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FERTILIZER MARKETING AND DISTRIBUTION IN KENYA: A Case Study

Analysis Of Private Sector Fertilizer Marketing And Distribution

Prepared For U.S. Agency For International Development

Louis Berger International, Inc.

April 1983

SELECTED BIBLIOGRAPHY

Agency for International Development, Report on Examination of the Kenya Program Loan No. 615-H-007, October 29, 1975.

Agency for International Development, Project Paper: Kenya Commodity Import Program Grant Project, 1980.

Government of Kenya, Report and Recommendations of the Working Party on Government Expenditures, Nairobi: Government Printing Office, July 1982.

Havelock, Wilfrid, Report of the Havelock Working Party on Agricultural Inputs in Kenya, Nairobi: Government Printing Office, 1971.

Mwenge International Associates Ltd., The Supply and Distribution of Farm Inputs to the Cooperative Sector, Nairobi, 1981.

Swedish International Development Agency, Report of the 1982 Swedish Agricultural Mission to Kenya, 1983.

Table of Contents

FERTILIZER MARKETING AND DISTRIBUTION IN KENYA : A Case Study

		Page
	Executive Summary	1
I.	Introduction	7
II.	The History of Fertilizer Marketing and Distribution in Kenya	13
III.	A Profile of the Private Sector	54
IV.	Institutional Profiles	60
V.	Implementable Private Sector Projects	79
VI.	Lessons Learned	89

iii

PREFACE

This case study of fertilizer marketing and distribution in Kenya is submitted in accordance with the provisions of Contract Number OTR-0091-C-00-2331-00 between the United States Agency for International Development and Louis Berger International, Inc. Field work in Kenya was carried out in January and February of 1983. Other countries for which Berger prepared case studies were Indonesia and Yemen Arab Republic (North Yemen).

EXECUTIVE SUMMARY

In 1970, Kenya's fertilizer distribution trade appeared to be on the doorstep of a golden age. Use of fertilizer nutrients in Kenya had more than quadrupled in the decade of the 1960's, and it looked as if consumption would grow even more rapidly in the Seventies. There was vigorous competition among fertilizer distributors in the prosperous farming areas, particularly for the larger accounts. The two principal distributors were building up networks of retailers to serve small holders, and this initiative appeared successful. The use of new varieties of maize was spreading throughout Kenya, bringing a demand for agricultural inputs in its wake.

Fertilizer distributors had developed good working relationships with European firms with established subsidiaries in Kenya. These subsidiaries handled the ordering of fertilizer and the Kenya side of international trade. The European firms provided supplies and technical experts to the distributors, who used them to advise farmers on use of fertilizers and other agricultural inputs in the field. The leading distributor, with thirty-five percent of the market, was the Kenya Farmers Association (KFA), an organization chartered both as a private firm and a cooperative. KFA had worked with UKF of Holland and its subsidiary, Albatros of East Africa, Ltd. Mackenzie Dalgety, Ltd., a private firm with twenty-five percent of the market, had an association with Windmill of Holland and its Kenyan

subsidiary. Sapa Chemicals, associated with the European firm of Montedison, and a number of other private and parastatal importers held the remaining sixty percent of the market.

The golden age of the Seventies never arrived. Imports of fertilizer by weight were lower at the end of the decade than they were in 1970. Consumption of fertilizer nutrients rose only 35 percent over ten years as compared with more than 400 percent in the previous decade.

In 1971, a Government-appointed Working Party reviewing existing systems for distributing agricultural inputs roundly criticized the structure and practices of the fertilizer distribution industry in Kenya. The Working Party argued that, 1) too much trade was concentrated in the hands of too few organizations; 2) the major distributors' practice of issuing common "official" price lists should be made illegal; 3) the Fertilizer Advisory Committee which had been routinely approving the fertilizer prices submitted to it was dominated by the industry and needed reconstitution to ensure independent review; 4) that the formula used by the trade to establish prices had permitted prices to rise too high; 5) that entry into the fertilizer importing business was being made too difficult; 6) that requirements that distribution organizations provide technical advice to farmers were paternalistic and unnecessary; 7) that insufficient effort was being devoted to providing low-cost distribution for smallholders; and 8) that inadequate attention was being given to the development of cooperative

institutions through the application of cooperative principles.

The Working Party's recommendations, together with other considerations, led the Government to disengage from its former close collaboration with the major distributors. It put into effect a constraining system of price controls, relaxed requirements that new importers demonstrate technical and distribution capability, and took other initiatives in line with the Working Party's recommendations.

Then came the oil shock. Fertilizer prices rose rapidly and then descended again. Shortages appeared and were followed by occasional gluts. Foreign aid fertilizers were obtained, but were badly handled. Fertilizer use stagnated and then resumed a more modest upward trend. Abortive attempts were made to establish a fertilizer manufacturing facility at Mombasa. With Government encouragement, new organizations entered the fertilizer trade; however, many withdrew or went into receivership. Existing firms changed hands or dropped out of the trade. By the end of the decade, one of the two main physical fertilizer distribution systems -- that operated by Mackenzie-Dalgety -- had been disassembled and sold off.

KFA survived in the Seventies in substantial part because it was able to moderate its earlier image as an organization which served white growers and large farms, and which behaved like a trading company. Although Government

price controls served to reduce service to farmers in remote areas, KFA provided more of such service to smallholders than any of its competitors which were able to remain in business.

In 1978, Kenya faced its worst foreign exchange crisis of the decade, and once more sought fertilizer foreign aid. KFA's ability to maintain financial viability, its relatively wide clientele, its ability to keep track of the fertilizer which it handled, and its reputation for being more efficient than most parastatal and cooperative institutions contributed to the appointment of KFA as exclusive agent for importing Government-purchased and foreign aid fertilizers. In the late Seventies and early Eighties, foreign aid accounted for as much as two-thirds of Kenya's fertilizer imports. KFA's exlusive agency, along with its commercial importation activities, enabled it to increase its distribution share to nearly three-quarters of Kenya's fertilizer market.

As foreign aid increased and KFA's market share swelled, so did KFA's inventories of Government-owned fertilizer -- to levels far above those that would be justifiable on a commercial basis. These inventories, which in themselves posed financial problems for KFA and the Government, also reflected other malfunctions in the operation of Kenya's fertilizer distribution system. These malfunctions resulted from interactions between foreign aid arrangements and Government fertilizer requirements forecasting, import licensing, fertilizer price controls,

and controls on producer prices paid to farmers. These malfunctions also threatened further erosion, if not the virtual elimination, of private sector competition in Kenya. By the early Eighties, KFA's market share rose to nearly seventy-five percent, more than double its share in 1970. Most of KFA's competitors during the Seventies and before had dropped out of the trade or gone bankrupt. KFA's closest remaining competitors, Mea, Ltd. and Devji Meghji, had ten percent and eight percent of the market respectively. The price formula applied by the Government provided higher percentage margins than the formula applied by the industry by common agreement at the time the Havelock Report was written, and competition was not as vigorous. Few stockists carried fertilizer.

Sufficient farm level demand and human and physical resources exist in Kenya to permit the creation of at least one distribution network of sufficient size to compete with KFA in most of its fertilizer markets and to develop markets which KFA presently does not serve well. The creation of such a network, handling 35,000 to 45,000 tons of fertilzers per year and having at least a 20 percent market share is a conceivably implementable private sector project, given changes in foreign aid arrangements, substantial restructuring of Government import licensing procedures, elimination of most or all controls on fertilizer prices, raising or eliminating ceilings on producer prices, and better relations between Government and the private sector.

A variety of projects for bagging fertilizer at Mombasa or at existing facilities in Nakuru are also conceivable. A dominating consideration concerns the future of fertilizer manufacture at Mombasa. The possibility that such a plant would be placed in operation in the near future has long cast a shadow over private ventures in marketing and distribution. The future of a domestic manufacturing venture needs to be clarified.

I. INTRODUCTION

A. Overview of the Case Study

This case study is presented in six sections. Section I (the present section) describes Kenya's system for marketing and distributing fertilizers in its African context. It then defines the principal focus of the case study.

Section II contains a history of fertilizer marketing and distribution in Kenya from 1960 to 1982. Section III presents a profile of private sector organizations involved in the fertilizer trade, while Section IV describes parastatal, cooperative, and joint venture organizations so involved. Section V identifies conceivably implementable private sector projects. Section VI summarizes lessons learned concerning private sector success and failure.

B. Kenya's System in the African Context

Kenya is the fifth largest user of fertilizers in Africa south of the Sahara. It consumed 62,000 tons of fertilizer nutrients in 1980/81 as compared with 174,000 tons in Nigeria, 173,000 tons in Zimbabwe, 81,000 tons in Sudan, and 78,000 tons in Zambia. Kenya is one of nine countries in Africa in which consumption of fertilizer nutrients exceed four kilograms per hectare of agricultural area. Most of these nine countries had private or mixed distribution systems.

Kenya is one of a limited number of African countries in which fertilizer distribution channels are essentially private. Others are Mauritius, Reunion, Swaziland, and

Zimbabwe. Kenya also is one of only eight African countries in which there are no fertilizer subsidies.

Channels of distribution used in other African countries include the Ministries of Agriculture, cooperatives, produce marketing boards, crop development projects, integrated rural development projects, and credit institutions. In Kenya, produce marketing boards and cooperatives have a role in fertilizer marketing and distribution. Indeed, KFA, the principal distributor in Kenya, is registered both as a corporation and as a cooperative. KFA also has significant ties to the public sector, acting as agent for parastatal marketing and credit institutions as well as serving as the Government's exclusive agent for the handling of foreign aid fertilizers.

C. Study Focus

This case study of private sector marketing and distribution in Kenya covers the period from 1960 to 1982, a span of years in which both private sector successes and failures occurred. The principal focus of the case study is on the years from 1970 to 1982, a period characterized by deterioration in the capabilities and competitive effectiveness of the organizations engaged in the trade.

In the late Seventies and early Eighties, foreign aid fertilizer programs were a significant cause of reduction in private secotor competition. Other causes operating during the 1970-1982 period included import licensing, price controls, uncertainty concerning the future installation of

a fertilizer manufacturing facility at Mombasa, failure on the part of new entrants and of the Government to appreciate the complexity of the fertilizer distribution business, and suspicion of monopolistic practices by firms in Europe and in Kenya. Such suspicions had accumulated over the years, but were particularly acute during the period after imposition of the oil embargo in 1973, when shortages appeared and fertilizer prices skyrocketed.

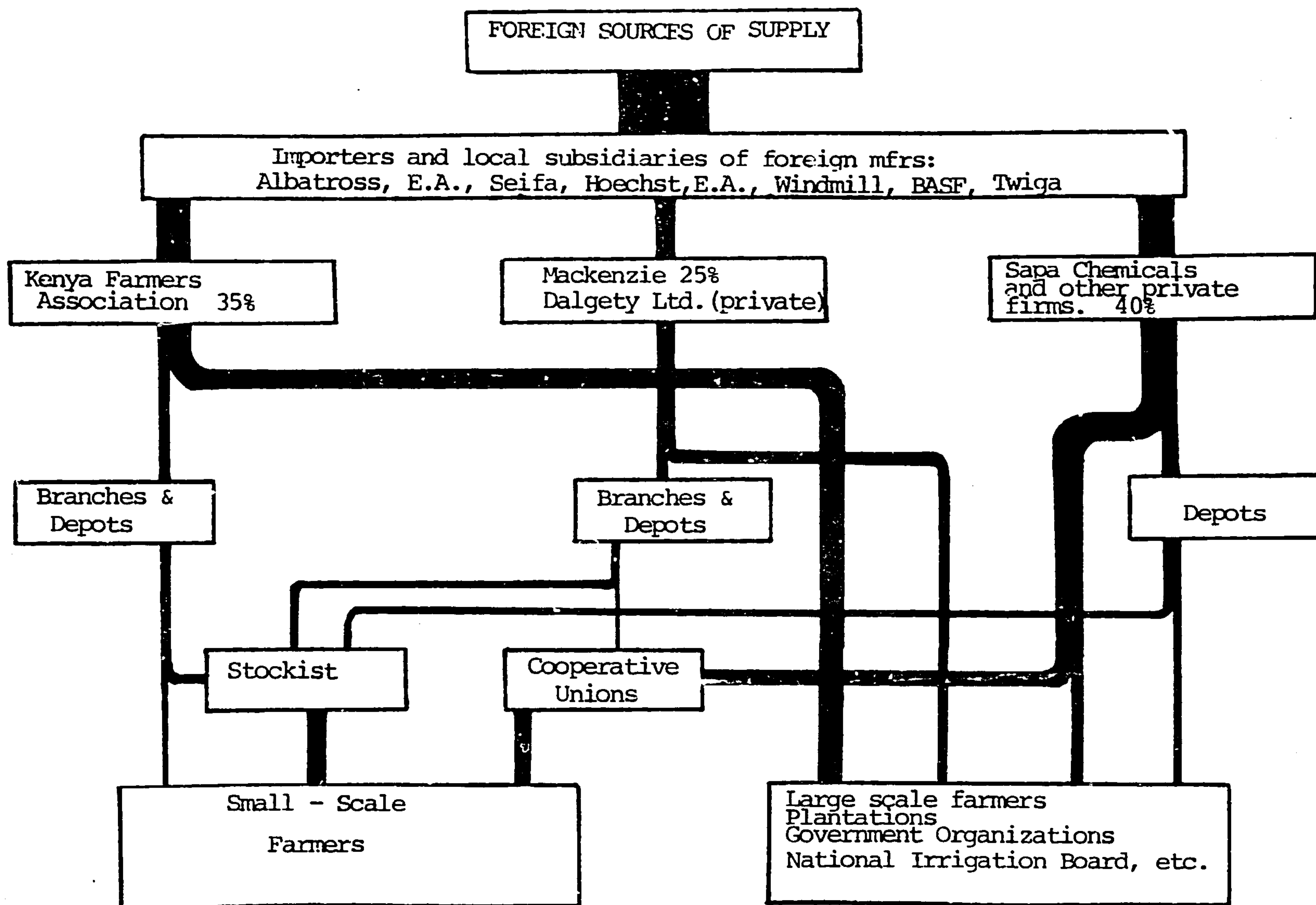
Exhibit 1.1 shows the structure of the industry in 1970. Note that KFA, which functions both as a cooperative and a private corporation and has close ties to the public sector, handled about 35 percent of the fertilizer distributed in Kenya in that year. A group of foreign subsidiaries served as intermediaries between foreign suppliers and the principal in-country distributors.

Exhibit 1.2 shows that by 1981 the intermediary function had disappeared and KFA held three-quarters of the market. In the intervening period, as we shall see, many competitors entered and dropped out of the market, and those organizations which survived sustained substantial losses.

There were two major tranches of fertilizer foreign aid in the Seventies and Eighties. The first tranch, which arrived in the mid-seventies, did not in itself have a sustained impact on the structure of the industry. However, problems with the handling of the aid fertilizer undoubtedly influenced the subsequent selection of KFA as the Government's exclusive agent for this purpose. That

ORGANIZATION OF FERTILIZER DISTRIBUTION IN KENYA

IN THE EARLY 1970's



Source: Adapted from Development of Fertilizer Supply and Marketing in Kenya, FAO, 1975

Exhibit 1.1

ORGANIZATION OF FERTILIZER DISTRIBUTION IN KENYA

IN 1981

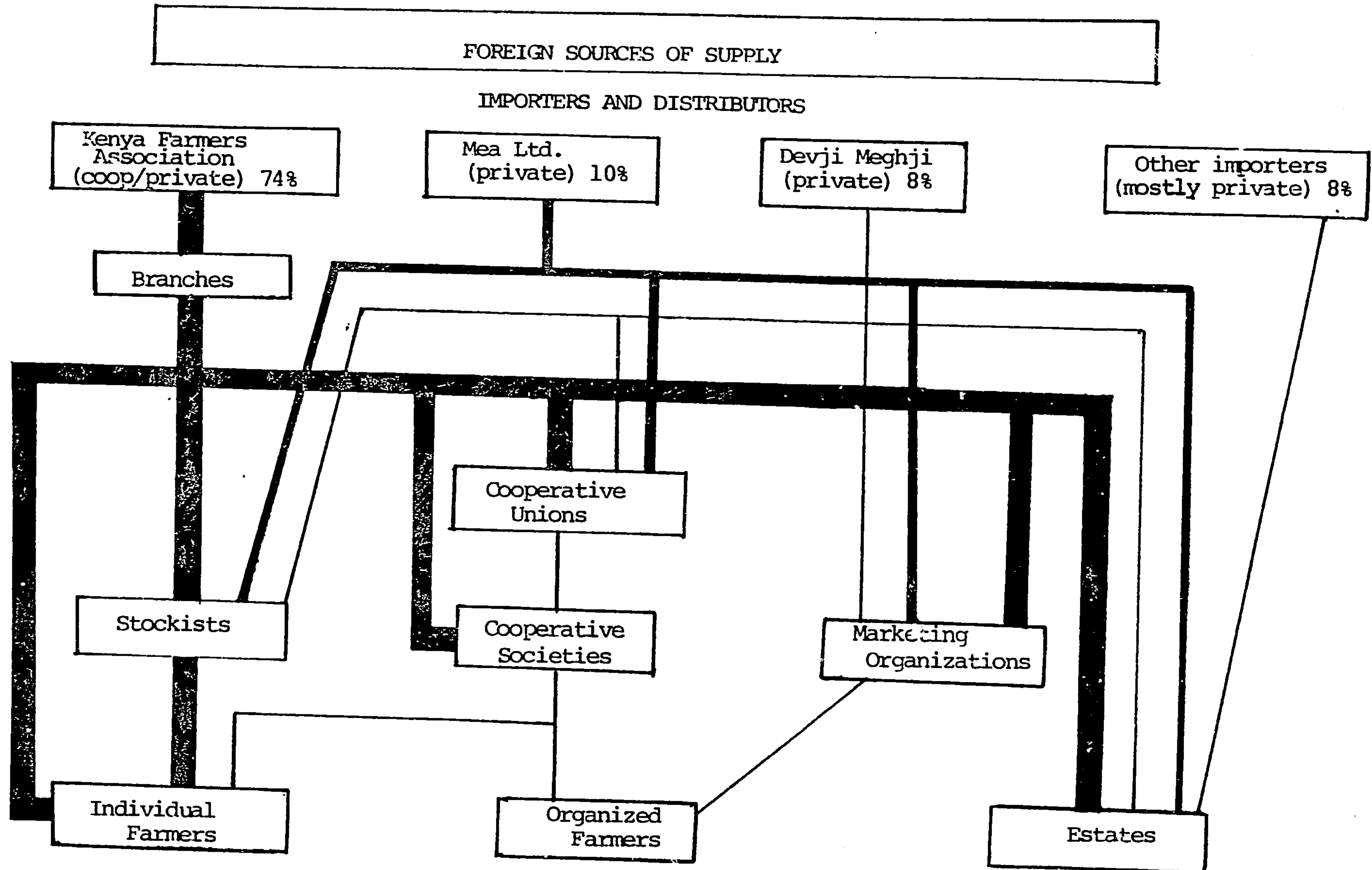


Exhibit 1.2

Source: Adapted from Fertilizer Marketing in Kenya, FAO/FIAC, Rome, 1983.

selection, in turn, had a profound influence on industry structure in the late Seventies and early Eighties.

II. THE HISTORY OF FERTILIZER MARKETING AND DISTRIBUTION IN KENYA

A. Introduction

Although fertilizer distribution in fact commenced in Kenya before World War I, the modern history of the trade began in 1960.

Subsection B will discuss the decade of the 1960's, a period characterized by expansion and success in the private sector. Subsection C deals with the years 1970-1974, a period in which issues for Kenya's fertilizer distribution system were posed as a result of internal reassessments and the impact of the oil embargo on fertilizer supplies and prices. Section D summarizes the period from 1975-1978 when the number of competitors in the trade expanded and then sharply contracted. Subsection E deals with the period from 1979-1982 when foreign aid caused a contraction and concentration in the industry. The final section, Section F, lists eleven organizations that dropped out of the fertilizer trade in Kenya between 1975 and 1982.

B. 1960-1970: Private Sector Expansion and Success

The 1960's represented an era of success for private sector organizations engaged in fertilizer distribution and marketing in Kenya. There was a considerable degree of specialization among organizations which engaged in manufacturing and supply, market intelligence and importing, and in-country distribution. Competitive teams of such specialized firms maintained reasonably stable in-group

relationships, through such devices as distributorships, co-location of offices, technical assistance, and other arrangements that bridged the gaps from sale to sale and commercial episode to commercial episode.

The relationships between the main groups of organizations in the trade ranged from collaborative to antagonistic, depending on the particular market or matter at issue. "Official" prices set by the industry were approved by the main groups of organizations, with KFA as the price leader. However, price competition for large orders could be fierce, even cut-throat at times. A closely collaborative style of government-business regulation evolved in which membership in the industry "club" (consisting of principal firms authorized by the Government to receive fertilizer susidies on the basis of their qualifications) was kept rather small through the establishment of requirements for facilities and technical capabilities that were not easy for new entrants to meet. However, at least one firm held itself aloof from any collaborative arrangements with its competitors, and another suceeded in forcing its way into the trade, despite the fairly stringent qualfication requirements and vigorous opposition. At the same time, the principal firms in the industry provided needed technical expertise and collaborated closely with the agricultural extension service in demonstrating new technology to farmers at the grass roots. They also established stockist networks to serve

smallholders.

Use of fertilizers in Kenya more than quadrupled between 1961 and the 1971 crop year. In 1963 (the first year of independence), Kenya imported 38,621 metric tons of fertilizer. By 1970, imports stood at 142,636 metric tons.

At the beginning of the decade, the Kenya Farmer's Association (KFA) was the only large scale distributor of fertilizer in Kenya. KFA is a cooperative as well as a corporation; its main market was its own membership -- large scale farmers in the "white highlands". KFA's headquarters was located at the hub of this area, in Nakuru. The earliest imported European fertilizer firm in Kenya was Albatros, the overseas arm of UKF of Holland. Albatros worked closely with KFA, which became the exclusive distributors of Albatros' products in Kenya.

Dalgety was a highly entrepreneurial company which served as manager of the Kenya Cooperative Planter's Union (and purchased fertilizer in that connection) and had a network of branches for purchasing in the African areas of Kenya.

In 1962, the Kenya Seed Company, a locally owned commercial enterprise headquartered in Kitale, decided to launch a program of hybrid maize seed production. The company recognized that white farmers were leaving Kenya in increasing numbers and targeted African smallholders as an important and growing market. KSC made arrangements for the Kenya Farmers Association to distribute its seeds. However,

since KFA was then almost entirely owned by European farmers, KSC asked Dalgety to distribute KSC seeds in the African areas which Dalgety served. KSC then began appointing stockists who were entitled to buy seeds at wholesale prices from KFA and Dalgety outlets. Stockists are African farmer-merchants who operate retail shops of modest size in Kenya's villages. Dalgety took on fertilizers and other agricultural imports as part of its trade.

In 1966, Dalgety was purchased by Smith Mackenzie, a company which had been established in East Africa since 1875. A subsidiary of the Inchope Group headquartered in London, Smith Mackenzie had lost much of its international trading, stevedoring and other businesses to governments and parastatal organizations as independence took hold in East Africa. Accordingly, it turned to the internal distribution trade as a replacement for the business areas it was required to relinquish. Dalgety became "Smith-Mackenzie Dalgety" then "Mackenzie Dalgety", and finally "Mackenzie".

Windmill Fertilizers, a subsidiary of Windmill/Holland, set up a subsidiary in Kenya in the early 1970's. Dalgety became exclusive distributor of Windmill fertilizers in Kenya. In 1966, Windmill commissioned the construction of a blending/bagging plant at Nakuru. Mackenzie Dalgety took a small position in the investment.

In the late 1960's, KFA and Mackenzie Dalgety with the encouragement of the Government, each had established its own set of networks to provide fertilizers to smallholders. In the late 1960's also, a Kenyan firm, Sapa Chemicals,

started to distribute fertilizer in farming areas, working with a European supplier, Montedison. KFA adopted a strategy of subsidizing some remote branches with supplies generated by its more profitable operation. Mackenzie Dalgety worked from major market towns and sought to keep each operation profitable. Thus, by the end of the decade, Mackenzie and Windmill were begging to attack KFA in its own heartland and KFA had started to leapfrog Mackenzie in the rural areas. Sapa, starting in the African areas followed a strategy like that of Mackenzie, but on a much smaller scale. KFA and Mackenzie Dalgety, which had been brought into the KSC stockist network, now each had means of distributing to the smallholder that it could call its own.

The Government regulated the industry essentially by establishing qualifications of importers applying for susidies. Principal qualifications included the demonstration of physical distribution capabilities and the provision of technical assistance to farmers. The European firms seconded personnel to the distribution organizations for the latter purpose. Mackenzie Dalgety, in particular, turned technical outreach requirements into a profitable business strategy. In order to serve the farmers economically, it considered the full range of the farmers needs which it could meet. Its activities included cattle auctions, wool department sales activities and other efforts that along with advice on agrochemicals, would have a cumulative impact on farmers' buying habits and on-the-farm performance. The principal fertilizer distributors thus

were competing within a framework which required of them standards of service to farmers which they otherwise might not have provided. At least one competitor turned a service requirement into an opportunity for profit.

C. 1970-1975: Reassessment, the Oil Shock and Foreign Aid

The period of the 1960's described above is now regarded by some observers of the fertilizer trade in Kenya with great nostalgia, by others as a period of subsidized misbehavior. In the first half of the 1970's, the oil boycott, the formation of OPEC, and ensuing increases in the price of petroleum resulted in shortages of fertilizer. Rapidly rising prices worldwide set the stage for significant changes in the relationships between Government and the fertilizer trade in Kenya. However, the policy groundwork for these changes had been laid well before the fertilizer-related effects of the oil shock were felt in Kenya. Concern with the integrity and cost-effectiveness of the system for distributing fertilizer and other agricultural inputs had in fact been gathering force for some time. We start this section with a discussion of one of the products of that concern, the Report of the Working Party on Agricultural Inputs.

1. The Havelock Report

In April 1971, Sir Wilfrid Havelock submitted the Report of the Working Group on Agricultural Inputs to the Minister for Finance and Economic Planning. This report, now known as the "Havelock Report", focused on fertilizer, other agricultural chemicals, and agricultural machinery. Among the pertinent findings and recommendations of the Havelock Report were the following:

(a) Since world fertilizer production was characterized by excess capacity, Kenya had an opportunity to reduce its fertilizer cost. However, the majority of distributors in Kenya represent companies which were members of the European-based Nitrex cartel of nitrogenous fertilizer manufacturers which set a common f.o.b. price for all straight nitrogenous fertilizers sold by its members. The Ministry of Agriculture's policy of restricting the entry of new fertilizer importers and distributors prevented firms who would have imported fertilizer from less costly, non-European sources from entering the market. The Working Party recommended that any firm wishing to import and distribute fertilizers in Kenya should be allowed to do so.

(b) Nearly all fertilizer importers were members of the Kenya Fertilizer Association and had active representation on the Fertilizer Advisory Committee, which was responsible for reviewing prices of existing importers and applications for new importers who wish to receive subsidies. The Working Party recommended that the membership of the Fertilizer Advisory Committee be expected to give a stronger voice to the public interest.

(c) The members of the Kenya Fertilizer Association issued a common, "official" price list, although one nonmember, subsidy-qualified importer issues its own independent list with lower prices. The formula applied to calculate the prices on the "official" list was 15 percent markup on the c.i.f. value of superphosphate and compound fertilizers and a 25 percent markup on the value of

nitrogenous fertilizers. However, there was in fact no single c.i.f. price for fertilizers, and the " largest importer" (KFA, in fact) tended to dictate the level chosen as the c.i.f. price for the group. Other members of the Fertilizer Association were willing to accept this price because they are at least as efficient as the largest importer, and they reflected this efficiency by offering larger discounts from the price list. The Havelock Report recommended that importers should set their own prices independently, and that the Fertilizer Advisory Committee should be reconstituted to provide for better representation of the public interest. Since there was no legislation in Kenya by which importers could be compelled to desist from issuing a common price list, the Report suggested consideration of such legislation.

(d) The Havelock Report found charging a 15 percent markup on superphosphates and a 25 percent markup on nitrogenous fertilizers hard to justify. Because some of the importers' costs (such as wharfage) are fixed, and others are incurred on a per ton basis, it recommended that the importers should base their wholesale markup on a fixed charge per ton plus a fixed percentage of the c.i.f. value. The Party thought a margin of Sh. 40 plus 10 percent of c.i.f. value, for example, would be a more reasonable pricing measure than the existing system.

(e) The Havelock Report found that large farmers were receiving 80 percent of subsidized fertilizer and

smallholders only 20 percent. It recommended a rationalization and reduction in the subsidy program.

The Havelock Report looked with great skepticism on the practice of qualifying agricultural inputs firms and requiring them to provide services to farmers. In discussing the agricultural chemicals situation, the Report stated:

> We recommend that this practice is discontinued and importers issue their own separate price lists. Their representatives, in addition to selling, offer technical advice to farmers in relation to preparation and application of agricultural chemicals, pest and disease identification and arrange demonstrations and field days in conjunction with Ministry of Agriculture extension staff. They also supervise field trials on new products in co-operation with Government Research stations. There is a paternal attitude on the part of importers towards farmers when discussion turns to the question of priceG (Emphasis added). 'We want to give service to the farmer' is their plea, implying that they would rather give the farmer a service, whether he wants it or not, than lower the price of the agricultural chemicals they sell.1

As we shall see, services to farmers were reduced in the years which followed the submission of the Havelock Report. New organizations, many of them not qualified, entered the trade and then dropped out. Prices went down for a while. In the end, a formula which resembled the Havelock Report recommendation in form turned out in context to allow significantly higher margins to importers. Stockists did not receive adequate margins, and the smallholder was not well served.

2.The Oil Price Shock

Figure 2.1 shows trends in average annual prices for crude oil in the period 1966-1982. The major petroleum exporting countries, having formed OPEC, virtually quadrupled petroleum export prices between 1973 and 1974. Petroleum importing developing countries, such as Kenya, experienced sharply rising fertilizer prices. Effects of price changes on demand for and supply of fertilizers were marked, and produced long-term supply trends due to the stockpiling of fertilizer materials following the rapid price excalation and resultant commodity panic. Price increases early in 1974 were attributed to the OPEC price increase; however, prices dropped after mid-1974 despite continued record high petroleum prices.

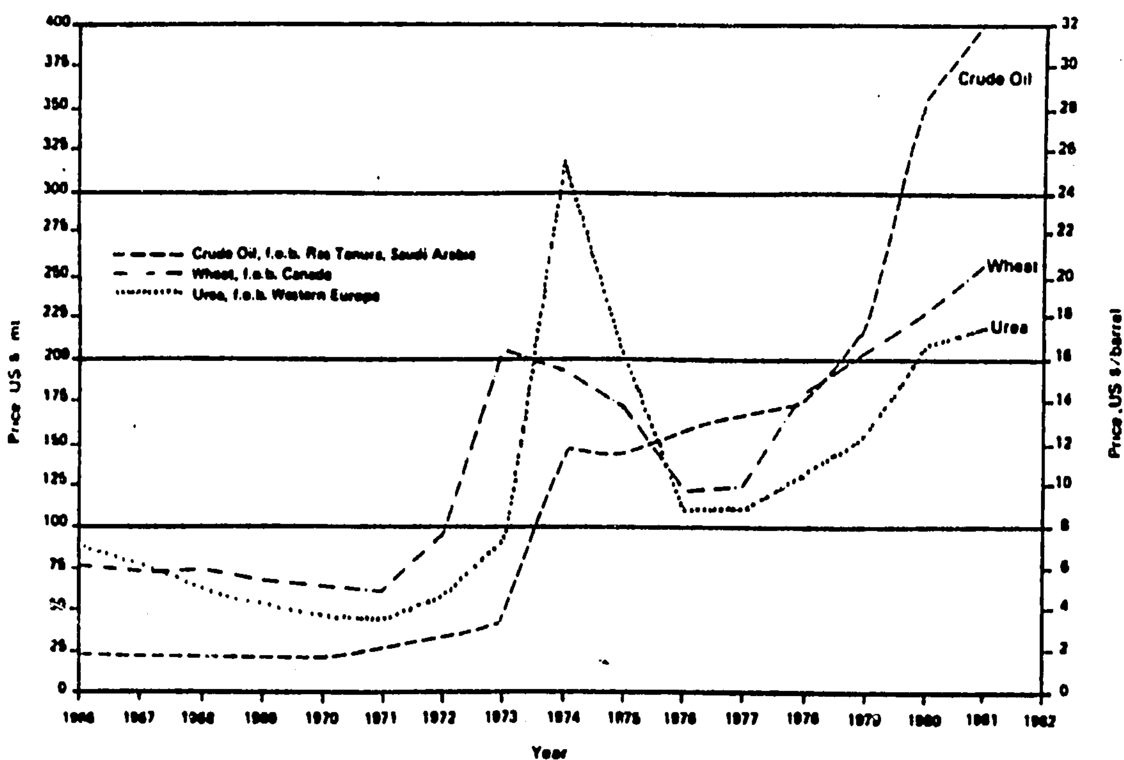
Increases in fertilizer prices did not occur as the result of energy price increases alone. A low level of world fertilizer supply and increased fertilizer demand resulting from panic buying played an important role in the supply-demand scenario. In 1974-1975, it became apparent to producers, distributors, brokers and retail dealers that inventories of high-value materials should be reduced. Therefore, demand for fertilizer fell in late 1975, in contrast to the previous period of attempts to build inventories in expectation of even higher prices.

Fertilizer prices in Kenya shot up by as much as 200 percent in 1973. In 1974, the Government started taking an interest. The price control act had been in place in 1973

Figure 2.1

INTERNATIONAL ANNUAL AVERAGE PRICES FOR CRUDE OIL, UREA FERTILIZER AND WHEAT

1966-1982



Source: <u>Energy and Fertilizer: Policy Implications and Options for Developing Countrie</u>
IFDC, 1982.

but was not applied to constrain the prices of fertilizer. In the past, prices were submitted to the Price Controller and routinely approved. However, in 1974, both obtaining Government approval of proposed prices and obtaining import licenses became very difficult.

Shortages and rapid price increases fueled suspicions of hoarding and collusion by the fertilizer trade in Kenya. They spawned efforts by the Government to obtain foreign fertilizers, to develop an in-country fertilizer manufacturing facility, and to bring more competitors into the fertilizer distribution business.

3. Mid-Seventies Foreign Aid

The United States signed its first AID Program Loan to Kenya on March 29, 1973. The loan provided $10 million in foreign exhange to the Government of Kenya over a period of two years to import materials and equipment of many kinds. However, after sixteen months of the twenty-four month period had expired, less than $70,000 of the loan had been used. In August of 1974, the Government decided to use the remaining funds to purchase fertilizers, and the loan in fact was used to finance the purchase of some 24,000 tons of product. A principal objective of the purchase was to relieve fertilizer shortages and high prices then being experienced in Kenya.

The procurement was carried out mainly through the Embassy of Kenya in Washington, D.C., which accepted offers that came in under a consolidated Invitation for Bids issued from AID/Washington. The Kenya Farmers Association, then the largest organization distributing agricultural inputs in Kenya, was originally designated as consignee by the Government. The Government subsequently changed the consignee to the Kenya National Federation of Cooperatives (KNFC), an apex organization for Kenya cooperatives, which had no prior experience with fertilizer distribution, but which had recently established a Merchandizing Branch to handle agricultural inputs. Descriptions of these organizations are contained in Sections IVB and IVC of this report.

While technically not a parastatal institution, KNFC was certainly subject to government influence and leadership. The idea of establishing a Merchandizing Branch had originally been developed by the Ministry of Agriculture, the Ministry of Cooperative Development and KNFC. In 1974 the Coffee Growers Association asked KNFC to participate in its newly established fertilizer import subsidiary, but KNFC declined when it learned that the subsidiary was closely associated with foreign-owned companies. The Government of Kenya then asked KNFC to distribute foreign aid fertilizers which it had purchased, and replaced KFA with KNFC as consignee for the aid fertilizer.

The fertilizer arrived at Mombasa in four shipments: 10,500 metric tons of TSP (December, 1974), 5,250 metric tons of DAP (January,1975), 5,000 metric tons of TSP (February, 1975), and 2,950 tons of mixed fertilizers (after June, 1975).

The story of the handling of this fertilizer in Kenya is a murky and controversial one. It is clear that the AID fertilizer was not promptly distributed to farmers and applied at spring planting as planned. Instead, the aid fertilizer was held in inventory for a substantial period, while commercial fertilizers filled farmers' needs. Ownership and accounting records became confused. At least five million shillings, representing amounts which should have been paid to the Treasury according to the Government of Kenya, was never paid in. Following the collapse of the

KNFC Marketing Branch in 1978, the amounts claimed due apparently were no longer pursued.

An Aid Auditor General's Report written in October of 1975 (before the last and smallest shipment arrived) included the following findings:

> ...the GOK did not have an effective organization for distribution or marketing of the fertilizer. KNFC admittedly lacked knowledge and experience in the local retail fertilizer market which we believe is the major contributing factor to delay in utilizing the imported fertilizer... ...according to GOK officials, the fertilizer industry in Kenya has been monopolized by four private companies. Consequently, when the KNFC put their fertilizer on the market, these four companies quickly reacted by undercutting the KNFC price. By the time the GOK and KNFC reacted, by establishing a more competitive price, the planting season had passed. Most farmers had purchased the less expensive products, leaving the KNFC with 93 percent of their consignment unsold.2

The Mwenge Report states:

> ...the GOK later approached KNFC to distribute certain fertilizers which they had imported with a view to supplying at least 75 percent of them to Government institutions such as farmers' training centers and research stations. The GOK had imported these fertilizers at a time when there appeared to be a shortage of fertilizers. Unfortunately, these institutions were later found to have already made arrangements with their "traditional" suppliers to supply all their needs. Eventually, however, KNFC sold out the stocks with considerable difficulty, the more so as these stocks supplied to them by GOK were priced higher than those of other importers... Difficulties were compounded because the shortage did not last and because other fertilizers which appeared to have been hoarded were now released into the market and purchased by unions/societies at lower prices than the KNFC/GOK price. In this way, KNFC was effectively undercut and it became exceedingly difficult for KNFC to command the loyalty of its member organizations.3

AID's Project Paper for the 1980 Kenya Commodity Import Program describes the history this way:

> The fertilizer was sold to ten private firms by the Kenya National Federation of Cooperatives, consignee for the Government of Kenya. These vendors were responsible for the ultimate distribution of the fertilizer... The lack of a systematic procedure for accountability of various donor fertilizer that arrived at Mombasa about the same time, a drop in the price of fertilizer on the world market after USAID fertilizer was sold to private distributors, and the loss of identity of the fertilizer with the original consignment as it was transported up country contributed to difficulty in tracing distribution and sales. Additionally, distributors made large periodic payments to the Exchequer without reference to the type or source of fertilizer... While all the fertilizer was eventually sold or otherwise accounted for as distressed cargo, complete payment was never made to the Government...4

We should note here that the Government had attempted three simultaneous quick fix solutions: the rapid pay-out of unutilized loan funds during the agreement period, a quick response to in-country fertilizer shortages, and the seizing of an opportunity to launch a new cooperative enterprise into fertilizer distribution and marketing. The third of these solutions could not be achieved because KNFC did not have the business and record-keeping know-how to protect itself and to perform the job it was assigned. Whether, in the final analysis, the KNFC Marketing Branch was done in by over-sanguine Government expectations, the predatory practices of competitors, trends in world prices, or its own shortcomings -- or a combination of all three -- is still in dispute.

D. 1975 - 1979: Industry Turbulence

The period from 1975 to 1979 was one of intense and rapid change in the industry, much of it involving complex relationships between the Government and the members of the industry. The discussion in this subsection summarizes two developments: first, unsuccessful attempts to start a fertilizer factory at Mombasa; and second, the turnover in competitors during the period from 1975 to 1979.

1. Fertilizer Manufacturing Ventures

The history of interest in fertilizer manufacture in Kenya goes back to the installation of the Mea blending plant in the late 1960's. At that time it was thought that the plant eventually would be used for fertilizer manufacture.

In 1968, the Development Finance Company of Kenya, Covil (ICI) Albatross of Germany, and Thyssen Rohr International GMBh of Germany entered into an agreement to develop a fertilizer manufacturing facility at Kwa Jomvu. The undertaking, known as Triangle Fertilizers, was to be the largest single project in East Africa. According to the original time table, the factory was to ccmpleted in two years. However, the project did not proceed.

The supply shortages and sharply rising fertilizer prices that followed the oil shock in 1973 convinced the Government of Kenya that the country needed a manufacturing facility in order to ensure lower prices and supply security. Following study, the Government received proposals

for construction of a plant at Mombasa. The sucessful competitor was N-Ren International, a firm headquartered in the United States and Belgium.

In 1975, Ken-Ren Fertilizers and Chemicals, Ltd., was formed as a joint venture in which the Government of Kenya was the majority owner and N-Ren the principal technical partner. The joint venture agreement contained a provision that Ken-Ren would have exclusive control of fertilizer imports into Kenya, starting twelve months before the plant was to come into operation.

In 1977, a series of serious disagreements arose between Government representatives and N-Ren. The issues included, among others, the location and cost of the factory, the suitability of its design and purchased components, the operational effect of the twelve-month exclusive import arrangement, current decisions of the Government on the granting of import licenses, and the implications of the sale of the Windmill bulk blending and bagging plant in Nakuru to Kenyan owners. In 1978, N-Ren and the Government parted ways.

In January 1979, the Government announced that it would proceed with the construction of the fertilizer factory. In 1980, National Agricultural Chemicals and Fertilizers (NACAF), a corporation wholly owned by the Government of Kenya, entered into an agreement with a Dutch firm, Stamicarbon B.V., which was to perform the construction work. However NACAF and Stamicarbon had disagreements over design and other matters, and disengaged.

The plan developed for Ken-Ren in the seventies envisioned that its facility was to operate on the then largely unutilized heavy oil by-products of the Mombasa pertroleum refinery which itself in turn operates on imported crude. NACAF expects to use heavy oil by-products as an energy source, although these by-products are currently being exported. NACAF's plant would produce up to 220,000 tons of DAP, MAP, and NPK compounds, requiring importation of liquid amonia, phosphoric acid, and muriate of potash. It is anticipated that the output of the plant could be sold in Kenya at prices which are close to the prices of imported fertilizers.

Kenya has now gone through three iterations of a cycle. In each phase an atmosphere was created in which in-country fertilizer manufacture seemed fairly imminent only to be replaced by a period in which such manufacture has seemed very much in doubt.

The question of whether a fertlilizer manufacturing facility really makes sense for Kenya deserves careful and independent reexamination. It is possible that the past problems with the project have resulted from inexperience and bad luck, that the project is a good one, and that careful plans should be laid to restructure the redistribution system to take account of it. It also may be the case that the construction of a fertilizer plant is no longer a good idea for Kenya, in which case this change should be acknowledged and the country should proceed to cut

its losses. If so, a decision to cancel the project could provide a clearer picture of the future to those organizations currently engaged in distribution and marketing, and help to unleash initiatives in the private sector.

2. Entrance and Exit

During the period between 1975 and 1979, import licensing and other measures were used to change the ownership patterns and structure of the fertilizer trade. There was a great deal of turnover among competitors. Unwise business decisions were made, and many firms suffered substantial financial losses. The Kenyan financial community attempted to contain the damage.

In 1976, the Government gave four new firms a virtually exclusive role in importing fertilizer. The impact on the European subsidiaries associated with Kenya's major distributors was dramatic. Albatros closed down. Windmill of Kenya sold out its plant in Nakuru. Montedison remained, but its relationship with Sapa broke down.

By and large, the new importers lacked experience and the qualifications that had been required in the past. The established distributors were reluctant to deal with them. The new importers, for their part, could not proceed on their own. They needed financing to import fertilizers, and the bankers insisted that they have a distribution network at their disposal.

There was, for a time, something of a standoff. The importers were inexperienced in dealing with international markets. They did not have the skills of the European subsidiaries at their disposal, and Kenya was quickly downgraded as a market by foreign subsidiaries. A price

that was good for a year quickly turned into a price that was good for six months and eventually into a price that was good for 48 hours.

The 1976-1977 growing season was confused. Late arrivals resulted in large stocks. The Government cut prices, and the losses were partly absorbed by the European companies.

The years 1976, 1977, and 1978 were years of high overhead and big carryovers of stocks. The fertilizer price structure rigidified. Prices started climbing overseas and the Government did not make suitable adjustments. Decisions on prices and other matters were delayed.

1979 was a year of shortages and rising prices. The Government now opened up importing to new and old firms alike, but no prices were announced by the Price Controller. This produced a slowdown until November. The Government assured importers that prices would be sufficient to their needs, but the banks insisted on having the prices.

In 1979, Mackenzie — after an earlier unsuccessful attempt to sell out — finally withdrew from the trade. A list of eleven other organizations which withdrew during the years 1970-1982 is contained in Section II-F. Reasons for withdrawal included force-outs, insolvency, mergers, losses, and inadequate profits.

E. 1979-Present: Aid Fertilizer and the Further Decline of the Private Sector

1. Introduction

In 1978, Kenya once again experienced severe balance of payments difficulties. These difficulties,which were more severe than those experienced earlier in the decade, were generated in part by low agricultural production and resulting food importation requirements. One of the Government's responses to these conditions was to seek foreign exchange support in the form of fertilizer aid.

The Government was quite successful in its efforts. In the July 1979/June 1980 fertilizer year, some 66,000 metric tons out of a total of 93,000 metric tons of imports were provided under aid programs. By 1981/82, 101,000 out of 150,000 metric tons imported were financed by foreign aid.

The 1979/80 foreign aid importations were provided by the Netherlands, Norway, and Japan. Fertilizers donated by the United States started arriving in 1980/81. In that year some 47,000 tons of U.S. aid fertilizers were received. In the subsequent fertilizer year, arrivals of U.S. fertilizer amounted to about 16,000 tons.

The Kenya Farmers Association has acted as exclusive agent for all foreign aid fertilizer imports, including the U.S. product. KFA is responsible for receiving, clearing, storing, distributing, and selling aid fertilizers, and for depositing local currency generated by these sales with the Government.

KFA inspects fertilizer cargo upon its arrival at Mombasa. Then Kenya Cargo Handling Services (KCHS) unloads the fertilizer, usually directly into railway cars. KCHS tallies the cargo as it is unloaded, labels the railway cars for destination, and seals them. The Kenya Railway then transports the cars to a KFA Branch, which is responsible for its further disposition.

There have been some mixups in the port, and there has been disagreement concerning the respective responsibilities of KFA and various private, government, and parastatal organizations. However, on the whole, the existing arrangements have resulted in much better handling of and accounting for foreign aid fertilizers than procedures which existed in the mid-Seventies.

KFA has well executed the mechanics of receiving, selling, distributing, and taking financial responsibility for Government fertilizer, given the basic structure and environment of the program. However, significant problems have occurred. Two of these problems -- excessive inventory levels and the increasingly dominant market share of KFA -- are closely related to the mechanics of the foreign aid fertilizer programs themselves. Several others -- such as shortcomings in fertilizer planning, difficulties presented by import licensing procedures, and anomalies in the operation of the price control program -- are closely intertwined with inventory and industry structure problems accompanying the increase in foreign aid.

2. Inventory Levels

Persistently high inventory levels are a symptom of a malfunctioning fertilizer distribution system. In Kenya, stocks of fertilizer have become far larger than they would have if inventory size were determined by purely commercial considerations. KFA's inventories (predominantly Government-owned aid fertilizers) stood at 101,000 tons in June of 1982. The June 1982 figure represents the equivalent of about two-thirds of Kenya's annual fertilizer requirements being held by one organization alone. Presumably, private sector firms held additional, but much more modest, inventories. Since Kenya imports all of its fertilizer and since the main requirements are for its application in the "short rains" in November and the "long rains" in April-May, these inventory levels were clearly too high for the month of June. These inventories also were poorly balanced. They contained excessive amounts of Sulphate of Ammonia 20x20x20, TSP 20x10x10, and CAN. DAP and ASN were in short supply.

The reasons for these large inventories include unrealistic estimation of fertilizer requirements by the Government, late deliveries of foreign aid fertilizers by donors, inadequate exchange of information between the Government and the private sector on procurement activities, problems with Government pricing of fertilizers, and relatively low prices for agricultural outputs.

The Government fertilizer planning process

traditionally has consisted of consolidation of estimates made by extension agents throughout the country. These estimates contained many subjective judgments, were not tested by rigorous forecasting disciplines, and were typically unrealistically high. In recent years, they may have been influenced by the objective of twenty percent annual growth in the use of fertilizers established in the National Food Plan; three percent is probably a more realistic annual growth rate. The belief that optimistic forecasts of fertilizer requirements bring in more foreign aid than realistic estimates may also have influenced planning for fertilizer supplies. Estimating procedures appear to have improved recently with the incorporation of private sector forecasts into the planning process, a step encouraged by foreign donors.

Fertilizers for the short rainy season in the Fall should arrive by September 15th, and by January 15th for the long rainy season in the Spring. Arrival at later dates risks delays due to congestion at the port and on the railway system. Given the way the price control system operates, there are particularly strong incentives for private firms to import commercial fertilizers as close to the rainy season as possible, and the potential for delay in the distribution of all fertilizers as a result of the simultaneous arrival of ships is significant. Several foreign aid shipments have missed the application season for which they were intended, and have had to be held in inventory for considerable periods.

Excessive and unbalanced inventories have accumulated in part because of deficiencies on the fertilizer import allocation system and because of poor communicications between the Government and the private sector on the subject of who is buying what kinds of fertilizer and when.

The Fertilizer Monitoring and Importation Committee (chaired by the Ministry of Agriculture with representatives from the Ministries of Finance, Cooperative Development, and Economic Planning) allocates import quotas among companies in the private sector on the basis of estimates of total fertilizer requirements in a given year, the share expected to be provided by foreign aid, and other considerations. After submitting applications, private sector firms receive allocations for importing specific amounts of specific types from this committee. These allocations are good for a year, but must be converted into import licenses before importation can be carried out. Applications for licenses are made to the Ministry of Commerce and are reviewed by the Ministry of Agriculture before going to the Central Bank of Kenya for final approval. Once the license is issued, the timing and the fact of importation is still not absolutely certain. Since some importers do not bring in product until they have firm orders in Kenya, quotas and even import licenses may not be used.

Decisions on importation for inventories thus take place in a considerable climate of uncertainty and difficulty. Quota allocations to the private sector may

substantially exceed realistic expectations because they represent a residual figure after foreign aid commitments are subtracted from inflated estimates of national requirements. On the other hand, the allocations may result in constraints because particular firms are limited to importing amounts of fertilizer which may not make good sense at the time they are ready to import. Allocations made by the Fertilizer Monitoring and Importation Committee are not made public, although lists of these allocations may be bootlegged through the trade. The Central Bank is a key point of decision and information because it may hold up the granting of a license because of immediate foreign exchange considerations and because the importer must make a substantial payment when he obtains his license. However, there is not a good channel of information between the Bank and the Fertilizer Monitoring and Importation Committee, nor between the Bank and the private trade. Similarly, there is not prompt feedback of information on fertilizers entering the country from Customs.

Even information on the amounts, types, and times of arrival of foreign aid fertilizers appear to be held closely. Meetings held between the Ministry of Agriculture and the trade are not consistently well attended, and attempts by the Ministry to have importers fill out monthly information forms have not had a great deal of success. In summary, mistrust between the Government and the trade, apparent irrationalities in the fertilizer allocation system and lack of timely and complete information on current

developments have led to poor procurement decisions and have, on occasion, contributed to unnecessarily high inventories.

The Government's price control procedures have contributed to high inventory levels in three ways. First, delays by the Government Price Controller in establishing prices for particular consignments of foreign aid fertilizers have resulted in delays in marketing these fertilizers. Second, prices for some foreign aid fertilizers have been set at prices that are unrealistically high in relationship to other fertilizers sold in Kenya; hence, the foreign aid fertilizers have not been sold. Third, the Government's price control system does not allow adequate margins for retailers at the grass roots level (stockists), constraining distribution and reducing sales of fertilizer below levels which might otherwise be achieved.

The Government Price Controller establishes a base price for foreign aid fertilizer by adding approximately 36% to the C+F value and adding allowances for in-country transportation. The formula is C+F plus 30% plus 100 Kenya Shillings per ton, plus transportation. Prices are established on a shipment-by-shipment basis, since C+F value will vary according to country of origin, and fluctuations in exhange rates are taken into account. However, where prices for a particular foreign aid fertilizer vary substantially among contemporaneous shipments, the price controller normally establishes a common price. When several

shipments of fertilizers arrive simultaneously, as they often do before the long rains, issuance of prices may be delayed and prevent timely sale of the fertilizer.

Foreign aid fertilizers sometimes remain in inventory because the price is set too high. The Price Controller usually does not take into account the nutrient content and prices of alternative fertilizers in establishing prices for foreign aid fertilizers. If offered a choice, knowledgable farmers will not buy product which is overpriced according to its nutrient content. For example, a shipment of TSP fertilizer was assigned a high price because it was required to be shipped on U.S. bottoms, and turned out to be more expensive for its nutrient content than other fertilizers being sold in Kenya. Thus it remained in inventory for more than a year, accumulating storage and other costs to the economy of Kenya. Thus some high prices for fertilizer are due to pricing decisions based on costs borne by the United States, under a U.S regulation which requires a high cost source of transportation for a fixed percentage of foreign aid shipments. In some cases, private sector importers undercut the prices of foreign aid fertilizers by buying abroad at lower prices than those which the aid agencies arrange or by operating with relatively low overheads.

Kenya's price control system serves as a constraint on distribution of fertilizer by stockists. These controls place artificial limits on both the amounts of fertilizers sold and the geographic area in which distribution is economic. Table 2.1 illustrates the structure of Kenya's

price using the 1981 price of 20x20x0 fertilizer as an example. The C+F price at Mombasa (including cost of fertilizer and freight to the port but not insurance) of 2840 K.Sh. is the basis for establishing the controlled price FOR (freight on rail) from Mombasa. A 30 percent "handling" charge (equivalent to 852 Sh.) and a 100 Sh. "fixed markup" are added to the C+F price to give the price of the fertilizer loaded on a railway car ready for dispatch to an up-country depot on the railway line. According to the theory of the price control system, all margins (including margins which sustain the activities of depots, subdistributors, and stockists' overheads upcountry) must come out of these two markups. The only additions to the FOR price which are allowed are for rail transport and for road transport. Allowances for these two elements of cost contain no allowances for overhead or profit, and on occasion may be less than real costs incurred.

Table 2.2 shows related costs and margins under price controls for the same ton of fertilizer. Note that the stockist's margin shown in the table is less than 5 percent of the cost to the farmer. Note also that the theory of the price control system in itself does not guarantee him this margin, and that the stockist's margin of 200 Sh. must come out of the importer's margin of 299 Sh. However, in fact, KFA maintains price lists showing both retail prices and discounted prices to stockists for purchases of 200-499 bags (ten to twenty-five metric tons). Assuming the stockist adds

TABLE 2.1

CONTROLLED FERTILIZER PRICES, 1981
(per ton of 20x20x0)

	Kenya Shillings
C&F Mombasa	2,840
30% Allowance	832
Fixed Markup	100
Controlled Price for Mombasa	3,792
Average Railway Cost	238
Controlled Price at Depot	4,030
Transport allowance to Village	120
Stockist Controlled Price	4,150

Source: Based on 1981 data for 20x20x0 contained in J.C. Abbott, Fertilizer Marking in Kenya, FAO, 1983, p. 15

TABLE 2.2

COSTS AND MARGINS UNDER PRICE CONTROLS 1981
(per ton of 20x20x0 fertilizer)

			Shs/ton
C and F Mombasa			2,849
Insurance(1% of 110% of C and F)			31
CIF Mombasa			2,871
Bank charges:	CBK levy (1% of C and F)	28	
	Bank transfer (2% of C and F)	57	85
Port clearance:	Wharfage (1½ of CIF)	43	
	Agency fee (Sh 15/ton)	15	
	Misc. charges (SH 15/ton)	15	73
Port handling:	Transit loss (1% of C and F)	28	
	Shore handling (Sh 33/ton)	33	61
Handling in/out of store (Sh 20/ton)			20
Storage: 4 months (Sh 60/ton/month)			240
Financing:	5 months suppliers finance (12% p.a. of CIF)		144
Importers/main distribution margin			299
Controlled selling price FOR Mombasa			3,792
Transport to up-country depot (average distribution)			238
Controlled selling price ex depot			4,030
Transport to village (Sh 6.00/ton/km x 20 km)			120
Stockist margin (Included in importer's margin)			(200)
Controlled price ex stockist			4,150

Source: Based on 1981 data for 20x20x0 contained in J.C. Abbott Fertilizer Marking in Kenya (FAO, 1983 p. 15.)

an adequate markup to cover the cost of transport from the KFA depot to his village, the discount (approximately 60 Sh. per metric ton) equals the stockist's markup. With this kind of markup, it is hardly surprising that few of KFA's stockists carry fertilizer. Moreover, some stockists do not know that they can add costs of transportation from the depot to the village to their retail prices. In addition, the standard costs per mile allowed by the Price Controller may be too low.

Several other points concerning the operation of the Kenya's price control scheme should be noted. First, there is no strong discipline operating on the C+F price of foreign aid fertilizer. The Government of course cannot control the costs incurred by foreign donors, and they may run up the costs as a matter of policy or ineptitude. Once these costs have been run up by the donors, it may be easier for the Government to accept them than to reconstruct or adjust them. As long as the fertilizer ultimately can be sold, the higher the C+F price, the more local currency the Government recovers.

Second, the way the importer can make the best margin is to sell directly and promptly to a large user. In this way, he minimizes his storage and financing costs, as well as costs associated with selling or distributing fertilizer in small lots from depots and branches. He gains in those situations where he has no stockist with whom to split his margin.

One of the few criticisms which private sector

companies do <u>not</u> have of the present system was that controlled prices have been set too low. Since these companies have increasingly concentrated on large and fast sales, the limits set by the Price Contoller appear to be not at all constraining. The higher the C+F price, the larger the 30 percent margin and the greater the opportunity for illegally sending profits abroad through supplier overinvoicing. Simply put, price control operates on the importer's margin, not on the cost (C+F, Mombasa) at the top line or the price (to the farmer) at the bottom line. Some Government and private interests may benefit in the short run from higher top line and bottom line costs. Given a fixed import allocation, it is in the immediate self-interest of the importer to maximize the number of his large buyers and minimize the number of stockists with whom he must split his profit.

A final reason for the accumulation of inventories as foreign aid has increased has been the relatively low prices paid to farmers for their produce. Although Government policy has shifted in favor of a policy of raising farmgate prices for principal food crops, the recent maize producer price increase still leaves the ratio between incremental output and input values below the critical 2 to 1 level for most smallholders. Some farmers are accepting lower yield rather than applying fertilizers to increase output.[5]

3. Increasing KFA Market Dominance

KFA is the exclusive agent of the Government of Kenya for handling AID fertilizers. Other firms may benefit from foreign aid to the extent that they may be used to bag bulk fertilizers handled by KFA or to operate as subdistributors or stockists for KFA, but KFA is in control of the process and KFA is the principal beneficiary. The larger the share that foreign aid fertilizer represents to Kenya's total fertilizer imports, the larger the share of the market that KFA occupies. Table 2.3 shows the importation pattern which resulted from the Government's recent success in attracting fertilizer aid.

In addition to handling all foreign aid fertilizers, KFA also imports for its own acccount. Thus, in 1980/81 KFA handled 67,500 metric tons of foreign aid fertilizers and imported about 36,600 tons of commercial imports --more than three quarters of Kenya's fertilizer imports in that year. If this trend continues, KFA's private sector competition, with the possible exception of Devji Meghji, will disappear. Devji Meghji has long followed a low cost, quick-response strategy that keeps overheads down, identifies low price sources of fertilizer (such as Korea) and capitalizes on short-term opportunities which occur in the Kenyan market. Devji Meghji has recognized when aid fertilizers are overpriced and has succeeded in underselling them. It also has utilized such techniques as hand bagging in the Port of Mombasa.

TABLE 2.3

FOREIGN AID AND COMMERCIAL FERTILIZER IMPORTS
(Metric Tons)

Year	Foreign Aid Imports	Commercial Imports	Total Imports
1979/80	65,550	27,470	93,020
1980/81	67,530	62,335	129,865
1981/82	100,930	49,500	150,430

Source: "Input Supply System," Workshop on Food Policy Research Priorities, KFA, April, 1982, p. 4.

The business strategy which has permitted KFA to achieve its dominant share of the market (see Section IV-B below) has rested on maintaining a relatively extensive network of storage locations and stockists. We have seen earlier that the main competing network was dismantled during the structural turbulence of the late 1970's (see Section II-E above). In fact, Kenya's network for distributing fertilizer has deteriorated in several ways, but KFA has become the only choice for donors interested in reaching beyond the large-scale users of fertilizer.

A decision on the part of KFA's competitors to rebuild a competitive distribution network faces formidable obstacles, beyond those of their effective exclusion from handling foreign aid fertilizers. These include the possibility that a fertilizer factory in Mombasa may establish its exclusive distribution arrangements through KFA or otherwise (See Section IV-C below), and the impact of Government input licensing.

In our discussion of the turbulent years from 1975 through 1979 (see Section IID earlier in this report), we have seen that the Government has intermittently used its power to issue import licenses to restructure the trade. The process of introducing new organizations to the trade by means of giving them import licenses continues.

To the extent that these new organizations lack distribution facilities and pertinent experience, they tend to endanger the position of KFA's competitors without much likelihood that they could effectively replace these

competitors. The new no credentials/no facilities importers can attempt to sell their import rights to an established distributor, in which case they are simply brokering a license and adding to the distributor's cost without performing a service. Alternatively, they can aim to capture a share of the profitable high-volume business with large farms and estates, a "cream-skimming" strategy which will leave competitors without a base to rebuild a distributing network competitive to that of KFA. In theory, a sufficiently capable and determined competitor, able to maintain and increase the import quotas on a sustained basis over the years, could skim enough cream to develop a base for challenging KFA. However, given past patterns of import allocations and licensing which have created and uncertainty about what standards will be applied and whether Government agencies will agree on any given importation, that is a most unlikely outcome.

In summary, foreign aid has increased the dominance of KFA because that organization has been designated as exclusive aid fertilizer distributor. Foreign aid, in combination with Government practices on issuing import licenses and uncertainty concerning the future of fertilizer manufacturing operations at Mombasa, have hurt KFA's competitors and blunted incentives to invest in the rebuilding of distribution systems to compete with KFA.

F. Withdrawals

Organizations which withdrew from performing one or more significant functions in the fertilizer trade in Kenya during the period between 1975 through 1982 included the following:

Mackenzie
Sapa
Intag
Consolidated Chemicals
KNFC (Merchandising Branch)
Albatros of East Africa
Windmill of Kenya
Kenya Merchants Supply
Cheka Investments
Brooke Bond Lilbeg
Tawai,Ltd.

III. A PROFILE OF THE PRIVATE SECTOR

A. Introduction

In the early Sixties, two organizations -- the Kenya Farmer's Association (KFA) and Mackenzie Dalgety -- distributed fertilizer in Kenya. KFA was associated with UKF of Holland and with its subsidiary, Albatros East Africa, Ltd. Mackenzie was associated with Windmill of Holland and its Kenyan subsidiary. Sapa Chemicals formed a relationship with Montedison of Italy and entered the trade along with several other smaller competitors later in the decade.

In the Seventies, many new organizations entered the fertilizer distribution business in Kenya in the wake of Government policies encouraging entry and virtually eliminating qualification requirements. In the late Seventies and early Eighties, there was a sharp contraction.

In 1977-78, on the eve of the major shakeout, KFA had 21 percent of the market (down from 35 percent in 1970), and Mackenzie had 15 percent (down from 25 percent in 1970). Sapa had 9 percent, Intag had 9 percent, Consoldiated Chemicals had 5 percent and the Kenya National Federation of Cooperatives (KNFC) had one percent. By 1982, Mackenzie, Sapa, Intag, Consolidated Chemicals, and KNFC had dropped out of the trade, along with several other organizations. The leading firms were then KFA, with 74 percent of the market, Mea, Ltd., with 10 percent, and Devji Meghji with eight percent.

The following subsection provides profiles of Mea, Ltd. and Devji Meghji. The history of Mackenzie Dalgety is described previously in Section II. A profile of KFA is contained in Section IV.

B. Mea, Ltd.

"Mea" is a Swahili word meaning growth. Mea, Ltd., an African-owned and managed firm, was successor to the Windmill bagging and blending plant located at Nakuru and to a portion of Mackenzie's distribution network. Mea is now controlled by Intag, a firm which entered the trade in 1974 as an importer of phosphate fertilizers from Uganda and later formed European connections. When Intag withdrew from the fertilizer trade, it transferred its branches to Mea. The Chairman of the Mea Board is also owner of Joles, Ltd., a firm which has participated in fertilizer importation for several years.

The blending and bagging plant at Nakuru has never operated at full capacity, and its greater utilization is a prime concern of Mea management. Although some foreign aid fertilizer has been imported in bulk and bagged at the plant, the preponderance has been imported in bags. Despite the fact that bagging at Nakuru involves some backhauling and broken railage, Mea's management strongly believes that bagging there is highly advantageous to Kenya from cost and economic viewpoints because:

-- There is a cost saving, after bagging, equivalent to \$50 - \$60 a ton on a C+F basis over the cost of fertilizer

bagged in Europe or the United States.

-- Bagging at Nakuru employs 200 Kenyans.

-- The bags are locally woven from local materials.

-- The local bags are sturdy and are reused by farmers for other purposes.

-- The Nakuru plant can blend mixtures that are specifically formulated to meet the special requirements of specific areas.

Mea's management attributes the limited use of the Nakuru plant for bagging fertilizer in part to the sometimes bitter history of the competition between the Mackenzie Windmill teams and the KFA/Albatros/UKF team. The issue of foreign versus domestic bagging was a sales issue between KFA and Mackenzie. Mea's management believes that this history has made it more difficult for KFA and Mea to resolve problems which have arisen between them in the handling of foreign aid fertilizer.

One of the reasons given for not using the Nakuru plant is that delays in Government requests for foreign aid and in donor procurement have created circumstances in which bagging had to be performed abroad in order to allow for distribution of the fertilizer in time for the growing season. With timely ordering and procurement, bulk fertilizer could arrive in sufficient time to allow for bagging at Nakuru, thus relieving the congestion that typically occurs at the port and on the railway shortly before the planting seasons.

Mea, Ltd. has pursued an aggressive sales policy. It has confidence in its own technical expertise and efficiency and would like to extend its physical distribution network. However, Mea finds itself with limited capacity to mobilize funds, a constraint which it attributes in part to KFA's exclusive distribution of foreign aid fertilizer, in part to a general liquidity squeeze in the Kenyan economy, and in part to the relatively modest return on the fertilizer trade in comparison with other lines of business in Kenya.

Mea would like to distribute foreign aid fertilizer under some of the kinds of financial arrangements which it believes that KFA has been given by the Government. If a financially feasible way could be found for it to obtain a share of the aid fertilizer trade, Mea believes it could ultimately build up a distribution network highly competitive with that of KFA.

Mea is very much interested in exploring the potential for distributing fertilizers in bags of less than 50 kilogram size. It believes that a study is required in order to identify the size of the market and the nature of advertising and promotional programs required.

C. Devji Meghji and Bros.,Ltd.

Devji Meghji is a firm which imports fertilizers for its own account and serves as a sales outlet for agricultural chemicals imported by agents. The firm has been in the fertilizer business for twenty years; fertilizers currently represent 80 percent of its sales. It

has storage facilities at Riuru (near Nairobi) and it is owned and managed by persons of Indian extraction.

Devji Meghji originally concentrated its efforts on selling fertilizers to farmers in the Central Province. However, it has expanded its range of operations in recent years. It has ten agents and stockists, serving such locations as Thika, Nyeri, Nakuru, Eldoret, Kitale and Kisumu. It has made direct sales to large customers in the area.

Devji Meghji operates on a low overhead, cost-conscious basis. It has a staff of 15, including two salesmen who call on the large accounts. It has successfully sought out low price sources of supply and found ways to economize on distributor costs. For example, the firm effectively undersold competitors by bringing in DAP in bulk and bagging by hand in Mombasa. The company would like to set up a mechanized bagging operation there, and has applied for license to import the necessary equipment.

Devji Meghji has shown some interest in handling foreign aid fertilizer during periods when its import quotas or licenses have been delayed, but handling such fertilizers is not one of the firm's fundamental objectives. The firm is normally in a position to finance its own imports, a position it believes distinguishes it from most other wholly private importers in Kenya.

Although Devji Meghji has expanded in recent years, it does not wish to challenge KFA, which it views as a potent economic and political force not to be antagonized. Devji

Meghji management whishes to maintain a relatively low profile and intends to concentrate on running an efficient and profitable medium-sized company.

IV. INSTITUTIONAL PROFILES

A. Introduction

The following section provides background on the variety of fertilizer sector organizations which have operated in Kenya. These include parastatals, cooperatives and joint ventures between private and public concerns. In subsection B, below, the nature of the Kenya Farmers Association or KFA is described. An overview of the part played by cooperatives in the marketing and distribution of fertilizer is contained in subsection C, while subsection D describes the related activities of agricultural marketing boards.

A. Kenya Farmer's Association

The Kenya Farmer's Association (KFA) has multiple status as private firm, a cooperative, and an agent of public organizations in Kenya. KFA came into existence in 1915 as the British East African Maize Growers Association. It subsequently registered as a corporation and finally as a cooperative. It now carries out significant distribution, marketing and credit-related functions on behalf of Government bodies and has ex officio Government representation on its Board of Directors.

For many years, KFA was regarded as an organization whose principal purpose was to serve white farmers in the Central Highlands. However, KFA has shed much of that image, in part by lowering its landholding requirements for

membership and in part by building up and expanding a nation-wide distribution system, and by striving, within limits, to serve the African smallholder. Although its distribution system remains concentrated on Kenya's areas of high production, KFA now provides agricultural inputs to more small farmers than any other organization in Kenya.

KFA has worked closely with the Kenya Seed Company in spreading the adoption of hybrid maize and other new varieties through the distribution of inputs which these varieties required. KFA combined its own stockist network with that of the Kenya Seed Company,and the two organizations now appoint stockists jointly.

KFA sells fertilizers, seeds, agrochemicals, petroleum products, and general merchandise. It also provides agency services to the Government in connection with distribution of foreign aid fertilizer, handling of maize and wheat crops, and recovery and remittance of Seasonal Crop Loans. KFA is a part-owner of Kenya Seed Company, Ltd., of Royal Insurance Company of East Africa, Ltd., and of Crop Protection Chemicals, Ltd. It has two wholly-owned subsidiaries, KFA Auctioneers, Ltd. and KFA Agriculural Machines Ltd.

KFA's share of Kenya's fertilizer market grew from about 35 percent in 1970 to more than 75 percent in 1982. KFA handled 104,000 tons of fertilizers imported in 1980/1981, 65 percent of which was foreign aid fertilizer consigned to it by the Government and 35 percent of which KFA imported on its own account. KFA is the Government's

exclusive conduit for aid fertilizers. Clearly this role has been an important factor in the growth of its market share.

KFA had an unusually good year in 1980-1981, with a turnover of about 42 million Kenya pounds. It distributed a bonus of 15 percent of members' qualifying purchases, and paid taxes on the 837,000 pounds net profit remaining after distribution of bonuses on members' purchases. However, in 1980-81, KFA's trade receivables increased from 8 million to more than 12 million pounds, and agency accounts payable to the Government rose by more than two million pounds.

KFA sells most of its fertilizer under the Seasonal Crop Loan Scheme, and has in the past recovered seasonal crop loans through the purchases of maize and wheat crops from farmers on behalf of the Government. Thus in some areas credit facilities extended by KFA for fertilizer have been secured against crop potential and subsequent handling by KFA.

KFA has capacity for storing about 120,000 metric tons of fertilizers as compared with less than 20,000 tons for its competitors. About half of KFA's storage capacity is in small short-term seasonal branch storage, much of it under tarpaulin.

KFA has 42 branches and and a network of some 3,000 to 4,000 stockists which it appoints jointly with the Kenya Seed Company. However this network is focused on already well developed farming areas, and less than 20 percent of the stockists regularly carry fertilizer.

KFA is in fact an institution with mixed characteristics. It is owned by some 6,000 farmer members. It pays taxes on that portion of its net trading profit which it retains after payment of the "bonus on purchases" which it distributes to its members, based on the value of qualifying purchases they make from KFA. It serves as agent or consignee for Government activities. The Permanent Secretries of Ministries of Agriculture and Commerce sit on its Board of Directors, and it has on occasion been classified as a "parastatal organization."[6]

KFA has been variously regarded as a private sector, cooperative, and government associated institution. Some criticisms have been directed at KFA's syncretic form and to its apparent lack of singleness of organizational purpose. It has been faulted on the grounds that:

--It is not a "true" cooperative; i.e., that it fails to dedicate its efforts wholly to the needs of the majority of farmers in Kenya, and to keeping prices low in particular.

--It is not a "true" private sector organization, since it does not bear a "full tax load", trades heavily on its government-related activities, and could not support its extensive infrastructure without these advantages.

--It is not a "true" public entity since it steers a course that is sometimes independent of public policy, looks after its own interests, and does not hesitate to point the finger of blame at Government when difficulties occur.

The Havelock Report, discussed in Section IIC, described KFA as:

> ... one so-called cooperative society operating in most districts but not as a cooperative so much as a general trading concern. It is our opinion that a cooperative society should make service to farmers its primary responsibility and to try to provide all necessary inputs at the lowest possible price. We cannot see how KFA can achieve this object when, for example, it is the agent of one make of imported fertilizer which means that if a member wishes to purchase another make he cannot do so from his own society. It seems to us, therefore, that in KFA there is already in existence the framework which could be built into a useful national cooperative society. We therefore recommend that the Kenya Farmers Association (Co-op) Limited should be drastically reorganized to become a national co-operative society with its national objective being to supply all farmers with all types of essential agricultural inputs at the lowest possible prices.7

While many of the recommendations of the Havelock Report were carried out, KFA was not dramatically reorganized.

During the period 1974-1978, major efforts were made to distribute fertilizer through a cooperative organization , the Kenya National Federation of Cooperatives, and to use Government controls to keep prices down. As described in Section C below, KNFC's fertilizer distribution efforts failed, in part because of unfamiliarity with international markets and inadequate margins permitted by price controls. KFA also reportedly experienced heavy losses on its fertilizer trade during the period. However, unlike the KNFC Merchandising Branch, KFA maintained its viability.

In the past, UKF of Holland provided agronomic services

out of KFA headquarters in Nakuru, but this service has been withdrawn. KFA now provides some advisory services through its marketing representatives.

There is general agreement that KFA is more efficient and businesslike than other cooperative institutions in Kenya. It has kept its fertilizer losses below the one percent standard and otherwise followed good commercial practices. KFA's cost structure is higher than most of its private sector competitors; it may well be less efficient than they are. However, it should be noted that there are in fact several reasons for KFA's relatively high cost structure.

KFA has maintained a much larger and more extensive physical infrastructure than have its competitors. Though KFA continues to concentrate its services on prosperous farming areas, it has undertaken to serve relatively remote, low volume, high cost areas to a greater degree than most of its competitors. It internally subsidizes some relatively high cost activities from some relatively low cost activities. Many of KFA's private sector competitors have minimized their investment and overhead requirements by concentrating on a strategy of providing low cost supplies of fertilizers to relatively high volume buyers. It could be argued that the apparent efficiency of KFA's competitors is more a matter of their special customer base than it is one of superior performance.

KFA has effectively marketed certain positive

characteristics of its distribution system associated with relatively high overhead. For example, foreign aid fertilizers account for two-thirds of KFA's fertilizer sales and perhaps twenty percent of its total sales. KFA owes its role as exclusive agent for distribution of Government fertilizer in significant measure to its reputation for being able to account for aid fertilizers to the satisfaction of donor's auditors. Thus, an investment in good recordkeeping, good commercial practices and procedural regularity has paid off for KFA. The fact that KFA maintains the most extensive distribution network in Kenya is also attractive to those donors whose programs focus on mproving the welfare of smallholders and the rural poor. It should be noted that KFA does not control the cost of the imported aid fertilizers which it distributes. Aid fertilizer is frequently more costly than commercial imports. As KFA grassroots competition has been eliminated or withdrawn from the trade, pressures on its distribution personnel have been reduced, and it is probable that the performance of KFA fertilizer distribution personnel has declined.

KFA's competitors emphasize the advantages which its close association with the Government gives to it: superior information concerning imports scheduled to come into the country in the near future, influence on decisions concerning whether foreign aid fertilizers are imported into Kenya in bulk or bagged in a competitor's plant in country, opportunities to pressure or embarrass competitors that

arise in the course of its exclusive role in the handling of foreign aid fertilizers, Government financing of the fertilizer inventories consigned to it, and other advantages that derive from KFA's ostensibly close relationship with the Government.

The Government is a very important client to KFA, but KFA has experienced difficulties with Government and parastatal organizations. Like its competitors, KFA wishes to have a good deal more information than it presently receives on the status of fertilizer import licenses and import plans. Storage of Government fertilizer inventories have posed financial problems for KFA which have not yet been resolved. The flow of funds from the Government-owned Agricultural Finance Corporation (AFC) to KFA under the Seasonal Crop Loan scheme (under which most credit fertilizer is sold to farmers) has been interrupted because of AFC claims that it is out of funds. The National Cereals and Produce Board has decided to handle maize and wheat purchases directly in the Rift Valley, rather than through KFC. This could also serve as a constraint on sales of fertilizer by KFA. Moreover, the Government now seems intent on bringing additional competitors into the fertilizer trade, as witnessed by its policies in allocating licenses for importing fertilizer.

On balance, it is clear that KFA has been a highly successful institution, though one whose success derives in part from monopolistic advantages conferred by the Government and the foreign aid community. It has adopted an

effective business strategy. It has made a successful adjustment from its beginnings as an organization serving European owners of large farms in the white highlands to one which provides inputs to many African smallholders. It has foregone some immediate profit in order to maintain a distribution network more extensive than that of its competitors. It has maintained its viability in a period when several of its competitors failed or withdrew from the trade. It has had the wisdom to look after its public image, and and to provide some advice without charge to farmers whether or not they are members of its organization.

KFA is well regarded by foreign donors, who appreciate the quality of its recordkeeping system and the integrity of its personnel. It has extended its services far enough into the countryside and devoted sufficient resources to good inventory control and recordkeeping practices to give it a distinct advantage over its competitors as a preferred conduit for foreign aid fertilizer.

KFA's weaknesses lie in the degree of its dependence on Government-connected and foreign aid-related activities, its vulnerabilty to the vagaries of Government credit schemes, and its increased exposure as its market share grows larger. The more of the marketplace KFA occupies, the more it is subject to blame for malfunctions in the distribution system, whether, for example, these difficulties are caused by foreign market conditions, by the Government's handling of import licensing procedures, by the liquidity problems of

parastatal institutions, or by KFA's own ineptitude. The less effective its competition, the greater the likelihood that ineptitude will develop.

C. Cooperatives

A few white farmers' cooperatives were formed in Kenya early in the twentieth century. They were principally concerned with the purchasing of inputs and the marketing of outputs. For example, the Lumbwa Cooperative was formed in 1908 for the collective purchase of fertilizers and other agricultural inputs, and for the collective marketing of produce. A few African cooperatives were formed in the 1930's, but it was not until after World War II that a grass roots movement started in earnest. In 1950 there were 75 cooperative societies in the country. By the end of that decade there were 1,000.

By 1980, there were 2,463 cooperative enterprises registered in Kenya. Of this number nearly 2,400 were primary societies. The remainder were district or commodity unions (formed from the affiliation of two or more primary societies) and national cooperative organizations. About 1,000 registered primary societies are classified as "agricultural", and about three-quarters of these societies are currently active.

Most members of cooperative societies are now smallholders, and most of their purchases of fertilizer are made through credit arrangements sponsored by the Cooperative Development Bank or by national marketing boards for particular farm products. With the exception of the Kenya Tea Development Authority, which utilizes a private sector distribution network, the Bank and the boards usually channel fertilizers as credit-in-kind through cooperative

societies and unions. These organizations either tender for fertilizer or buy from a commercial buyer with whom the organization has established relationships. The supplier may provide transportation for large orders, particularly if distances to the cooperative from the location of the supplier's inventories are not far. For smaller quantities and longer distances the cooperative will normally have to provide its own transport. Members of the cooperative ordinarily arrange their own transportation from the cooperative to their individual farms.[8]

Two national cooperative organizations have been heavily involved in fertilizer distribution, the Kenya Farmers Association (KFA) and the Kenya National Federation of Cooperatives (KNFC). KFA'S operations have been very successful, although the organization has been criticized on the grounds that it is more of a trading company than a true cooperative (see Section IV-B above, which describes KFA and its fertilizer distribution activities). KNFC's venture into fertilizer distribution during the period 1974-1978 was a failure, as its Merchandising Department collapsed in February of 1978 and went into receivership.

KNFC is the apex organization for the cooperative movement in Kenya. It acts as a national and international spokesman, provides education and training, carries out feasibilty studies, and provides a range of other services for the movement. Within Government, cooperative activities are overseen by the Ministry of Cooperative Development. The

Ministry has an extensive field establishment and often takes an active part in the affairs of societies and unions. KNFC is sometimes characterized as a "parastatal" institution. Though it has been very much under Government influence and subject to leadership by Goverment ministries, it is not a parastatal organization in form.

KNFC's merchandizing branch was an idea conceived jointly by the Ministry of Cooperative Development, the Ministry of Agriculture, and KNFC. The basic concept was developed in 1969, but it was not implemented until 1974 after some studies had been completed and a sharp rise in fertilizer prices gave the concept added impetus. KNFC was to act as a clearinghouse for pooling orders from the cooperative unions, and to lower consumer prices through collective bargaining power.[9] The smallholder cooperative sector was to become a low cost fertilizer price setter in Kenya at a time when shortages and high fertilizer prices were being passed on to other sectors through commercial channels as a consequence of the 1973-1974 oil shock.

KNFC engaged in several types of agricultural input distribution activities, none of them successful. In an attempt to respond to fertilizer shortages, the Government asked KNFC to distribute Government-imported fertilizers to institutions. After KNFC undertook this activity, it discovered that most of these institutional customers already had made arrangements to receive fertilizers from their customary commercial sources. KNFC also discovered that the prices at which Government had supplied fertilizer

to it were higher than those paid at the time by the private sector for imports brought in through commercial channels. Competing organizations placed on the market relatively low cost fertilizers which, up to that point, had been held in inventory. Thus the organization which had been brought into the trade to become the low cost fertilizer price setter in the country became an organization trying to dispose of overpriced inventories which it had purchased at the wrong price at the wrong time. KNFC subsequently imported fertilizers and other agricultural inputs through commercial importers, and finally undertook its own import operations. It was unable to sell sufficient volumes of fertilizers from its inventories in Mombasa and defaulted on its loan from the Cooperative Development Bank.

Ostensible reasons for the failure of KNFC include the following:

1. Initiatives at critical points in the venture came from the Government side. Neither Government nor KNFC officials had enough practical experience to judge whether the business strategy of the Merchandizing Branch or the specific undertakings which they proposed were soundly conceived.

2. The staff of KNFC's Merchandising Branch was too small. It had insufficient knowledge of international markets, of the competition and of its customers.

3. KNFC attempted to compete with commercial fertilizer distributors in their area of greatest strength and

experience: the high production areas of Kenya. It would have been better to focus on areas in which existing competitors were not entrenched.

4. Government price controls did not permit sufficient margins to enable KNFC to serve remote areas of Kenya profitably.

5. KNFC had no distribution network of its own, nor did it have strategically located inventories.

6. KNFC unwisely located its inventories in Mombasa. There they were remote from KNFC's members and subject to losses.

7. Delays by Government and parastatal institutions in getting credit out to cooperative organizations caused substantial delays in KNFC's sales and ran up its storage costs.

8. KNFC did not have a proper marketing study prepared in advance of its undertaking merchandizing operations.

9. KNFC paid too little attention to advertising, communications and public relations. It did not sufficiently inform its members and its customers of its merchandizing functions and its role in fertilizer distribution.

10. KNFC's competitors perceived its early lack of knowledge of the trade as well as the threat which it ultimately could pose to their market shares and their profitability. KNFC was an easy mark in a fiercely competitive environment.

A later casualty in Kenya's fertilizer distribution and marketing competition was Kenya Merchants Supply (KMS). KMS

was a private firm, whose stock was most recently held in substantial part by cooperative unions and societies. KMS was originally established to serve the cooperative movement. KMS had followed the practice of keeping consignment stocks of fertilizers in union and cooperative society storage facilities. However, the cooperatives restricted this activity in order to give themselves other alternatives. In 1982, KMS withdrew from the trade.

Despite this unfortunate history, interest in involving cooperatives more directly in the importation and distribution of fertilizers continues. The Murang'a Cooperative Union has been importing its own fertilizers directly on an experimental basis, and appears to have achieved some success. The Ministry of Cooperative Development and KNFC are exploring ways in which KNFC could reinvolve itself in fertilizer distribution. One proposal is for a pilot project in which the Government would channel a certain proportion of aid fertilizers through a KNFC subsidiary or a company owned by the cooperatives themselves. The Swedish aid agency has been approached with this idea, but is believed to have reservations as to whether prices for agricultural produce are high enough to encourage smallholders to increase their use of fertilizer. A number of the unions or societies which would be served by KNFC appear to be located in the vicinity of KFA branches. For KNFC to be successful, it presumably would have to find a way to give service and prices which are comparable or

better than those provided by KFA and other competitors.

D. Marketing Boards

Organizations responsible for purchasing, processing, and marketing agricultural crops in Kenya include the Coffee Board of Kenya, the Kenya Planters Cooperative Union (coffee), the Kenya Tea Development Authority, the National Cereals and Produce Board (maize, wheat, and beans), the Cotton Lint and Seed Marketing Board, the Pyrethrum Board of Kenya, and the Horticultural Crop Development Authority.

The Kenya Tea Development Authority tenders for fertilizer to be delivered by private distributors to stockists and cooperative outlets designated by tea growers. It prescribes fertilizer application requirements for each tea grower in advance, provides credit for the approved amount, and subtracts the costs of inputs from the tea it purchases from them. Coffee organizations have not yet been able to develop a centralized system of distribution, and generally make use of the KFA network. However, the Coffee Board of Kenya has recently been given an allocation to import fertilizer. Although the Coffee Board has no present plans to distribute fertilizer outside of Nairobi and although it is not clear that the types of fertilizer which it has been allocated for importation are suitable for coffee growers, the Board's venture into importing could be a step toward centralized procurement and distribution. Until recently, KFA perfermed marketing services for maize and wheat on behalf of the Rift Valley Province on behalf of the National Cereals and Produce Board. Thus KFA was able to

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NO. 78

V. IMPLEMENTABLE PRIVATE SECTOR PROJECTS

A. Introduction

Given substantial changes in policy, a range of private sector initiatives may be anticipated in Kenya. One anticipated initiative is the re-creation of private sector physical facilities and stockist network. Various initiatives and investments with respect to bagging projects may also be foreseen. It is possible that these developments will occur spontaneously as impediments to private sector participation are removed. They also can be encouraged through positive measures taken by donors and the Government of Kenya. An independent analysis of the current feasibility of the operating a fertilizer plant at Mombasa could lay the basis for public sector decisions concerning the future of this facility and provide a clearer picture of the future as a background for private investment decisions.

B. Private Sector Storage and Stockist Network

Creating a network of storage facilities, branches, agents, and/or stockists (perhaps somewhat along the lines of that operated by Mackenzie in the Seventies) is an idea which has occurred to several capable Kenyan entrepreneurs who have experience in the fertilizer trade. Substantial initiatives would require a stable policy environment, a reduction in the share of fertilizer exclusively allocated to KFA, and possibly a source of funds for purchasing or leasing facilities, and for financing inventories.

1. Project Elements and Related Policy Changes

The structuring of a private sector stockist network requires several distinct elements of the firm involved in the undertaking. These include:

- Attaining a level of supply (say 35,000 to 45,000 tons per year) which will permit the firm to achieve economies of scale in its operations, provide fertilizers to a fairly broad range of customers, and sustain credit, service and advertising programs.

- Establishing branches and maintaining fertilizer inventories in at least five cities in Kenya.

— Establishing and maintaining stable relationships with a few foreign suppliers, such that the firm develops a reputation with suppliers as a serious, reliable, and discriminating customer; is able to draw on the supplier's technical expertise, and participate in cooperative parastatal programs.

-- Establishing and maintaining stable relationships with competent stockists, such that the stockist regards the firm as a valuable source of supply for a profitable line of business.

-- Maintaining a program of providing technical advice and services to stockists and farmers.

-- Developing an advertising and promotional program, with suitable supplier support.

Government policies which would support the build up of such a network include:

(a) the elimination or substantial restructuring of the basis for issuing import licenses,

(b) the elimination or substantial restructuring of Government price controls on fertilizer,

(c) the elimination or substantial restructuring of KFA's exclusive ole in handling foreign aid fertilizers,

(d) raising or freeing of producer's prices for farm outputs,

(e) the creation of an atmosphere of cooperation and collaboration between Government and industry.

Limitations on the price of fertilizer have served to restrict the geographic territory within which it is profitable for importers/distributors to supply fertilizer, and have resulted in the reduction of stockist margins to completely inadequate levels. If price controls are retained in any form, they should be focused on monitoring C+F prices at the port, to determine likely cases of overinvoicing or ineptitude on the part of importers in obtaining fertilizer supplies abroad. The purchasing record of importers (i.e., their ability to purchase fertilizer and related services at competitive prices) could be one basis for receiving eligibility for import licenses, if an import licensing system is retained. In any event, the Government should have a capability for establishing prices for foreign aid fertilizers which takes into account prevailing world prices for product and shipping, comparative costs of nutrients, and local prices as well as costs incurred by suppliers of foreign aid.

2. Import Licensing

Since fertilizers are not manufactured in Kenya, policies with respect to issuing of import licenses can be critically important determinants of industry structure. In the absence of a substantial change in Kenya's balance of payments position and in the presence of unnecessarily high levels of fertilizer inventories, it seems unlikely that tight regulations on importation of fertilizers will be relaxed. Conceivably, these controls could be used affirmatively to help rebuild a competitive industry fstructure. In the recent past, attempts to use the import licensing system to create a competitive industry structure have not succeeded. New entrants with little experience in the trade were given import licenses; in some cases these entrants were cooperative or parastatal institutions with existing or potential distribution networks. In other cases, the organizations had no substantial distribution capabilities, and focused on serving large users through temporary storage and distribution arrangements. In still other cases, the holders of licenses sought to broker their import rights to existing distribution organizations. As a result, one extensive distribution network has been eroded and KFA's position of dominance was strengthened. A strategy of rebuilding the private sector through affirmative Government action should be premised on a recognition that pertinent business experience, demonstrated

technical knowledge, financial capacity, and physical distribution facilities will be required to develop more effective competition. It will also require sufficient stability and predictability in Government actions on import licensing to permit private sector firms to invest in the future with some confidence. For this reason, the Government should develop and apply written policies on granting import licenses which emphasize objective factors related to competence in fertilizer distribution.

3. Foreign Aid

Countries supplying foreign aid to Kenya who are interested in providing foreign exchange support could simply replace fertilizer with cash gifts or loans. That would, to some extent, extricate donors from a situation in which foreign aid arrangements are manifestly contributing to the demise of private sector competition due to the Government's reliance on a convenient exclusive arrangement for distributing through the dominant distributor. However, if the Government choses to use foreign exchange support to purchase fertilizer, it may well believe it can effectively do so only through its exclusive agent. Thus, the structural problem in Kenya's agricultural inputs distribution system would remain.

A second approach is to offer fertilizer and other forms of foreign aid in working with the Government to create a more competitive industry structure in Kenya. This approach would probably require collaborative efforts among

donors, renegotiation of the existing agreement between the Government and KFA, and perhaps the provision of technical assistance to ensure that accounting for foreign aid fertilizer meets the requirements of donor's regulations. KFA is experiencing enough problems with its current arrangements with the Government that it may allow for renegotiation of its existing agreement. It could be argued that the deterioration of private sector competition in Kenya is the price that the Kenyan economy has paid for the accounting, reporting, and other requirements that foreign aid agencies attach to their contributions.

A committee of fertilizer donors existing in Kenya includes U.S., Dutch, Norwegian, German and Japanese representatives among its members. Conceivably, the U.S. could take the lead in working with this committee and the Government to develop a program which would support the rebuilding of competition in the private sector.

A third approach would be to auction off foreign aid fertilizer or sell it to distributors in Kenya through a financial or other intermediary. Such arrangements would require careful consideration of what entities will bear the financial risks if products turn out to be overpriced or in oversupply. They may also require special arrangements for financing of purchases. Local currency generated through sales of foreign aid fertilizer could be used for this purpose.

The three approaches outlined above are by no means

mutually exclusive. They could be combined into a planned strategy in which donors gradually withdraw fertilizer aid, leaving in place a healthy and effective industry structure.

4. Producer Prices

The Government of Kenya has taken several steps to raise producer prices in accordance with its national food policy. Carrying this policy further would serve the best interests of an improved fertilizer distribution structure and of smallholders not well served by the existing system by making fertilizer use more economic and attractive. The reintroduction of fertilizer subsidies, which has been proposed from time to time, is not an attractive alternative.

5. Government-Industry Cooperation

Cooperation between the Government and the industry needs to be improved, particularly in the area of exchange of information. An effort to rebuild mutual confidence is required on both sides.

Steps which the Government could take to contribute to a process of improvement could include:

-- Making information already in the public domain readily available to the trade, such as donors plans and actions on procurement for foreign aid fertilizers.

-- Making arrangements for prompt reporting and release of Customs information on fertilizer imports.

-- Publishing criteria for allocating import quotas among applicants.

-- Promptly publishing fertilizer import quotas and allocations once made.

-- Holding importing organizations to a common standard of reporting on the status of their activities, and providing them with appropriate feedback.

C. Bagging and Related Projects

There is longstanding interest in bagging projects both in Mombasa and Nakuru. Mea, Ltd. has substantial bagging facilities at Nakuru, which have occasionally been used for bagging fertilizer imported in bulk. These facilities have not been fully utilized in recent years. In the past, some foreign aid fertilizers have been imported in bulk for bagging at the Nakuru facilities. This procedure takes advantage of unused capacity at Nakuru and provides local employment, while using local materials for bagging.

Devji Meghji has undertaken hand bagging in the Port of Mombasa, and is interested in importing bagging machinery for use there. There is considerable interest in bagging fertilizers in sizes of less than 50 kilos.

In rural areas, fertilizer is often transported to the farm by foot and by bicycle. Smaller bag sizes would be convenient for these modes of transport as well as requiring a smaller total cash outlay. Rebagging operations have been

undertaken on a small scale from time to time by stockists and others in rural Kenya.

The Port of Mombasa lacks facilities for importing fertilizers in bulk. From time to time, recommendations have been made that such facilities should be installed.

Issues with respect to fertilizer bagging projects may be summarized as follows:

(a) Determination of feasibility, timing and location of principal bagging facilities.

If all Kenya is to be served from the Mea facility in Nakuru, split railage and backhauling will be involved. On the other hand, the humid climate in Mombasa is not well suited for bagging, and the Mea plant represents a sunk cost to Kenya's economy as contrasted with a new investment of foreign exchange. If the NACAF project for manufacturing of fertilizer becomes operational, this project will dominate investment decisions concerning the installation and location of any new bagging facilities in the country. The prospect for installation of specialized bulk handling facilities at Mombasa also could bear heavily on these decisions.

(b) Appropriateness of bagging in small sizes.

Bagging in small sizes raises the cost of fertilizer and may lead to application in insufficient amounts to be useful to the farmer. On the other hand, prohibition of sales may not stop the practice of bagging in rural areas, with attendant dangers of adulteration. For a rebagging

project to be successful, both private sector investors and public officials would have to be convinced of its merits.

(c) Bagging of foreign aid fertilizers.

Most foreign aid fertilizer has been imported into Kenya in bags rather than in bulk, despite the fact that bagging operations abroad often have been more costly than those in Kenya. When fertilizer is imported in bulk, it tends to relieve congestion in the port and railway system, as lead time must be allowed for bagging before the planting season. The result of importing in bags has been to create higher prices to farmers and real losses to Kenya's economy. Reasons for bagging abroad have included: the respective procedures of donor and Kenyan Government agencies which have not allowed sufficient lead time to permit in-country bagging prior to the planting season; less than satisfactory relationships between KFA and Mea, Ltd.; and disputes among the several organizations concerned with the handling of foreign aid fertilizer concerning responsibility for loss of product.

When these issues are resolved, it is likely that one or more bagging projects will be undertaken, in whole or in part by the private sector in Kenya. It is in the interest of the Government and the private sector to establish a common framework for dealing with these issues. One means of doing so would be through a Government-appointed working party with appropriate representation. Another means would be through a jointly funded study.

VI. LESSONS LEARNED

A. Introduction

This section summarizes the principal lessons contained in this case study of private sector involvement in fertilizer distribution and marketing in Kenya. It also treats some of the principal issues in the context of the experience of other developing countries. Section B discusses private sector success. Section C deals with private sector failure. Section D examines key issues in context.

B. Private Sector Success

In the 1960's, the private sector enjoyed considerable success in fertilizer distribution and marketing in Kenya The principal reasons for that success were as follows:

1. Effective integration of the skills of groups of organizations specializing in manufacturing and supply, market intelligence and importing, and in-country distribution of fertilizers; and maintenance of stable working relationships among these groups over extended periods.

2. Presence in the trade of more than one managerially and technically well-qualified organization with access to the physical and financial resources needed for country-wide distribution of fertilizers and other agricultural inputs.

3. Opportunities for qualified firms to enter the trade, and freedom for competitors to follow individual business strategies.

4. Provision of technical assistance to farmers.

5. Favorable external conditions: relatively low fertilizer prices and fairly strong prices for Kenya's agricultural outputs world markets; introduction of new maize varieties requiring modern agricultural inputs; generally good performance by Kenya's economy.

6. Ability and willingness of principal fertilizer organizations to serve at least some smallholders.

C. Private Sector Failure

The period of the Seventies and early Eighties in Kenya was one of deterioration and failures in the private sector, principally attributable to:

1. Belated recognition by European firms of the inevitability of Africanization of the ownership and management of the fertilizer trade in Kenya; delay in developing adaptive responses to this trend; a practice of limiting capable African employees' roles to management of in-country distribution activities; failure to involve them in fertilizer procurement decisions and the mechanics of international trade.

2. Poor international purchasing decisions and practices by organizations newly entering the trade.

3. Poor control and accounting for the handling of stocks of foreign aid fertilizers.

4. Failure by organizations engaged in the fertilizer trade to mobilize sufficient financial, technical, and physical resources to carry out effective country-wide

distribution.

5. Inability of the Government to make prompt and realistic assessments of allegedly corrupt, collusive, or predatory practices by organizations in the industry; failure to develop and enforce clear legal guidelines concerning business practices and competition.

6. Inappropriate application of price controls.

7. Failure by the Government to articulate criteria for issuing import quotas and licenses.

8. Failure by the Government and by joint venture partners to resolve questions concerning the economic and technical feasiblity of operating a fertilizer manufacturing facility at Mombasa, and to provide sufficient assurance that its market power will not be used to squeeze most remaining private sector fertilizer distributors out of the market.

9. Failure of foreign donors to anticipate the impact of foreign aid, and more particularly of [illegible]FA's exclusive agency arrangements for importing aid fertilizers, on the market [illegible] capacities, and [illegible] of the private sector.

D. Key Issues in Context

Foreign assistance can have a profound effect upon the structure and functioning of a nation's fertilizer distribution system. In some cases (as in Afghanistan in the early Seventies), financial and technical assistance are combined to create a new institution and a new business environent. In others (as in Bangladesh today), assistance is given to improve existing institutions and restructure their operations. Sometimes fertilizer distribution is in fact an ancillary function of an institution which is assisted for some other principal purpose (as in the case of World Bank support for the Agricultural Credit Bank in Yemen and for PUSRI's construction of fertilizer plants in Indonesia). In still other cases, the central purpose of fertilizer assistance is foreign exchange support, rather than assistance to particular institutions themselves. Although Kenya's current donors have collateral objectives such as improving the structure of Kenya's economy and giving assistance to the smallholder, the dominating objective is foreign exchange support. It is understandable that donors would wish to accommodate a government's choice of an institution to handle fertilizer, particularly where there has been a past history of product mishandling, and the selected organization has a reputation for competence in this area.

Foreign assistance agencies usually think of governments and public institutions as their primary

clienteles. Thus, it is not suprising that fertilizer assistance programs can be conceived and executed without giving a great deal of attention to their impact on private sector competition and on industry structure. However, these matters are critically important to the efficient functioning of the economies of developing countries, and attention to them is indeed in order.

A fertilizer manufacturing project in a developing country can have a profound distribution system impact. In India, IFFCO, a successful cooperative institution, built its own distribution system in advance of the commencement of manufacturing operations of its new plant by importing fertilizers and placing its brand name on the imported product. Ken-Ren, which unsuccessfully attempted to construct a fertilizer plant at Mombasa in the mid-Seventies, negotiated the exclusive right to import fertilizers into Kenya twelve months in advance of the opening of its plant. With or without prior import rights, the prospect of the installation of a fertilizer manufacturing facility which will provide a substantial portion of a country's needs can have a chilling effect on private investment within the distribution sector. This is particularly the case if the manufacturing facility is partly or wholly government-owned and if prices of domestically manufactured fertilizers are protected by tariffs or price averaging schemes. At the same time, the installation of new plant affords an opportunity to open up distribution to the private sector where it has controlled

by the government in the past. Thailand is a country which has a private sector-oriented fertilizer distribution system, but will soon have a government-controlled manufacturing facility which could challenge that system. Nigeria is an example of a country in which the installation of a new fertilizer plant affords an opportunity to change a government-controlled distribution system and provide more opportunity for the private sector.

There are in Kenya, as in many other countries, privately and publicly voiced concerns about wrong-doing in public and private sectors. In the mid-Seventies, the Government's consignee lost control of a shipment of foreign aid fertilizer and the Government was not able to recover fully from the distributors to whom it was sold. Beyond this, references to misdeeds of the private sector that occasionally are found in donor documentation and elsewhere that appear to taken out of context or to lack substantiation.

There is a legacy of suspicion of the private sector fertilizer trade that exists in Kenya as it does throughout the developing world. This legacy derives in part from industry's tradition of hard-nosed -- even cut-throat -- competitive practices, the existence of international cartels supplying nitrogen and phosphate fertilizers, and the lingering after-effects of the shortages and price rises which followed the oil embargo in 1973.

In Kenya, as in other developing countries, unfavorable

assessments of the behavior of the private sector are often introduced as an argument for shifting distribution functions from private to public or cooperative institutions. Suspicions of private sector wrong-doing are no better a guide to the proper allocation of fertilizer distribution functions among government, cooperatives, and the private sector than are allegations of public sector wrong-doing, which allegations are also pervasive in developing countries.

REFERENCES

1. Wilfrid Havelock, *Report of the Havelock Working Party on Agricultural Inputs in Kenya*(Nairobi:1971), p.47.

2. AID, *Report on Examination of the Kenya Program Loan No. 615-H-007*, October 29, 1975, p.4.

3. Mwenge International Associates Ltd., *The Supply and Distribution of Farm Inputs to the Cooperative Sector* (Nairobi:1981), pp.F2-F3.

4. AID, *Project Paper:Kenya Commodity Import Program Grant Project*(1980), pp.45-47.

5. SIDA, *Report of 1982 Swedish Agricultural Mission to Kenya(1983)*, p.1.

6. Government of Kenya, *Report and Recommendations of the Working Party on Government Expenditures*(July 1982), p.91.

7. Havelock, *op. cit.*, p.2.

8. Mwenge International Associates Ltd., *op. cit.*, pp.18-20.

9. Mwenge International Associates Ltd., *op. cit.*, p.F1.