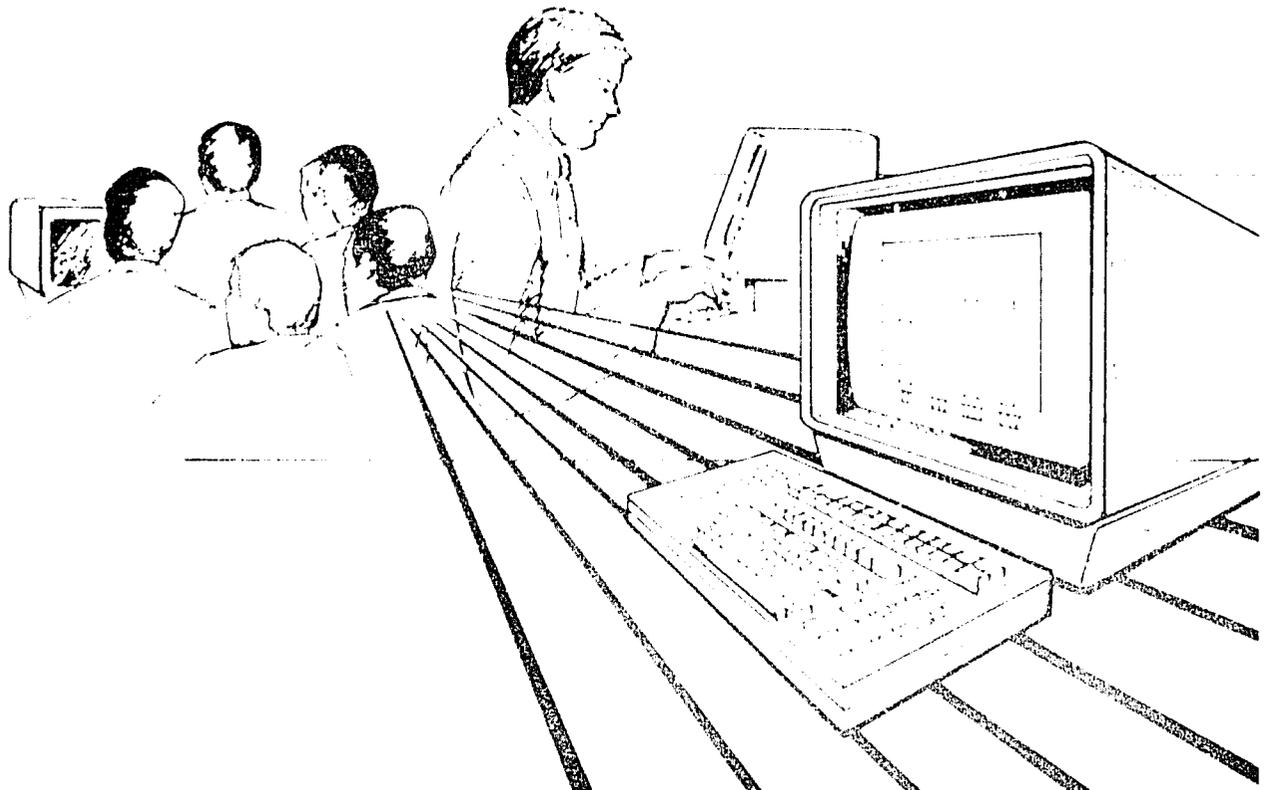
Petroleos de Venezuela, S.A. (PDVSA) is administrator of the nation's petroleum industry and its related petrochemical and fertilizer production operations. At PDVSA's request IFDC developed a fertilizer supply strategy to enable Venezuela to meet its domestic fertilizer needs from 1981 to 1990. The supply strategy was based on an analysis of the current fertilizer marketing system and a consideration of future marketing needs with respect to anticipated changes in supply and increasing demand.

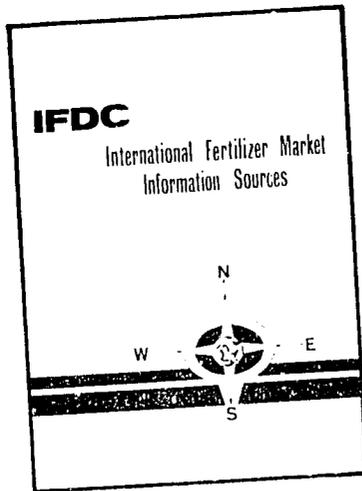


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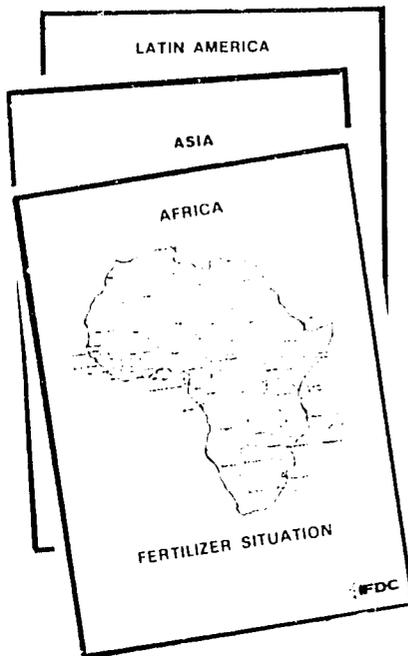
Market Statistics





International Fertilizer Market Information Sources

IFDC has prepared a report on information regarding fertilizer markets. The report identifies both the types of information that are considered essential for decisionmakers and the sources of this information. The sources are discussed in three broad categories: (1) publications, (2) computer data services, and (3) unpublished data files and reports. The comprehensive listing includes publishers, addresses, costs, and other useful information about each source.



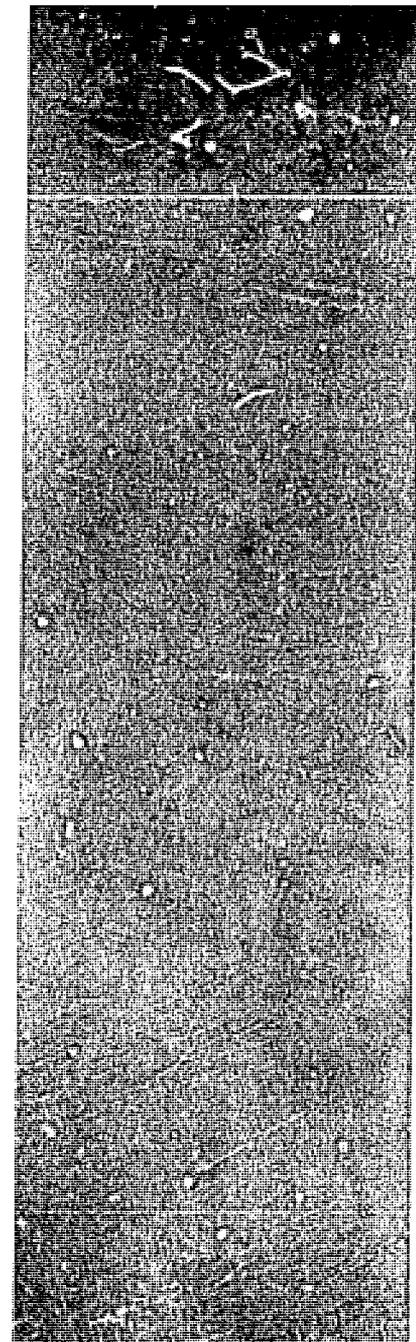
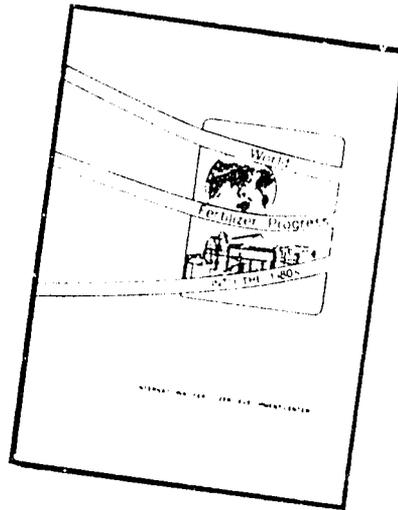
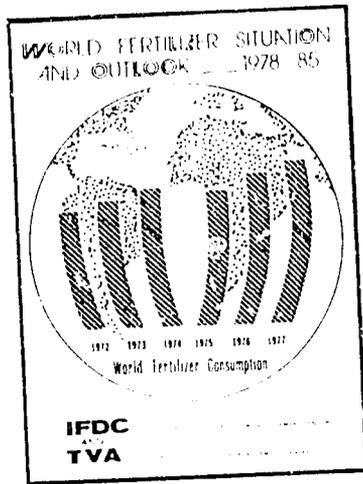
Regional Supply/Demand Studies

Each regional report includes information by country on nutrient production, consumption, imports, and exports as well as information on ammonia and phosphoric acid capacity. Each report contains about 25 graphs on the trends in major fertilizer statistics for the region. The three reports contain the latest supply/demand information by product for about 60 developing countries; this information is supplied by IFDC contacts from these countries. Reports are bound so that they can be updated when new information becomes available.

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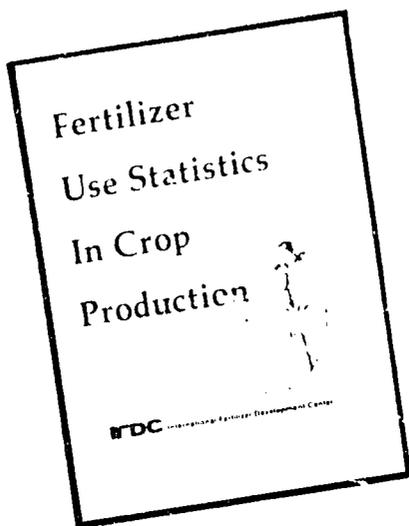
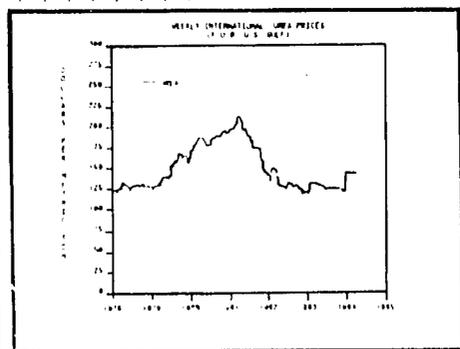
Global Studies

World supply/demand studies are carried out jointly by IFDC and the Tennessee Valley Authority (TVA) to analyze the changing patterns of world fertilizer production and consumption and to identify major trends. These reports provide useful statistics on a regional and worldwide basis. They are designed to help policymakers efficiently plan their fertilizer supply sector by balancing production with imports needed to meet projected demand.



Fertilizer Market Statistics

IFDC collects monthly farm-level prices on major fertilizer products and crops for about 30 countries; the information comes directly from incountry correspondents. IFDC also collects weekly international market prices of fertilizers and crops and creates graphs accordingly. We maintain a computer data file on historical production, consumption, and import and export statistics available from the Food and Agriculture Organization of the United Nations (FAO) and other sources by country. Current product statistics are available from about 60 developing countries. Plant capacity statistics by country for ammonia, phosphoric acid, and other fertilizer materials can be accessed with the IFDC computer from records maintained by TVA. We have our own library and access to TVA's library, the most complete fertilizer library in the world. All this information is available to keep our marketing staff abreast of current developments.



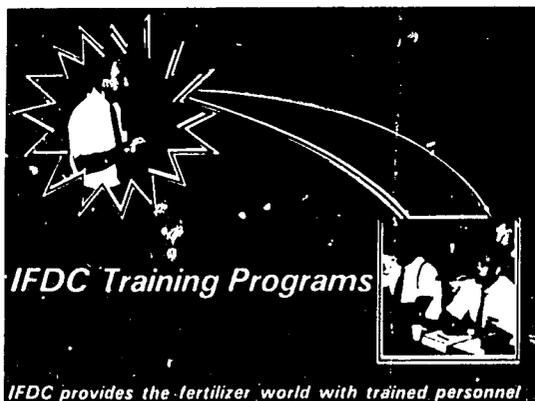
Crop Use Statistics

Statistics on fertilizer use by crops are very limited. This publication represents IFDC's first attempt to assemble statistics on a worldwide basis by country for the major crops. Data for 78 countries were gathered through a literature review and a questionnaire mailed to approximately 300 respondents throughout the world. Such data can be helpful in preparing marketing studies.

Some of the Organizations for Whom IFDC Has Performed Marketing Services

Agricultural Inputs Corporation (AIC), Nepal
Bangladesh Agricultural Development Corporation (BADC), Bangladesh
Caribbean Development Bank (CDB), Barbados
Federal Ministry of Industry, Nigeria
Fertilizantes Ecuatorianos, S.A. (FERTISA), Ecuador
Fertilizantes Mexicanos (FERTIMEX), Mexico
Foster Wheeler International, U.S.A.
Industrial Development Corporation (IDC), Zimbabwe
International Fund for Agricultural Development (IFAD)
Iowa State University, U.S.A.
M. W. Kellogg Company, U.S.A.
Ministry of Coconut Industries, Government of Sri Lanka
Ministry of Industry, Royal Government of Thailand
Monomeros Colombo Venezolanos, S.A. (MONOMEROS), Colombia
Occidental Petroleum Company, U.S.A.
Overseas Private Investment Corporation (OPIC), U.S.A.
Petroleos de Venezuela, S.A. (PDVSA), Venezuela
P.T. Pupuk Kujang, Indonesia
P.T. Pupuk Sriwidjaja (PUSRI), Indonesia
Singmaster and Breyer, U.S.A.
United Nations Development Programme (UNDP)
U.S. Agency for International Development (USAID), U.S.A.
Windmill, Zimbabwe
World Bank, U.S.A.





Fertilizer Marketing Training

IFDC holds a number of fertilizer marketing-related training programs. Attendance per program generally ranges from 20 to 30 participants representing 10-15 different countries. Country-specific programs have also been held. Marketing-related programs include the following:

1. Fertilizer Marketing Management Training Program—A 6-week program held annually in August and September at IFDC Headquarters. Field visits are made to universities, cooperatives, small farms, commercial fertilizer plants, and ports.
2. Regional Fertilizer Marketing Training Program—A 2-week program held for a specific region, i.e., Asia, Africa, or Latin America.
3. Fertilizer Distribution and Handling Training Program—A 3-week program offered every other year. The program is held in India, Indonesia, and Singapore and includes field trips to observe fertilizer distribution, packaging, and handling facilities.
4. Data Collection and Analysis for National Fertilizer Sector Studies—A 2-week program offered at IFDC Headquarters and Washington, D.C., every other year.
5. Use of Microcomputers for Fertilizer Sector Personnel—A 1-week program to be offered for the first time in 1984.
6. Statistics and Economics of Fertilizer Use—A 3-week program to be offered for the first time in 1984.

IFDC will consider special individual or group requests for training. Requests for dates, fees, and enrollment forms for marketing programs should be addressed to:

TRAINING COORDINATOR
IFDC
P.O. Box 2040
Muscle Shoals, Alabama 35662
U.S.A.

Publications List

The latest list of IFDC publications is available, free of charge.

Most of the publications and reports described on the preceding pages are available for distribution; others that were done on a confidential basis for a client and paid for in full by that client are not available.

In your request, please include this information:

Name _____

Organization _____

Mailing Address _____

Country _____

Send to:

Publications
IFDC
P.O. Box 2040
Muscle Shoals, Alabama 35662
U.S.A.



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IFDC Profile

The International Fertilizer Development Center (IFDC) is dedicated to fighting world hunger by increasing agricultural production in the tropics and subtropics through the development of improved fertilizers and fertilizer use including fertilizer marketing.

IFDC is a public, international, nonprofit organization with headquarters in Muscle Shoals, Alabama, U.S.A. Its proximity to the Tennessee Valley Authority (TVA) facilitates a sharing of research information and a comprehensive fertilizer library. IFDC also has staff stationed in Africa, Asia, and Latin America.

Funding

The initial funding to establish IFDC came from the United States Agency for International Development (USAID) and the International Development Research Centre (IDRC) of Canada. In addition to the continuing support of these two organizations, funds for training, technical assistance, and research and development come from a wide range of national and international agencies. Marketing studies are generally done on an actual-cost reimbursable contract basis.

Board of Directors

Program guidelines are provided by a 12-member international Board of Directors. The Board represents diverse subject-matter backgrounds, and members are from both developed and developing countries.

Staff

The IFDC staff of 190 people recruited from 21 countries is both internationally and technically diverse; it includes representatives from several disciplines, including agronomists, chemical engineers, chemists, economists, geologists, marketing specialists, and soil scientists.

IFDC is able to conduct unique fertilizer research and development because of three complementary factors: (1) the multidisciplinary structure of the task teams used for research planning; (2) the ability to test experimental fertilizers in laboratories, pilot plants, and greenhouses; and (3) linkages with research institutions around the world.

Framework

IFDC has three divisions—Agro-Economic, Fertilizer Technology, and Outreach. The Agro-Economic and Fertilizer Technology Divisions are research oriented and focus on the development of products and practices. Most of the marketing services described in this booklet are performed by the Outreach Division with support from both the Agro-Economic and Technology Divisions.

Facilities

The three divisions are supported by facilities that include laboratories; greenhouses; growth chambers; specialized instruments essential for laboratory research; bench-scale and pilot-plant units used in studies such as beneficiation of ores, acidulation, and granulation of fertilizer; and audiovisual, communications, and word processing centers capable of disseminating information through various media.

Linkages

IFDC has developed strong linkages with a number of international and national organizations. These include the international agricultural research centers, United Nations, Fertiliser Association of India, Fertilizer Producers' Association of Indonesia, Centro de Estudos de Fertilizantes, etc. These ties allow IFDC technology to become more effective in helping increase the production of food and fiber.

