

WDP 305
Oct. 1995

305



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Pakistan's Public Agricultural Enterprises

Inefficiencies, Market
Distortions, and Proposals
for Reform

Rashid Faruqee
Ridwan Ali
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305



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Rashid Faruquee
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The World Bank
Washington, D.C.

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and Development/THE WORLD BANK
1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

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First printing October 1995

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ISSN: 0259-210X

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Library of Congress Cataloging-in-Publication Data

Faruqee, Rashid, 1938-

Pakistan's public agricultural enterprises: inefficiencies,
market distortions, and proposals for reform / Rashid Faruqee,
Ridwan Ali, Yusuf Choudhry.

p. cm.—(World Bank discussion papers; 305)

Includes bibliographical references.

ISBN 0-8213-3459-X

1. Agriculture and state—Pakistan. 2. Agricultural industries—
Government ownership—Pakistan. 3. Agricultural productivity—
Pakistan. I. Ali, Ridwan. II. Choudhry, Yusuf, 1943-

III. Series.

HD2075.5.Z8F37 1995

338.1'85491—dc20

95-38821

CIP

Contents

Foreword	v
Abstract	vii
Acknowledgments	viii
Acronyms	ix
Executive Summary	xi
1. PUBLIC ENTERPRISES AND THEIR IMPACT ON AGRICULTURE	1
The Adverse Impact of Public Enterprises on Agriculture.....	3
Common Problems with Public Enterprises	5
Evaluating Performance of Public Enterprises: General Considerations	6
Assessing Agricultural Public Enterprises in Pakistan	7
2. THE PRODUCTION PUBLIC ENTERPRISES IN PAKISTAN	10
Physical Performance	11
Financial Performance.....	12
Profit and Loss	12
Financial Ratios	15
3. THE MARKETING PUBLIC ENTERPRISES IN PAKISTAN	19
Physical Performance	19
Financial Performance.....	27
Profit and Loss.....	27
Financial Ratios.....	33
4. PERFORMANCE AND IMPACT OF AGRICULTURAL PUBLIC ENTERPRISES IN PAKISTAN	39
System Inefficiencies	39
The Effect of Price Intervention	43
The PE's Budgetary Relationship with the Government.....	44
5. PUBLIC ENTERPRISE REFORM IN PAKISTAN	47
The Search for a Remedy.....	47
PE Reforms: The Alternatives	49
Country Experience with PE Reforms	50
The Lessons of Experience	51
Instituting Reforms in Pakistan	52
Annex 1: Agricultural Public Enterprises in Pakistan	56
References	60

LIST OF TABLES

Table 1.1	Economic Cost of PEs World Wide.....	4
Table 2.1	Production at Subsidiaries of NFC.....	11
Table 2.2	Financial Performance of NFC Subsidiaries: 1986-93	12
Table 2.3	NFC Production Subsidiaries: Financial Ratios (1986-93).....	17
Table 3.1	NFML: Targeted and Actual Fertilizer Distribution (Million Tons).....	20
Table 3.2	NFML: Fertilizer Market Share.....	20
Table 3.3	Pakistan's Conventional Seed Market - 1993.....	21
Table 3.4	Fertilizer Offtake in Punjab.....	22
Table 3.5	Pakistan Wheat Production and Procurement by PASSCO	23
Table 3.6	RECP Export and Market Share.....	24
Table 3.7	Pakistan: Raw Cotton Production.....	26
Table 3.8	Pakistan: Cotton Production, Consumption and Export	26
Table 3.9	Cotton Export by CEC and the Private Sector.....	27
Table 3.10	Profit & Loss of the Marketing Corporations	28
Table 3.11	NFML: Total Operating Costs (Million Rupees).....	28
Table 3.12	Financial Ratios of Six Marketing PE	34
Table 4.1	Market Shares of Selected PEs in 1983 and 1993	41
Table 4.2	Key Performance Indicators (1987-1992-93).....	41
Table 4.3	Policy Transfers to Producers from Support Prices & State Trading	43
Table 4.4	RECP: Operating Profit & Loss under Two Accounts.....	46

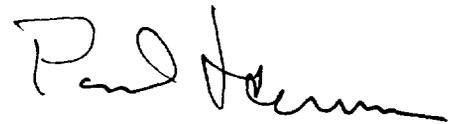
LIST OF FIGURES

Figure 2.1	Pakarab Corporation: Net Sales and Income Trend	13
Figure 2.2	Paksaudi: Net Sales and Income Trend	14
Figure 2.4	Lyallpur Chemicals: Net Sales and	13
Figure 2.3	Pakamerican: Net Sales and Income Trend.....	14
Figure 2.5	Hazara: Net Profit Trend (1988-1993).....	15
Figure 3.1	PAD&SC: Fertilizer Handling.....	22
Figure 3.2	The Wheat Market in Pakistan	24
Figure 3.3	RECP Export Volume and Share of Export Market	25
Figure 3.4	NFML: Net after Tax Loss 1987-1993.....	28
Figure 3.5	PSC Net Profit 1987-1993	29
Figure 3.6	PAD&SC: Net Losses 1986-1992.....	30
Figure 3.7	PASSCO: Net After Tax Loss (Profit) 1987-93	31
Figure 3.8	RECP: Net After Tax Profit and Loss	32
Figure 3.9	CEC: Profit and Loss: 1986-1993	33
Figure 5.1	A Taxonomy of Agriculture PEs in Pakistan	53
Figure 5.2	Strategy Matrix for Agricultural PEs in Pakistan	54

Foreword

It is now widely agreed that a proper institutional environment is crucial to development. The role of the public enterprises must be properly formulated so that they do not produce market distortions and harmful externalities that hinder private sector growth, poverty alleviation, or sustainability of development. This study is a follow-up of the report "Pakistan: Strategy for Sustainable Agricultural Growth" (Agricultural Operations Division, South Asia Region, November 1994). It identifies key problems of agricultural public enterprises in Pakistan and advocates reforms of economic, financial, and managerial efficiency. It shows that although most agricultural public enterprises in Pakistan are supposed to be self-financing through their operating revenues, in reality they have shifted the financing burden to the budget and the financial system. The study also shows that most public enterprises in agriculture operate inefficiently and create distortions in incentives for agriculture.

It is hoped that this study will assist the growing efforts within Pakistan to bring about a comprehensive reform program that redefines the public sector's role in agriculture, including withdrawal of the government from strictly commercial functions.



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Abstract

Agricultural public enterprises in Pakistan, like their counterparts in most developing countries, share common problems of economic, financial, and managerial inefficiency. Subsidies that never reach intended beneficiaries and cause inefficient allocation of resources, pricing regulations that benefit undeserving segments of the population, and restrictive trade policies applied through the public enterprises have distorted the market for supplies, production, and distribution of agricultural goods. All of these also have come with a hefty price tag for the government also. The public budget has had to absorb direct financial losses totaling millions of rupees, and the state may have to bear much more in indirect losses from guaranteed loans underwritten by the nationalized commercial banks.

It is time for the government to institute serious policy reforms for the public enterprises in Pakistan's agriculture. The options include operating leases, management contracts, straight divestiture, and liquidation in certain cases. In addition, the government has to institute the requisite macroeconomic policy reforms, deregulate prices, improve the regulatory framework, and reform financial markets to allow private enterprises to grow and take over, leaving only the provision of public goods to public enterprises.

Acknowledgments

The authors are indebted to Dr. Rashid Qayyum and Dr. Sarfraz Quereshi for collection of data for this study. They also wish to thank the managers of the public enterprises for their cooperation and help. The views and conclusions in the paper should be ascribed to the authors and not to those who provided assistance.

Acronyms

CEC	Cotton Export Corporation
FID	Fertilizer Import Department
NFC	National Fertilizer Corporation
NFML	National Fertilizer Marketing Limited
PAD&SC	Punjab Agricultural Development and Supplies Corporation
PASSCO	Pakistan Agricultural Storage and Services Corporation
PE	Public Enterprise
PSC	Punjab Seed Corporation
RECP	Rice Export Corporation of Pakistan
ROA	Return on Assets
ROI	Return on Investment
ROS	Return on Sales
SOE	State Owned Enterprise

EXECUTIVE SUMMARY

Pakistan has many public enterprises in agriculture. The reasons for establishing them include a wrongly perceived need for the Government to intervene in some markets to control prices and distribution. The public enterprises have not yielded tangible benefits, and they have inhibited the development of an efficient market in agricultural services, besides costing a lot to the public exchequer. The long-run cost of price intervention on agricultural producers has been substantial. Estimated transfer out of agriculture due to price intervention, as a percentage of producer value, was around 10 percent between 1981-87. This transfer has adversely affected farmers' incentives for agricultural investment. Furthermore, the government's strategy of stabilizing prices year-round and imposing uniform geographical pricing have held back the development of private storage and distribution capacity, in addition to imposing unnecessary fiscal burden as noted.

Major problems generally encountered with public enterprises — economic, financial, and managerial — are all present in Pakistan. From an economic perspective, pursuit of noncommercial goals, noncommercial pricing, and a drive for import protection have led to operating inefficiency, high cost structure, and inadequate capitalization to meet potential demand. From a financial perspective, low profitability, heavy debt, overreliance on government bailouts, and preferred credit have contributed to a poor return on investment — driving many public enterprises to the brink of insolvency. On the management side, overstaffing and loose control over human resources, lack of incentives for productivity enhancement, and inadequate accounting and cost control procedures have led to considerable administrative inefficiency.

Overall Enterprise Performance

Applying the standard norms for judging organizational performance — profitability, operating efficiency, creditworthiness, marketing achievements, and so on — to the agricultural public enterprises in Pakistan reveals many deficiencies. Among the production parastatals, only the Paksaudi and Pakarab Fertilizer Corporations have shown any real commercial viability, but Paksaudi's income growth has been extremely low. Others, like Pakamerican and Hazara Fertilizer Corporations, had negative income and negative growth between 1986-93. The return on assets in this period for Hazara (-0.8 percent) and Pakamerican (-17.8 percent) are also a strong indication of the economic nonviability of these institutions. The overall fertilizer market share of the combined state corporations is relatively small, about 31 percent for urea and only 15 percent for phosphate, the rest belonging to the private sector. The production of Pakarab, Paksaudi, and Pakamerican declined between 5-12 percent between 1988-93.

The marketing parastatals have fared worse. The market share of the National Fertilizer Marketing Limited has gone down steadily and its financial losses, on average, have been Rs.13.8 million a year between 1987-93 (0.2 percent of operating income)¹. Other enterprises selling seed and fertilizer, like the Punjab Seed Corporation and Punjab Agricultural Development and Supplies Corporation, also have lost market share over the

¹ Operating income is revenue minus operating expenses minus depreciation.

years. The Punjab Seed Corporation had an average yearly after-tax profit of Rs.13.2 million (3 percent of operating income) in the 1987-93 period, but its true performance (taking into account subsidies to the corporation) would not be as favorable as these figures indicate. The financial performance of Punjab Agricultural Development and Supplies Corporation has been extremely poor. It had losses in each of the seven years (1987-93) averaging Rs.64.4 million (7 percent of operating income). The Pakistan Agricultural Storage and Services Corporation (PASSCO), the chief instrument of government's price stabilization policy, also has shown losses in recent years. In FY1992/93 the loss was Rs. 89 million. Its procurement of wheat has also declined steadily over the years, which speaks strongly for its redundancy.

Among the prominent exporting parastatals, both the Rice Export Corporation and Cotton Export Corporations have seen rapid decline in market share over the years. For example, Rice Export Corporation of Pakistan's export share declined from 32 percent to 19 percent between 1988-93. Likewise, Cotton Export Corporation's export of raw cotton fell from 50 percent to 35 percent between 1990-94. The steady growth of private sector exports has made these parastatals unnecessary and redundant. There is a particular urgency of divesting them because they are causing huge losses to the government. During 1987-93 the average after-tax loss of RECP was over Rs.347 million a year (7 percent of operating income), and for CEC Rs.421 million a year (6 percent of operating income).

The Adverse Effect of the Agricultural Parastatals

The principal adverse effects on agriculture of public enterprises have been the negative impact of price intervention, the crowding out of the private sector from the market, and the high cost to the public exchequer. The controlled price system in Pakistan, for both inputs and outputs, has inhibited growth of marketing services. State enterprises, acting as large public monopolies with substantial government patronage, have arrogated financial resources from the market and held back the development of an efficient private sector.

The public enterprises have also received substantial direct financial support from the government, adding to the budget deficit. PASSCO, for instance, is financed directly from the government budget and the federal government reimburses the corporation for losses incurred. Part of the country's wheat subsidy of over Rs.4 billion is spent on PASSCO. Similarly, the Rice Export Corporation and the Cotton Export Corporation are heavily subsidized by the government. The yearly losses of the marketing corporations have amounted to about 18 percent of current agriculture public expenditure and the combined losses of the production and marketing corporations have been approximately 7 percent of current agricultural expenditure. These are high in comparison to similar ratios in India and elsewhere. Such unproductive expenditures are hard for the country to afford.

Instituting Reforms

The problems of agricultural public enterprises in Pakistan should be addressed through specific institutional and policy reforms. Institutional reforms should focus on divestiture of all commercial activities to the private sector, keeping only those institutions and functions that support the creation of public goods. The privatization of viable but large enterprises could take place in stages, which would allow the private sector to absorb the assets gradually, increase competition, and prevent the growth of private monopolies. Three public enterprises, the Pakarab Fertilizer, Paksaudi Fertilizer, and Punjab Seed Corporations should be given to the private sector on operating leases in the short term and eventually divested. Three others, the National Fertilizer Marketing Corporation, the Rice Export Corporation and the Cotton Export Corporation, should be placed under management contracts until they show improved performance and then divested. Enterprises like the Pakistan Agricultural Storage and Services Corporation and Lyallpur Chemical Corporation should be divested immediately. Three other corporations — the Pakamerican Fertilizer Corporation, Hazara Fertilizer Corporation, and Punjab Agricultural Development and Supplies Corporation — should be liquidated as soon as possible.

Policy reforms should supplement the institutional reform and privatization process. Principally, they should focus on four main issues: macroeconomic policy reforms, price reforms, regulatory reforms, and financial reforms. Macroeconomic policy reforms include elimination of trade barriers and foreign exchange rate alignment. Price reforms should focus on withdrawing input and output subsidies on agricultural goods. Regulatory reforms should be directed toward strengthening the legal environment for business, including efficient dispute resolution mechanisms, enforcement of property rights, elimination of legal monopolies, and controlling harmful environmental externalities. Financial reforms should address the need for easing government credit restrictions on financial institutions, strengthening of the money and capital market through proper regulatory measures for preventing investor frauds, and so on.

PUBLIC ENTERPRISES AND THEIR IMPACT ON AGRICULTURE

In many countries of the world, industrial and developing alike, public enterprises represent a significant aspect of state activities in agriculture. Governments have often chosen to intervene in the market through public enterprises (PEs), carrying out various production and distribution functions in several sectors including agriculture. Although the rationale for this has been to provide basic infrastructural support for critical areas of development such as health, nutrition, and public transport, and to control key sectors that affect economic development, ideological reasons also have played a key role in the creation of public enterprises. These have included state distrust of a private sector that is sometimes dominated by foreign interests. Unfortunately, when welfare objectives have overridden economic rationale, the system has generally been abused. The classic example is where public enterprises have been created to gain direct control over food markets and to provide economic benefit to favored groups through price regulation and distribution. Some common arguments extended by governments for total or partial ownership of commercial enterprises are:

- Generating revenue for the government.
- Preventing private monopolies.
- Providing socially necessary services (even with financial loss).
- Influencing prices.
- Improving access to foreign equity or loans.
- Providing market leadership in new ventures.

Revenue generation through commercial activities is definitely outside the accepted norms of state involvement if these activities do not produce public goods. Moreover, there is no guarantee that the PE's operation would be profitable. Fiscal policies that encourage private activities leading to higher tax revenue are better substitutes for this. Such policies also reduce the risk of government investment and provide a more conducive environment for private sector efficiency and growth.

Preventing private monopolies is a legitimate concern of the government for which it may be tempted to step in and take over operation. However, the best way of checking private monopoly is not through direct government takeover, but through better regulation. In market economies like the United States this form of government control is fairly obvious. Also, in economies going through structural adjustment this idea has been generally accepted. For example, in Nigeria and Côte d'Ivoire, water and telecommunications services are operated by private group, under state regulations.

Providing essential social services (such as public health services) is important for the government, but it is now accepted that the government's role should be limited to

provision of public goods.² The cost of private goods that benefit specific individuals (other than target groups) should be borne by the beneficiaries. This principle is certainly lost in situations where broadly based subsidies given by the government are arrogated more by the privileged groups in the society than by the underprivileged. Worse, since the cost of providing these subsidies from the state budget is borne by all citizens, the poor may probably lose more because these subsidies take away resources from other services which go to them.

Influencing prices in the economy is again a way of channeling general subsidies to all that is economically and socially unjustified. For assisting target groups, however, the benefit of lower prices can be extended through direct budgetary support, such as food stamps, without the distortionary market intervention.

Because of their underlying state sponsorship, public enterprises may have better access to international capital, but the utilization of this capital often has not been ideal. The objective of increasing capital inflows can be better achieved through a free liberal environment for investment in the country that reduces the risk for foreign investors, and in some cases by underwriting foreign funds, as through the International Finance Corporation.

Finally, government's pioneering of new business activities to attract private entrepreneurs is both inappropriate and inefficient for accomplishing the commercial growth objective. The risk of a new venture taken by the government, if it produces private goods, cannot be economically justified. A more appropriate way to accomplish this goal would be to help reduce the risks in the system through efficient information networks, infrastructure buildup, and so on.

Pro-market reforms worldwide emphasize rationalizing the size of the public sector and limiting its activities to the production of public goods. Reformists put their faith in the efficiency of market mechanism and the drive and motivation of private entrepreneurs to utilize opportunities offered by the marketplace for advancing their individual well-being and aggregate economic welfare at the same time (Boss 1986). Public enterprises tend to develop their own durability, and over time they acquire monopolistic control, effectively crowding out private enterprise development. Their performance in terms of economic efficiency and effectiveness has been poor and their operations often have imposed or serious financial drain on government budgets.³

² Public goods are defined by two essential characteristics, nonsubtractability (the ability to consume as much as desired with no reduction in the amount available to others) and nonexcludability (inability to exclude anybody from consuming the goods).

³ For example, in the 1980s net government transfers to agricultural marketing PEs reached 27 percent in the Gambia, 12 percent in Zambia, and 11 percent in China. Their respective burden on the economy as a whole (as a percentage of GDP) was 15 percent, 7 percent, and 2 percent, respectively. See Knudsen, and others (1990) and Austin (1992).

The Adverse Impact of Public Enterprises in Agriculture

In many countries public enterprises in agriculture were set up to perform marketing functions and in some cases produce inputs. They were actually conceived as ways of imposing government control over agriculture, some to address presumed market problems and others for political reasons. As mentioned before, the government's principal objectives for creating public enterprises include market intervention in underdeveloped markets, price stabilization, efficient distribution of resources, and addressing market failures in geographical pockets. But whether state-owned enterprises are capable of achieving these is not often carefully probed. Furthermore, in some cases government objectives set years ago have been overtaken by subsequent development without the enterprise effectively changing its activities to reflect the trend. After World War II many industrial countries adopted a no-loss, no-profit approach in their public enterprise management, but later changed to emphasize commercial profitability (Premchand 1993). The concept of PE profitability was further modified to reflect the true opportunity cost of capital.

When noncommercial goals such as regional quotas, maintaining redundant workers, and pricing below market to benefit target groups creep into the rationale for promoting public enterprises, they lead to severe adverse effects on the public budget. Additional distortions are created in decisionmaking for public and private investments, wages between skilled and unskilled workers, falls in productivity, relaxed management, and ensuing inefficiencies (commonly known as x-inefficiencies; see Leibenstein, 1966), creating shortages and bottlenecks throughout the economy.

Experiences in many countries have shown that public enterprises create distortions in incentives, operate inefficiently, and are a burden on the state. Table 1-1 lists examples of losses perpetuated by public enterprises in many economies during the 1980s. The data illustrate that the magnitude of the burden on the state as well as on the economy can be pretty high. Public enterprises have been the main instruments of government control over the market, particularly in pricing of agricultural commodities. But, where such action has been guided by political rather than economic considerations, for example, setting prices below their international levels to achieve price stabilization, the results have been disastrous on agricultural producers.⁴ In one study, Krueger, Schiff, and Valdés (1988) found that the domestic price of export crops were forced an average of 11 percent below their international levels in the 18 countries they analyzed. The realization of the stabilization goal is also debatable. Studies by Knudsen and Nash (1990), using data on 37 countries and 15 crops, show that for a sizable fraction of the countries the actual domestic producer prices were less stable than what they would have been following international prices. The fact is that this sort of stabilization gives an indirect subsidy to the consumers (mostly urban dwellers and favored groups like the armed forces and selected manufacturing industries) at a tremendous cost to the producers. There are also other costs of price stabilization that often go unnoticed. Price is determined by supply and

⁴ As in the case of cotton and wheat and fertilizers in Pakistan.

demand, and it is an information system that sends signals to suppliers, producers, distributors, and consumers. By holding down prices, governments understate the cost of a commodity and encourages overconsumption. Simultaneously, it penalizes the producer by holding down the value of the product and forcing him or her to cut production. In both ways there is misallocation of resources (Knudsen, et al., 1990).

Table 1-1
Economic Cost of Public Enterprises Worldwide

Country	PE	Period	Loss/Subsidy as	Percentage of
			(a) Curr. Exp	(b) GNP/GDP
China	Grains	1988	10.5	2.0
India	Grains	1984-85	4.6	0.5
Gambia, The	Groundnuts	1982-87	10.8	2.8
Mali	Grains	1982-85	8.8	1.3
Zambia	Maize, Fert, Cotn	1980-86	4.0	3.2
Zimbabwe	All Crops	1983-87	5.6	4.6

Note: Figures in column (a) are median government transfer to PEs as a percentage of government budget. Figures in column (b) are median government transfer plus deficit of the organization as a percentage of GNP or GDP.

Source: Knudsen, et al., 1990.

The long-run costs of controlled pricing policies are usually substantial. Some obvious effects are: (Knudsen, et. al., *ibid.*)

- A decline in production as farmers find little incentive for incremental investment. Countries with depressed producer prices have invariably seen declining output. A case in point is Sri Lanka's tea exports, which declined from a 40 percent share of the world market in 1970 to 19.5 percent in 1991, partly due to heavy export taxes levied in the 1970s and 1980s (World Bank 1994a). In Kenya the opposite happened. Its share of the world tea market went from less than 3 percent in the 1970s to more than 9 percent in the early 1990s, primarily because it had fairly low export taxes to begin with (less than 15 percent) and then because it abolished them entirely in 1988.
- An increase of smuggling to bordering countries, particularly when the exchange rate is overvalued. For example, in Ghana the Cocoa Marketing Board's pricing policy imposed an effective tax on cocoa of 89 percent in the late 1970s. As a result Ghana's market share dropped from 40 to 18 percent. At the same time, neighboring Cote d'Ivoire's share rose from 9 to 29 percent.
- Uniform pricing throughout the year leads to lack of interest in developing storage facilities by the private sector because the cost of carrying inventory cannot be recouped. This forces the government to build public storage, which is susceptible to substantial losses due to undercapitalization and operational inefficiency. These losses have run as high as 30 percent in Tanzania (Bryceson 1985).

- Public enterprises offering uniform low, often uneconomic, consumer prices drive private entrepreneurs from the market and thereby hold back development of an efficient, competitive market.

Common Problems with Public Enterprises

Country experiences show that a number of problems exist with public enterprise management that stand in the way of their effective performance. These can be classified as structural, economic, financial, and managerial (IMF 1982). From the structural consideration, the extent of autonomy exercised by the organization and the specificity of the link between government and enterprise often have been neglected. In the process there has been an attrition of clear-cut accountability. Public enterprises have failed to deliver the expected results because governments did not provide adequate managerial autonomy and demand full accountability to ensure that things were done right (Ramamurti 1991). It was hoped that autonomy would prevail if the organization was made legally distinct from the state by placing it under an independent board of directors and allowing it to regulate their own service conditions and financial management. Government was meant to keep away from operational matters, involving itself only with policy issues. However, it did not work out in this manner in most circumstances for a number of reasons. First, there was a conflict between the objective of the organization and the expected performance of its management. For example, it was difficult at times for management to deliver good financial performance and at the same time adhere to social goals set by the government. Second, governments generally lacked the administrative systems, institutions and, personnel to coordinate the government - PE relations. The enterprises were run under the shadow of the government, which wanted to ensure that they did the "right kind of things" even if they were not done the right way. Governments appointed chief executives in the absence of hard budget constraints and paid more attention to satisfying political objectives than to economic efficiency. Third, accountability failed because the system for budgeting, monitoring, evaluation, and financial controls were modeled after those in the public sector, where procedures rather than accomplishment were pursued vigorously.

From the economic standpoint, issues like pursuit of noncommercial goals, noneconomic pricing and import protection, inadequate capacity to meet demand, and inadequate capital structure are some of the common problems of public enterprises. Noncommercial goals, such as promotion of regional development, employment generation, and income redistribution have forced PEs to put plants in uneconomic zones, maintain redundant workers, and price below their costs. Many people believe that the best way to make an enterprise efficient is by requiring it to maximize profit in a competitive environment (Shirley and Nellis 1991). Imposing government constraints lowers profits and even generates losses despite efficient operation in all other areas. To address this problem governments may provide direct transfers from the budget or indirectly through the financial system. However, there are evidence that these interventions lead to declining productivity and the organization tends to attributes its failings to meeting the

noneconomic goals. Direct subsidies tend to benefit large producers and the cost is met from tax revenues or deficit financing, whose inflationary effect on the well-being of the poor is well documented. Indirect subsidies, such as guaranteed loans from the financial markets, have a long-term degenerative effect on the organization and because of their lack of transparency can lead the government to disastrous end results.

From a financial perspective, low profitability, heavy debt burden, inordinate dependence on government, inability to service debts, and poor return on investment stand out as major problems for public enterprises. Most financial underperformance is the result of the economic subventions described earlier. But the government's inability or unwillingness to set financial standards for PEs, however modest they may be, is another cause for the failure.

In the managerial area, failure to establish specific performance criteria and giving management the freedom to operate and set microeconomic policies create managerial inefficiency. Establishing performance criteria is a complex issue under the guided management policy of the government. There are two ways of looking at this issue. One is to evaluate the performance of the firm using shadow prices and judge management on the basis of its "social" performance. The other is to evaluate performance on conventional measures using market prices. Studies have shown that most countries follow the second approach (Ramamurti 1991, *ibid*). Countries have differed on the formal autonomy given to PE managers under the more stringent performance standards. The most extreme situation was in the Republic of Korea, where operational controls such as budgeting, personnel management, procurement and auditing were almost entirely given over to the PE management by the government.

Corruption is also a persistent problem in public enterprises that assume considerable economic role in providing goods in short supply. It is difficult to quantify corruption losses (Knudsen, et. al., 1990, *op cit.*). However, for reasons discussed above, even when they operate honestly, PEs fulfill their mission inefficiently. They are bureaucratic and inefficient marketers, buying, stocking and selling at the wrong time, and generally destabilizing the market they are intended to stabilize (Idachaba 1985).

Evaluating Performance of Public Enterprises: General Considerations

Performance is measured by the accomplishment of an organization's objectives. Some of the basic questions asked before making any evaluation concern the validity of the organization's objectives. Organizational norms and values change as the environment changes and new conditions redefine the task and even the philosophy of the institution. For example, some public organizations were developed to address what were perceived as market failures. The relevance of this approach and correctness of the perception of market failure could be debated. Granting that the approach was justifiable at one stage, it could no longer be justified when competitive institutions had taken root. With development of the private sector the organization lost its utility in areas such as trade and marketing. But there may be a need for its existence in other areas such as regulation and

standardization. Thus there is a need to constantly reevaluate the role of public institutions.

The main problem encountered in measuring efficiency within public enterprises is the difficulty of quantifying noncommercial objective (e.g. benefiting consumers in remote areas). Noncommercial objectives should be taken into account when making investment decisions, not at the time of operating decisions. A project's evaluation criteria may be affected by noncommercial goals but its performance criteria should not be guided by these goals (Jones 1991). Once the enterprise is in operation, the standard performance criteria should be profitability, growth, and the like.

When evaluating the result of a public activity, the issue of private versus public cost and benefit is usually encountered. Public profit becomes different from private profit for two reasons: public prices are different from private prices (due to, say, price controls) and the accounting differs because private costs are sometimes public benefits and vice versa. There are, moreover, substantial problems in evaluating performance on the basis of social costs and benefits. First, they tend to favor inefficient management because a lot of private costs are written down when converting them to public costs, resulting in a show of positive public profit when the calculations show a private loss. Second, operational managers may not grasp the true meaning of public cost accounting and may be unable to develop performance monitors. Third, the state budget may be in jeopardy if too many public enterprises take shelter under the net public benefit umbrella. The soft budget constraints which gives public enterprises access to subsidies and unsecured bank credit bring direct pressure on the government budget. They also takes pressure off management to cut costs and increase efficiency. For these reasons, this paper attaches more importance to measuring the performance of public enterprises in terms of private costs and competitive market indicators.⁵

Assessing Agricultural Public Enterprises in Pakistan

Nonfinancial public enterprises (NFPE) in the agriculture sector of Pakistan have grown tremendously in size and scope in the past twenty years.⁶ Their works, however, reveal

⁵ On similar considerations, the Government of Pakistan set up the Economic Advisory Cell in 1980, to design a performance evaluation system for public enterprises under the Ministry of Production. The system evaluated state-owned enterprises on the basis of private financial profits after tax at current prices, principally because the government did not want to reward managers of loss-making enterprises that showed positive social benefits, and also to evaluate operations on more realistic current costs rather than constant values. The difference is illustrated by Mary Shirley's evaluation of Paksaudi Fertilizer in 1989, which showed an upward trend for the enterprise, on basis of public profits at constant prices but a downward trend when evaluated on private profits after taxes at current price (See Shirley, 1991).

⁶ By strict definition nonfinancial public enterprises (NFPEs) are institutions that engage in production and sales of goods and services for commercial gains, as contrasted to autonomous public corporations, whose primary purpose is not so much commercial as to provide a public service. These distinctions have blurred in many countries and there are institutions that have characteristics of both commercial entities and public policy institutions. Some NFPEs in Pakistan have both financial dependence on the government and the authority to raise capital from the market either on their own credit or through government-guaranteed loans. For the purpose of analysis we refer here to nonfinancial public enterprises

many problems that affect both the beneficiaries that they were created for and the government. Often they have contributed to inefficiencies, inappropriate investment choices, cost escalation, credit expansion, and overall inefficient allocation of resources. They also have added to budgetary pressures by shifting burdens to the government budget. Most of the NFPEs keep separate budget and accounts, and they usually are not counted in general public expenditure reviews. However, they represent a significant share of the total activity of the public sector and any assessment of the public sector's role in agriculture needs to look at their finances and operations.

The standard norms for assessing an organization's performance are based on the principles of maximizing profit, increasing efficiency of operation, maintaining credit worthiness, maximizing marketing achievements. To analyze the agricultural public enterprises in Pakistan, we begin with the financial statements for a number of years. The three basic financial statements prepared are the income statement, balance sheet, and the funds flow statement. From these two very important diagnostic results are derived: the net benefit statement and operating ratios. The financial rate of return of the enterprise over the period of analysis are calculated from the net benefit statement. The financial ratios provide information about the efficiency of the enterprise, its return on key aggregates, and creditworthiness. Since it is not possible to give absolute ranges within which these ratios should fall, as they vary with the nature of the industry, a specific enterprise's ratios are compared with the industry averages or their change over time is traced to judge the pattern.

Of the many agriculture public institutions in Pakistan, a few critical ones have far-reaching influence on the growth of the sector. They are important players in both the agriculture input and output markets. Noteworthy among them are such giant corporations as the Cotton Export Corporation (CEC), Rice Export Corporation of Pakistan (RECP), National Fertilizer Corporation (NFC), Pakistan Agricultural Storage and Services Corporation (PASSCO). All the enterprises could be grouped into two categories of organizations, manufacturing and marketing PEs.

The Manufacturing Public Enterprises

The only state-owned manufacturing enterprises in the agricultural sector are the fertilizer manufacturing concerns. There are five fertilizer companies under corporation, the National Fertilizer Corporation (NFC), a holding corporation for all fertilizer manufacturing concerns of the federal government with headquarters in Lahore:

that are owned and controlled by the government, that have received their initial investments from the government, that are under the administrative control of a sponsoring ministry, that generally have access to government budget, and that are used as instruments of government policies within the macroeconomic framework. Many of these organizations have lost the critical objective of a normal self-sustaining organization, rendering a service in the marketplace and making a positive return on investment. Unqualified support from the government tends to make these organization ineffective, inefficient, and prone to the types of organizational sclerosis typical in monopolies and duopolies -- commonly known as X-inefficiency in the theory of industrial organizations.

1. Pakarab Fertilizer Limited.
2. Paksaudi Fertilizer Limited.
3. Pakamerican Fertilizer Limited.
4. Lyallpur Fertilizers and Chemicals Limited.
5. Hazara Phosphate Fertilizers Limited

The Marketing Public Enterprises

There are six important marketing PEs in Pakistan (See Annex 1).

1. National Fertilizer Marketing Limited (NFML): A subsidiary of NFC with headquarters in Lahore.
2. Punjab Seed Corporation (PSC): A provincial enterprise belonging to the government of Punjab. Headquarters in Lahore.
3. Punjab Agricultural Development and Sales Corporation (PADSC): A provincial enterprise belonging to the government of Punjab. Headquarters in Lahore.
4. Pakistan Agricultural Storage and Services Corporation (PASSCO): A federal enterprise headquartered in Lahore and responsible for the procurement of major food commodities and other operations to implement the price support program.
5. Rice Export Corporation of Pakistan (RECP): A federal enterprise undertaking commercial export of rice from Pakistan, located in Karachi.
6. Cotton Export Corporation (CEC): A federal enterprise like RECP, dealing with export of cotton, located in Karachi.

The performance evaluation of these enterprises are presented in the following chapters.

THE PRODUCTION PUBLIC ENTERPRISES IN PAKISTAN

Pakistan's agriculture is heavily influenced by a number of public enterprises engaged in production and distribution of agricultural commodities. They are controlled by three different ministries, the Ministry of Agriculture and Food, the Ministry of Production, and the Ministry of Commerce. The principal production organization in the sector is the National Fertilizer Corporation (NFC) under the Ministry of Production. The NFC started as a government-owned holding company for nine independent organizations, namely Hazara Phosphate Fertilizers Limited, Paksaudi Fertilizers Limited, Pakarab Fertilizers (Pvt.) Limited, Pakamerican Fertilizers Limited, Lyallpur Fertilizers and Chemicals Limited, Pakchina Fertilizers Limited, National Fertilizer Marketing Limited, Fertilizer Research and Development Institute (Pvt.) Limited, and NFC Technical Training Center (Pvt.) Limited. Although incorporated as a private limited company, all its shares are held by the government. The Pakchina Fertilizer company was divested in 1992, leaving NFC directing, coordinating, and controlling the activities of five fertilizer manufacturing companies, one fertilizer marketing company, and two research, development, and training organizations.

NFC maintains a strong position in the fertilizer industry of Pakistan, controlling 50 percent of all nitrogenous fertilizer production and 100 percent of all phosphate fertilizers production. NFC was established in 1973 to manage the fertilizer plants owned by the former Pakistan Industrial Development Corporation. Its mandate was expanded over time to include:

- Operating the existing fertilizer production facilities in the public sector.
- Establishing additional fertilizer production facilities in the public sector.
- Developing fertilizer marketing and distribution facilities.

As a holding company, NFC is responsible for the operation of all companies under it, including arranging finance and development funds, managing personnel and training, and research and development.

The Fertilizer Research and Development Institute, located in Faisalabad, is NFC's research and development arm. It conducts research in testing and evaluation of indigenous and imported raw materials and chemicals for fertilizer, and also tests NFC's fertilizer products for the market.

The Technical Training Center was set up in 1985 at Multan to train technicians, supervisors, and engineers in various areas of fertilizer manufacturing. The center also conducts courses for outside agencies through its Professional Skills Development

program. In 1994 NFC upgraded this center to the NFC College of Engineering and Technology.

Physical Performance

Since its establishment NFC has added more than 1.33 million tons of production capacity, raising it from 342,400 metric tons in 1973 to 1,673,700 metric tons in 1993. Actual production, however, has varied over the years -- declining in most facilities (Table 2-1).

Table 2-1
Production at Subsidiaries of NFC, 1988-93

Corporation	Prod.	Capacity MT/Year	Actual Production (metric tons)					An. Change
			1988-89	1989-90	1990-91	1991-92	1992-93	
Pakarab	NP	304,500	330,768	333,319	320,961	309,756	297,337	-2.02%
	CAN	450,000	350,553	338,065	318,800	300,029	302,198	-2.76%
	Urea	92,400	108,705	114,880	115,970	113,715	102,523	-1.14%
Paksaudi	Urea	556,800	585,578	602,222	558,942	562,026	512,767	-2.49%
Pakameri	AS	90,000	98,108	94,610	92,278	92,888	92,890	-1.06%
Lyallpur(Faisal)	SSP	18,000	23,971	23,710	23,100	22,230	23,600	-0.31%
Lyallpur(Jaran)	SSP	72,000	85,040	85,740	86,980	87,780	90,700	1.33%
Hazara	GSSP	90,000	34,022	54,400	65,011	84,009	90,700	33.32%
TOTAL:		1,673,700	1,616,745	1,646,946	1,582,042	1,572,433	1,512,715	-1.29%

Source: NFC.

The total requirement of nitrogenous fertilizer in Pakistan was 1.65 million nutrient tons in 1993-94, of which NFC provided 0.51 million nutrient tons, or 31 percent. Requirement of phosphate fertilizer was 0.66 million tons in 1993-94, and NFC provided 0.10 million tons, or 15 percent. The balance of the nitrogenous fertilizer was produced by companies in the private sector and the deficit phosphate fertilizers were imported by of the government's Fertilizer Import Department.

Among all of the NFC units, Pakarab Fertilizer Corporation is the largest, producing over 700,000 tons of calcium ammonium nitrate, nitro-phosphate, and urea per year. Over the 1988-93 period, however, its production of NP, CAN, and urea fell by 1 to 3 percent a year. The Paksaudi Fertilizer Corporation is also one of the largest manufacturing units of NFC, producing over half a million tons of urea, or about 35 percent of total fertilizer output of the group. Like Pakarab, its production has fallen by an average of 2 percent a year in the past five years. The Pakamerican Fertilizer Corporation is one of the oldest NFC fertilizer plants, built in 1958 to produce ammonium sulfate. Its present output is 90,000 tons of AS a year. Its production, also, has fallen on an average of 1 percent a year in the past five years. Lyallpur Fertilizer and Chemicals Company consists of two separate plants, at Faisalabad and Jaranwala. Both plants manufacture single superphosphate -- about 90,000 tons annually. The Faisalabad plant declined in production somewhat between 1988-93, but the Jaran plant expanded output by about 1 percent a year. The

Hazara Phosphate Fertilizer Company had a production of about 90,000 tons in FY1992-93 and it has experienced a sales growth of about 33 percent a year in the past five years.

Financial Performance

The financial performance of the five production companies under NFC, from 1986-93, are presented in Table 2-2.

Table 2-2
Financial Performance of NFC Subsidiaries :1986-93 Average
(millions of Rupees)

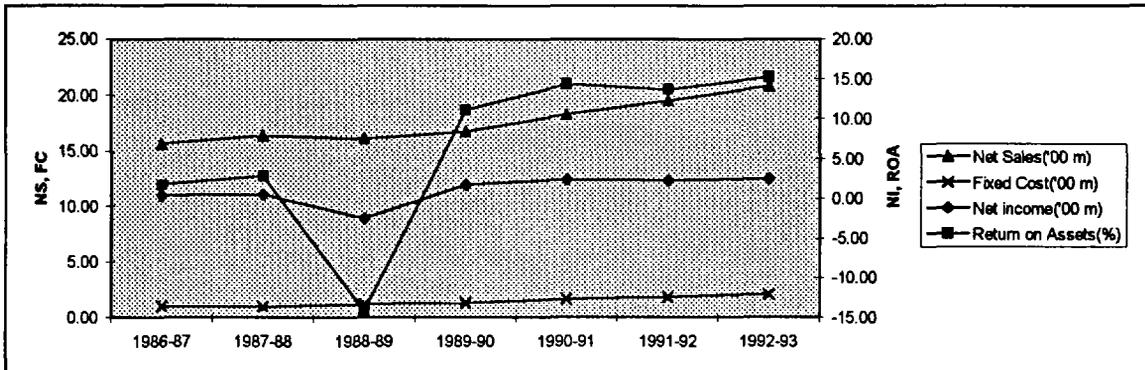
Variable	Pakarab	Paksaudi	Pakamerican	Lyallpur	Hazara
Operating income	1778.79	1438.63	157.76	269.52	200.88
<i>Growth rate</i>	5.49%	2.94%	17.49%	13.57%	92.82%
Nonoperating income	7.94	49.18	0.4	0.31	0.21
<i>Growth rate</i>	170.67%	5.42%	7.69%	21.67%	110.71%
Total income	1786.73	1487.81	158.17	269.83	201.09
<i>Growth rate</i>	5.74%	3.01%	17.46%	13.57%	92.55%
Operating expense	1123.15	753.05	174.63	229.84	177.88
<i>Growth rate</i>	5.72%	1.08%	8.46%	12.70%	87.40%
Non-operating expense	114.53	74.93	12.21	35.82	24.52
<i>Growth rate</i>	2.40%	-8.89%	-14.99%	24.68%	46.57%
Total expense	1536.26	827.98	186.83	265.67	202.4
<i>Growth rate</i>	1.90%	-0.13%	6.55%	14.02%	80.94%
Fixed cost	148.06	68.62	51.56	29.05	17.02
<i>Growth rate</i>	16.35%	21.82%	14.18%	31.02%	97.33%
Profit before tax	250.47	659.83	-28.67	4.16	-1.31
<i>Growth rate</i>	90.92%	7.45%	-21.88%	-3.79%	-88.52%
Income tax	144.64	269.49	1.56	1.98	0.55
Net income after tax	105.83	390.34	-30.22	2.18	-1.86
<i>Growth rate</i>	97.35%	1.87%	-20.37%	-7.68%	-79.96%

Source: Corporation accounts.

Profit and Loss

Among the five NFC subsidiaries, Pakarab Fertilizer Corporation has shown good performance with acceptable return on equity and return on assets. It has been profitable in all but one year during the past seven years of operation (Figure 2-1). Sales growth has been steady at 5.5 percent. Administrative costs grew by 31 percent and salaries and wages escalated by 15 percent a year. With the inclusion of depreciation costs, which declined at the rate of 14 percent, the overall operating expenditures rose only about 2 percent, providing the margin for profit. The average growth rate of net income after taxes was a good 97 percent per annum over the seven years.

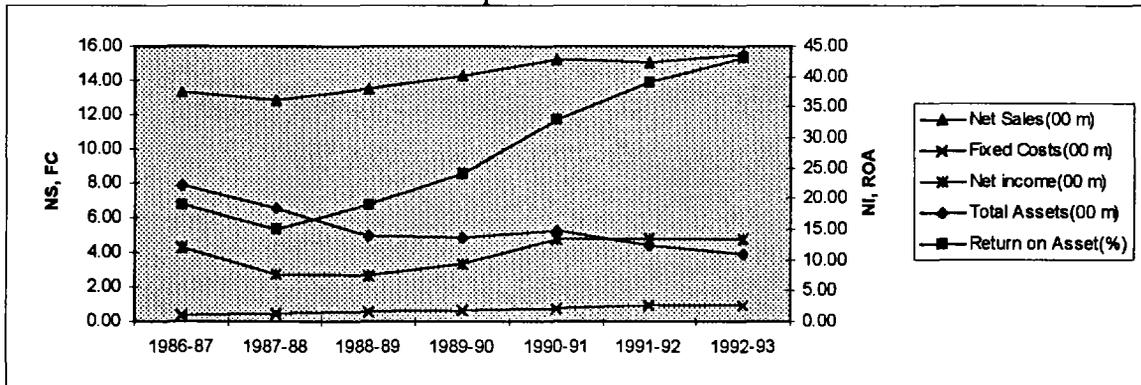
Figure 2-1
Pakarab Fertilizer Corporation: Net Sales and Income Trend



Source: NFC.

The Paksaudi Fertilizer Corporation has been a profitable operation in the past seven years, with an average after-tax income of Rs.390 million a year (Figure 2-2). Sales have been fairly steady, growing at 2.7 percent a year. Cost of sales, however, have gone up by 11.4 percent, salaries and wages by 21 percent, and general administration by 24 percent. Increasing operating costs have put pressure on net earnings, resulting in an after-tax profit growth of only 1.9 percent.

Figure 2-2
Paksaudi Fertilizer Corporation: Net Sales and Income Trend

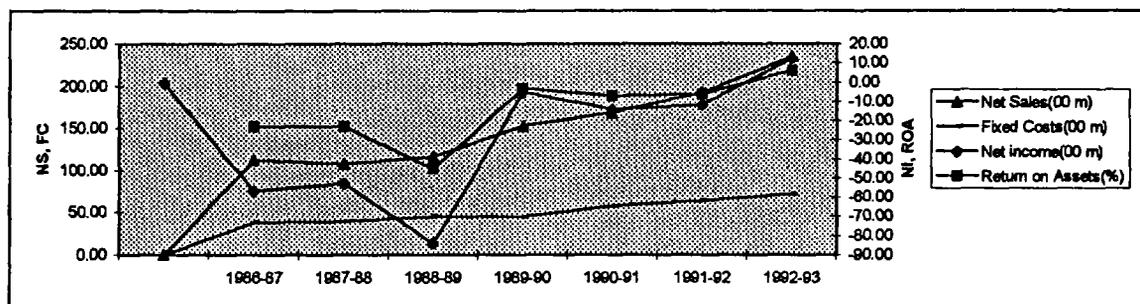


Source: NFC.

The Pakamerican Fertilizer Corporation incurred losses in all of the seven years except FY1992-93 (Figure 2-3). These were mostly due to plant inefficiency, with low levels of sales in comparison to both the cost of goods sold and establishment costs. The cost of sales was 74 percent of revenue, compared with 36 percent at Paksaudi and 63 percent at Pakarab. Similarly, establishment cost in the corporation was 33 percent of revenue compared with 4.8 percent at Paksaudi and 8.4 percent at Pakarab. The combined variable cost of sale and fixed establishment cost of the corporation were almost always greater than revenue from sales and the company operated below break-even in five of the seven years from 1986-93. Thus, even with less increase in establishment costs (14.2 percent)

compared with sales (18 percent), the difference between total income and total expense remained negative.

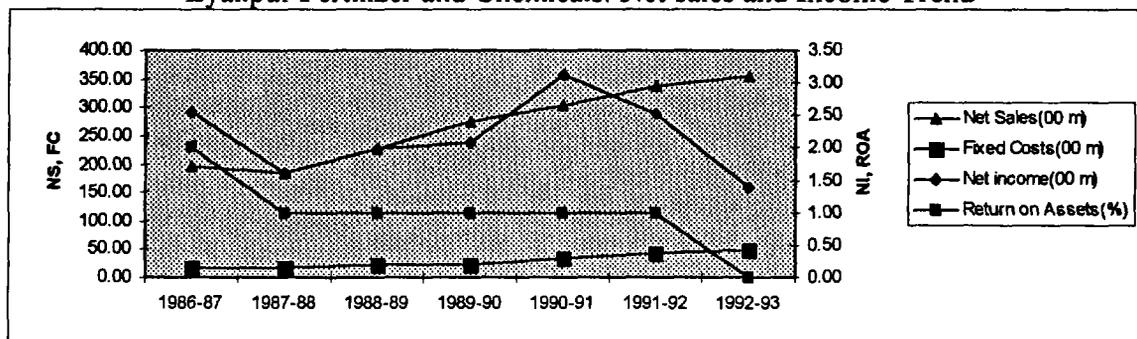
Figure 2-3
Pakamerican Fertilizer Corporation: Net Sales and Income Trend



Source: NFC.

Lyallpur Fertilizer and Chemical's sales growth has been steady at 13.5 percent a year (Figure 2-4). Cost of goods sold rose by 10.7 percent. But there was a heavy increase in salaries and wages -- almost 31 percent -- as well as in general administration cost - nearly 34 percent. The overall operating expenditure increased by 12.7 percent. In the aggregate, total expenses rose 14.0 percent against total income increase of 13.6 percent, exerting pressure on net earnings. The net income after taxes was positive in all seven years, and averaged Rs.2.2 million. However, it is declining at about 8 percent a year. The immediate concern for the corporation should be to cut its fixed operating cost, including salaries and wages.

Figure 2-4
Lyallpur Fertilizer and Chemicals: Net sales and Income Trend

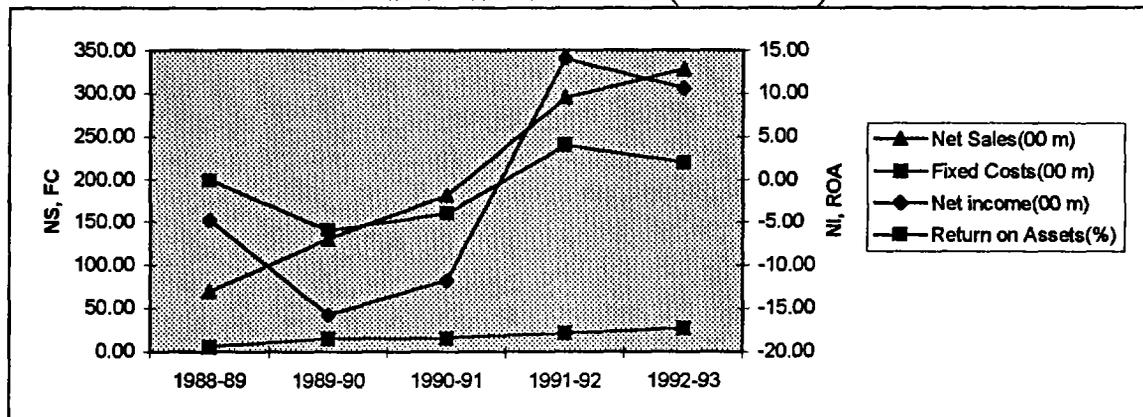


Source: NFC.

Hazara Phosphate Fertilizer Company had losses in four out of six years since it started in 1988. Even though the company has shown some promise in the past two years (Figure 2-5) there was considerable fluctuation in its profitability trend. Most of the gain is attributable to short-term sales and income growth of about 92 percent a year. The total expenditure growth was 81 percent, which provided a margin for offsetting earlier losses, ending in an average after-tax loss of only Rs. 1.5 million. The organization has not done

too well in controlling cost so far. Salaries and wages have gone up by nearly 112 percent a year (in nominal terms) and general administration by 42 percent.

Figure 2-5
Hazara: Net Profit Trend (1988-1993)



Source: NFC.

The financial performance of all the fertilizer production corporations may again show a lower level of performance if the subsidy on natural gas price provided by the government is factored into the cost of production. Properly accounted, this factor may turn Paksaudi and Pakarab Corporations into loss-making concerns also.

Financial Ratios

Selected financial ratios for the five companies are given in Table 2-3 (see explanation of the ratios in Box 2-1).

Pakarab Fertilizer Corporation operating ratio of 0.80 is not good. The inventory turnover ratio could be improved also, since the company is holding almost 182 days of inventory. The income ratios are all positive, although not very strong. For example, the average return on sales was only 5.4 percent, and the return on assets just 6.4 percent. Return on equity was slightly better at 10.5 percent. The current ratio was good at 2.4. The debt service coverage ratio of 3.3 also indicated that the company was in a good position to make its debt payments. The return on assets, after a serious drop between 1988-89, rose to about 15 percent in 1992-93. The FRR to all resources engaged was 18 percent. The financial rate of return to equity after taxes, however, was low at 2 percent. Its operating expense in relationship to revenue is also high (80%).

Box 2-1
Meaning of Financial Ratios

Financial ratios can be divided into four main categories: efficiency ratios, income ratios, creditworthiness ratios, and growth ratios.

Efficiency Ratios

Operating Ratio = Operating Expense/Revenue. Used to determine how much of the operating expenses are balanced by revenue earned.

Inventory Turnover Ratio = Cost of Goods Sold/Inventory. An asset management ratio, measuring how effectively the organization is managing its inventory assets.

Fixed Asset Turnover Ratio = Sales/Net Fixed Assets. Measures the utilization of plant and equipment. A low value indicates that the company is not using its fixed assets efficiently.

Total Asset Turnover Ratio = Sales/Total Assets. Measures the turnover, or utilization, of all of the firm's assets. A low value is indicative of weakness in its operation.

Income Ratios (indicates the long-term financial viability of an enterprise).

Return on Sales Ratio = Net Income/Sales. A profitability ratio that measures the profit margin on sales.

Return on Equity Ratio = Net Income/Equity. Measures the rate of return on stockholders' investment.

Return on Assets = Net Income/Total Assets. Measures the return on total assets.

Creditworthiness Ratios (indicates the degree of financial risk inherent in the enterprise).

Current Ratio = Current Assets/Current Liability. The most commonly used measure of short-term solvency. A rule of thumb is that the current ratio should be around 2.

Debt Equity Ratio = Debt/Equity. Measures the "cushion" by which the organization could absorb initial losses or weather bad times.

Debt Service Coverage Ratio = (Net Income+Depreciation+Interest paid)/(Interest Paid+Repayment of Long-term Debt). The most comprehensive measure of the organization's creditworthiness.

Growth Rates

These rates indicate the annual rates of growth for sales revenues, operating expenses, after-tax profit and total assets.

Table 2-3
NFC Production Subsidiaries: Financial Ratios (1986-93)

	Pakarab	Paksaudi	Pakamerican	Lyallpur	Hazara
Efficiency Ratios					
Operating Ratio	0.80	0.53	1.18	0.85	0.90
Inventory Turnover Ratio	2.02	1.78	2.45	4.19	2.96
Total Asset Turnover	1.01	-	0.70	1.00	0.65
Income Ratios					
Return on Sales	5.40%	27.00%	-31.50%	0.93%	-3.49%
Return on Equity	10.54%	52.00%	-69.49%	12.95%	-1.27%
Return on Assets	6.42%	27.00%	-17.82%	0.96%	-0.77%
Creditworthiness Ratios					
Current Ratio	2.43	2.07	0.77	1.02	1.20
Debt Service Coverage Ratio	3.34	-	-2.90	1.10	1.65

Source: NFC.

Paksaudi's operating ratio of 0.53 is good, showing that the organization has used just 53 percent of its revenue to cover operating costs. The inventory turnover ratio could be better than 1.8. The company generally holds more than 205 days of inventory, which is costly and far in excess of need. The income ratios are quite strong, with 27 percent average return on sales, 52 percent average return on equity, and 27 percent average return on assets. The current ratio, likewise, is good at 2.1 indicating strong credit position of the company. The return on assets grew strongly from about 19 percent in 1986-87 to more than 40 percent in 1992-93. The financial rate of return to all resources engaged was very strong at almost 43 percent. The financial rate of return to equity after taxes was also healthy at 28 percent.

The operating ratio of 1.18 at Pakamerican Fertilizer Corporation confirms what was seen earlier -- that revenue was not sufficient to cover the company's operating costs. The high inventory turnover ratio of 2.45 also contributed to high operational cost. As expected, all the income ratios were negative, with return on sales averaging -31 percent, return on equity averaging -69 percent, and return on asset averaging -18 percent. The current ratio of 0.77 indicates the shortage of current assets to cover current liability. The debt service coverage ratio was -2.90, which means that the company was insolvent. The return on assets for the company was strongly negative for most of the years between 1986-93. This strongly suggests that the plant is financially nonviable. The financial rate of return to all resources engaged was -2 percent. The financial rate of return to equity after tax could not be calculated because of the very large negative earnings, but it was well below -15 percent.

Lyallpur Fertilizer's operating ratio of 0.85 was bad. The inventory turnover ratio of 4.2 was much better than the others, and the company held, on average, 87 days of inventory. The income ratios, though positive, were very low. For example, return on sales was only 0.93 percent and the return on asset was a mere 0.96 percent. Return on equity was better

at 13 percent. The current ratio was precariously close to 1, and this could be disastrous for the company. Similarly, the debt coverage ratio was only 1.1, threatening a likely default of loan repayments if earnings fall. The return on assets was close to 1 for most of period between 1987-92, after which it dropped to almost zero. The financial rate of return to equity after taxes could not be calculated because of a very large negative cash flow in the last year of analysis due to outstanding short-term loans. But in all probability it would be extremely negative.

Hazara's below 1 operating ratio indicates that it fell short of covering its operating expenses from revenue earning. The inventory turnover ratio of 2.9 meant that the company, on average, held almost 123 days of inventory, which added to the cost. The total asset turnover ratio was also too low. The return on assets was negative for four of five years between 1988 and 1993. All three income ratios were negative, with return on sales at the extreme end (-3.5 percent). The return indicators were thus negative in the past five years. The financial rate of return to all resources engaged in four years of operation (1989-93) was 23 percent. The FRR to equity after taxes was, however, only 2 percent.

THE MARKETING PUBLIC ENTERPRISES IN PAKISTAN

A large number of PEs dominate the input and output markets for agricultural products in Pakistan, including fertilizer, seed, pesticide, cotton, rice, and wheat. Three different ministries have control and jurisdiction over these organizations and they do not always act in concordance. Four of the six marketing PEs listed in Chapter 1 are involved with the distribution of fertilizer, seed, and pesticides at the wholesale and retail levels. A summary description of the nature, goal and status of the six domestic marketing and distribution companies has been included in Annex 1.

Physical Performance

The National Fertilizer Marketing Limited (NFML)

NFML uses a large network of nearly 3,000 dealers to distribute its products, although a small amount goes directly to distributors and institutional buyers. It has five main storage points throughout the country and more than thirty temporary storage points in the main consumption areas.

The company provides some advisory services to farmers on farm management and modern agronomy. It publishes a quarterly magazine with fertilizer-use information and a number of crop and product brochures. Mass media is also used to promote NFC fertilizers. It is difficult to assess the effectiveness of these services because no detailed monitoring and evaluation has been carried out. Judging the performance of the company by its ability to achieve targeted goals, the company met only 86 percent of its target in 1991, 89 percent in 1992, and 91 percent in 1993 (Table 3-1). The highest level of distribution reached was 98 percent in Faisalabad in 1993 and the lowest was 76 percent in Quetta in 1991. The shortfalls were most likely due to internal inefficiency than to unplanned natural causes (like drought) since they varied considerably across regions in a given year.

The total sale of fertilizers by NFML fell from 1.70 million tons in 1991 to 1.68 million tons in 1992 and again to 1.53 million tons in 1993. The reduction from 1991 to 1993 was approximately 11 percent. The future market share trend is also negative, as evidenced by the 14 percent decline in share between 1991 and 1993 (Table 3-2). The private fertilizer distribution companies are evidently gaining market share with increasing liberalization of the market.

Table 3-1
NFML: Targeted and Actual Fertilizer Distribution (Million Tons)

Region	1991		1992		1993	
	Target	Actual	Target	Actual	Target	Actual
Hyderabad	139,300	129,501 (93%)	119,150	113,636 (95%)	122,500	107,304 (88%)
Nawabshah	106,280	82,468 (78%)	97,380	83,941 (86%)	96,550	76,561 (79%)
Sukkur	75,400	66,953 (89%)	86,910	71,171 (82%)	87,300	80,527 (92%)
Quetta	22,920	17,497 (76%)	19,420	16,337 (84%)	15,370	15,002 (98%)
Multan	391,200	330,807 (85%)	352,050	317,680 (90%)	296,680	269,408 (91%)
Bhawalpur	255,760	208,003 (81%)	260,500	237,452 (91%)	212,300	192,867 (91%)
Sahiwal	261,750	233,875 (89%)	253,700	233,572 (92%)	212,950	203,018 (95%)
Lahore	209,130	193,681 (93%)	207,200	194,126 (94%)	195,500	178,679 (91%)
Faisalabad	247,540	208,318 (84%)	251,450	194,581 (77%)	217,700	213,131 (98%)
Rawalpindi	65,850	51,321 (78%)	62,540	59,871 (96%)	58,700	49,250 (84%)
Peshawar	184,750	158,963 (86%)	176,200	158,387 (90%)	160,050	146,177 (91%)
Total	1,987,400	1,700,150 (86%)	1,886,500	1,680,754 (89%)	1,675,600	1,531,924 (91%)

Source: Company statements, 1994.

Table 3-2
NFML: Fertilizer Market Share

	1991		1992		1993	
	National	NFML	National	NFML	National	NFML
Fertilizer sales (millions of tons)	3,198,888	1,700,150	3,293,994	1,680,754	3,924,950	1,531,924
Market Share (percent)	100	53	100	51	100	39

Source: Company statements, 1994.

The Punjab Seed Corporation (PSC)

In a potential market more than 880,000 metric tons of conventional seeds, PSC's present contribution is 76,200 tons a year, or about 9 percent (Table 3-3). But it holds a market share of 74 percent, compared with a local and multinational private share of only 16 percent. These figures reflect the dominant position of the public sector in the seed market.

Table 3-3
Pakistan's Conventional Seed Market 1993
(metric tons unless otherwise specified)

Organization	Cotton	Rice	Wheat	Maize	Vegetable	Total
Multinationals						
Pioneer	2000	100	2000	0	0	4100
Cargill	55	50	2000	0	0	2105
Sandoz	450	0	0	0	0	450
Lever Brothers	100	0	0	0	0	100
Local companies						
Jallinder	6400	0	100	10	0	6510
Zaheer	1000	0	0	0	0	1000
Jhandeer	400	0	0	0	0	400
M.Ali	50	0	0	0	0	50
Others	1450	0	0	0	500	1950
Public corporations						
Punjab Seed Corporation	14000	1600	60000	1000	0	76600
Sindh Seed Corporation	2000	2000	6800	0	0	10800
Current Market Total (tons)	27905	3750	70900	1010	500	104065
Value (millions of rupees)	252	21	354	5	135	767
Potential market (tons)	67500	10437	790000	10750	2000	880687
Value (millions of rupees)	607	59	3950	540	54	5210
Present /potential ratio	41.34%	35.93%	8.97%	9.40%	25.00%	11.82%

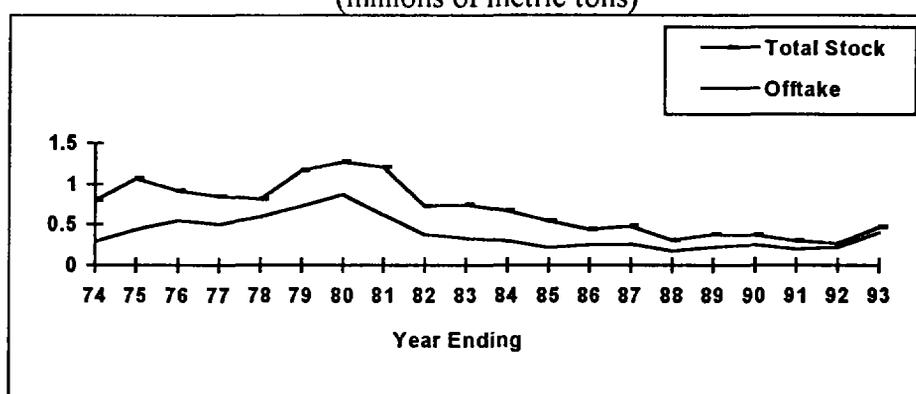
Source: ICI Pakistan Ltd. Agrochemical and Seed.

The corporation distributes its seeds through the Pakistan Agricultural Development and Supplies Corporation, a network of 600 private dealers, and about thirty self-owned sale points. It plans to set up production facilities in some remote areas to reduce transportation costs. Organizationally, PSC has had little interference with the government except in labor matters. Five unions represent its 600 employees and 400 private laborers. There is approximately 25 percent overstaffing in the lower ranks, but firing is difficult under existing rules.

The Punjab Agricultural Development and Supplies Corporation (PAD&SC)

PAD&SC has been active in the procurement and distribution of fertilizer in Punjab. This activity has shrunk over time, however, due to progressive liberalization of the fertilizer market. The corporation's supplies shrunk from about 53 percent in the 1970s to about 18 percent in the 1990s. Currently it is distributing only phosphate fertilizers, imported exclusively by the Government of Pakistan, under an assigned quota. Figure 3-1 shows the trend of fertilizer handled by the corporation between 1974-93.⁷ From a peak of 0.87 million tons in 1980, it dropped to 0.27 million tons in 1991-92. Inventory management by the corporation during the 1970s and 1980s was also very poor. Excess inventory during these years varied from 27 percent to 64 percent.

Figure 3-1
PAD&SC: Fertilizer Handling
(millions of metric tons)



Source: PAD&SC.

The market share of PAD&SC has remained insignificant over the years, averaging around 8 percent (Table 3-4). The low market share is contributing to high unit operating cost.

Table 3-4
Fertilizer Offtake in Punjab
(thousands of metric tons)

	1988	1989	1990	1991	1992	1993
Province total	2611	2830	3010	3003	2974	3365
PAD&SC	170	220	250	200	220	400
Market share	6.51%	7.77%	8.31%	6.66%	7.40%	11.88%

Source: Corporation data, 1994.

⁷ Derived from Appendix A, Table A-1.

The corporation also has distributed pesticides since 1983, but there has been a decline in this area too. The pesticide business of PAD&SC dropped by over 80 percent between 1991-92 and 1992-93. This was due mainly to the emergence of private firms after decontrol of the pesticide market and the inability of the corporation to compete. PAD&SC's seed distribution operation is also limited, and it is simply acting as an agent of the Punjab Seed Corporation. The agricultural machinery and implements business also has been very small.

The Pakistan Agricultural Storage and Services Corporation (PASSCO)

PASSCO is essentially a service organization for implementing the government's food procurement and distribution policy. Its operating budget is close to Rs. 3 billion. The corporation had major losses prior to 1987 amounting to almost Rs. 335 million. These losses have been carried in the books and adjusted against profits in the subsequent years. The corporation had profits every year from 1987-92. In fiscal year 1993, however, it suffered a loss of Rs. 89 million.

The corporation's equity base has remained consistently low. It started with a paid-up capital of Rs. 30 million in 1973, when the volume of business was less than Rs. 500 million, and has maintained the same capital base in 1994, when business is close to Rs. 3 billion. Shareholders' equity went down to Rs. -0.25 billion in 1987 and again Rs. -139 million in 1989. The position has improved since then, but the organization is still grossly undercapitalized.

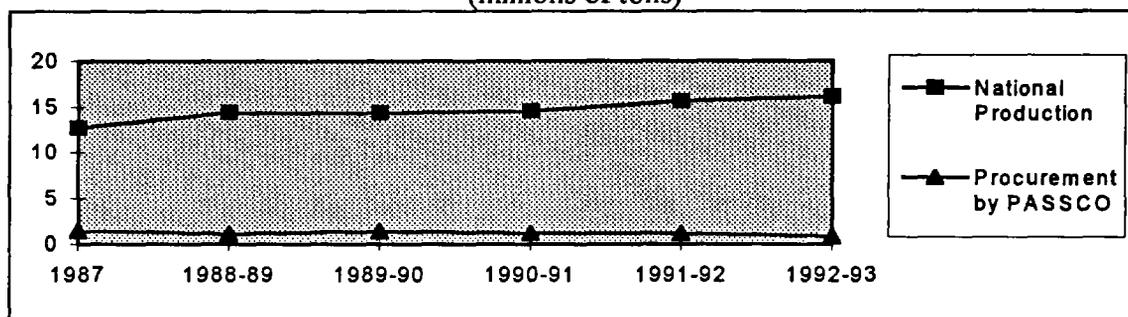
The trend in wheat procurement by PASSCO in the past six years has been downward. Even with increasing production in the country, the market share of PASSCO has fallen steadily, from 11.3 percent in 1987 to 7.6 percent in 1991-92 (Table 3-5 and Figure 3.2).

Table 3-5
Pakistan Wheat Production and Procurement by PASSCO
(millions of tons)

Year	Production	Procurement by PASSCO	PASSCO's share of market (%)
1987	12.67	1.43	11.29%
1988-89	14.42	1.08	7.49%
1989-90	14.32	1.39	9.71%
1990-91	14.57	1.20	8.24%
1991-92	15.68	1.19	7.59%

Source: Pakistan Economic Survey, 1992-93; PASSCO records.

Figure 3-2
The Wheat Market in Pakistan
(millions of tons)



Source: PASSCO.

The Rice Export Corporation of Pakistan (RECP)

RECP, like PASSCO, was used to implement the government's rice price-support program, by procuring rice from growers at a predetermined price and later selling them at approved government prices. The procurement activity, however, has been declining --- dropping from 47 percent in 1988-89 to 0 percent in 1992-93 (Table 3-6). Yearly procurement is affected by the inventory balance after export. In 1992-93, the corporation most probably decided to clear accumulated stocks without fresh intakes. Excess inventory build up seems to have been a result of declining export (Figure 3-3).

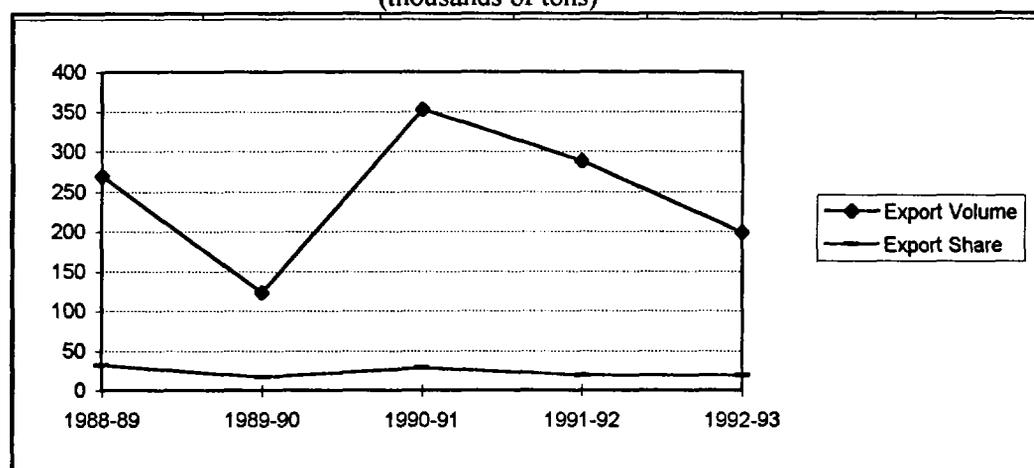
Table 3-6
RECP Export and Market Share
(thousands of tons)

Year	National procurement	RECP procurement	RECP export	RECP balance stock	RECP procurement share	RECP export growth	Pakistan rice export	RECP Export Share
1986-87	1285	NA	NA	NA	NA	NA	1270	NA
1987-88	834	NA	NA	NA	NA	NA	1210	NA
1988-89	1079	503	270	233	46.62%	NA	849	31.80%
1989-90	1334	546	123	656	40.93%	-54.44%	744	16.53%
1990-91	817	153	353	456	18.73%	186.99%	1205	29.29%
1991-92	492	120	288	288	24.39%	-18.41%	1512	19.05%
1992-93	946	0	199	89	0.00%	-30.90%	1032	19.28%
Average	970	264	247	344	26.13%	20.81%	1117.43	23.19%

Source: Economic Survey of Pakistan 1992-93 and RECP.

With the exception of 1990-91, RECP's yearly export growth was negative in the last four years, ranging between -18 and -54 percent per year. The share of export fell from 31.8 percent in 1988-89 to 19.3 percent in 1992-93. Among the different types of rice exported, Basmati has been a strong seller. However, bulk Pakistani Basmati is being

Figure 3-3
RECP Export Volume and Share of Export Market
(thousands of tons)



Source: RECP.

edged out of the international market by packaged Indian Basmati. This attests to the lack of marketing skill within RECP for maintaining international competitiveness.

The Cotton Export Corporation (CEC)

CEC held the monopoly for cotton export until 1987, when the private sector was allowed to enter the export business. Internal market demand in Pakistan rose steeply in the 1980s, reducing the availability of raw cotton for export. The government persistently protected the local textile industry by setting export quotas. In 1993 the quota was drastically reduced to 2 million bales after a particularly devastating draught and attack by plant virus. The government imposed further constraints were put on CEC and private exporters by ordering them to curtail their export commitments to 0.5 million bales in the November-January shipping period. At the end of November 1993, when CEC and private companies had already made commitments to international buyers for sale of about half a million bale of cotton, the government suspended all exports, throwing the market in further disarray. In January 1994, the government totally suspended the export of cotton. The upshot of this heavy intervention was a drastic reduction of the cotton growers' income - already had been affected by crop damage and low yields that year. Insulating the market from peak international demand enabled the government to contain price increases to benefit the local textile industry. But it had severe effect on cotton production which declined rapidly (Table 3-7).

Table 3-7
Pakistan: Raw Cotton Production
(Thousands of bales)

Year	Farm Production
1986-87	7760
1987-88	8633
1988-89	8385
1989-90	8560
1990-91	9628
1991-92	12822
1992-93	9054
1993-94	7600

Source: Pakistan Central Cotton Committee.

International cotton prices moved up in 1994 due to supply shortages all over the world. Prices for New York Futures shot up 40 percent between November 1993 and May 1994. The Liverpool 'B' Index price went up 61 percent during the same period. In Pakistan, however, the export ban restrained the price changes to a marginal 15 percent. The loss to Pakistani farmers was thus at least 25 percent of potential revenues.

The government's 1993-94 cotton export policy was thus very ambiguous. One of the policy's stated objectives was to boost exports by eliminating the export duty on consignments priced below US\$0.44 a pound. The paradox was that not only was this limit too low and well below the export prices of cotton in 1991, 1992, and 1993, but also that the government totally suspended the export of cotton in late 1993.

Cotton exports from Pakistan have fallen since 1986 (Table 3-8). The share of CEC also has gone down, from 100 percent in 1987 to 35 percent in 1994 (Table 3-9). This suggests in the market that CEC is fast losing competition from the private sector.

Table 3-8
Pakistan: Cotton Production, Consumption,
and Export (thousands of bales)

Year	Production	Consumption	Export
1986-87	7760	3935	3861
1987-88	8633	4282	2909
1988-89	8385	4765	4958
1989-90	8560	5873	1831
1990-91	9628	4569	1378
1991-92	12822	7396	2633
1992-93	9054	8000	1541
1993-94	7600	8000	500

Source: CEC, 1994.

Table 3-9
Cotton Export by CEC and the Private Sector
(millions of bales)

	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent
CEC	0.858	49.90	1.987	58.50	0.658	49.70	0.23	35.00
Private Sector	0.861	50.10	1.411	41.50	0.666	50.30	0.436	65.00

Source: CEC.

Financial Performance

Profit and Loss

A summary of key financial indicators of the six marketing PEs is presented in Table 3-10.

The National Fertilizer Marketing Limited had an average loss of Rs. 13.77 million a year over the 1987-1993 period Figure 3.4. The losses were almost entirely due to income taxes assessed on zero profit before taxes. Unfortunately, the corporation did not try to recover the losses by increasing revenue or reducing operating costs.

Table 3-10
Profits & Losses of the Marketing Corporations
(millions of rupees)

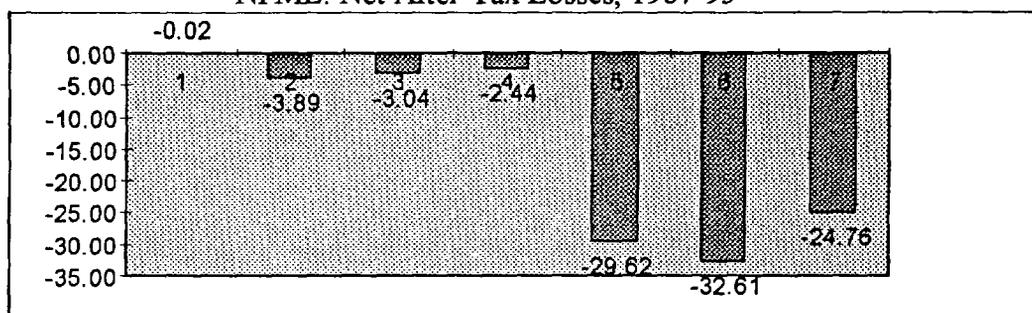
Item	NFMLa/	PSCb/	PAD&SCa/	PASSCOb/	RECPb/	CECb/
Operating income	5743.80	468.31	920.78	3660.33	5210.42	7479.00
Non operating income	26.05	11.02	1.19	15.5	0	122.57
Total income	5769.85	479.33	921.98	3675.83	5210.42	7601.57
Operating expenses	5761.34	451.29	929.07	3356.5	4534.79	6364.14
Non operating expenses	8.52	14.06	55.9	213.5	758.83	1658.71
Total expenses	5769.86	465.35	984.97	3570	5293.62	8022.85
Profit before taxes	-0.01	13.98	-62.99	105.83	-83.2	-421.28
Income taxes	13.76	0.75	1.44	28.17	264.22	0.00
Net income (profit) after taxes	-13.77	13.23	-64.43	77.66	-347.42	-421.28

a/ 1986-92.

b/ 1987-93.

Source: Company accounts.

Figure 3.4
NFML: Net After-Tax Losses, 1987-93



Source: NFML.

Sales growth at NFML was about 11.13 percent a year against growth in operating costs of 11.10 percent. In three of the seven years of analysis (1987, 1988, and 1989) sales were above the break-even point. But the following four years saw a rapidly increasing margin of sales below the break-even point. In fiscal 1993, sales below break-even was almost 66 percent of net sales. This shows that the company experienced steeply rising operating costs. Most of this came from increases in fixed costs and in the cost of goods sold. Fixed costs include salaries, wages, allowances, and general administrative costs. A breakdown of operating costs shows that fixed costs increased by an average of 11.72 percent between 1987 and 1993, generally due to salary and wage increases and increases in general administrative costs (Table 3-11). The cost of goods sold also increased by 9.54 percent due to increases in fertilizer prices from NFC plants. From these statistics it becomes apparent that the company cannot operate at a profit or break even as long as:

- The retail price of fertilizer is fixed by the government.
- The cost inflation of fertilizer from NFC plants is higher than the rise in retail prices.
- The company is not able to contain its wages and general administrative costs within the retail price increases.

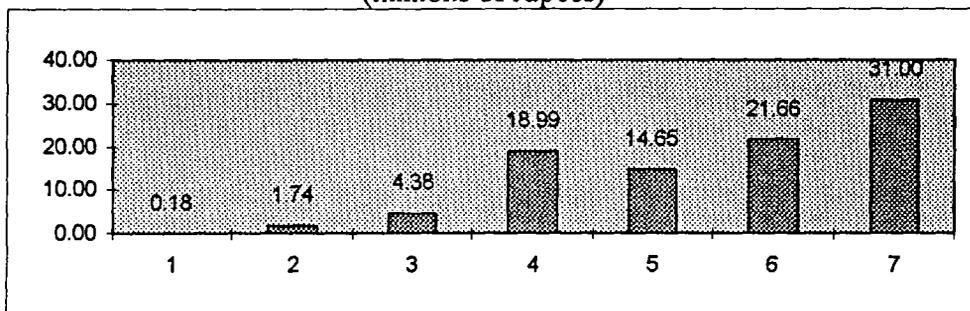
Table 3.11
NFML: Total Operating Costs (millions of rupees)

	1987	1988	1989	1990	1991	1992	1993	Average	Share of cost
Cost of goods	3934	3912	4486	5104	6094	6851	6682	5294.71	92.05%
% Change	-	-0.6	14.71	13.78	19.40	12.42	-2.5	9.54	
Other expenses	314.20	293.57	312.73	319.64	384.36	389.33	380.70	342.08	5.95%
% Change	-	-6.70	6.50	2.22	20.00	1.30	-2.06	3.54	
Fixed costs	80.74	94.03	97.17	106.68	124.05	146.99	155.97	115.09	2.00%
% Change	-	16.05	3.37	10.31	15.89	18.55	6.12	11.72	
Total Op. Cost	4328.94	4299.60	4895.90	5530.32	6602.41	7387.32	7218.67	5751.88	100%
% Change	-	-0.83	13.86	12.95	19.39	11.89	-2.27	9.17	

Source: Company data.

The Punjab Seed Corporation had an average after-tax profit of Rs. 13.77 million a year over the seven-year period (1987-93). The average operating income was Rs.468 million (from the sale of seeds) and the average operating expenses (including cost of sales, marketing expenses, salaries, wages, general administration costs, and depreciation) was Rs. 451 million. The net operating income was negative in 1986-87, but turned positive and has since been rising. Total income grew by more than 100 percent in the past seven years whereas expenses went up by 92 percent, thus providing the increasing profit margin (Figure 3-5).

Figure 3-5
PSC: Net Profit 1987-93
(millions of rupees)



Source: PSC.

Within the operating expenses, the highest rise was in salaries and wages, which increased on an average of 25 percent per annum. The cost of goods sold also went up by an average of 14.33 percent per annum and general administration by 4 percent. However, sales above break-even increased five times in the past seven years and the trend is positive .

On the surface, PSC seems to have done very well in the past six years. However, certain expenditures have not been noted in the books whose inclusion will depress the net profit. For example, interest on the corporation's borrowing of Rs. 50 million working capital from the government of Punjab is still outstanding.⁸ Also, the cost of capital obtained from the nationalized banks have been well below market (around 12.5 percent). The corporation also has received occasional grants from the government of Punjab for expansion of facilities whose effect are not fully stated in the operating statements.⁹ Again, some equity of the government of Punjab shown in the corporation's balance sheet were in effect a loan from the International Development Agency for the Seed Industry Project. The terms of repayment of this loan have not yet been determined. The corporation has put aside Rs. 3 million for principal repayment and Rs. 2 million for interest in the loan

⁸ The government's claim for interest charges on this loan is Rs. 11.95 million. But the corporation has accepted a liability of Rs. 7.21 million only, without actually paying it.

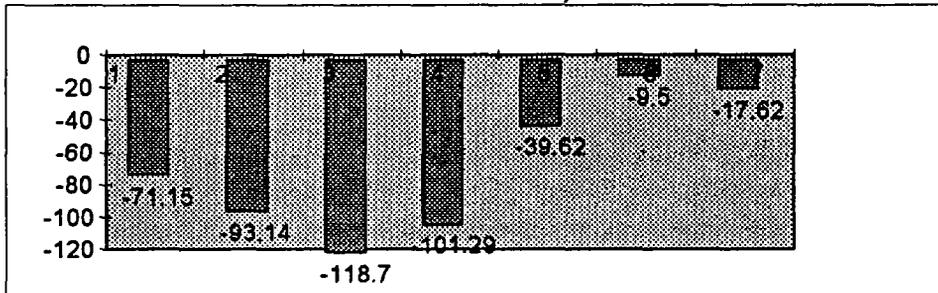
⁹ Such as the grant of Rs. 49.98 million from the government of Punjab for modernization and expansion of acid delineating plant at Khanewal and Rahim Yar Khan.

redemption fund. But the accrued interest liability has not been shown in the income statement. There are some other pending liabilities because of disputed capital contract bills under litigation.

The asset valuation of the corporation is also understated in its balance sheet due to exclusion of the value of seed farm land transferred from the Punjab Agricultural Development and Supplies Corporation. In 1994 market valuation, the price of 6,500 acres of land is Rs. 390 million. This value was added to the balance sheet for fixing realistically the size of the corporation's assets. The corporation had Rs. 2.5 million tied up in a real estate investment (the LDA Plaza) since 1977 but is not receiving any return from it.

The Punjab Agricultural Development and Supplies Corporation suffered an average loss of Rs. 64.43 million per year over the past seven years. It had losses in each of the seven years, ranging between Rs. 9.5 million in 1992-93 to Rs. 118.7 million in 1988-89 (Figure 3-6).

Figure 3-6
PAD&SC: Net Losses, 1986-92



Source: PAD&SC.

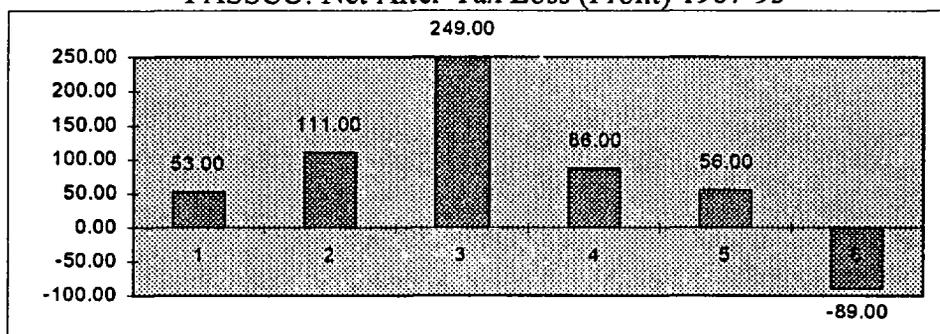
Sales growth has been about Rs. 6.35 percent per annum against growth in operating costs of about 6.63 percent. However, in all but two years (1986 and 1992) sales have been below the break-even point.

The corporation's debt servicing costs are far in excess of earnings before interest charges. Even in the years where earnings before interest and taxes have been positive (1986, 1992), the interest payments on short- and long- term loans have left the company with substantial losses. Remarkably, the organization has no equity and its entire operation is financed from loans. This loan liability is increasing every year following continuous operating losses. The corporation has very few real assets. More than 85 percent of its long-term assets are shown as a claim against the government for accumulated losses, through a balance sheet entry called 'appropriation accounts. The magnitude of this claim in 1992-93 stood close to Rs. 1.5 billion. The government will have to absorb this loss on behalf of the corporation – a typical illustration of indirect subsidy due to absence of hard budget constraint.

Salary and general administration costs in the corporation have been rising above general inflation. However, the increase in *real* administrative expenses were a staggering 52 percent in the past seven years compared with a more modest 7 percent increase in real salaries and wages.

The Pakistan Agricultural Storage and Services Corporation had an average profit of Rs. 77 million over the past seven years, with one year of negative profit (1992-93). The profitability trend, however, is fairly ominous (Figure 3-7), declining steadily from Rs. 249 million in 1989 to Rs. -89 million in 1992-93.

Figure 3-7
PASSCO: Net After-Tax Loss (Profit) 1987-93



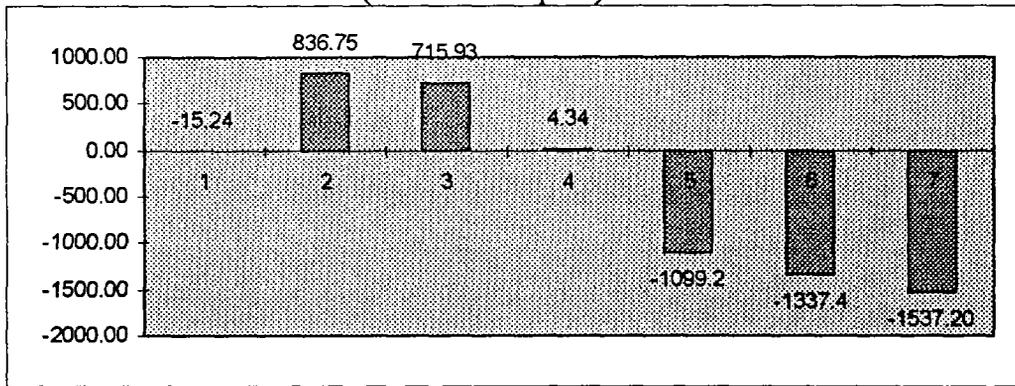
Source: PASSCO.

Part of the decline could be attributed to falling volume of business, either due to capacity constraints or increasing competition in the market from other agencies, including the private sector. The worst drop in sales was between FY1991-92 and FY1992-93 – nearly 28 percent. Average sales growth between 1987-93 was -2.2 percent a year. Total income fell by almost the same amount. The corporation did not incur losses until about 1992 because the total expense declined by 1.6 percent a year, enabling it to keep from sliding into the red. Sales generally have been above the break-even point throughout the period.

The organization's operating profit in the six years from 1987-92 was reversed in FY 1992-93, when it incurred a loss of Rs. 89 million. Major contributors to this loss were the 28 percent drop in sales revenue and a high proportion of interest expense. However, the corporation's method of revenue accounting makes a significant part of its loss or profit dependent on the timing of reimbursement of costs by the government. Reimbursable losses are recognized as revenue in the company's account on their approval by the government. With such guaranteed reimbursement of losses on rice, onion, potatoes, and a few other minor crops, the corporation is insulated from penalties of inefficiency on a sizable part of its operations. Only in the case of wheat is PASSCO constrained to keep within the margin (incidentals) allowed by the government, and it is not always able to do so. On any account, however, the losses are liabilities of the government by virtue of its holdings of 100 percent of PASSCO's stocks.

The average after-tax loss in 1987-93 for the *Rice Export Corporation* was more than Rs. 347 million (Figure 3-8). These are without counting the profit and losses of its two subsidiaries, Pakistan National Produce Company and Doaba Rice Mills Limited, which were divested in 1992.

Figure 3-8
RECP: Net After-Tax Profit and Loss
(millions of rupees)

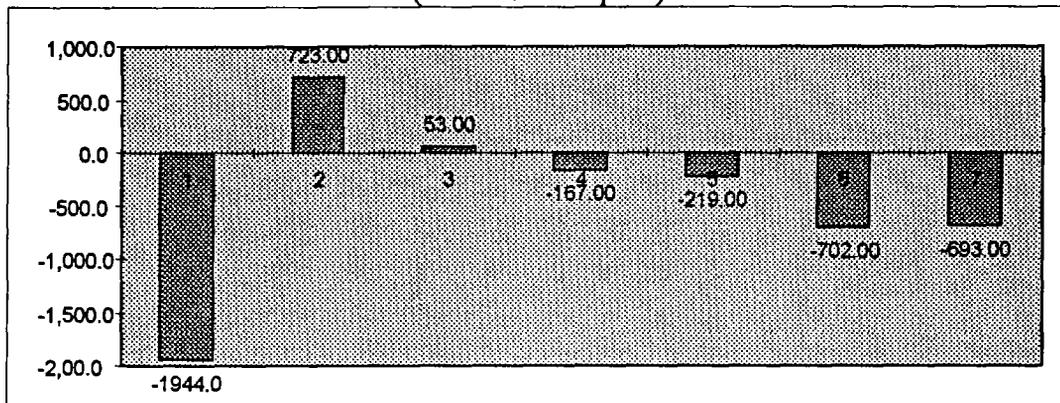


Source: RECP.

Sales until 1991 were above the break-even point, after which they turned negative. The principal reason for this fall was the steep drop in sales between 1991 and 1993. Marginal income in 1991 dropped 30 percent from its 1990 level, and 1992 income was 63 percent below its 1991 level. Income thus was unable to meet fixed costs by a wide margin. On top of this, non operating expenses (mainly interest on loans) widened the deficit further. RECP reduced its general administration cost significantly in fiscal 1993, but it had little noticeable impact. The corporation's performance has been decidedly poor since 1989. It has not maintained its competitiveness with Indian and other suppliers in the international rice market.

The *Cotton Export Corporation's* average seven-year after-tax loss was more than Rs. 421 million (Figure 3-9).

Figure 3-9
CEC: Profit and Loss: 1986-93
(millions of Rupees)



Source: CEC.

Even though sales were above break-even in all seven years, non operating expenses were large enough to put the organization in the red after fiscal 1989. The major non operating expense was the export tax on cotton, which averaged Rs. 1.19 billion a year between 1986-93.

Financial Ratios

The financial ratios for the six corporations are summarized in Table 3-12.

Efficiency ratios

The average *operating ratio* for NFML was over 100 percent reflecting operating expenditure in excess of revenue. The comparable ratio for a representative private firm was about 8percent. The past six-year trend of this ratio is also bad, showing the failure of management to control operating costs. However, the *inventory turnover ratio* is very good, suggesting that the company does not hold excessive stocks of inventory. Excess stocks are unproductive and represent an investment with a low or zero rate of return. On average NFML has kept about four days of inventory in hand, compared with about twelve days for the private sector company. The *asset turnover ratios* have also been very good, indicating that the company is using its fixed assets to a high percentage of capacity, much more than other firms in the industry.

The average *operating ratio for PSC* was slightly below 100 percent showing that revenue was marginally in excess of operating expenditure. The past six-year falling trend of this ratio is bad, underscoring the failure of management to contain operating costs. The *inventory turnover ratio* is also poor, suggesting that the organization is generally holding too much stock of inventory. On average PSC keeps about 171 days of inventory in hand, which is high considering the degradability of the stock. The *asset turnover ratios* also

have been poor, showing that the corporation has not used its fixed assets to a high percentage of capacity. They are, however, improving.

Table 3-12
Financial Ratios and Growth Rate of Six Marketing PE
(seven-year average)

Ratio a/	NFML	PSC	PAD&SC	PASSCO	RECP	CEC
<u>Efficiency Ratios</u>						
Operating Ratio (%)	100	97	101	92	89	82
Inventory Turnover	92.53	2.13	2.43	15.72	0.84	6.72
Fixed Asset Turnover	50.38	0.85	0.66	21.82	10.23	24.94
Total Asset Turnover	5.97	0.57	0.50	4.89	0.84	2.31
<u>Income Ratios</u>						
Return on Sales (%)	-0.20	3.47	-7.92	2.12	-10	-5.50
Return on Equity (%)	-0.52	1.96	NA	24.55	-	-113.50
Return on assets (%)	-0.01	1.50	-3.45	11.70	-3	-8.51
Basic Earning Power (%)	-0.01	2.04	-0.39	40.20	13	1.83
<u>Creditworthiness Ratios</u>						
Current Ratio	0.92	2.57	2.01	89.04	1.04	1.07
Debt-Equity Ratio.	86:14	82:18	NA	NA	NA	NA
Debt service coverage	-1.50	6.74	-0.08	150.03	1.18	1.68
Times Interest earned (TIE)	1.00	4.12	-0.29	156.06	2.10	1.68
<u>Growth Rate</u>						
Sales (%)	0.09	12.68	6.35	-2.21	-14.00	-5.48
Operating Expenses (%)	0.09	11.44	6.63	-0.88	-6.00	-7.47
After-tax Profit (%)	-34.01	236	1.29	-44	n.a	-10.73
Total Assets (%)	0.06	41.16	3.08	-57.93	0.68	-8.70

a/ See Box 2-1 for definitions of the ratios.

Source: Corporation records.

The average *operating ratio* for PAD&SC has been over 100 percent which again shows operating expenditure in excess of revenue. This indicates the failure of management to control operating costs. The *inventory turnover ratio* is relatively poor, even though this reflects to some extent the highly seasonal nature of agricultural processing. The inventory turnover can also relate to the length of time a firm keeps its inventory on hand. On average PAD&SC keeps about 150 days of inventory in hand, compared with 12.34 days by the private sector company. Even accounting for buffer stock maintenance function of the organization, the inventory stock has been high. Excess inventory during the seven years have varied from 27 percent to 64 percent. The *asset turnover ratios* also have been extremely low, indicating that the company is not using its fixed assets to as high a percentage of capacity as other firms in the industry.

PASSCO's average *operating ratio* was slightly below 100 percent showing that revenue was only marginally in excess of operating expenditure. The ratio has improved gradually

in the past seven years. The *inventory turnover ratio* is good, suggesting that the organization does not hold excessive inventory. On average PASSCO keeps about twenty-three days of inventory in hand, which is fairly good. The *asset turnover ratios* also have been strong, showing that the corporation has used its fixed assets to a high percentage of capacity.

The *operating ratio* for RECP has been above 100 percent since 1991, showing that revenue earnings are no longer covering operating expenditure. This ratio had shown some improvement in 1987, but it has gone downhill since then, underscoring the failure of management to contain operating costs. The *inventory turnover ratio* is extremely poor, suggesting that the organization maintains excessive inventory. On average RECP keeps about 435 days of inventory in hand which is extremely costly. The *asset turnover ratios* also have been poor, showing that the corporation has not used its fixed assets to a high percentage of capacity.

The ratios are much better for the Cotton Export Corporation. The *operating ratio* has been kept below 100 percent since 1989, which indicates that revenues are at least covering operating expenses. The *inventory turnover ratio* is also good. On average CEC keeps about fifty-four days of inventory in hand. The *asset turnover ratios* also have been good, showing that the corporation has used its fixed assets to a high percentage of capacity.

Income Ratios

All four income ratios were negative for NFML. The *return on sales*, which shows how large an operating margin the corporation had on its sales, is -0.26 percent, meaning the company has been operating slightly below cost. The *return on equity* is -0.52 percent, far below the 49.63 percent return of a comparable private sector firm. The *return on total assets* is likewise negative, showing that the assets used have no earning power. Again, going by the rule of thumb, since the return on assets do not exceed the cost of capital, the public funds in this company would be better employed in other enterprises.

The income ratios were also low for PSC. The *return on sales*, was only 3.47 percent. The *return on equity* was 1.96 percent, far below the minimum of 20 percent expected of the industry. The *return on total assets* was likewise low, at 1.50 percent, showing that the assets used have very little earning power. The only positive aspect of these ratios is that they have been improving slowly over the years.

In the case of PAD&SC all four income ratios have been negative. The *return on sales* was -7.92 percent, meaning the company has been operating below cost. The *return on equity* could not be calculated because the balance sheet shows zero equity. The *return on total assets* was also negative, showing that the assets used have no earning power. Going by the rule of thumb that once an enterprise is running at normal capacity, the return on assets should exceed the cost of capital in the society measured by such things as bank

lending rate to industries, it is evident that in this case public funds would be better employed in other enterprises.

The *return on sales* for PASSCO was only about 2.12 percent, much lower than average return on sales of 10 or more in comparable private firms. The *return on equity*, however, is good at 24.55 percent. The *return on total assets* is likewise good at 11.70 percent, showing that the assets used have adequate earning power.

The average *return on sales* was negative in the past seven years for the Rice Export Corporation. The *return on equity* could not be calculated because the equity turned negative in the past three years. The *return on total assets* was also negative.

In the Cotton Export Corporation the average return on sales was also negative over the past seven years. The *return on equity* was highly negative (-113 percent) and, furthermore, getting worse each year. The *return on total assets* was also negative.

Creditworthiness Ratios

Of the three measures used for measuring creditworthiness, the *current ratio* for NFML (less than 1) is pretty bad, indicating that it does not have enough current assets to meet current liabilities. The *debt-equity* ratio is good, at 14 percent. The negative *debt service coverage ratio*, because of the long-term debt overhang, is bad. The *times-interest earned* ratio, which measures the extent to which operating income can decline before the firm is unable to meet its annual interest cost, is also very low. Failure to meet this obligation could bring legal action by creditors and bankruptcy.

The *current ratio* for PSC (over 1) is reasonably good, indicating that it has enough current assets to meet current liabilities. The *debt-equity* ratio is fairly good at 18 percent. The *debt service coverage ratio* is also good, showing the organization's strong position to repay debts. The *times-interest earned* ratio, which measures the extent to which operating income can decline before the firm is unable to meet its annual interest cost, is also high. Failure to meet this obligation could bring legal action by creditors, possibly resulting in bankruptcy.

The *current ratio* for PAD&SC (over 2) is good, indicating that it has enough current assets to meet current liabilities. The *debt-equity* ratio again cannot be calculated in the absence of equity. This is, however, bad because the organization has no "cushion" to absorb losses which, of necessity, have to be passed on to the government. This is illustrated by the negative *debt service coverage ratio*. The *times-interest earned* ratio is negative, meaning its interest liabilities are not covered. Normally, this should have led to bankruptcy, except when creditors are government financial institutions willing to internalize the losses themselves or if the government provides bail-out subsidies.

PASSCO's *current ratio* of 89 is very good, indicating that it has no problem in meeting current liabilities. The *debt-equity* ratio was not available for evaluation. The *debt service*

coverage ratio was also good showing the organization's strong position to repay debt liabilities as they occurred. The *times-interest earned* ratio also stands high at 156.

Even though the average *current ratio* for RECP was over 1 during the seven-year period, it fell below 1 after 1989 and continues to fall. This is a very bad sign – the corporation is becoming progressively unable to service current liabilities. The *debt-equity* ratio could not be calculated because of negative equity in some of the years. The *times-interest earned* ratio.

The *current ratio for CEC* was marginally over 1 for the seven-year period and could turn downwards any time. The *debt-equity* ratio could not be calculated. Both the *debt service coverage ratio* and the *times-interest earned* ratio were fairly good.

Growth rates

Four important growth rate indicators of the companies studied were sales growth, operating expense growth, after-tax profit growth and total assets growth.

At NFML, *sales* and *operating expenses* growth rates have been more or less uniform (0.09 percent), showing no sign of improvement of earnings in the past seven years. The *negative after-tax profit* growth of 34 percent indicates hard times ahead. The total assets growth rate is also a low 0.06 percent.

Sales and operating expenses growth rates for PSC were fairly close to each other at 12.68 percent and 11.44 percent. But the *after-tax profit* growth rate has been somewhat erratic, varying from 866 percent to -23 percent. So, any inference here must be interpreted carefully.

In the case of PAD&SC, *sales* and *operating expenses* growth rates have been close to each other — about 6 percent, showing no sign of improvement of earnings in the past seven years. The positive average *after-tax profit* growth of 1.3 percent underlies relatively erratic growth rates over the years — varying from highly negative to positive. The lack of consistency should be a matter of concern for management. The *total assets growth rate* of 3 percent is also low.

PASSCO's negative *sales growth rate* (-2.21 percent) has been a major setback for the corporation, contributing strongly to its operating losses. It was somewhat offset by a decline in the *operating expense ratio* which declined -0.88 percent a year. Both after-tax profit and total asset growth rate were extremely negative (-44 percent and -58 percent, respectively).

Even though *operating expenses* for RECP declined 6 percent per annum, the -14 percent *growth in sales* completely neutralized this advantage. The *after-tax profit* growth rate could not be estimated with reliability because of its erratic behavior. The total assets growth rate of 0.68 percent was also very low.

All the growth ratios were negative for CEC for the period of analysis. The sales decline of 5 percent was compensated somewhat by the decline in *operating expenses* of 7 percent. But after counting non operating expenses, the *after-tax* profit went down almost 11 percent. *Total asset* growth was also -9 percent.

Financial Rate of Return

Two internal rates of return were calculated for the corporations: the financial rate of return to all resources engaged and the financial rate of return to equity. The financial rate of return to all resources engaged is based on incremental net benefit before financing. For NFML this ratio was 2 percent, assuming a six-year life of the entity from 1987-93. The *financial rate of return to equity*, obtained after adjusting for financing and income taxes, was -18 percent. This highly negative internal rate of return in the past six years, long after maturity, proves the financial nonviability of the organization. The company was set up in 1973 to fill a void in the market because private sector agencies were scarce. In the twenty years hence the structure of the market has changed, the government policy toward preservation of public enterprises has changed, and in the presence of a strong and growing private sector for marketing fertilizers the corporation is facing increasing difficulty in remaining competitive.

For PSC the financial rate of return to all resources engaged was 72 percent, assuming a seven-years life of the project from 1986-93. The *financial rate of return to equity*, obtained after adjusting for all financing and income taxes, was -4.33 percent. This negative internal rate of return on equity in the past seven years was partly due to inadequate returns on the highly valuable land used in the seed farms.

In the case of PAD&SC the financial rate of return was -0.41 percent assuming a seven-years life of the project from 1986-93. The *financial rate of return to equity*, obtained after adjusting for all financing and income taxes, could not be calculated because the net benefit stream was negative throughout.

For PASSCO the financial rate of return to all resources engaged was 47 percent assuming a seven-year life of the project from 1987-93. The *financial rate of return to equity*, obtained after adjusting for all financing and income taxes, was 38 percent.

The financial rate of return to all resources engaged for RECP was 21 percent, assuming a seven-years life of the project, from 1987-93. The *financial rate of return to equity* could not be calculated because of the extremely high level of short-term debt of the corporation.

For the CEC the financial rate of return to all resources engaged was -2.34 percent, assuming a seven-years life of the project, from 1987-93. The *financial rate of return to equity* could not be calculated because of the highly negative net benefit stream throughout the period.

PERFORMANCE AND IMPACT OF AGRICULTURAL PUBLIC ENTERPRISES IN PAKISTAN

The previous chapters presented a detailed analysis of each of the institutions, evaluating their mandate, their functions, and their operational efficiency. The main findings from these analyses are presented below.

Consistent with the experience of other countries almost all the public enterprises surveyed are inefficient in their operation and their costs of operation are high. Audited accounts of most of these corporations show that they have been incurring financial losses for many years (Tables 2-2 and 3-10). The aggregate average yearly loss for the six marketing PEs between 1987-93 was Rs. 755 million which was about 18 percent of the average current expenditure on agriculture.¹⁰ The production corporations showed average annual profit of Rs. 466 million during this period. However, as mentioned before, these profits could have been much lower and perhaps even negative if the corporations did not receive the major input — natural gas — at a highly subsidized price from the government. Together, the production and the marketing corporations had an average annual loss of Rs 289 million which was approximately 7 percent of current agricultural expenditure. This is much higher than a similar ratio for India, Zambia, or Zimbabwe shown in Table 1-1.

Even when some of the PEs are shown to be profitable by management, a careful review raises serious doubts about that assertion due to accounting anomalies. For example, the Punjab Seed Corporation has shown consistent profits during 1990-93, but certain expenditures were excluded from the account whose addition would have changed the performance picture. One of these items was the seed farms, acquired from another government agency, that were not valued properly. The corporation also received an interest subsidy (on loans taken from government-owned banks) that was not counted. In addition, it received funds from the government on which it paid no interest charges, and also occasional state grants — all of which contributed to its misleading operating results.

System Inefficiencies

In general, three types of inefficiencies have been examined in details for all of the corporations in the current study, and the results presented below.

Financial Inefficiency: The state corporations' resources are generally limited to government equity and debt from nationalized banks. However, persistent budget constraints have resulted in inadequate availability of funds for expansion, capital expenditure, and working capital.

¹⁰ Expenditure data is taken from Table 4.2, World Bank 1994 (c). Current expenditure is exclusive of subsidies.

Since most PEs fail to generate sufficient funds internally, their free cash flows are usually very low or negative. As a result commercial bank lending is usually not available, and the only source of funds is federal preferred credit schemes disbursed through nationalized banks.

The effects of this form of undercapitalization have been twofold: First, the cost of debt has been higher than the cost of equity. This has further undermined the PE's profits and creditworthiness. Second, since nationalized banks were forced to lend to PEs through directed credit schemes, the effects of accumulated debt or default were merely transferred from one government department to another, with the state still taking the loss.

Technical or Cost Inefficiency: The PEs generally exhibited poor control over variable and fixed costs. The reasons for this are fairly obvious.

First, PEs have followed a cost-plus pricing scheme in which retail prices are set by the concerned ministry on the basis of actual costs incurred by the organization plus a margin to cover selling and distribution expenses (called "margin for incidentals" in Pakistan). This has removed all incentives for management to control costs. This is amply reflected in the poor or nonexistent internal cost accounting system and the lack of a workable management information system.

Second, with the government being the sole or major shareholder, there has been inadequate external control over the PEs' managers. Public enterprise evaluation committees are usually staffed by bureaucrats who often belong to the same cadres as PE managers; in any case, clear incentives for objective evaluation are lacking.

Third, labor policies have provide PE managers with little discretion in cutting administrative and labor costs.

Managerial Inefficiencies: They are the result of various factors such as lack of performance-based incentives, poor compensation compared with the private sector, and lack of skills and training. These have created an organizational scleroses commonly known as x-inefficiency (Leibenstein, op cit.) in the agricultural PEs of Pakistan. X-inefficiency generally manifests itself in a high cost structure and low technical efficiency. Evidence from Pakistan indicates that the caliber of managers and officials in agricultural PEs and departments is less than that of personnel in industrial bureaucracies. Less value and prestige is attached to employment in the agricultural sector for historical and sociocultural reasons.

With domineering public enterprises and controlled prices, the marketing services provided by both the public and private marketing channels are inadequate. The inefficient operation of the public corporation is evident from the lower prices charged by private sector organizations and public preference for the private sector services even where the public sector exists.

The current analysis of the seven agricultural state-owned enterprises in Pakistan shows that all of them have been steadily losing market share to the private sector over time (Table 4-1). This

was mainly due to policy reforms in the mid-1980s which liberalized rules governing private sector activity.

Table 4-1
Market Shares of Selected PEs (%), 1983 and 1993

	1983	1993
National Fertilizer Corporation (nitrogenous fertilizer production)	78	50
National Fertilizer Marketing Limited (fertilizer marketing)	69	39
Cotton Export Corporation	100	35
Rice Export Corporation (Basmati rice)	88	23
Pakistan Agricultural Storage and Services Corporation (wheat handling)	16.3	7.6
Punjab Agricultural Development & Supplies Corporation (fertilizer handling)	5.6	11.9

Source: Company data.

Table 4-2
Key Performance Indicators (1986-93)
(seven-year averages except for net worth)

	Pre-Tax Profit (M Rs)	After- Tax Profit (M Rs)	Annual Sales Growth (%)	Return on Sales (%)	Operating Ratio (%)	Debt Service Coverage	Net Worth, 1993 (M Rs)	Financial Rate of Return to Equity (%)
NFC (5 units)	884	466	26 a/	8.90	85	0.99	1776	-1
MFML	-0.01	-13.77	0.09	-0.26	100.22	-1.50	5.24 b/	-18
PSC	13.98	13.23	12.70	3.50	97	6.74	800	-4
PAD&SC	-63.00	-64.40	6.35	-7.29	101	-0.08	0.00	-High
PASSCO	105.83	77.66	-2.20	2.10	91.70	150	144	NA
RECP	-83.21	-347.40	-14	-10	89	1.18	NA	NA
CEC	-421.30	-421.30	-5.50	-5.50	82	1.68	390	-High

a/ Overstated because one unit started production in 1988-89 and initial growth was very high. Without this unit, annual sales growth was 9.8 percent.

b/ In 1992 it was Rs. -24.00 million.

Source: Company data.

Evaluation of the financial performance of some PEs reveals that production units have generally fared better in cost control, operating efficiency, and profits than the trading and distribution agencies (e.g., some production units of NFC). The key performance indicators for seven enterprises are summarized in Table 4-2.

Possible reasons for the better performance of the production units could be:

- Government equity in the NFC units increased by 30 percent between 1973-93, whereas equity in the trading agencies studied did not increase at all. RECP, CEC, PAD&SC, and PASSCO were grossly undercapitalized. As an extreme example, PAD&SC has operated with zero equity, and financed its operations solely through short-term credit from nationalized banks.¹¹
- Production units of the NFC were subject to periodic performance evaluation by the Experts Advisory Cell, a semiautonomous body affiliated with the Ministry of Production. Other state enterprises in the agricultural sector did not undergo any form of performance evaluation. Some of them, notably the RECP, could not produce audited financial statements for their subsidiaries. Sindh Seed Corporation's financial records consisted of unaudited financial statements for just one year.
- Turnover taxes were levied on trading agencies based on their level of activity (procurement and sales) irrespective of profits. This led to taxes being levied on consistently loss-making organizations. In contrast, the production units of NFC paid taxes only on profits.

None of the enterprises studied had any cost accounting or management information systems in operation. This was reflected in the extremely high levels of variable, fixed and operating ratios even for those enterprises that were profitable. The system of cost-plus pricing certainly did not encourage cost efficiency. Despite the fact that retail (administered) prices were fixed on the basis of incurred costs plus a margin for "incidentals" (handling and transport), corporate sources complained that retail price increases did not keep pace with increased costs.

Although the losses incurred by trading agencies due to price support operations were to be reimbursed by the government in practice reimbursements were delayed or not made at all. These unreimbursed amounts were shown as receivable in the balance sheet. In the extreme case of PAD&SC, more than 80 percent of the corporation's long-term assets consisted of reimbursable losses. On the other hand, nonreimbursable losses accumulated in the balance sheet under the category "other long-term liabilities."

RECP and PAD&SC have continuously defaulted on their bank and government loans. Others are on the verge of default due to consistently negative cash flows. It is evident that they are

¹¹ This would only be possible for an organization backed by the government since lenders will not carry a 100 percent leveraged entity under any circumstances.

able to continue operating only because of preferred credit schemes extended by the nationalized banks and the Agricultural Development Bank of Pakistan.

The negative effects of gross undercapitalization are reflected in the fact that financial rates of return to equity (adjusted for financing, taxes, and prices) for most of the enterprises were extremely negative. The financial rate of return to all resources engaged ranged between -3 and 2 percent for trading agencies, but was much higher for the NFC. Given that the opportunity cost of capital in Pakistan is well over 10 percent, it is clear that public resources were not put to the best use.

Profitability measured in terms of public profits were uniformly higher than private profits, indicating that many aspects of operations were not in the control of enterprise managers – such as capital structure, pricing, and indirect taxes. However, PE managers did not perform well with respect to the main factor over which they do have control, namely, working capital. On average, more than 85 percent of working capital was tied up in inventory. The average inventory turnover rate of the enterprises was 2.0, which means that, on average, each unit of inventory was held for about six months – a figure too high from an efficiency standard. Excess inventory was highly unproductive, which also contributed to the poor short-term liquidity and low levels of nonoperating income (interest earned on short- and long-term deposits).

The Effect of Price Intervention

Table 4-3 shows the amount of transfers to producers from state trading activity and support prices between 1981-87 and again in 1992-93. The more recent estimate shows the transfer to be just above 6 percent of agricultural GDP. It is evident from this data that price interventions through PEs have had significant negative effect on agricultural production.

Table 4-3
Transfers to Producers from Support Prices and State Trading

	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1992-93 ^{a/}
Transfer (million of rupees)	-7,875	-15,190	-9,582	-11,605	-12,209	-16,674	-19,000
As a percentage of:							
Producer value	-10	-19	-11	-11	-9	-11	–
Agricultural GDP	–	–	–	–	–	–	-6

a/ Data for 1992-93 alone taken from World Bank 1994 (c).

Source: Pakistan Journal of Agricultural Economics, January 1992 and World Bank 1994 (c).

The foregoing performance analysis of the enterprises indicated that most of them are commercially nonviable due to high cost structures and managerial inefficiencies characteristic of state-owned enterprises. These agencies should no longer engage in commercial activities

and should be divested to the private sector. Some of them, however, could assume regulatory functions for facilitating free enterprise.

A 1990 review of marketing institution by the World Bank indicates that a number of problems could arise with PE marketing in developing countries. In Pakistan these problems are quite serious:

- Under a system of controlled prices, inadequate marketing margins are the primary reasons for the inadequacy of marketing services provided by both public and private marketing channels. Fertilizer and seed are heavily subsidized and the state organizations like PSC and PAD&SC, have difficulty in realizing their full operational costs from consumers. The problem has compounded as prices set by the government are imposed on the private sector, either through administered prices or by the large presence of the government marketing agencies. This has resulted in inefficiency of supply, such as inadequate and untimely availability of inputs.
- For large PEs, the diseconomies resulting from poor management become serious. The cost of inefficient operation is reflected in both the price and the level of service in Pakistan. There is evidence that private sector prices have been less than those of state enterprises in many instances of fertilizer and seed distribution in Pakistan.
- The private sector also has better-quality records where the regulating agencies are alert.
- Even with the presence of large PEs, private marketing channels have continued to service farmers and have been preferred by them. This seriously calls in question the argument that expansion of public sector marketing services is needed to check alleged exploitation by merchants.

The existence of the large PE marketing organizations is not only costly to the government but also costly to the economy in both the short and long run. Apart from the inefficiency costs attached to their operations, these institutions compete with the infant private sector on a nonlevel playing field. They often represent monolithic public monopolies, enjoy tremendous government patronage, and arrogate financial resources from the market with state backing. The net result is a crowding-out effect that leaves the private sector weak, noncompetitive, and thereby exploitative whenever it gets the chance to be so. The losers are the public and the productive sectors.

The PE's Budgetary Relationship with the Government

Most of the agricultural public enterprises in Pakistan receive direct and indirect financial support from the government. For example, although NFML receives no direct subsidy from the government, its borrowings in the financial market are underwritten by NFC – its parent corporation and the government. It received direct long-term government loans prior to 1987 and again in 1988. Part of these loans have been paid back, leaving an outstanding amount of Rs. 6.77 million in 1993. The company shows that it operates on a

nonprofit basis and that its net income before taxes is almost zero. But under Pakistani law, corporations have to pay income taxes under a specific formula even in the absence of profit. With the inclusion of these taxes the company has run losses consistently.

The Punjab Seed Corporation is partly self-financing and partly operating on credits underwritten by the government of Punjab. The principal lending agencies are Habib Bank, United Bank, and National Bank — all nationalized financial institutions who provide working and long-term finance to the corporation at discounted rates ranging from 9 to 12.5 percent.¹² The corporation, however, has borrowed working capital directly from the government of Punjab in the past. It also has received a total of Rs. 239 million from the Punjab government as an equity grant, and Rs. 92 million as a long-term loan under the International Development Association refinancing. Even though the corporation has been a net receiver of government finance, its profits after taxes in certain years have been treated as retained earnings rather than transferred to the government budget.

The selling price of phosphate fertilizer is fixed by the government and PSC is given a fixed incidental per metric ton to meet its operating expenses. But this incidental has not been sufficient to cover its costs, and the corporation has been sustaining losses in most years. The shortfall was Rs.9.5 million in 1991-92 million and Rs.17.6 million in 1992-93. Considering its falling market share, this is evidence of cost inefficiency within the organization, partly due to high fixed operational costs. Government allocation for meeting operational expenses (incidentals) has been consistently short of actual costs. But the corporation was able to reduce its costs when faced with reduced incidentals, which may speak for further residual inefficiencies in the system.

PAD&SC finances its operations through bank overdraft underwritten by the government under counterfinancing facilities, against hypothecation of fertilizer stocks. The interest rates on these loans follow market norms. Although the corporation receives no direct subsidy from the government, the guaranteed availability of funds in a credit-restricted market is a form of indirect subsidy. The continuous losses for the past seven years have been possible only because of availability of this credit.

PASSCO is financed directly from the government budget or through credits underwritten by the government of Pakistan. Both are indirect subsidies from the state. It's losses are not a major concern for the government because of its role in implementing the state's food policy. Its principal commodity, wheat, is sold back at procurement price plus a handling charge fixed by the federal government. Any excess expenditure over the handling charge is a loss for the corporation, but there are no impediments to carrying the loss forward. Furthermore, the government reimburses PASSCO for losses incurred on the open market sale of rice, onion, and potato,¹³ and the corporation has no incentive to make up these losses. The corporation thus acts as an agent of the government with no

¹² The corporation obtained a loan of Rs. 9 million from the National Bank of Pakistan by pledging fixed deposits of Rs. 15.553 million, on an annualized interest rate of 0.17 percent above the deposit rate of 8.8 percent.

¹³ The loss being the difference between procurement price and market bid price.

financial headaches. Part of Pakistan's national wheat subsidy of more than Rs. 4 billion spent on PASSCO.

RECP maintains two sets of account, one for its own operation as a limited company and another separately for a government fund used for price support.¹⁴ The size of this fund in 1993 was Rs. 11.46 billion. Net sales revenue credited to the fund in 1993 was Rs. 2.92 billion, against which Rs. 4.26 billion was charged as cost of sales. The net operating loss of 1993 on the fund's account was Rs. 1.47 billion (Table 4-4).

Table 4-4
RECP: Operating Profits and Losses under Two Accounts
(millions of rupees)

	1988	1989	1990	1991	1992	1993
Fund	892.15	692.08	15.76	-1,084.83	-1,281.78	-1,469.58
Corporation	147.31	46.16	34.73	20.40	-35.25	-102.87

Source: RECP.

RECP's budgetary relations with the government arises from its administration of the fund. Operational profit and losses on this account are placed directly in the national budget. The corporation's own operating gains and losses are linked indirectly to the national budget, because it is owned by the government.

CEC finances its operation from three sources: export sales revenue, bank borrowing, and federal subsidies. The subsidies have increased in recent years – from Rs. 91 million in 1990 to Rs. 943 million in 1993. These amounts have been very close to the operating losses of the corporation and, on the face of it, seem to be given to balance the income and expenditure account. In any case, they reflect a direct government budget liability on behalf of CEC. In addition, there is an element of indirect subsidy through the subsidized, guaranteed loan from nationalized banks. Finally, the government's liability extends to the balance of the corporation's losses left even after the subsidy.

¹⁴ Since it is a government-owned organization, however, a consolidated account was prepared for the analysis that follows.

PUBLIC ENTERPRISE REFORM IN PAKISTAN

The Search for a Remedy

There is now ample evidence that state intervention to control the market has not been useful. On the contrary, it has destroyed the emerging private sector. For example, a study has shown that in much of Africa farmers were deprived of the right to sell their crops on their own and get a fair price from buyers because government buying through marketing PEs usually set prices below the world level (Knudsen et al, 1990). While governments have used state agencies to influence and control the market, often paying farmers less than relevant international prices, they have sold fertilizer, seeds and other inputs to the same farmers at subsidized rates. This pattern of intervention, and its consequent adverse effects on agricultural productivity, are obvious in Pakistan's agriculture today.

What should be done about public enterprises in Pakistan? The starting point of any reform program is the recognition of the appropriate role of the government in agriculture. The correct role of the government in agriculture is to provide basic infrastructural support, public goods, and an enabling environment for private enterprise development – which should be clearly understood and accepted by policymakers. As in other parts of the economy, an overextended public sector creates inefficiency that hurts agriculture. The monopoly powers of state enterprises could be a major impediment to the development of the sector because it drives away private initiative and competition. Perhaps the cardinal principle that needs to be acknowledged is that farmers have the right to produce whatever they wish, using the technology they feel best and selling their products freely at home or abroad. Traders, likewise, have the right to move the goods in their best interest without obstruction from the government or any authority, and consumers have the right to buy products at the best price from whatever source, domestic or international.¹⁵ Markets work best when individuals are allowed to transact freely, and even in cases when private exploitation becomes an issue it is good to ask before any intervention whether the market failure is likely to be more serious than government failure. The best case for public intervention is where externalities exist and individuals do not absorb the full cost or the full benefit of their action. Government's participation should be confined to the creation of such public goods. This includes infrastructure expansion, prevention of environmental degradation through overuse of chemicals and fertilizers that pollute streams and rivers, and regulation of such activities that create harmful externalities and research for development of inputs, outputs or techniques that could not be patented.

In a few occasions where there may be a need for government intervention in the market, such as addressing poverty and nutritional intakes of the very poor, the action should be focused and transparent. Providing targeted food subsidies to the underprivileged and

¹⁵ Much of the arguments made here are derived from Knudsen, Nash, et al. (1990), op. cit.

income support to very poor farmers are all right as long as they do not distort the price signals and if they address the problem at the root rather than at the symptom. For example, if it is absolutely necessary to stabilize basic food prices in order to provide access to a large segment of a poor population, it may be better to do so through a system of variable border taxes or subsidies, than through direct procurement and distribution. This would also minimize the distortion of prices in the distribution chain that arises due to control over distribution margins. It also would eliminate the need for maintaining large, inefficient public procurement, storage, and distribution organizations that become a drain on the public budget.

Control of adverse environmental, health, and sanitation effects of agricultural pursuits also require government intervention through strong regulatory and monitoring measures. Failures to recognize individual property rights have taken away from the incentives to invest in erosion and other environment depletion control measures. The government could persuade farmers to be more responsive by internalizing this cost through taxation. In addition, education and temporary enabling subsidies could increase the likelihood of their cooperation. Similarly, fertilizer and pesticide overuse that lead to poisoning of the environment could be discouraged through education and removal of artificially induced low prices.

Institutional and political factors keep governments from explicitly defining the objective and role of public enterprises even within the current environment of market liberalization. The appropriate justification of an organization engaged in commercial activities is in its profitability being close to the market norm. Even such objectives of the government as promoting "strategic" sectors, income generation for the treasury, balancing foreign or local economic dominance, regulating monopoly powers, etc. could be accomplished within the accepted operating norms of a commercial enterprise (Choksi 1979; Nellis 1986). Problems arise when the state enterprises take on such noncommercial objectives as pricing below the market (and sometimes below cost) for income redistribution, absorbing unemployed workers, keeping uneconomic facilities open to satisfy labor, and so on (Shirley and Nellis 1991). The government may sometimes want to fill a market gap left by the existing private sector, such as distribution to remote and geographically unattractive market segments. It may even tolerate a loss of the PE providing this service. But two things could go wrong. First, the service could take away the pressure from the enterprise to improve performance. Second, it could perpetuate the need for public sector presence by blocking entry of private firms. This has happened with the supply of fertilizer and seed in many of the remote agricultural regions of Pakistan. The government must realize that some social objectives are beyond its means and that the best long-term solution to the problem lies not in the continuance and support (through subsidies) of the PEs, but in developing viable alternatives such as infrastructure development (for example, roads and highway networks that link markets to production centers).

PE Reforms: The Alternatives

Reforming public enterprises have certain key prerequisites, such as instituting a set of pro-market reforms that create conditions for free enterprises to function, including exchange rate alignment, removing trade distortions, rationalizing the relative price of capital and labor, and removing unnecessary regulations and restrictive bureaucratic controls from the market.

Historically, the solution sought by countries at different times have followed two different tracks, one in the direction of straight privatization and withdrawal of government from strictly commercial functions, the other along the way of tightening control over the enterprise to extract higher efficiency. The desire of governments to increase efficiency and control over their PEs sometimes stemmed from the desire to prepare for eventual privatization. This was attempted by giving operational control to private firms and maintaining simple supervision over the partly privatized enterprises. In 1988, twenty-five developing countries were instituting these changes under World Bank assistance, of which fourteen African countries had ninety-three contract plans.¹⁶ The lessons of experience gained from these efforts are discussed later in this chapter.

The better option is to privatize commercial state enterprises. Privatization gained immense popularity in the 1980s. By the end of 1987 about 571 state enterprises (in all sectors) were privatized in fifty-seven developing countries, led by Côte d'Ivoire, Guinea, Niger, and Togo in Sub-Saharan Africa; Singapore in Asia; and Brazil, Chile, and Jamaica in Latin America and the Caribbean (Ramamurti 1991).

Different countries have tried different methods of public enterprise reforms such as privatization through public offerings, privatization through private sale, privatization through leasing, sale of assets, contract plan, management contract, and in some cases through stricter financial monitoring and accountability of the enterprise management. Chile has sold or transferred about 470 enterprises to the private sector since 1973; Mexico has sold, liquidated, merged, or transferred some 700 enterprises (roughly 20 percent of state assets); Jamaica has sold or leased forty firms; Guinea and Togo have each sold fifteen firms and liquidated many more; Tunisia has sold forty public enterprises and Philippines has sold twenty-nine PEs (Shirley and Nellis 1991). The pace has increased, and World Bank data show a total of 2,440 privatization transactions among its member countries through 1992 (World Bank 1994b). The momentum was spurred by Latin American countries such as Chile, Mexico, Peru and Venezuela in the late 1980s and early 1990s. But many new countries have recently joined the privatization explosion, such as Bolivia, Egypt, El Salvador, India, Mozambique, Papua New Guinea, Sierra Leone, Tanzania, Trinidad, Tunisia, and Uganda.

¹⁶ Contract plans are agreements between the government and the enterprise that spell out the rights and duties of both parties, thus eliminating the problems of vague or shifting objectives, insufficient autonomy of managers, and excessively constraining control systems. See Nellis (1991) for more details.

Country Experience with PE Reforms

The philosophy of improving the efficiency of public enterprises through close supervision and imposing strict financial responsibility also had many followers in the 1980s. These advocates believed that the failure of state enterprises was not because of a flawed concept but because of poor implementation. Unfortunately, despite the best efforts, PE operations could not develop the efficiency needed due to a multitude of factors, including confusion about policy, and control and the general deficiency of public institutions and personnel in business undertakings. For example, attainment of social goals was considered extremely important but enterprises also were expected to earn a profit. Enterprise independence was built into laws but they had enough loopholes to retain the heavy hand of government in daily operation. Similarly, systems for planning, budgeting, monitoring, performance evaluation, and financial controls were modeled after those in the government, which focused on procedures and issues used for public accountability rather than for commercial efficiency. Even government controllers who tried to go beyond these issues found it hopeless with the shortage of staff, skills and time (Ramamurti 1991). There is a critical flaw in the approach to remedying PE failures through close control. While it tried to ensure that the enterprises did *things right*, it did not look deeply enough to see that the enterprise did the *right things*. The duty of the state to provide public goods was interpreted too loosely, and there was little justification for the presence of large PEs doing what they were doing and crowding out sustainable private sector development.

The best indicators of success of a privatization program are the economy's overall efficiency improvement, reduction of fiscal deficit, improvement of efficiency of the enterprise under private ownership, and the social benefits obtained from privatization. In countries where the divestiture was implemented after careful planning using competitive processes, there is strong evidence of success. Argentina is a good example of a country in which privatization backed by macroeconomic liberalization has yielded positive overall results (Alexander and Corti 1993). It helped reduce deficits in the budget and balance of payments and also helped to build credibility with the private investors. In general, privatization in Latin America has been a significant factor in reduction of fiscal deficits and foreign debt (Thobani 1994). Experience has also shown that liberalizing before privatizing has many advantages. It prepares private investors to be able to exploit market opportunities to the fullest extent. On the other hand, giving private buyers special privileges such as protection from competition to make up for the restricted market could only slow the liberalization process and create similar market distortions.

Evidence of efficiency at the enterprise level following privatization is somewhat difficult to gather due to lack of studies of post-privatization experience. But there are some examples, such as Jamaica, where the privatization of the state telephone company led to 255 percent increase in outgoing international calls; and Mexico, where the auto parts industry following divestiture showed substantial cost reduction and technological advancement (Shirley and Nellis 1991).

The social benefits of privatization also have been positive in many countries. A study of twelve privatized firms in Chile, Malaysia, Mexico, and the United Kingdom shows that net welfare of different participant groups (consumers, workers, enterprise owners, competitors, and the government) improved in eleven of the twelve cases (Galal, Tandon, and Vogelsang 1994). Privatization sometimes can create negative impacts like loss of jobs due to liquidation (as in Benin, Ghana, Mali and Senegal) or organizational restructuring (as in Argentina, Peru and Tunisia). Different methods can be used to mitigate this effect, such as severance packages, relocating personnel to other areas (as in Peru), out-placement services to redundant workers (as in Tunisia), and offering seed capital to help start microenterprises (as in Mali and Senegal, see World Bank 1994b).

At the same time, it must be remembered that privatization is a process — and not a single-shot deal — that must be backed by strong will of the government. History is replete with privatization ventures that failed because they lacked one or more of the essential ingredients. In Turkey, for instance, the program was slow due to delay in enacting necessary laws for guiding the process and designing an agency to manage it (World Bank 1994b). In Tanzania the privatization program was set back by insufficient preparation, institutional and administrative inadequacy, and lack of systematic implementation. Unsuccessful privatization has generally been the result of two types of failure: noncompletion or midstream reversal of the process (Type I failure) and completed transactions that failed to deliver efficiency and fiscal or social benefits (Type II failure). To overcome Type I failure it is necessary to establish strong program ownership by the government. Overcoming Type II failure is a matter of placing the process in the proper socioeconomic context of the country and planning out details in advance taking all constraining factors into account. Improved economywide or sectorwide efficiency can only happen if the presence of improved competition policies and regulations is ensured.

The Lessons of Experience

A policy environment that encourages competition within private enterprises and efficiency pricing includes antitrust legislation, reduction in import protection, elimination of privileged access to credit and inputs, and deregulation of prices (Berg and Shirley 1987). Undertaking institutional changes without adequate macroeconomic reform could be counterproductive. The barriers to performance contracts in some West African countries have been failures of pricing and finance policies of the government (Shirley and Nellis 1991). For example, without removing price controls it would be futile to expect private firms to extend their geographical reaches to the farthest areas of NWFP and Balochistan. Competition in the domestic market is essential for increasing market efficiency (for example, lower prices), and this could be introduced through elimination of import/export barriers and restructuring of the domestic market by removing entry-exit constraints, public monopoly- monopsony, liberalization of financial markets, and removal of artificial price constraints.

The experience gathered from different countries provides the following lessons for successful privatization of public enterprises in Pakistan (Kekeri, Nellis and Shirley 1993).

- The more market-friendly a country's policy framework, the easier is the privatization process.
- An appropriate regulatory framework can increase public confidence and support for privatization.
- The primary objective of privatization should be to increase efficiency — not to maximize revenue or to distribute ownership widely at the expense of managerial efficiency.
- Instead of restricting market by excluding foreign investors and favoring certain special groups, government should try "golden shares" and partial share offerings to win acceptance for international and domestic buyers.
- Instead of putting new investments into enterprises before privatization, it is better to prepare for sale by carrying out legal, managerial, and organizational changes, financial workouts, and labor shedding.
- Providing a social safety net through severance pay, unemployment benefits, retraining, and job search assistance could lessen the pain for retrenched labor.
- Providing transparency to the privatization process increases the possibility of its success.

Instituting Reforms in Pakistan

To address the problems of agricultural public enterprises in Pakistan it is necessary to focus on certain institutional and pro-market policy reforms.

Institutional Reforms

The first step in the process of changing the structure of agricultural public enterprises is a critical analysis of the enterprises in terms of their reasons for existence, scope, and objectives. Following arguments presented earlier on the appropriate role of the state in agriculture, we have examined each public enterprise on the basis of its strategic importance. Strategically important institutions are the ones that fulfill a crucial economic role within the concept of public goods. It is not surprising that none of the eleven PEs studied appeared strategically important, because they did not produce public goods. This provides a strong argument for privatization of these organizations.

In general, the agricultural PEs in Pakistan can be analyzed from two major perspectives, financial viability and dispensability in the short term. Financial viability can be defined as the return on assets and dispensability as the ability to dispose of the organization in the short term without seriously disrupting the market. The size of the market presently served by the enterprises could be a measure of dispensability. The classification matrix in Figure 5-1 positions each PE in terms of its viability and divestiture potential in the short run.

Figure 5-1
A Taxonomy of Agricultural PEs in Pakistan

		<u>Dispensability</u>	
		Low	High
<u>Viability</u>	High	Paksaudi Fertilizer Corp. Pakarab Fertilizer Corp. Punjab Seed Corporation	Lyallpur Chemical Ltd. Pakistan Agricultural Storage & Services Corp.
	Low	National Fertilizer Marketing Ltd. Rice Export Corporation of Pakistan Cotton Export Corporation	Hazara Phosphate Fertilizer Ltd. Pakamerican Fertilizer Corp. Punjab Agricultural Development & Supplies Corp.

Note: An organization's viability is considered low if its five-years average return on assets is negative. Its dispensability is considered high if its relative market share is below 15 percent.

Paksaudi and Pakarab fertilizer corporations, and PSC are viable because they are operating at a profit. They also are difficult to divest quickly because of their large market share (over 15 percent) and it could take some time for the government to privatize them. The Lyallpur fertilizer units of NFC and PASSCO are viable but easy to divest immediately because their market shares are small and could be replaced by the private sector. The NFML, RECP, and CEC are all nonviable but difficult to divest in the short term because their large market shares would necessitate careful planning and time for privatization. However, Hazara Phosphate Fertilizer, Pakamerican Fertilizer Corporation, and PAD&SC are all nonviable and divestible enterprises that the government could immediately dispense with.

The strategy matrix in Figure 5-2 shows the best possible scenario for these institutions in the short and long run. The eventual goal for the government should be to withdraw from the market, leaving the enterprises either under private control or liquidating them if they serve no useful purpose. In general privatization could follow a number of different approaches going from the least to the most drastic depending on demand.

Figure 5-2
Strategy Matrix for Agricultural PEs in Pakistan

Enterprise	Short-term option	Long-term option
Pakarab Fertilizer	Operating lease	Divestiture
Paksaudi Fertilizer	Operating lease	Divestiture
Pakamerican Fertilizer	Liquidation	
Layallpur Chemical	Divestiture	
Hazara Fertilizer	Liquidation	
NFML	Management contract	Divestiture
Punjab Seed Corporation	Operating lease	Divestiture
PAD&SC	Liquidation	
PASSCO	Divestiture	
RECP	Management contract	Divestiture
CEC	Management contract	Divestiture

For example, government may *give a management contract* to a private firm for running the enterprise if it is viable and indispensable, or it may grant a private *lease* or *concession* if the PE is nonviable (under government management) but indispensable. Both options are generally exercised if the enterprise is considered indispensable, with management contracts initially used for nonprofitable entities and lease (or concession) used for organizations running at a profit.¹⁷ Dispensable enterprises, if they are profitable, are generally *divested* through privatization of ownership. However, if the enterprise is neither indispensable nor profitable it is *liquidated* through outright sale of its assets. The suggested options, are to liquidate the Pakamerican Fertilizer Corporation, the Hazara Fertilizer Corporation, and the Punjab Agricultural Development and Supplies Corporation.

The government should also sell off Lyallpur Chemical and PASSCO to the private sector in the immediate future. The National Fertilizer Marketing Corporation and the Rice and Cotton Export Corporations should be placed under management contracts until such time that they become profitable, and then divested. The Paksaudi and the Pakarab Fertilizer Corporations, along with Punjab Seed Corporation, should be given to the private sector on a lease or concession and then divested.

The process of implementing the reforms may be difficult, and political opposition is likely. Only sustained, concerted efforts will maintain the momentum through such actions as designing an equitable reform package, balancing farmers' short-term losses with other benefits, and building commitment to reform through dissemination of information, providing transparency of the process and consultations with the affected parties (Heaver and Israel 1986).

¹⁷ Methods of government withdrawal from the market have been discussed extensively in the literature. See Berg and Shirley (1987); Kikeri, Nellis and Shirley (1992); Rueda-Sabater, et al.

Pro-Market Policy Reform

The Government of Pakistan has moved ahead in recent years to accomplish many of the necessary macroeconomic reforms needed for providing stable free market conditions for agriculture. However, a lot more is needed for further easing of macroeconomic, fiscal, and trade policy constraints, deregulation of prices, development of appropriate regulations for protecting businesses and consumers, and financial sector reforms facilitating entry and enhanced competition.¹⁸

Macroeconomic Policy Reform. Eliminating administrative allocation of imports, exports, and foreign exchange are necessary for providing incentives to new entrants in the market for agriculture inputs and outputs. Not allowing the exchange rate to appreciate in real terms would also allow market for agricultural trade to develop.

Price reforms. Government efforts to stabilize agriculture commodity prices have not been very successful in many countries. Such efforts also have distorted price signals and encouraged underproduction. Moreover, they have subsidized the rich without much benefit to the poor. Efficiency pricing requires government withdrawal from state procurement and elimination of price control. Getting rid of costly output and input subsidies would remove the disincentives for both producers and private firms.

Regulatory Reforms. The government needs to strengthen those aspects of the regulatory environment that protect business and consumer interests, such as legal mechanisms for dispute resolution, enforcement of property rights, elimination of legal monopoly and other market preferences favoring public enterprises, elimination of entry and exit barriers for private firms, and so on. It also needs to strengthen the legal and regulatory mechanisms for preventing anticompetitive behavior and harmful environmental externalities. Transparency of laws and regulations are also necessary for removing business uncertainties.

Financial Reforms. Underdeveloped financial markets are one of the largest obstacles to development of the private sector. Many actions by the government can relieve the situation, such as easing of credit allocation enforced on private and public banks, lending support to microenterprises, and proper regulation of the money and capital markets to prevent fraud, inside information, and exploitation of investors.

¹⁸ For a comprehensive discussion of reforms to ease private sector constraints see Rueda-Sabater and Levy (1991) (op cit.).

Annex 1

Agricultural Public Enterprises in Pakistan

The National Fertilizer Marketing Limited

This company is a wholly owned subsidiary of the National Fertilizer Corporation of Pakistan. It was set up as a marketing division of NFC in July 1976 after prolonged failure of the provincial fertilizer distribution agencies to market the corporation's products. NFML has ten regional offices all over Pakistan to coordinate its extensive private dealer network of 2945 companies. It was a pioneer in its field, being the first to start national distribution, and till recently the first to market indigenous phosphatic fertilizer in the country. Today the main objectives of NFML are:

1. Sole marketing of NFC fertilizers and allocated share of imported fertilizers in the most cost efficient manner.
2. "To organize market requirements and to regulate sale of all products in order to curtail transportation cost and to ensure maximum sale of each factory's production throughout the country".
3. To provide technical and agronomic services to farmers for promoting the best use of fertilizers.

The company prepares its yearly marketing plan on the basis of total projected demand for the whole country, expected local production and the previous year's balance stocks. Following this preparation, the government is advised of fertilizer import requirements for the year. The operational plan is prepared on the basis of seasonal needs, cropping pattern and location of fertilizer plant sites.

The Punjab Seed Corporation (PSC)

This is an autonomous public corporation under the Department of Agriculture. Established in 1976, its primary objective at inception was to enhance the province's facilities for production, multiplication, procurement, processing, storage and marketing of certified seeds. Private seed companies started entering the market from the mid 1980s, but the original mandate of PSC has remained the same.

The corporation established its own seed farms, registered growers for multiplication of certified seed, established seed processing plants and set up a marketing system for seed distribution. The seed farms are used for production of basic seeds which are then given to contract farmers for multiplication. The farms at Khanewal (6269 acres) and Sahiwal (163 acres) have provided high yield of cotton seeds.

Multiplication of basic seeds are done through 600 contract growers. The corporation maintains quality control through its own seed testing laboratories attached with seed processing plants.¹⁹ There are three of the latter with PSC, at Khanewal, R.Y. Khan and Sahiwal. The combined capacity of the three processing plants are 58,000 tons of wheat, 28,000 tons of cotton, 1,410 tons of paddy and 2,620 tons of maize seeds.

A potato seed project was started by the corporation in 1978, which has produced about 4,061 metric tons of disease free potato seeds in the last few years. A new laboratory at Sahiwal is producing tissue culture seeds which has strong potentials for rapid multiplication using modern tissue culture techniques. PSC has also acquired an oilseed development project whose main objective is to increase production of traditional and non-traditional oilseed. The specific mandate of the corporation is to produce certified soybean, mustard and rape seeds from pre-basic and basis seeds supplied by government research institutes, at close proximity to the Sahiwal seed processing plant. The expected output of this venture is 37,000 maunds of soybean and 5,400 maunds of mustard and rape seeds per year.

The Punjab Agricultural Development and Supplies Corporation

Headquarters in Lahore, this corporation was established in 1973 by PAD&SC Act XXI of 1973. It is a marketing, distribution and price control parastatal which serves as an instrument for implementation of the Punjab Government's agricultural policies. Its principal functions are

- 1) To procure, store and distribute locally produced and imported fertilizers, gypsum, pesticides, seeds, agricultural machinery and implements and spares to farmers at the village level.
- 2) To stabilize fertilizer prices in the province of Punjab.
- 3) To implement the Punjab Fertilizer Control Order of 1973.
- 4) To compile statistical data on fertilizer supplies and distribution in the Province of Punjab.

The price stabilization function of the organization has been designed to operate irrespective of the costs involved, which puts it on a noncommercial footing vis-à-vis the private sector. The mandate of the organization extends to promoting the use of fertilizer, pesticide, quality seeds and farm implements. It has had very little success in promoting the use of small tractors. Promotion of gypsum was included in 1992 and by mid 1994 it has distributed about 1/2 million tons, at subsidized rates to the farmers.

The Pakistan Agricultural Storage and Services Corporation (PASSCO)

The organization started as a public limited company in 1973, fully owned by the federal government and six public sector banks. The authorized share capital of the company is Rs.100 million and the paid up capital Rs. 30 million. A quarter of this share is directly

¹⁹ However, final certification is given by the Federal Seed Certification Department after its own lab tests.

held by the government of Pakistan and the rest are owned by five nationalized banks²⁰ and the Agricultural Development Bank. The management of the corporation is with its Board of Directors consisting of nominees of the share holders and a managing director.

PASSCO's defined functions are:

- 1) Procurement and supply of wheat, gram, paddy/rice, potatoes, onions and sunflower seeds under the government support price mechanism.
- 2) Construction and operation of warehouses for the storage and disposal of food commodities.

The corporation started with wheat procurement in Punjab in 1974, later extending into Sindh, Balochistan and finally to NWFP in 1993. Procurement of paddy and grams in all the four provinces started in 1977 and 1982 respectively. Onion and potatoes, two other crops handled by PASSCO, were first given over to AMSL -another federal authority in 1984, but brought back again.

Wheat is procured by PASSCO at the support price fixed by government, and then sold to the provincial authorities of Punjab, Sindh, Balochistan and NWFP, AJK and the Northern Areas, defense forces, international agencies and the World Food program. The sale price equals the support price plus a handling markup fixed by the government. All other crops procured by PASSCO are sold through open tender and any loss incurred due to difference between purchase price and sale price is reimbursed by the government.²¹

Paddy procured under the support price scheme is either processed in PASSCO's owned mills in Punjab and Balochistan or outside rice mills working on contract before sale through open tender in the market. Any loss on this operation incurred by the corporation are reimbursed by the Finance Division of the government of Pakistan. Till recently PASSCO had to sell its rice directly to the Rice Export Corporation of Pakistan. But now it has switched to open market sale. Similar selling procedure and loss reimbursement by the government exists for onions and potatoes procured by PASSCO.

Food storage built up by PASSCO consists of 312 godowns, each with 1100 tons of bagged storage capacity. The corporation also undertakes construction work and has built 500 food warehouses for the federal government, and a number of similar facilities for the provincial authorities. For some reason it has also been involved in the construction and rehabilitation of certain educational institutions in Punjab.

The Rice Export Corporation of Pakistan (RECP)

This corporation is a federal government agency under the Ministry of Commerce. Established in 1974 under the Companies Act, it is a management contract company that

²⁰ Namely, National Bank of Pakistan, Habib Bank Ltd., United Bank Ltd., Muslim Commercial Bank Ltd., and Allied Bank of Pakistan Ltd.

²¹ With the exception of gram, where the corporation absorbs the loss on its own account.

administers a set of assets on behalf of the government of Pakistan. Its specific mandate are:

- 1) To implement the government's support price system for rice.
- 2) To export rice on behalf of the government.

The corporation had two subsidiaries - Pakistan National Produce Company Limited and Doaba Rice Mills Limited, which were privatized in 1993.

RECP procures rice directly from growers and intermediate agents with financing through nationalized commercial banks, who act as paying agents for RECP. Marketing is done through international open tenders. This method of selling has certain disadvantages because in its principal market for coarse rice - the Middle East - tender purchase is not favored. Not too long back, the base price for rice used to be fixed in the Gulf Council (GCC) meetings. This has been replaced by open tenders now.

The Cotton Export Corporation (CEC)

This is a federal agency under the Ministry of Commerce. It was established in 1973 with a chairman and Board of Directors, and members from the Ministries of Finance, Commerce, Food and Agriculture and the Pakistan Central Cotton Committee. Operational management lies with an executive committee consisting of the chairman and four in-house directors. The essential mandate of CRC include:

- 1) Export of raw cotton.
- 2) Sale of cotton to local textile mills on government directives.
- 3) Implementation of government policies on cotton.
- 4) Implementing the government price support program for cotton.
- 5) Improvement of cotton ginning.
- 6) Standardization.
- 7) Development of cotton storage facilities.

The corporation has an authorized capital of Rs. 50 million, which has been fully paid-up by the government of Pakistan. Its Head office is in Karachi, and there are three regional offices and 11 zonal offices in Punjab and Sindh. It also has a regional office in Hongkong. The personnel strength in 1994 is 1,174.

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ISBN 0-8213-3459-X