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***FERTILIZER MARKETING IN PAKISTAN:
SOME LESSONS FROM RECENT
BANGLADESH EXPERIENCE***

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Fertilizer is one of the most important components of improved agricultural technology, since as much as a third to a half of the increased crop output per unit of land is attributed to fertilizer use. Involving millions of users, the potential for adding on unnecessary costs of inefficient distribution to the farmers' fertilizer costs are great.

Proper dissemination of fertilizer price information is quite as important as the announcement of administered prices (now relevant only for non-nitrogenous fertilizers). The only current official source of price information and that too for an arbitrary assortment of fertilizer products (1. Ammonium Sulphate, 2. Ammonium Nitrate, 3. Urea & 4. Super Phosphate), is the Monthly Statistical Bulletin of the Federal Bureau of Statistics, giving wholesale prices of the four products for Karachi only. The interesting thing is that there is no wholesale market for fertilizer products in Pakistan and Karachi is now the least relevant center for the products concerned.

From May 4, 1986, the prices of nitrogenous (N) fertilizers were deregulated. Similar deregulation is planned for straight phosphatic fertilizers and compounds from October 1991 and for straight potassic fertilizers and compounds from October 1995. Even in respect of N fertilizer, price determination is oligopolistic rather than competitive, with public sector and para-statal manufacturers playing the role of price leaders. Of the two private sector manufacturers, one maintains explicit and the other implicit relationship with the oligopolistic price setting. Further complication arises due to occasionally imported urea also being distributed largely through domestic manufacturers. When marginal supplies are provided by imports, the price of imported urea, if it is higher than that of the domestic manufacturers' consensus, becomes the price setter and provides super profits to domestic N manufacturers at the cost of the farmers. There is a clear case for following a dynamic policy to reform the fertilizer marketing and distribution system with a view to removing constraints on the supply side, and ensuring adequate fertilizer availability at the farm-level at competitive prices and at the correct seasonably determined time.

In many cases the key to such reform lies in privatizing the fertilizer marketing and distribution systems long dominated by public sector and para-statal agencies. In this endeavor, Pakistan can usefully draw on some of Bangladesh's recent experience in this field for two main reasons. Firstly, the areas now constituting parts of the two countries had the same system of distributing and marketing fertilizer till 1971. Secondly, Bangladesh has, during the past 12 years, made significant progress in reforming its fertilizer distribution and marketing system from a total public sector monopoly to a largely competitive free marketing system, through a series of policy reforms. For bringing about such a transformation towards a market oriented fertilizer

marketing system, it will be necessary to have clear-cut criteria for determining whether a particular agency should be placed in the public sector or the private sector. Such a determination is particularly important for Fauji Fertilizer Company (FFC) that handles a substantial part of fertilizer marketing and distribution in Pakistan. The two divergent considerations, legalistic and substantive, involved in this determination are set out in Annex A.

A brief historical background of the various common stages undergone in the distribution and marketing of fertilizer in Pakistan and Bangladesh areas in the earlier years has been provided in the paper. The most important of these common stages was that the Agricultural Development Corporation (ADC) was formed in 1961-62 to assume control over fertilizer procurement, and also share in the subsidized distribution work with the RSCC. There were two separate ADC's for West Pakistan and East Pakistan, the latter (EPADC) becoming Bangladesh ADC (BADC) in 1972.

The rise in annual fertilizer supplies in present day Pakistan for the years recounted above are enumerated at Annex Table A.1. Fertilizer use here started a bit later than in Bangladesh areas and other South Asian countries growing plantations crops, which have historically attracted fertilizer use much earlier than cereals or other field crops.

The distribution system of fertilizer from the factory or port to the farmers in Pakistan is illustrated in Annex B. The volume and timing of fertilizer imports are decided by the FID of the Ministry of Food, Agriculture and Cooperatives with or without the advice of the domestic fertilizer manufacturers. The criteria for establishing import volume goals include objectives of maintaining reserve stocks equal to about 15% of demand for N, 25% for P and 50% for K. However, the Ministry does not consult with the private traders and decisions may often be based on GOP's ambitious crop production targets.

The shares of provinces and distributing agencies (public and private) in imported fertilizers are set out below:

Table 1

SHARES OF IMPORTED FERTILIZER

	<u>(Per cent)</u>				
	<u>Punjab</u>	<u>Sind</u>	<u>NWFP</u>	<u>Balochistan</u>	<u>Total</u>
<u>Public Sector</u>					<u>76.00</u>
PADSC	22.78	-	-	-	22.78
SASO	-	7.65	-	-	7.65
ADA	-	-	3.06	-	3.06
Balochistan Agriculture	-	-	-	0.51	0.51
NFML	10.72	3.60	1.44	0.24	16.00
FFC	17.42	5.85	2.34	0.39	26.00
<u>Private Sector</u>					<u>24.00</u>
DCL	9.38	3.15	1.26	0.21	14.00
EXXON	6.70	2.25	0.90	0.15	10.00
<u>Total</u>	<u>67.00</u>	<u>22.50</u>	<u>9.00</u>	<u>1.50</u>	<u>00.00</u>

Since production in domestic plants is more or less evenly spread throughout the year and the demand is concentrated more or less over 100 days, the peak loads of fertilizer supplies have got to be accommodated in warehouses or storage go-downs. Storage is also essential because the effectiveness of fertilizer use is dependent on its timely availability at the place where it is needed. However, it has to be avoided to the maximum extent possible due to additional costs borne not only on storage but also on double handling. All imported and domestically produced fertilizer is bagged for movement and there is no internal movement of bulk fertilizer at the present time.

Both imported and locally manufactured fertilizer is transported to distribution points far more by truck than by rail. Road transport is handled by Pakistan's private trucking industry, and the National Logistics Cell (NLC), established in 1978 by the Government through the Army, which is operating a large fleet of about 1,200 over-sized trucks generally not used by the private trucking industry.

Annex Table A.2 gives a comparison of fertilizer sales in Bangladesh and Pakistan for 20 years from 1970 to 1989. The comparison is in terms of product tons, more relevant for purposes of physical distribution. This table shows that fertilizer sales in Pakistan have generally been several times the magnitude in Bangladesh. Considering the qualitative contrasts the three products dominating the macro-nutrient sales in Bangladesh are urea (N), TSP (P₂O₅) and muriate of potash, MOP (K₂O); in Pakistan, they are urea (N), DAP (P₂O₅) and SOP (K₂O).

In Bangladesh, all the existing fertilizer production facilities, controlled by the Bangladesh Chemical Industries Corporation (BCIC), are in the public sector. In Pakistan, two such urea facilities (Exxon and Dawood Hercules) are undoubtedly in the private sector.

In Bangladesh, fertilizer transportation up to the district level is 42 percent by road, 37 percent by waterways and 21 percent by rail. In Pakistan, fertilizer transportation by waterways is non-existent and rail-roads carry less than 20 percent.

Fertilizer sales to farmers in loose form are predominant in Bangladesh: approximately 80 percent of urea, 90 percent of TSP and 100 percent of MOP. In Pakistan such loose form sales are virtually unknown except in some hilly areas and urban home gardens.

Channels of fertilizer distribution in Bangladesh emanating from BADC may be seen in the figure in Annex C. A similar channel figure for Pakistan in Annex B shows at least five starting points of distribution, namely, FID, NFML, FFC, Dawood Corporation Ltd. (DCL) and Exxon.

The salient features of marketing of fertilizers in Bangladesh are: A dynamic private sector wholesaler/dealer network, resulting in improved fertilizer availability at competitive prices for farmers. Withdrawal of restrictions on fertilizer movement has made the market more responsive to shifts in demand and supply.

As a first step, private distributors were allowed in 1987/88 to lift large lots of fertilizer at discount prices from a few major distribution centers, including factory locations, operated by BADC. The designated major centers for such liftings operated by BADC are called Transportation Discount Points (TDPs). The operation of the TDP program led to a significant shift of fertilizer movement responsibility from BADC to the private sector.

Direct purchase of urea by the private sector distributors from factories started from Ghorasal factory from March 14, 1989 at the same price as BADC (later extended to all factories). The private distributors were provided the opportunity of port lifting of TSP, MOP and other imported fertilizer at a discount from July 1989. This discount was allowed due to movement cost reductions derived from port lifting.

A large number of private distributors from all over the country started direct lifting from the factories and their share of the urea market steadily increased from 6% in March 1989 to over 90% in January 1990, when BADC also imported 61,000 MT of urea, of which over 80 percent was sold direct from the ships to the private distributors. Over 369 firms and individuals are now participating in direct fertilizer lifting from the factories and ports.

The effect on farm-level fertilizer prices has been dramatic. Since the introduction of the private sector lifting, intense competitive pressure has forced distributors, dealers and retailers to economize costs, reduce marketing margins and offer lower prices to farmers. As a result, farm-level prices of different fertilizer products steadily declined.

On-going Fertilizer Distribution Improvement II Project (FDI-II) envisages phased entry of the private sector into national-level procurement and distribution. Entry of the private sector into fertilizer import is the next major step towards achieving a fully competitive, cost-effective and market-oriented fertilizer distribution system.

In Bangladesh, all the existing fertilizer production facilities, are in the public sector. In Pakistan, the public sector, including FFC, controls 75% of straight N output and the entire domestic P₂O₅ output. Even after subsidy removal and deregulation, public sector in Pakistan has been playing the role of N (including urea) price leader.

Till 1978, BADC, an "absolute public monopoly", was responsible for procuring and distributing fertilizer up to the level of TSC, beyond which private dealers and cooperatives undertook retail selling to farmers. In Pakistan also the private sector has always dominated the retail fertilizer sales. But in Bangladesh induction of private sector in wholesaling and distribution was encouraged by offering quantity discounts even at the TSC level. No such encouragement has ever been formally provided in Pakistan. Distribution and wholesaling in Pakistan is now dominated by manufacturers, who also handle imported supplies and price-setting in deregulated products is widely believed to be oligopolistic. Now that the product-mix of deregulated supplies, including imported ones, is expected to be expanded this year, we may give serious thought to the type of competitive marketing reform all along the line introduced in Bangladesh.

Desirable changes in the system of fertilizer marketing in Pakistan have to center around:

- Competitive price setting in the deregulated fertilizer products.
- Maximum privatization of marketing, aimed mainly at gradually bringing down the costs of fertilizer distribution.
- Encouraging a system of bulk discounts to promote the emergence of the currently non-existent class of private fertilizer wholesalers and distributors.
- Step by step privatization of FID's present functions of import procurement and distribution of fertilizer.
- Opening all stages of fertilizer marketing, import procurement, distribution, wholesaling and retailing to private trading companies also.
- The field of fertilizer import procurement should also be open to fertilizer manufacturing companies.
- Intensifying public sector role of fertilizer price monitoring, demand forecasting, and setting of fertilizer standards and implementing them (Bangladesh's 6 national fertilizer price surveys per annum covering dozens of markets should be an eye opener).

- Privatizing some of the fertilizer manufacturing entities now in the public sector.

The aforementioned measures are quite inter-related. Private fertilizer marketing, starting with import procurement, would promote competitive price setting in the expanding list of deregulated fertilizer products. To begin with, private distributing and wholesale entities can be encouraged by directing public sector manufacturing and import procurement agencies to introduce a suitable system of bulk discounts. In due course, the private sector manufacturing and import agencies may also introduce such discounts in view of their being economical and conducive to greater efficiency.

As the Bangladesh experience shows, the procurement rules of all the major donors of fertilizers (ADB, IDA, Netherlands, NORAD, USAID and CIDA) allowed for private importation, using the informal, negotiated bidding process, so long as evidence was provided that several bids were elicited and the importer could justify supplier selection. Private importers could thus not only undertake imports, despite heavy dependence on aid financing, but could also resort to negotiated, as opposed to closed, bidding procedures, with a view to bringing down the import procurement costs. Private sector participation in imports could also bring several other advantages like timely arrivals and introduction of new fertilizer products.

There should be no bar to private importers having either integrated chains of distributors, wholesalers and approved retailers or using bulk discounts for the disposal of imported supplies. Fertilizer manufacturing companies should also be free to undertake even aid-financed imports under lower cost negotiated bidding procedures.

From October 1991, over 95 percent of fertilizer sales will be deregulated. The present system of monitoring the deregulated fertilizer prices will then be totally inadequate for informed decision-making in the field of fertilizer marketing. Through suitable reporting systems and surveys a close watch should be kept on the movement of fertilizer prices at various tiers of manufacture/import procurement, distributors, wholesalers, dealers and farm-level retailers. Suitable statistical systems should also be instituted for recording imports, domestic manufacture, stocks and off-takes at dealer as well as farm-level. Demand forecasting, broken down by crop seasons and administrative districts, should be undertaken as a careful and continuous exercise to guide the policy-makers as well as importers, manufacturers, distributors and wholesalers.

Pakistan Standards Institution should be requested to set workable standards for all the main types of fertilizer products used in the country. These standards should be introduced through appropriate enabling laws and inspection agencies should be set up to undertake random checks not only to enforce the standards of quality but also to identify cases of marketing malpractices, including adulteration and under-weighting, and referring them to relevant legal authorities for prosecution and punishment.

Privatization is now receiving due attention in Pakistan in many fields of manufacturing, trading and banking. As an instrument of efficiency and low cost working, suggestions made from time to time regarding Pak-Saudi Fertilizer Company and Pak-Arab Fertilizer Company should provide the starting point for privatization initiatives in the key fertilizer industry.

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ANNEX A

FFC-PUBLIC OR PRIVATE SECTOR STATUS

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According to normal procedures followed in Pakistan, the Fauji Fertilizer Company (FFC) is a "private sector" organization, because it is: (i) a private limited company, (ii) not a department of Government, and (iii) not a statutory body. However, there is also a point of view that the crux of the matter lies in establishing whether real ownership and control of the organization lies in the "public" or the "private" sector. Partial ownership/control by other para-statal organizations (such as Fauji Foundation, Army Welfare Trust etc) is, according to this point of view, partial ownership/control in the "public sector".

The entire Class "B" share holding of FFC, which is approximately 56.77% of the total, lies in the public sector, since Fauji Foundation (35.88%), PIDC (1.25%), ICP (6.96%), NIT (6.96%) and Bankers Equity (5.72%) are para-statal organizations. Another 6.01% from Class "A" also lies indubitably in the "public sector", namely, 2.21% of GOP and 3.80% of NDFC. Even the non-controlling beneficial interest, represented by the preference shares (18.44%) accrues exclusively to public sector organizations, namely, Fauji Foundation (3.56%), ICP (3.56%), HBL (2.83%), UBL (2.83%), NBP (2.83%), MCB (1.78%) and ABL (1.05%).

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ANNEX A-1

***TABLE A-1: PAKISTAN: TOTAL SUPPLY OF FERTILIZERS
(PRODUCTION AND IMPORTS)***

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(PRODUCTION AND IMPORTS)

YEAR	N	P2O5	K2O	TOTAL NUTRIENTS	TOTAL PRODUCTS
=====	=====	=====	=====	=====	=====
(Product and nutrient tonnes)					
1952-53	2,100	-	-	2,100	10,000
1953-54	29,274	-	-	29,274	139,000
1954-55	4,137	-	-	4,137	19,700
1955-56	7,675	-	-	7,675	36,523
1956-57	18,731	-	-	18,731	89,196
1957-58	12,274	195	60	12,529	59,597
1958-59	25,766	411	-	26,177	124,978
1959-60	19,684	153	75	19,912	94,735
1960-61	45,655	1,592	25	47,272	219,161
1961-62	53,713	1,424	-	55,137	226,001
1962-63	39,955	1,073	-	41,028	148,407
1963-64	48,944	1,186	-	50,130	178,836
1964-65	49,824	1,447	-	51,271	175,819
1965-66	82,007	1,415	-	83,422	332,585
1966-67	157,147	17,104	500	174,851	635,862
1967-68	153,395	52,661	-	206,056	536,901
1968-69	196,736	35,124	5,702	237,562	570,527
1969-70	421,473	15,605	-	437,078	1,033,263
1970-71	247,946	43,066	5,000	296,012	699,117
1971-72	288,152	4,868	-	293,020	722,247

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Source: 4

**FERTILIZER MARKETING IN PAKISTAN:
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ANNEX A-2

***TABLE A-2: TOTAL FERTILIZER SALES
(000 MT)***

TABLE A-2: TOTAL FERTILIZER SALES
(000 MT)

YEAR	Bangladesh	Pakistan
1970	282	1,033
1971	309	699
1972	248	722
1973	390	1,056
1974	386	1,425
1975	284	1,076
1976	465	1,141
1977	521	1,348
1978	731	1,603
1979	745	2,348
1980	852	2,492
1981	875	2,482
1982	829	2,805
1983	968	2,712
1984	1,129	2,850
1985	1,260	3,426
1986	1,156	3,929
1987	1,324	3,779
1988	1,514	3,903
1989	1,719	4,154

Source: 2 and 4

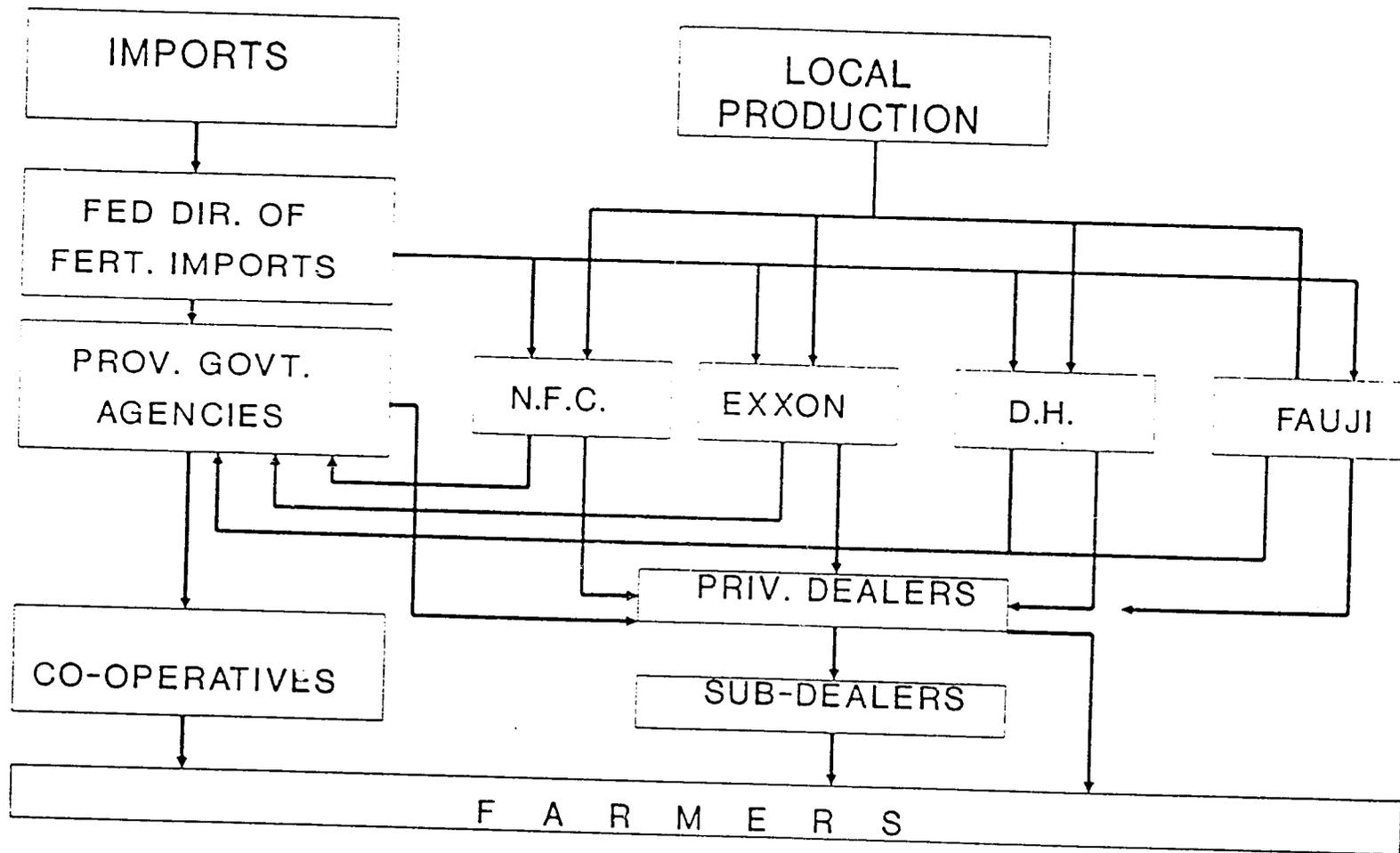
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ANNEX B

***PAKISTAN
FERTILIZER DISTRIBUTION CHANNELS***

PAKISTAN FERTILIZER DISTRIBUTION CHANNELS



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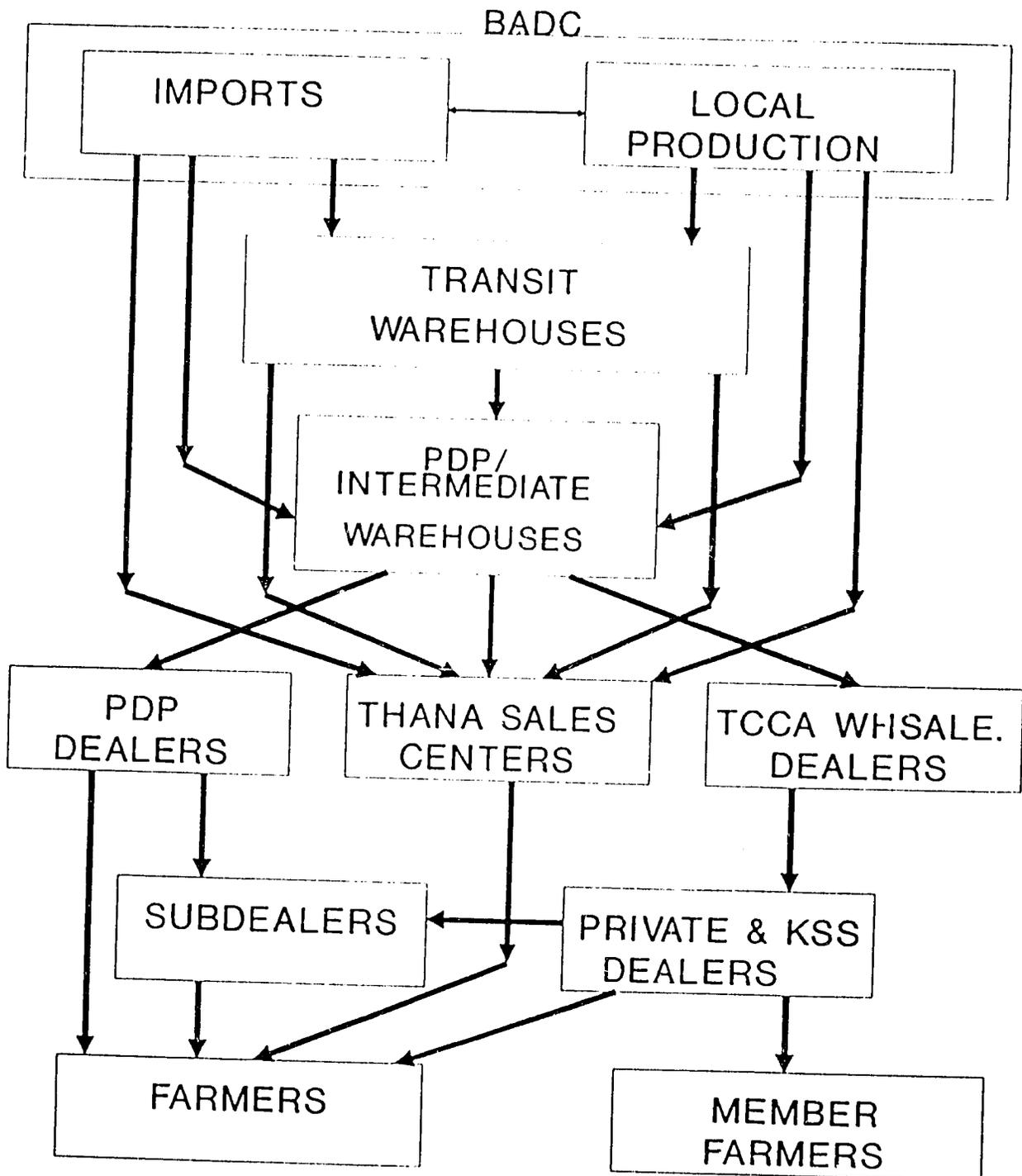
**FERTILIZER MARKETING IN PAKISTAN:
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ANNEX C

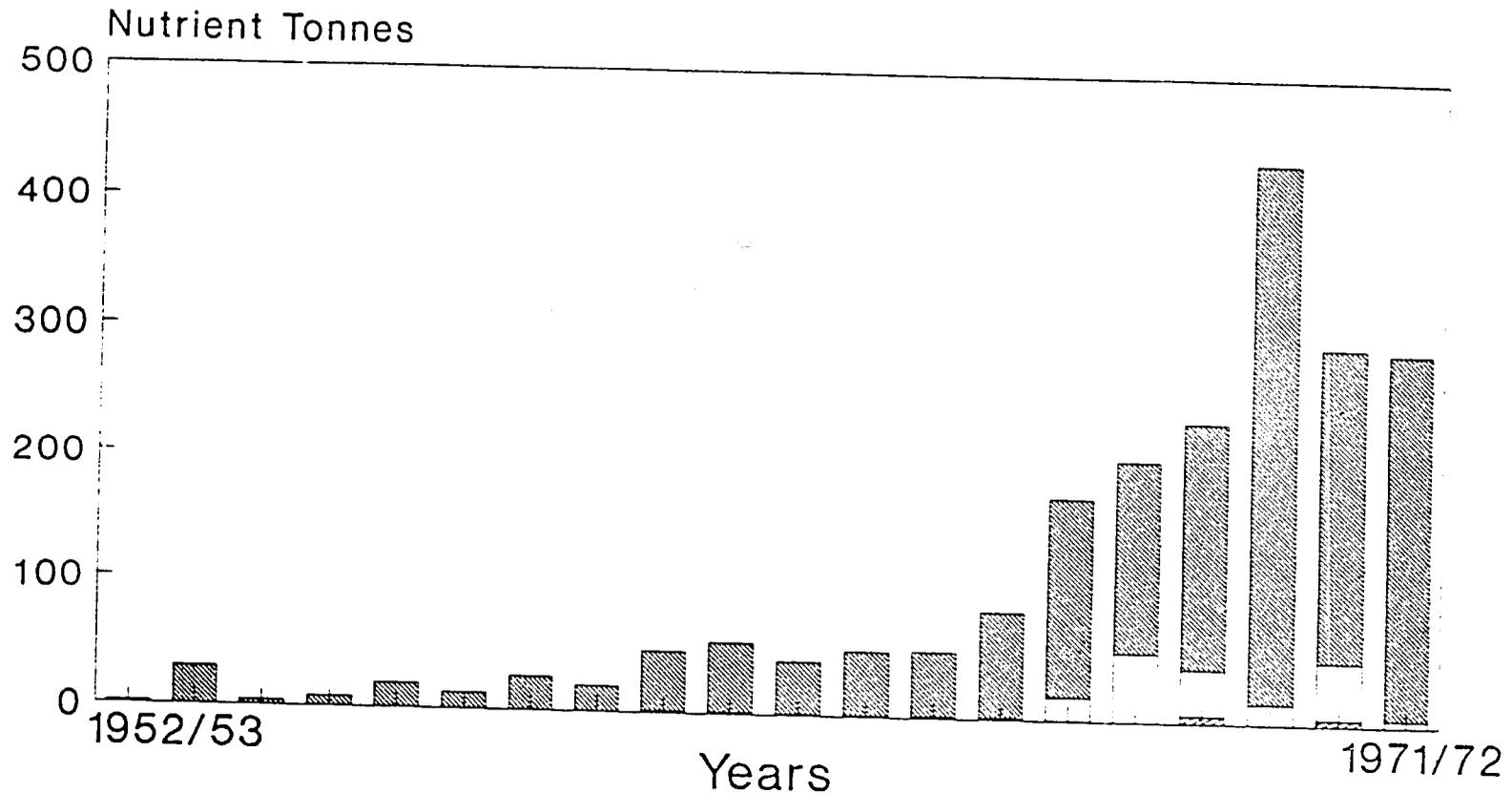
***BANGLADESH
FERTILIZER DISTRIBUTION CHANNELS***

BANGLADESH

FERTILIZER DISTRIBUTION CHANNELS



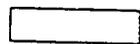
PAKISTAN: TOTAL SUPPLY OF FERTILIZERS (PRODUCTION AND IMPORTS)



NUTRIENTS



N



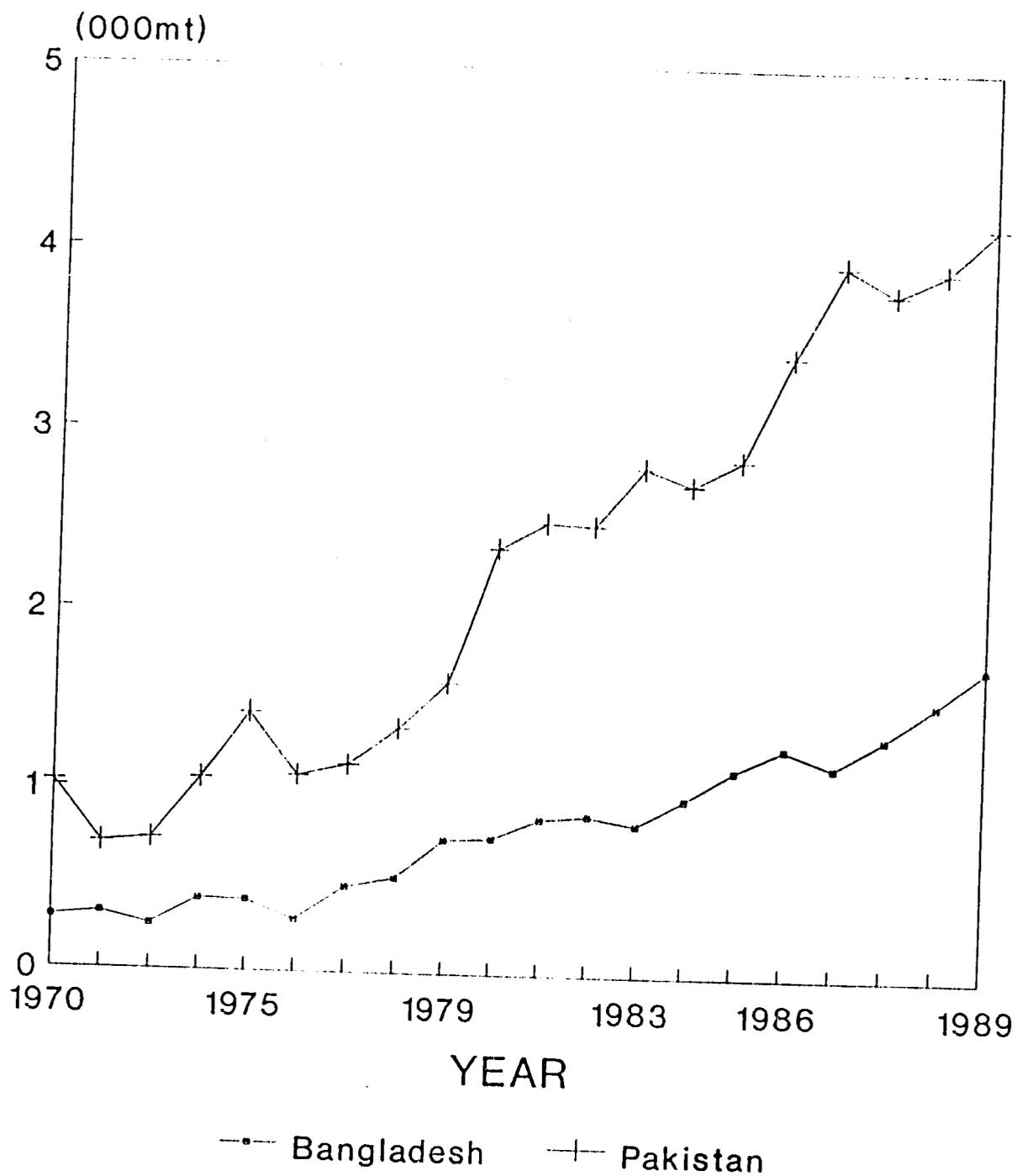
P2O5



K2O

10

TOTAL FERTILIZER SALES



Source: 2 and 4

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