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SUMMARY: LESSONS LEARNED

Analysis Of Private Sector Fertilizer Marketing And Distribution

Prepared For U.S. Agency For International Development

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A. INTRODUCTION

This report is submitted in accordance with the provisions of Contract Number OTR-0091-c-00-2331-00 between the Agency for International Development and Louis Berger International, Inc. under which Berger conducted an analysis of private sector marketing and distribution of fertilizer in developing countries. Three case studies were selected from a universe consisting of all AID host countries, using criteria relating to geographic location, agronomic conditons, stage of market development, and other considerations. The three countries selected were the Yemen Arab Republic (North Yemen), Kenya, and Indonesia. Field studies in these countries were carried out in January and February, 1983.

The purpose of the present report is to examine lessons of general application which emerged from the case studies and from the analyses of fertilizer marketing and distribution systems in other developing countries carried out during the case study selection process.

This report is presented in four sections in addition to this Introduction. Section B identifies underlying problems of understanding distribution systems and of relationships between the public and the private sectors. Section C discusses lessons pertaining to the private sector. Section D deals with parastatal institutions and organizations with mixed characteristics. Section E is concerned with the public sector. The remainder of the present section is concerned with lessons that involve all sectors and the relationships among them. The organization of this report reflects the interest of AID in identifying the reasons for identifiable private sector successes and failures, and in advancing possible corrective actions. These corrective actions, of course, can come from either the governments of the developing countries themselves or through programs or policies adopted by international donor agencies, including AID.

B. UNDERLYING PROBLEMS

There is an imperfect understanding in many developing countries— in the public and private sector alike— of what a fertilizer marketing and distribution system is. Fertilizer is a bulky and valuable commodity, which is expensive to transfer and transport, and costly to store. Hence, in establishing and operating a system that is to serve an extensive rural area, there is a premium on financial capability. Because demand is seasonal and the timing of deliverivies is critical to the farmer, there is a premium on logistical and physical distribution skills. Because fertilizer is only saleable if it enables the farmer to recover substantially more than its cost in increased yields, promotion of expanded use requires agronomic knowledge and the ability to put that knowledge to work for farmers in the field. Because many developing countries must import substantial amounts of fertilizers, there is a premium on understanding international markets and international trade, and on developing effective relationships with international buyers.

There is a persistent tendency to wish away the complexities, the costs, and the skill requirements of fertilizer distribution. The merchant focuses on the trading profit or at Lest on the relatively simple mechanics of the large sale to the large farm. The Ministry of Agriculture assigns fertilizer distribution functions to the duties of its extension agents-- by adding a line to their job descriptions. The cooperative official retells the ancient myth that the middleman is not necessary and then proceeds to run up very high costs for acting as a middleman. In summary, the system operates poorly and incurs unnecessary costs because it is treated as if it were much less complex and much less sensitive to mismanagement than it really is.

A corollary to the "wish away" theory of fertilizer distribution is the conviction that there is or should be a costless way to transfer fertilizer from prosperous, accessible, high volume areas to remote areas characterized by subsistance farming and low levels of fertilizer use. The private sector or the cooperative or the Government, it is felt, "should" provide modern inputs at low prices to small farmers just as they "should" provide them at low cost where volume sales are possible. There is a persistent expectation that a fertilizer distribution organization ought to serve the entire nation, and that in so doing, it can find a way to overcome the hard realities of locational economics.

In developing countries fertilizer distribution is often considered to be invested with a public purpose. A private sector approach that does not serve a politically important area may be judged a failure even when distribution in such an area is uneconomic. Any large fertilizer distribution organization will face pressures to expand the geographic scope of its services, and may have a short life if it resists too inflexibly. Successful fertilizer distribution organizations tend to fall into two categories (1) those which serve prosperous farms and relatively high volume markets while keeping a relatively low public profile, and (2) those which have been able to strike a successful balance considerations of efficiency, viability, and profitability against the service expectations within their societies.

One theme that underlies all of the case studies is the lack of trust between the private and public sectors. This distrust heightens the inclination of government to intervene in the fertilizer sector, and it increases the unwillingness of private companies to invest and assume long-term risk. The case studies have attempted to address the basis of any mutual suspicions that were uncovered, and they point out events in the history of each country that may have increased these suspicions. Improved communications between the public and private sector and attention to creating a favorable climate for private investment can be important preconditions to improvement in the operation of fertilizer distribution systems in developing countries.

The advantages to farmers of competitive markets for fertilizer need to be particularly emphasized in those countries where competition has been discouraged, and where private sector strategies have been "defensive". Changes in the market structure require changes in the outlook and expectations of both the private and public sectors. Private and public sector officials alike are not often encouraged to look beyond the short term. The case studies lay out policy steps that require long-term commitments on both sides.

C. PRIVATE SECTOR LESSONS LEARNED

1. Private Sector Success

Of the three countries in which case studies were carried out, Kenya has experienced the most competitive market. In the late 1960's the fertilizer distribution market was carried out by several private firms, parastatal organizations, and an organization with mixed characteristics. Several of these organizations had strong ties with foreign suppliers. The European suppliers provided inputs and technical experts. Their local subsidiaries handled procurement and importing. Distribution organizations in Kenya handled transportation, storage, and sales. The links between foreign suppliers, local subsidiaries and local distributors contributed to the development of a marketing system that combined technical capabilities, financial resources, planning ability, and understanding of the Kenyan market. This effective integration of skills, together with the maintenance of stable working relationships among organizational members of a team over a period of years, was a principal reason for private sector success in Kenya in the 1960's.

In Indonesia, PUSRI, a large fertilizer and manufacturing parastatal, successfully expanded from being a minor distributor to becoming the exclusive distributor of all government subsidized fertilizer in Indonesia. It did not do this by receiving a government mandate to do so, but by acting like an aggressive private sector manufacturing and sales organization, and maintaining an early independence from government control.

The common denominator in these two stories is that there was a high degree of technical competence, largely instilled by a western style of management. In Indonesia, management also reflected the values and emphasis on efficiency of the army. In particular, western management concepts can be said to have made two types of contributions to these enterprising Kenyan and Indonesian organizations: a) specific expertise in such areas as inventory control, importing, and applied research; and b) an efficient management style that emphasized forward planning and control.

The lesson here is that a large fertilizer distributor in any developing country can benefit from close and constructive ties with its foreign supplier. If the major distribution organization is like PUSRI, i.e., a domestic fertilizer manufacturer and not an importer, it can also gain substantially through periodic contact with outside management consultants and operations specialists.

Not all private sector successes were by large companies. In both

Kenya and Indonesia, very successful private companies — Devji Meghji in Kenya and P.T. Rolimex in Indonesia — are relatively small companies with long experience in the trade. They are distinguishable by the fact that they have survived during times when other private sector companies were squeezed out, and they have also both overcome problems associated with being members of cultural minorities (Indian in Kenya, and Chinese in Indonesia). The marketing strategy of both companies has been to target larger customers (the area of the market that is typically of less social concern to governments), to market more than one agricultural input, and to use a small staff to make site visits. These two companies show that aggressive, cost-conscious entrepreneurs can find (or create) opportunities even in markets dominated by Government-favored competitors.

In all of the countries studied, small rural shopkeepers were enlisted as agents by both private and public sector distributors. The marketing and warehousing activities of these retailers are very senstitive to the financing arrangements with their distributors, and to the profit margins received. In both Indonesia and Yemen, recent policy initiatives have increased retail margins. This is a srep in the right direction since, with sufficient incentives, retailers can perform valuable marketing tasks, such as making demonstration plots and performing "ombudsmen" services to help farmers gain government-issued fertilizer credits. Changes to ensure adequate retail margins, even at the cost of slightly higher retail prices, can be in the best interests of all concerned.

A final comment concerning private sector successes concerns the marketing strategy adopted by successful entrepreneurs. The "new generation" of fertilizer distributors in Yemen is experimenting with ways to provide a full line of agricultural inputs to a poorly defined and unsophisticated rural market. As a marketing strategy, this approach seems superior — even in small and diverse markets — to the more traditional "trader" psychology whereby individual items are bought and sold for short-term profits. The recent emphasis on dealer training programs, through the FAO and through a United Nations sponsored project in Asia (FADINAP), can help both large-scale and local distributors develop the necessary marketing ideas and skills.

2. Private Sector Failures

It is also interesting to look at reasons for private sector failures, which occurred, in varying degrees, in each of the three case studies. In Kenya, the most important reason behind the withdrawl of an important private distributor was that it chose not to adapt to social and political changes occurring in the 1970s. In another sense it could be said that the Government failed to take steps to assure that more than one effectively competitive national fertilizer distribution system would remain intact as changes in ownership were executed.

In Yemen, the private companies which first dominated the fertilizer market were displaced by Government actions partly because they too failed to satisfy the Government's expectations. In this case, the issues were fertilizer prices and Government control over supplies to rural areas. In Indonesia, private distributors were faulted for behaving "defensively" (i.e., focusing on short-term profits; showing reluctance to make long-term investments) in an economic environment where they had no incentive, economically or politically, to do so.

All governments in developing countries search for means of control over economic and development problems. Private companies have to be aware of being judged by social criteria as well as by economic criteria. As the pendulum swings back towards a greater role for private enterprise, large firms, in particular, need to devote attention to the image and the reality of what they do for society. In fact, private sector distributors in some countries have accomplished more for small farmers than have the cooperative, parastatal or other organizations which hold themselves out as being particularly devoted to the interest of the small farmer. Private sector accomplishments in developing and serving new rural markets should be publicized effectively as should other socially useful activities of the firms in the trade.

D. PARASTATAL LESSONS LEARNED

The most successful parastatal organization studied was PUSRI, the large fertilizer manufacturer and distributor in Indonesia. PUSRI was able to undertake large-scale investments in the fertilizer distribution system because it combined a business outlook (i.e. a need to find a market for its own significant amounts of urea production), public accountability, and government backing in the event of losses. Given the amount of investment required to meet the rising demand of the time and the attendant risks, it was judged that the project's resources could not have been marshalled or managed by private sector organizations, nor managed without international concessionary financing.

In Yemen, the Agricultural Credit Bank undertook the distribution of fertilizer. Both the World Bank and the Yemeni government encouraged this approach with the idea that it would assure fertilizer availabilities to credit customers in agricultural project areas.

In Kenya, the Kenya Farmers Association, an organization with mixed private, cooperative, and public characteristics, was given exclusive rights to distribute all foreign aid fertilizer — up to two thirds of the supply— because it was regarded as the most reliable, broad-based, and politically acceptable distributor working in the country at the time. Although not strictly a parastatal, it has been favored and supported by the Kenyan government in a manner common to most parastatals.

These three stories give three different reasons for the role of the parastatal in fertilizer distribution:

1. To manage high cost, low return investments, with both government and international backing;

2. To serve immediate government service interests (and to be

controllable by that government); and

3. To be rewarded for fulfilling government ideals of quality service.

It is apparent that these reasons for giving a special sectoral role to a parastatal organization, at the expense of competition, stand up to economic scrutiny in about the same order in which they were presented.

Once a parastatal organization is given a central role to play in the fertilizer distribution sector, another set of concerns comes into play. How long should that parastatal be allowed to operate free from direct competition, especially from the private sector? Any protected organization will become inefficient and complacent. Care should be taken that the reason given for promoting the parastatal into a position of primacy in the first place does not simply become an excuse for eliminating all competition, raising prices, and lapsing into public sector inefficiency.

The lesson learned is that a parastatal can help a government solve the basic problem of ensuring market supplies at reasonable cost. It can perform the valuable function of stabilizing a young and undeveloped market. Once this function is fulfilled, however, the private sector should be allowed to compete for sales to a more established and perhaps diversifying demand. By focusing on its role as a market stabilizer, not monopoly supplier, a parastatal organization can perform its most valuable function without the risk of unnecessary public cost.

E. PUBLIC SECTOR LESSONS LEARNED

Governments are inclined to intervene in national fertilizer distribution systems. Reasons include: a) a government's unwillingness to watch private companies profit from selling a vital commodity to rural farmers; b) a government's desire to control the supply of a commodity essential to rural development projects and/or national food self-sufficiency drives; c) a government's unwillingness to cede control over an important market to foreign interests, whether or not those interests work through local subsidiaries or distribution companies; d) the government's desire to take responsibility for distributing foreign aid fertilizer e) a government's desire to reduce fertilizer prices, f) a government's desire to control outflows of foreign exchange for fertilizer purchases, and g) requirements for government intervention which derive from the effects of other government interventions, for example an exodus of private sector firms which forces a government or government-owned organization, to assume the role of distributor of last resort.

When a government intervenes in a market, it assumes responsibility for the series of complex ramifications which flow from its intervention. For example, when a government sets prices for fertilizer, it determines, to a large extent, to whom, at what distance, and with what degree of timeliness the fertilizer will be distributed. When a government accepts foreign donations, it runs the risk of distorting the local economy, particularly the performance and role of the private sector. Too often the full impact of public policies is not understood, and long-term ill effects are felt that could have been foreseen. This point will be elaborated in the three subsections that follow: 1) pricing policy, 2) the impact of foreign aid, and 3) the impact of public policies on competition.

1. Price Policy

At some point in the past decade, all of the governments in the countries studied felt that prices charged by private distributors were excessive, and imposed price controls. Price controls immediately limit the return on private sector investment, and usually have the result of limiting such investment. This is clearly shown in the case of Indonesia, where government controlled margins prevented private distributors from expanding beyond local outlets, and propelled PUSRI into assuming a national distribution role. Also, in all the case studies, government price controls reduced the geographic area served by private distributors. Unless an elaborate price averaging, incremental pricing, or cross-subsidization scheme is promulgated, price controls immediately increase the burden on the public sector to fill the gap left by diminishing private sector incentives.

Price controls on some, but not all, types of fertilizer also have an immediate effect on the pattern of use. Indonesia has kept its pattern of fertilizer use simple by subsidizing four basic fertilizer types and minimizing the use of all others. Yemen has priced urea below the market cost of all other fertilizers, but has done so not because of its technical appropriateness, but because urea is donated and the government gains from its sale. Part of the Yemen case study shows how the interests of the government, as reflected in its pricing policy, differ from the long term interests of the farmers, the international donor agencies, and the private sector. The case study shows how a fairly small change in the dometic price of urea would lead to far-reaching changes in fertilizer marketing, distribution, use, and other related government policies.

Fertilizer subsidies are another aspect of price policies that alter the role of the private sector, and it does so in at least three ways. First, it increases demand, demand which may or may not be met by private distributors. (In Indonesia it wasn't; in Yemen it is starting to be.) Second, it favors the suppliers of the subsidized fertilizers, which supplier often turns out to be the government itself. Third, it interjects a complication, both administrative and financial, into the distribution flow, which often works against private sector interests. When Indonesia introduced price subsidies, it tried to administer the program through existing private distributors. The government found the verification and reimbursement procedure so unwieldly that it began moving towards a market dominated by one state-owned distribution organization.

2. Foreign Aid

Foreign fertilizer donations are difficult to use without distorting the entire distribution system, often in ways which discourage private sector involvement. When a government accepts a donation, it becomes more than a simple recipient: it becomes committed to pricing, storing, distributing, and selling it. In Yemen, the government appointed a parastatal, the Agricultural Credit Bank, to distribute all donations. in Kenya, the Kenya Farmers Association was appointed the exclusive agent. In both countries, fertilizer donations accounted for more than half of all fertilizer consumption, and the governments' actions had the effect of displacing private sector sales. Yemen has started to channel urea donations through both parastatal and private sector distributors, but Kenya has not. Both case studies recommend further policy initiatives designed to reduce the detrimental effects on private sector market shares of the the arrangements made for the distribution of foreign aid fertilizers.

Another complication imposed by foreign donations is their impact on domestic supplies and stocks. Governments have strong incentives to solicit as much fertilizer as possible each year, even though the amounts received may exceed national requirements and the capabilities of the distribution system. First, aid fertilizers are often free; second, there exists uncertainty over amounts from year to year, and governments are induced to "stock up". The result of government overstocking is the loss of fertilizer qualitity, an incentive to reduce prices, and the risk faced by private sector distributors of government dumping. These factors together reduce the ability of the nation's distributors to control and distribute inventories efficiently.

3. Competition

Competition in almost any form is desirable: competition among and between private companies, parastatals, and/or cooperatives. The level of competition that is achieved in any particular market is determined by the maturity of the market, the sophistication of the distributors, the economies of scale, and perhaps most importantly, the public policies that are adopted to encourage (or discourage) competition.

Fertilizer market areas within a country can be divided into two general categories: the "A", or prime agricultural areas, where there exist both an established demand for fertilizer and adequate transportation infrastructure; and the "B" areas that lack access, and that may or may not have much agricultural potential. The level of fertilizer demand in the "B" areas seldom can support competition, and if served at all, is usually served by a publically-owned or cooperatively -owned distributor. Competition is often only a major issue among distributors in the "A" areas, as well as on the national level where supplies for the "A" areas are coordinated and shipped.

On the local level, i.e. within the "A" areas, there should be few barriers to entry for any number of small distributors who wish to compete. Their success will depend on their marketing strategies, which may range from low-cost supplies of a few products for which there are large orders, to the marketing of a full line of agricultural inputs, not all of which will be equally profitable. There is little need for the government to limit competition on this level.

On the national level, however, certain economies of scale and technical qualifications may be necessary. In Indonesia, the national level task of distributing fertilizer throughout the archipelago is high cost, and the argument for a single national-level organization to manage the shipment of supplies on scarce transport facilities has, for the time being, carried the day. However, the size of the Kenyan national market— which is much smaller than Indonesia's— is sufficient to support two or three national-level distributors, infrastructure that are large enough to be economically efficient. An effective national distributor also requires a higher level of technical skills, ranging from importing and procurement planning to market intelligence and inventory control capatilities. The Kenya case study suggests that it is desirable to have at least two well qualified and well financed distributors on the national level, and that some form of qualification procedure may be justifiable at that level.