

## **AGRICULTURAL POLICY ANALYSIS PROJECT, PHASE II**

Sponsored by the

### **U.S. Agency for International Development**

Assisting AID Bureaus, Missions and Developing Country Governments  
to Improve Food and Agricultural Policies

Prime Contractor:

**Abt Associates Inc.**

Subcontractors:

**Harvard Institute for International Development, Harvard University**

**Food Research Institute, Stanford University**

**North Carolina State University**

**Abel, Daft & Earley**

**International Science and Technology Institute**

**International Food Policy Research Institute**

---

**Project Office** 4800 Montgomery Lane, Suite 500, Bethesda, MD 20814 • Telephone: (301) 913-0500 • Telex: 312635

AID Contract No. DAN-4084-Z-00-8034-00

# **AGRICULTURAL POLICY ANALYSIS PROJECT, PHASE II**

Under contract to the Agency for International Development, Bureau for Research and Development, Office of Agriculture  
**Project Office** Hampden Square, 4800 Montgomery Lane, Suite 600, Bethesda, MD 20814 • Telephone: (301) 913-0500  
Telex: 312636 • Fax: (301) 652-3839

DA 21359

## **POST-RATIONING WHEAT POLICY IN PAKISTAN: ISSUES AND OPPORTUNITIES**

**December 1992**

**APAP II  
Colaborative Research Report  
No. 345**

**Prepared for**

**USAID/Pakistan**

**under**

**Agricultural Policy Anlysis Project, Phase II (APAP II)**

**Contract Nos. DAN-4084-Z-00-8034-00 and DAN-4084-Z-11-8034-00**

**Author: Gary Ender, Abt Associates Inc.**

**Prime Contractor: Abt Associates Inc., 55 Wheeler Street, Cambridge, MA 02138 • (617) 492-7100**

**Subcontractors: Harvard Institute for International Development, Harvard University, One Eliot Street, Cambridge, MA 02138 • (617) 495-9779  
Food Research Institute, Stanford University, Stanford, CA 94305-6084 • (415) 723-0693  
North Carolina State University, Department of Economics and Business, Box 7645, Raleigh, NC 27695-7645 • (919) 515-3107  
Abel, Daft & Earley, 1410 King Street, Alexandria, VA 22314 • (703) 739-9090  
International Science and Technology Institute, 1129 20th Street, NW, Suite 800, Washington, D.C. 20036 • (202) 785-0831  
International Food Policy Research Institute, 1200 17th Street, NW, Washington, D.C. 20036 • (202) 862-5600**

## TABLE OF CONTENTS

<b>LIST OF TABLES</b> .....	iii
<b>LIST OF FIGURES</b> .....	iii
<b>LIST OF ACRONYMS</b> .....	iv
<b>ACKNOWLEDGEMENTS</b> .....	v
<b>EXECUTIVE SUMMARY</b> .....	vi
<b>1. INTRODUCTION</b> .....	1
<b>2. RECENT WHEAT POLICY: OBJECTIVES AND KEY ACTIONS</b> .....	3
2.1 Objectives of Wheat Policy .....	3
2.2 Abolition of Rationing .....	3
2.3 Financial Accord Among the Provinces and the Federal Government .....	3
2.4 Wheat Policy Dialogue and the New Government Philosophy .....	4
<b>3. PAKISTAN'S WHEAT ECONOMY SINCE 1987</b> .....	5
3.1 Stability of Prices .....	5
3.2 Price Level and Availability to (Urban) Consumers .....	8
3.3 Cost .....	9
3.4 Adequacy of Quantities Available to Those at Nutritional Risk .....	12
3.5 Production and Self-Sufficiency .....	13
<b>4. WHEAT POLICY ISSUES AND OPPORTUNITIES</b> .....	16
4.1 Stability of Prices .....	16
4.2 Price Level and Availability to (Urban) Consumers .....	16
4.3 Cost .....	19
4.4 Adequacy of Quantities Available to Those at Risk .....	19
4.5 Production and Self-Sufficiency .....	20
4.6 Benefits and Costs of Current Wheat Policies .....	20
4.7 Recommendations .....	22
<b>5. CONCLUDING NOTES: THE IMPORTANCE OF QUALITY AND A     RECOMMENDATION FOR FURTHER RESEARCH</b> .....	24

## LIST OF TABLES

Table 1	Pakistan: Import Unit Values of Wheat and Retail Prices of Flour in Karachi . . . . .	8
Table 2	Pakistan: Nominal Rates of Protection for Flour . . . . .	9
Table 3	Pakistan: Wheat Supply and Government Operations . . . . .	10
Table 4	Pakistan: Wheat Subsidies . . . . .	11
Table 5	Pakistan: Procurement and Release Prices of Wheat . . . . .	12
Table 6	Pakistan: Government Recovery of Domestic Wheat Marketing Costs . . . . .	13
Table 7	Pakistan: Recovery of Bag Cost in Government Wheat Operations . . . . .	14
Table 8	Pakistan: Nominal Rate of Protection of Wheat . . . . .	15

## LIST OF FIGURES

Figure 1	Pakistan: Import Parity (Border) Price at Farmgate and Producer Price of Wheat . . . . .	5
Figure 2	Pakistan: Wholesale Wheat Prices . . . . .	6
Figure 3	Pakistan: Retail Flour Prices . . . . .	6
Figure 4	Pakistan: Wheat Price Spreads (Betw. Highest & Lowest Monthly Average Prices) . . . . .	7
Figure 5	Pakistan: Flour Price Spreads (Betw. Highest & Lowest Monthly Average Prices) . . . . .	7
Figure 6	Pakistan: Per Capita Wheat Production in the 1980s . . . . .	15

## **LIST OF ACRONYMS**

<b>ASSP</b>	<b>Agricultural Sector Support Program</b>
<b>GATT</b>	<b>General Agreement on Tariffs and Trade</b>
<b>HYV</b>	<b>High-Yielding Variety</b>
<b>NRP</b>	<b>Nominal Rate of Protection</b>
<b>PASSCO</b>	<b>Pakistan Agricultural Storage and Services Corporation</b>
<b>USAID</b>	<b>United States Agency for International Development</b>
<b>WHO</b>	<b>World Health Organization</b>

## **ACKNOWLEDGEMENTS**

The author wishes to thank the following three individuals for their steadfast collegiality during the author's stay in Islamabad. Abdul Wasay, Akhtar Mahmood, and Dr. Zakir Hussain Rana were always ready to share their considerable knowledge and insights. Without their help, this study would not have been possible. Errors of course remain the responsibility of the author.

## EXECUTIVE SUMMARY

Wheat policy is the most expensive and visible agricultural policy in Pakistan. Its cost has been increasing, while the positive effects became harder to identify and the negative effects continued to grow. The nominal cost of the wheat subsidy grew from Rs. 3.2 billion at the end of the rationing period (1984/85-1986/87) to Rs. 5.8 billion in the post-rationing period (1987/88-1990/91); the real cost increased over 40 percent. The abolition of rationing in 1987 was a substantial shift in wheat policy. The new policy, however, promised unlimited releases and left the Government open to incurring much higher costs.

The objectives of this study are to:

- Review progress in the wheat sector vis-a-vis policy objectives and changes made since the end of rationing,
- Distill key wheat policy issues that need to be addressed, and
- Recommend appropriate courses of action to continue the reform of wheat policy in line with previous policy dialogue and the current Government's philosophy.

The overall assessment of this study is that the cost of the wheat subsidy is high relative to its benefits. On the consumption side, the unintended beneficiaries outnumber the intended. On the production side, the negative impact is clear. It is true that the cost of the subsidy has been reduced very recently. The Government, however, has not given any clear signs of its intentions for future changes in wheat policy. Thus the cost could just as easily increase again, particularly if the promise of unlimited releases at a fixed price is maintained.

On the basis of the analysis, the following actions are recommended for the Government's consideration. The Government should make a clear statement of a new wheat policy, as it did when rationing was ended. The new policy should include:

- Phasing out the subsidy on imported wheat by raising the release price significantly each year for the next two or three years,
- Phasing out regular releases into the market,
- Reducing the Government role to holding back-up stocks and getting the private sector back into storage,
- Transferring storage capacity from the Government to the private sector, initially through leases,
- Building government stocks from commercial imports and procurement at market prices,

- **Permitting the private sector to import wheat (on a permanent basis), and**
- **Targeted subsidies for those at nutritional risk.**

**The concluding notes discuss the importance of quality-related factors in wheat marketing and a make recommendation for further research into the extent of marketed surplus.**

## 1. INTRODUCTION

Wheat policy is the most expensive and visible agricultural policy in Pakistan. What is worrisome about Pakistan's wheat policy is that, until very recently, its cost was clearly increasing, while the positive effects became harder to identify and the negative effects continued to grow. The nominal cost of the wheat subsidy grew from Rs. 3.2 billion at the end of the rationing period (1984/85-1986/87) to Rs. 5.8 billion in the post-rationing period (1987/88-1990/91); the real cost increased over 40 percent. Household surveys do not show an increase in per capita wheat consumption in the 1980s as a result of the lower real flour prices to consumers,<sup>1</sup> while subsidized imports grew from an average of 420,000 tons per year in the last five years of rationing (1982/83-1986/87) to 1.14 million tons in the five years after the end of rationing (1987/88-1991/92). The Government did achieve a significant measure of domestic price stability, but the question must be asked, At what cost? The dampening of the producer price that has been inseparable from the price stabilizing mechanisms has contributed to the stagnation and possibly the beginning of a downward trend in per capita production, further reinforcing the need to import. Meanwhile, malnutrition is still common among women and young children.<sup>2</sup>

The abolition of rationing in 1987 was a substantial shift in wheat policy, for which the Government of Pakistan deserves credit. The shift to the new policy regime was managed carefully to avoid disruption, particularly through the build-up of stocks. The new policy, however, because it promised unlimited releases at a subsidized price, left the Government open to incurring the problems mentioned above.

Solutions for these problems exist in new mixes of public and private sector involvement in the wheat market. If policymakers are to alter the course of wheat policy, an understanding of the key objectives of wheat policy and the success so far in achieving these objectives should first be available. Sufficient time has elapsed that an evaluation of post-rationing policy is possible; this study carries it out.

The objectives of this study are to:

- Review progress in the wheat sector vis-a-vis policy objectives and changes made since the end of rationing.
- Distill key wheat policy issues that need to be addressed.

---

<sup>1</sup> For a more complete analysis of household survey results in the context of wheat policies of the past two decades, see Ender, Gary, Abdul Wasay and Akhtar Mahmood, *Wheat Price Policies in Pakistan: Should There Be A Subsidy?* Washington, DC: Abt Associates Inc., APAP II Collaborative Research Report No. 333. October 1991.

<sup>2</sup> See section 3.4, below.

- **Recommend appropriate courses of action to continue the reform of wheat policy in line with previous policy dialogue and the current Government's philosophy.**

**The organization of the study is by policy objective. That is, the most important objectives of wheat policy will be enunciated and then used to structure both the analysis and recommendations sections. The main sections of the study are as follows. The first section sets out the Government's main objectives in its wheat policy and related history. Next there is an analysis of the effects of wheat policy, and finally, the recommendations section, entitled, "Issues and Opportunities." Concluding notes stress the importance of quality issues alongside those based on quantity (like food security) and mention an important topic for further research.**

## **2. RECENT WHEAT POLICY: OBJECTIVES AND KEY ACTIONS**

### **2.1 Objectives of Wheat Policy**

The most important objectives of the Government's wheat policies have for many years been to:

- Stabilize producer and consumer prices
- Ensure adequate quantities and lower prices to urban consumers (and indirectly to other areas)
- Limit the budgetary cost
- Ensure adequate quantities to those at risk (the poor, women, and children)
- Promote production and self-sufficiency

These objectives are induced both from the implementation of the policies and from general statements of policy. As such they represent the author's interpretation of those policy objectives that are most important, in the presumed order of priority to the Government. As will be seen below, this order of priority is deduced from the effects of the policies as they were actually implemented. For example, domestic prices have been much more stable than international prices, and production and self-sufficiency have suffered from producer prices that have been below import parity prices. Urban areas get the direct benefits of subsidized distribution of wheat because public *godams* are located in urban areas.

### **2.2 Abolition of Rationing**

To pursue its wheat policy objectives before 1987, Pakistan had a ration system. The Government eliminated rationing because it did not meet these objectives effectively. The major difference between rationing and post-rationing wheat policy has been the notion of limited eligibility for the benefits of subsidized public distribution under rationing vs. unlimited supply at a fixed price in the latter period.

### **2.3 Financial Accord Among the Provinces and the Federal Government**

The recent financial accord among the Provinces and the Federal Government had an important impact on the implementation of wheat policy. The provinces got the rights to certain royalties (i.e., on hydropower and natural gas) generated within their borders. At the same time, the Federal Government stopped making block transfers of budgetary resources to the Provinces for items like the wheat subsidy. The domestic part of the wheat subsidy, which covers the loss on the procurement and sale of local wheat, is now borne by the Provinces, while the cost of subsidizing imports still falls to the Federal Government. The Federal Government retains control of wheat imports and the substantial subsidy involved. It also has a large measure of control over the level of the domestic subsidy because it sets the procurement and

release prices.<sup>3</sup> Handling costs incurred by the Provincial Food Departments on domestic wheat are, however, now paid by the Provincial Governments. Thus these Governments have a much greater incentive to control these costs than they did before.

#### **2.4 Wheat Policy Dialogue and the New Government Philosophy**

Shortly after abolishing rationing, the Government of Pakistan entered into a policy dialogue with the United States Agency for International Development in Pakistan (USAID/-Pakistan) in conjunction with the Agricultural Sector Support Program (ASSP). As a result of this dialogue, the Government agreed to make certain changes in agricultural policies. Most important (to USAID) among them was increasing the gap between the release and procurement prices. The previously very small gap not only resulted in the well-known subsidy but also effectively prevented the private sector from performing the storage function in the wheat market: there was almost no price rise over the marketing season (to cover storage costs) because the Government's price was fixed at the same low level throughout the year.

In 1988/89, the Government began to increase the price gap. The largest recent increase in both procurement and release prices (in 1991/92) was put into effect by the new government of Prime Minister Nawaz Sharif. The gap between the two prices rose for the first time ever to over 10 percent, and there was a significant decrease in procurement. This new wheat price structure and the associated decline in procurement are consistent with the new Government's philosophy of getting itself out of production and marketing activities. In conjunction with this new philosophy, the Government is carrying out the privatization of the nationalized commercial banks and several key agribusiness industries, including fertilizer and ghee. In the case of wheat, however, the Government has not clearly specified its goals.

---

<sup>3</sup> The Provinces are consulted in this decision: the Cabinet, including the Chief Ministers of the Provinces, decides. If there is not agreement, final say rests with the Prime Minister.

### 3. PAKISTAN'S WHEAT ECONOMY SINCE 1987

#### 3.1 Stability of Prices

One is led to believe that price stability was a high priority of the Government by the statistical record, as reflected in the following figures. The effect of the Government's ban on private imports or exports of wheat and the Government's releases into the domestic market is shown in Figure 1. Comparing the border price and domestic producer prices reveals that the latter were much more stable during both the late ration and post-ration periods. Figure 2 and Figure 3 show the annual domestic wheat and flour prices in Lahore and Karachi, cities in surplus and deficit areas, respectively. These trends are typical of those in other Pakistani cities, and they again show that prices were quite stable. Finally, Figure 4 and Figure 5 present a measure of the variability of average monthly prices during the year. With the exception of one or two years—in 1984 there was a very bad crop—the highest monthly price was about 15 to 20 percent higher than the lowest month's for wheat and about 10 percent higher for flour. This, again, is a picture, of quite stable prices.

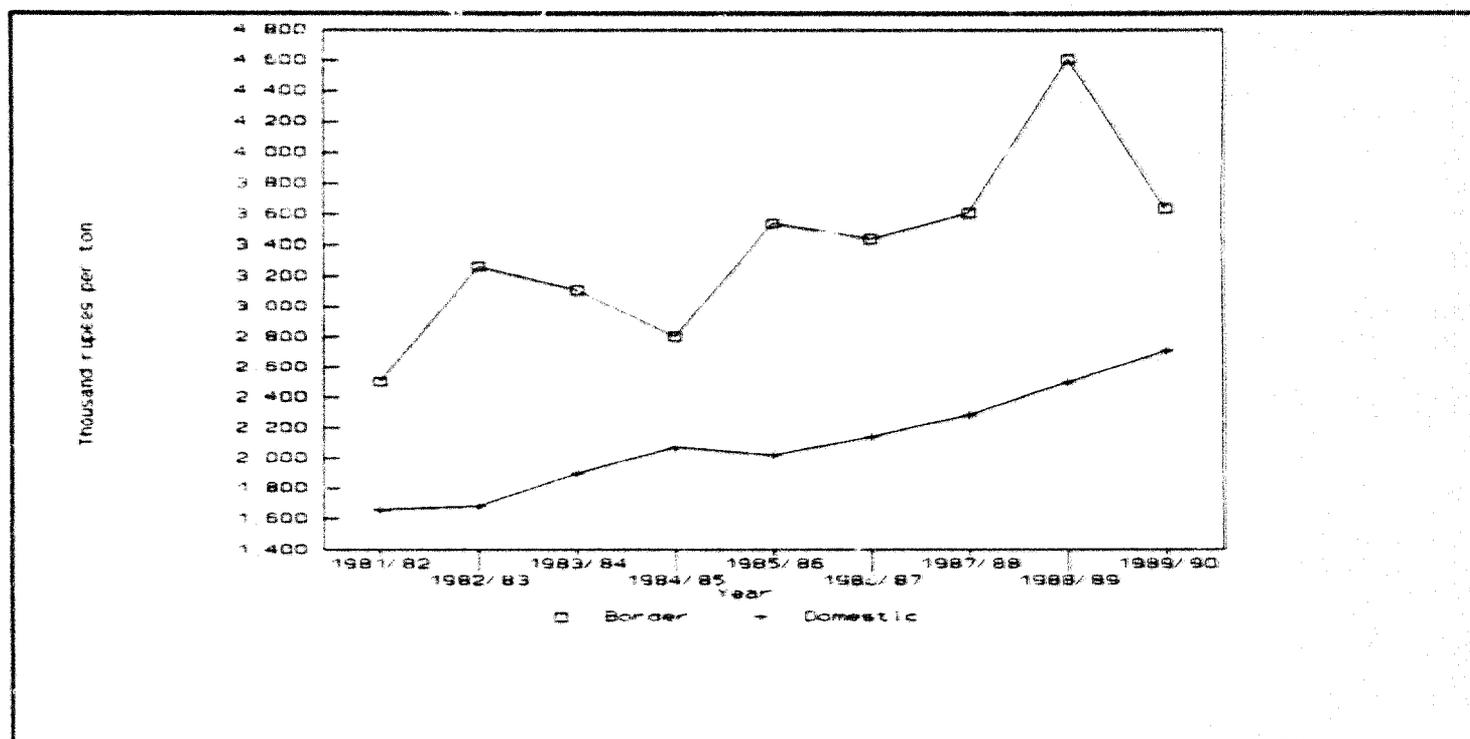


Figure 1 Pakistan: Import Parity (Border) Price at Farmgate and Producer Price of Wheat

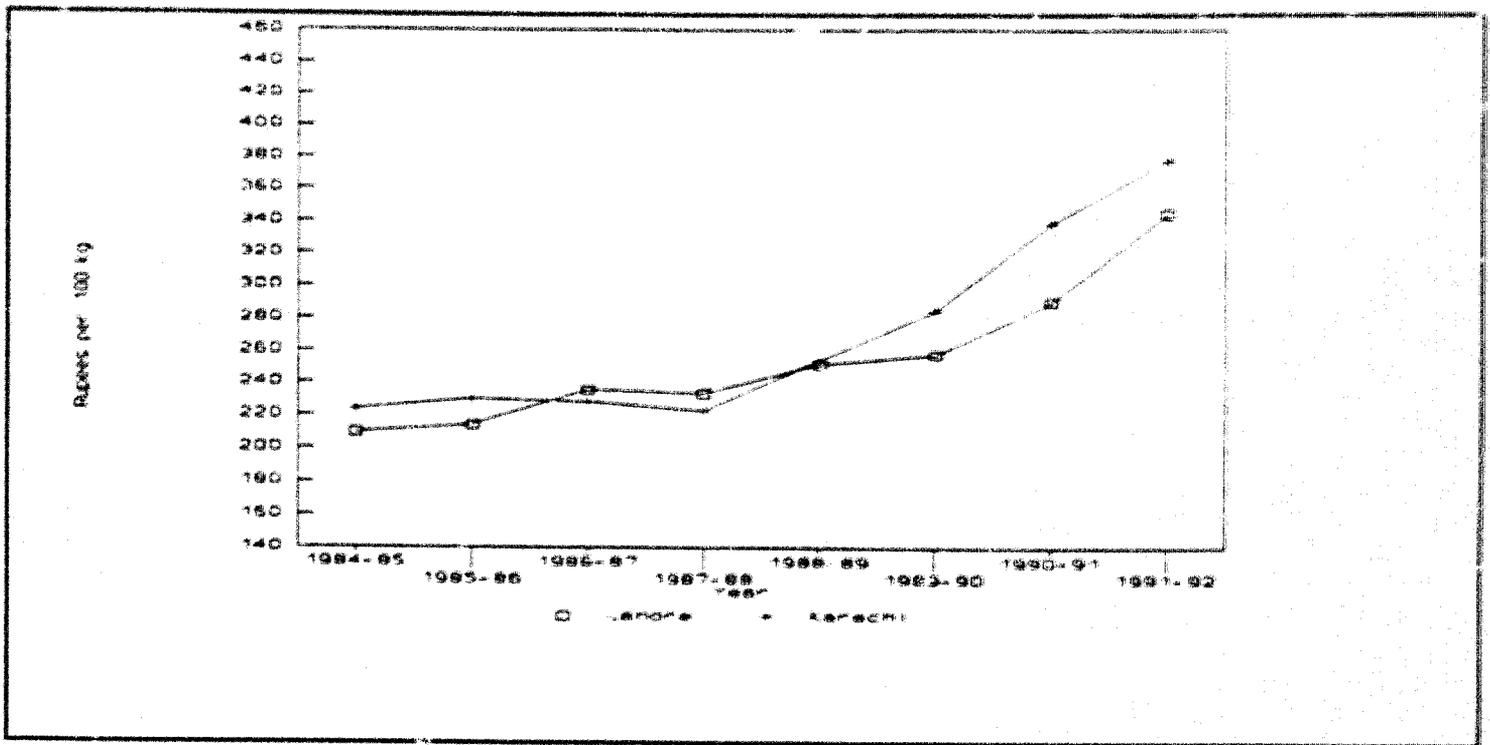


Figure 2 Pakistan: Wholesale Wheat Prices

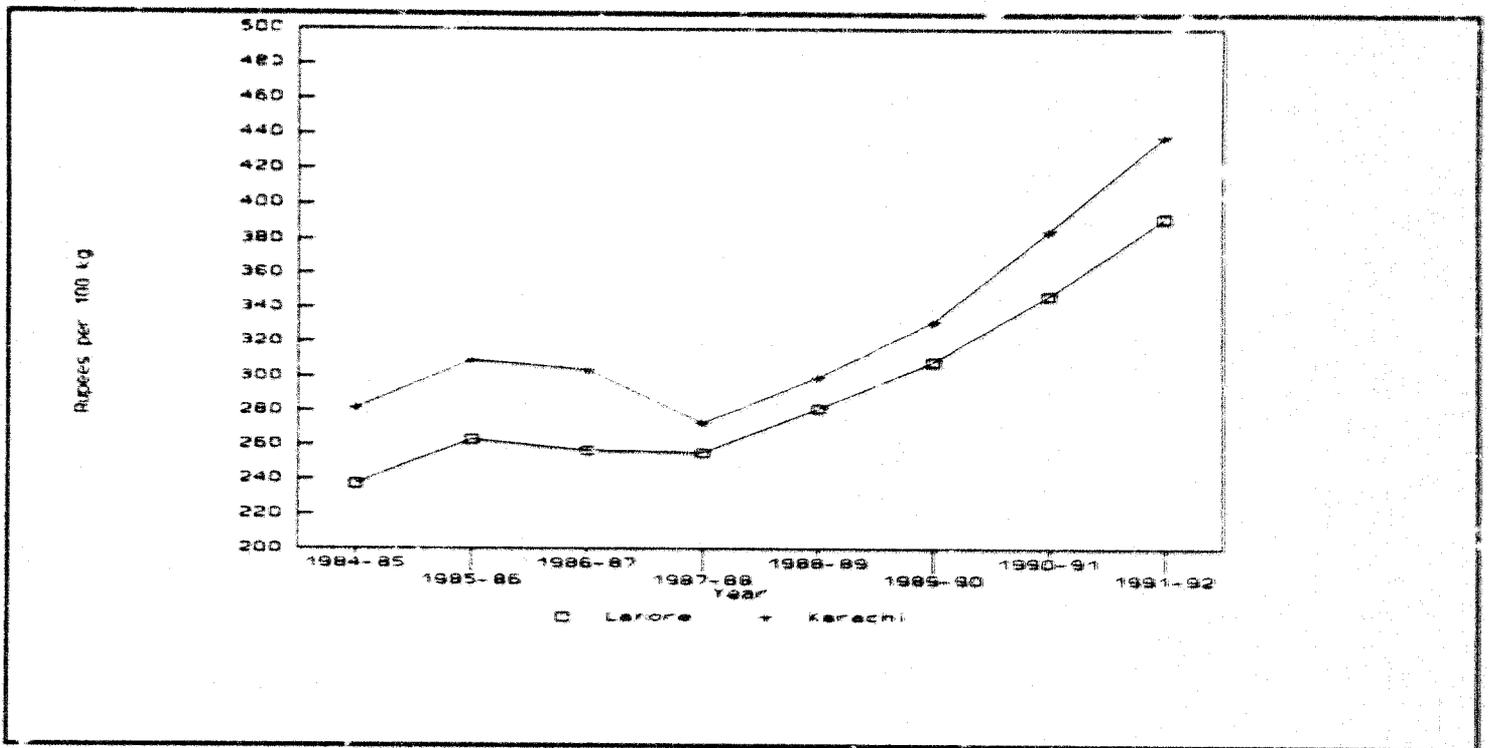
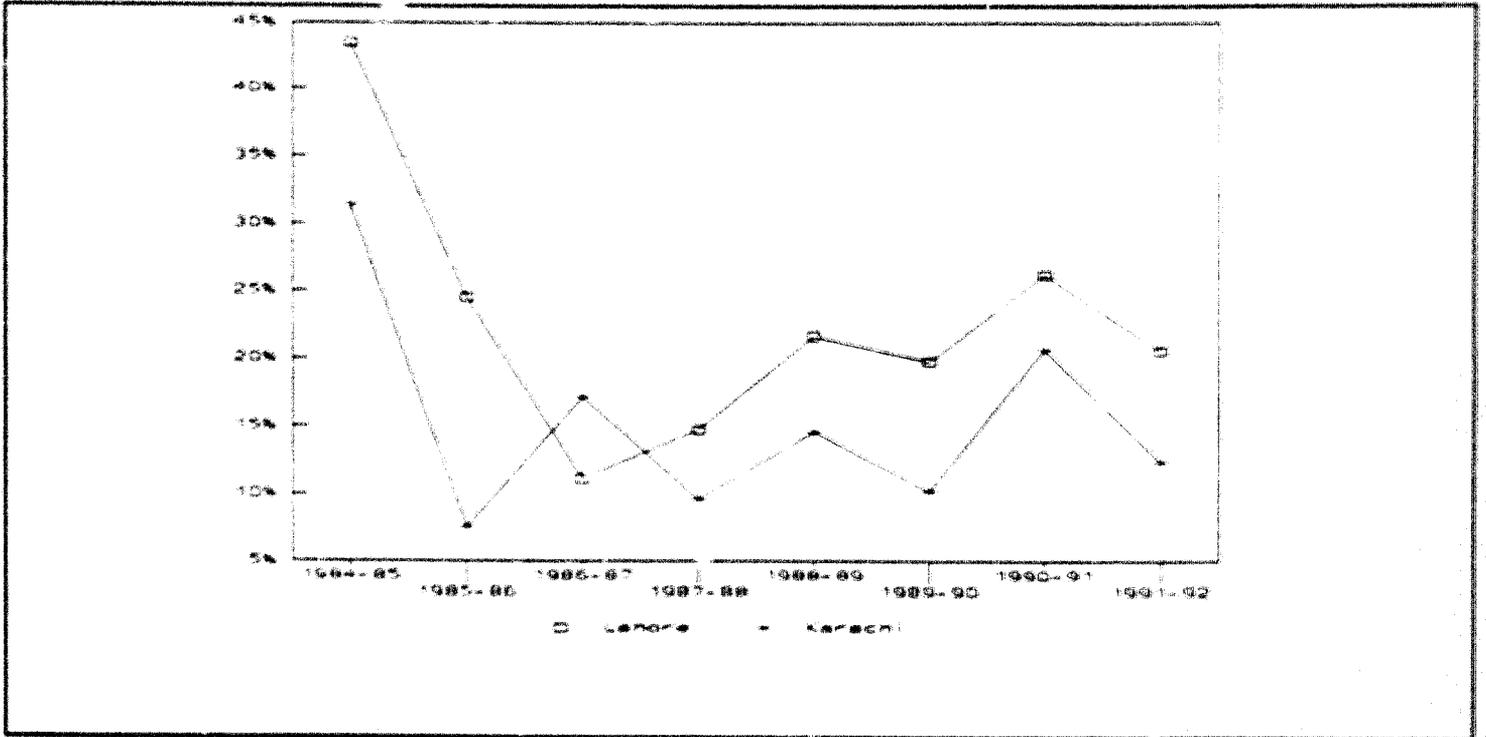
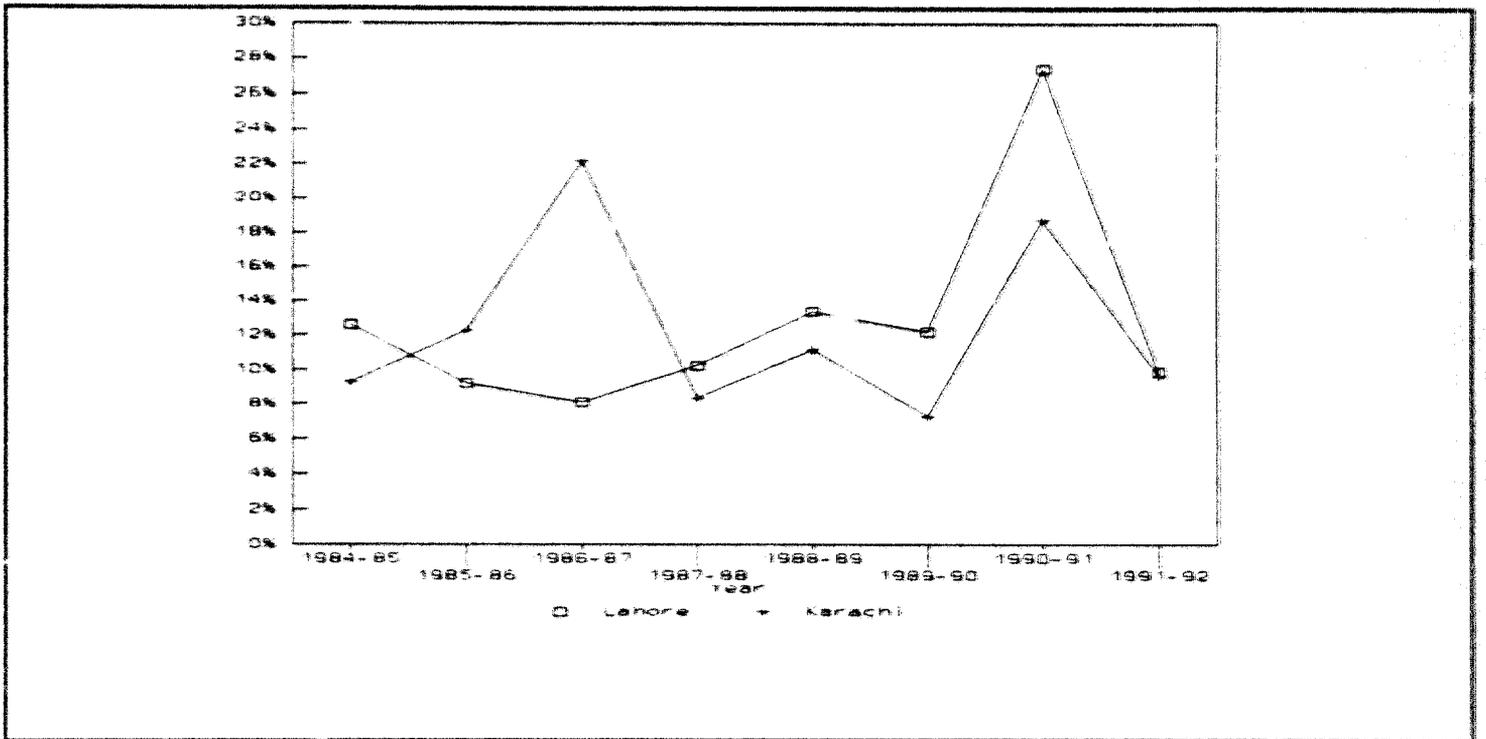


Figure 3 Pakistan: Retail Flour Prices



**Figure 4 Pakistan: Wheat Price Spreads (Betw. Highest & Lowest Monthly Average Prices)**



**Figure 5 Pakistan: Flour Price Spreads (Betw. Highest & Lowest Monthly Average Prices)**

Along with stabilization of prices, the Government successfully pursued its program of lowering the price of flour in urban and other areas. Evidence for this effect is found in comparisons of domestic and international prices. One simple comparison is between the import unit value of wheat (at Karachi) and the retail price of flour in Karachi. These data are shown in Table 1. In most years shown, the price of flour at the retail level was less than the cost of imported wheat; that is, even without allowing for the costs of unloading, local transport and milling, flour in Karachi was selling for less than the cost to the Government of imported wheat. For consumers in other parts of Pakistan, the same kind of comparison can be made, and allowance can also be made for handling costs. In general, the comparison will show an even greater benefit to consumers: flour prices in Karachi are generally the highest of any city in the country, and the cost of importing wheat into other parts of the country will always be higher than into Karachi. Thus the subsidy that is the difference between the cost of imported wheat (when converted to flour) and domestic flour will be larger in the rest of Pakistan. Estimates of this subsidy (expressed as a nominal rate of protection) for retail flour range from 6 to 33 percent over the period from 1984/85 to 1990/91 (see Table 2).

The Government was able to influence the domestic price of flour because it had control of substantial quantities of wheat. Procurement by the Provincial Food Departments and Pakistan Agricultural Storage and Services Corporation (PASSCO) and imports by the Ministry of Food, Agriculture, and Cooperatives resulted in significant stocks. These stocks were regularly released (primarily to millers) over the year to ensure adequate supplies of wheat to urban areas. The magnitude and trends in Government wheat operations are shown in Table 3. During the five-year periods 1982/83-1986/87 and 1987/88-1991/92, the Government's commitment to supplying the wheat market increased, as releases as a percentage of total supply went from 25 to 34 percent. This commitment did not come from procuring a higher percentage of production, but rather by increasing the average level of subsidized imports.

**Table 1 Pakistan: Import Unit Values of Wheat and Retail Prices of Flour in Karachi**

Year	Border,	Karachi,
	Wheat	Flour
	Rs./ton	
1984-85	2,807	2,817
1985-86	2,472	3,095
1986-87	3,132	3,039
1987-88	3,079	2,728
1988-89	3,229	2,996
1989-90	4,197	3,313
1990-91	3,208	3,849

Sources: Economic Survey, 1990/91, Statistical Supplement and Monthly Bulletins of Statistics

**Table 2 Pakistan: Nominal Rates of Protection for Flour**

	Unit	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
Import Unit Value (Wheat)	Rs./ton	2,807	2,472	3,132	3,079	3,229	4,197	3,208
Handling, Transport, and Milling	Rs./ton	445	470	495	520	545	570	590
Import parity price of flour	Rs./ton	3,252	2,942	3,627	3,599	3,774	4,767	3,798
Domestic price of flour inland	Rs./ton	2,408	2,639	2,686	2,620	2,899	3,188	3,561
Nominal Rate of Protection	Percent	26%	10%	26%	27%	23%	33%	6%

Sources: Economic Survey, 1990-91, Monthly Bulletins of Statistics, author's estimates of marketing costs based on Government incidentals.

### 3.3 Cost

As a result of increased imports and releases, the cost of the wheat subsidy has increased in the post-rationing period. The relevant figures are shown in Table 4. The amount shown under "Federal" represents the loss from selling imported wheat at the release price, while that under "Provincial" represents the loss on the Government's domestic operations. The nominal cost of the total wheat subsidy went from over Rs. 3 billion at the end of rationing to almost Rs. 6 billion afterward. The real cost of the subsidy increased by over 40 percent.

The Government modified its domestic pricing policies in conjunction with the policy dialogue conducted under ASSP, which began in 1988/89. A substantial increase in the gap between the release and procurement prices was brought about through this dialogue and the Government's bold action. The most significant action was the increase in the release price in 1991/92—over 19 percent—after which much-predicted consumer protests did not occur.<sup>4</sup> The history of procurement and release prices is shown in Table 5. The new price structure resulted in the stabilization of the nominal value of the domestic subsidy, and a reduction in its real cost. The widening of the gap, supplemented by additional recoveries of the costs of bags used in distribution, resulted in a dramatic increase in total recoveries per unit of wheat distributed (see

<sup>4</sup> In 1991/92 the Government also announced the Utility Stores Corporation (USC) scheme, under which it would sell flour to the public at subsidized rates. The modest number of outlets of the USC preclude a major impact on the market or on the level of the subsidy.

**Table 3 Pakistan: Wheat Supply and Government Operations**

	Production (April-May harvest)	Imports (Jul-Jun)	Imports (excl. Afghan Program) (May-Apr)	Stock (May 1)	Supply b/ (May-Apr)	Procure- ment (May-Apr)	Procure- ment as a percent of Production c/	Releases	Releases as a percent of Supply (May-Apr)
Million metric tons									
1980/81	11.5	0.3	0.1	0.7	11.4	3.0	28%	2.8	24%
1981/82	11.3	0.4	0.1	0.8	12.4	4.0	35%	3.2	26%
1982/83	12.4	0.4	0.0	1.7	13.0	3.1	28%	3.1	24%
1983/84	10.9	0.3	0.0	1.6	14.0	3.8	31%	3.3	23%
1984/85	11.7	1.0	0.6	1.8	13.2	2.3	21%	3.7	28%
1985/86	13.9	1.9	1.6	0.8	14.0	2.5	22%	3.5	25%
1986/87	12.0	0.4	0.0	1.2	15.2	5.0	36%	3.8	25%
1987/88	12.7	0.6	0.0	2.5	14.5	4.0	33%	5.2	36%
1988/89	14.4	2.2	1.8	1.2	15.6	3.5	28%	5.7	37%
1989/90	14.3	2.1	1.6	0.6	16.6	4.1	29%	5.0	30%
1990/91	14.6	1.0	0.6	1.5	16.5	4.4	31%	5.6	34%
1991/92 a/	15.4	1.7	1.7	0.8	17.1	3.2	22%	5.5	32%
<b>Averages</b>									
			0.42			3.4	27%	3.5	25%
			1.14			3.8	28%	5.4	34%

a/ The preliminary estimate for 1992 harvest was 14.66 mmt; the second estimate is 15.43 mmt.

b/ Supply during a wheat year (May-Apr) is equal to opening (public sector) stock on May 1, + wheat harvested before the beginning of wheat year, plus imports during the wheat year.

c/ Procurement for a wheat year as percent of immediately preceding harvest.

Source: Government of Pakistan

Table 6). During the rationing period, the release price was often less than the procurement price. By contrast, in 1990/91 the Government recouped approximately 74 percent of its domestic marketing costs.

In 1990/91, the Government increased its recovery of bag costs to 100 percent (see Table 7). In the following year, if the Government had stuck to this 100 percent cost recovery on bags, it would have recouped approximately 90 percent of its domestic marketing costs. In that year, however, it bargained away some of this cost recovery in an effort to enlist the millers' help in stabilizing prices. Overall cost recovery on domestic wheat operations dropped to 70 percent.

**Table 4 Pakistan: Wheat Subsidies**

Fiscal year	Federal	Provincial	Total	GDP deflator 1980-81 = 100	
	Rs. Million				
1984/85	1,371	1,517	2,888	131.99	
1985/86	1,792	2,030	3,822	136.33	
1986/87	160	2,625	2,785	142.49	
1987/88	368	3,549	3,917	156.19	
1988/89	5,230	2,056	7,286	169.60	
1989/90	5,145	2,363	7,508	180.42	
1990/91	2,405	1,988	4,393	199.67	
<u>Averages</u>				<u>ratio</u>	
1984/85-1986/87			3,165	137	23
1987/88-1990/91			5,776	176	33
			1.82	1.29	1.42

Source: Economic Survey 1990/91, Statistical Supplement.

The picture was even less rosy on the import side. While the increase in the release price also made the unit import subsidy lower than it would have been, the aggregate import subsidy grew in the post-rationing period, topping Rs. 5 billion in 1988/89 and 1989/90. In 1990/91, the subsidy on imports dropped, partly because the world price of wheat fell. Another reason for the decline in the subsidy was a dip in the volume of imports below its apparent new norm of 1.7 million tons to only 0.6 million tons.

### 3.4 Adequacy of Quantities Available to Those at Nutritional Risk

When the ration system was abolished, it is clear that there was no semblance of targeting in the program. Leakage and abuses were widespread. The set of price and distribution policies that have replaced rationing, including "unlimited" releases at a subsidized price, do not address the question of nutritional adequacy of specific groups; targeting is not attempted. In 1991/92, the Government initiated a scheme through the Utility Stores Corporation to sell subsidized flour. The intention of this scheme, too, however, was only to depress the market price and not to target any specific groups in the population.<sup>5</sup> Thus, aside from small programs or projects that may service particular areas, at this time the Government does not have a program to enhance the nutritional status of those most at risk.

<sup>5</sup> Personal communication with Managing Director, Utility Stores Corporation, June 16, 1991.

**Table 5 Pakistan: Procurement and Release Prices of Wheat**

	Procurement Price		Release Price		Difference	
		Percent change		Percent change		Percent change
	(Rs./ton)					
1978/79	991.25	0.0%	950.00	0.0%	-41.25	0.96
1979/80	1,205.75	21.6%	1,000.00	5.3%	-205.75	0.83
1980/81	1,450.00	20.3%	1,220.00	22.0%	-230.00	0.84
1981/82	1,450.00	0.0%	1,325.00	8.6%	-125.00	0.91
1982/83	1,450.00	0.0%	1,567.40	18.3%	117.40	1.08
1983/84	1,600.00	10.3%	1,702.90	8.6%	102.90	1.06
1984/85	1,600.00	0.0%	1,702.90	0.0%	102.90	1.06
1985/86	1,750.00	9.4%	1,702.90	0.0%	-47.10	0.97
1986/87	2,000.00	14.3%	1,702.90	0.0%	-297.10	0.85
1987/88	2,000.00	0.0%	2,000.00	17.4%	0.00	1.00
1988/89	2,062.50	3.1%	2,100.00	5.0%	37.50	1.02
1989/90	2,125.00	3.0%	2,300.00	9.5%	175.00	1.08
1990/91	2,400.00	12.9%	2,600.00	13.0%	200.00	1.08
1991/92	2,800.00	16.7%	3,100.00	19.2%	300.00	1.11
1992/93	3,100.00	10.7%	3,400.00	9.7%	300.00	1.10

There is little question that there are substantial numbers of Pakistanis whose nutritional status is poor. The National Nutrition Survey (1985-87) found that:

Protein-energy malnutrition and anaemia continues as a serious, wide-spread problem throughout the country....According to [World Health Organization] WHO criteria of weight-for-age,...10% [of young children] are severely [malnourished].<sup>6</sup>

<sup>6</sup> Pakistan, National Institute of Health, Nutrition Division, 1988, *National Nutrition Survey, 1985-87*, pp. vi, vii.

**Table 6 Pakistan: Government Recovery of Domestic Wheat Marketing Costs**

	1987/88	1988/89	1989/90	1990/91	1991/92
	Rs./ton				
Procurement price	2,000	2,063	2,125	2,400	2,800
Release price	2,000	2,100	2,300	2,600	3,100
Difference	0	37	175	200	300
Incidentals	609	580	600	598	598
Recovery of bag costs	80	120	200	240	120
Total recoveries	80	157	375	440	420
Percent recoveries	13%	27%	63%	74%	70%

### 3.5 Production and Self-Sufficiency

Self-sufficiency in wheat has long been a stated objective of the Government. The net effect of wheat price policies, however, has been to depress the producer price of wheat substantially below the import parity price. The nominal rate of protection in the 1980s ranged from 26 to 48 percent (see Table 8). Longmire estimated the NRP (at Gujranwala) at 32 percent in November, 1991.<sup>7</sup> Such prices have not promoted either production or self-sufficiency.<sup>8</sup> Meanwhile on the technical side, the substitution of high-yielding varieties (HYVs) for traditional varieties has more or less been completed, and the yields of HYVs themselves have been flat for some time. The net result is that per capita production has shown little trend in the 1980s, but if there is a recent trend, it is downward (see Figure 6).

The Government has other policy instruments to affect production besides price policy. A key institution that the Government can mobilize in support of agricultural production is the research system. Because research is an activity that has a long-term payoff, it is difficult for the often shorter-lived administrations of most countries to give it the priority it deserves.

<sup>7</sup> Longmire, Jim, *Agricultural Pricing Policy and Comparative Advantage in Pakistan: An Update to 1991-92*. Forthcoming consultant report, World Bank.

<sup>8</sup> The prices of land-competing crops cotton and *basmati* rice were also depressed by Government policies. On the other hand, in the 1980s the combination of pricing, research, and extension led to an increase in the yields of cotton and *basmati* rice, but not of wheat.

**Table 7 Pakistan: Recovery of Bag Cost in Government Wheat Operations**

Year	Cost of New Bag				Average	Cost Recovery	Percent Recovery
	Punjab	Sind	PASSCO	Imported			
Rs./ton							
1985/86	167.24	152.00	162.74	171.04	163.26	0	0%
1986/87	183.06	154.00	182.02	171.04	172.53	0	0%
1987/88	191.71	172.70	180.87	184.00	182.32	80	44%
1988/89	201.15	194.50	198.45	200.00	198.53	120	60%
1989/90	201.15	194.50	248.97	230.00	218.66	200	91%
1990/91	240.00	240.00	240.00	240.00	240.00	240	100%
1991/92	270.00	270.00	270.00	270.00	270.00	120	44%

**Notes**

The costs shown are for ten 100-kg bags, or one metric ton.

For 1990/91, precise costs are not known. Costs are based on 100 percent recovery figure announced.

For 1991/92, a 100 percent recovery figure of Rs. 270 was announced, but then changed to Rs. 120.

Source: Government of Pakistan.

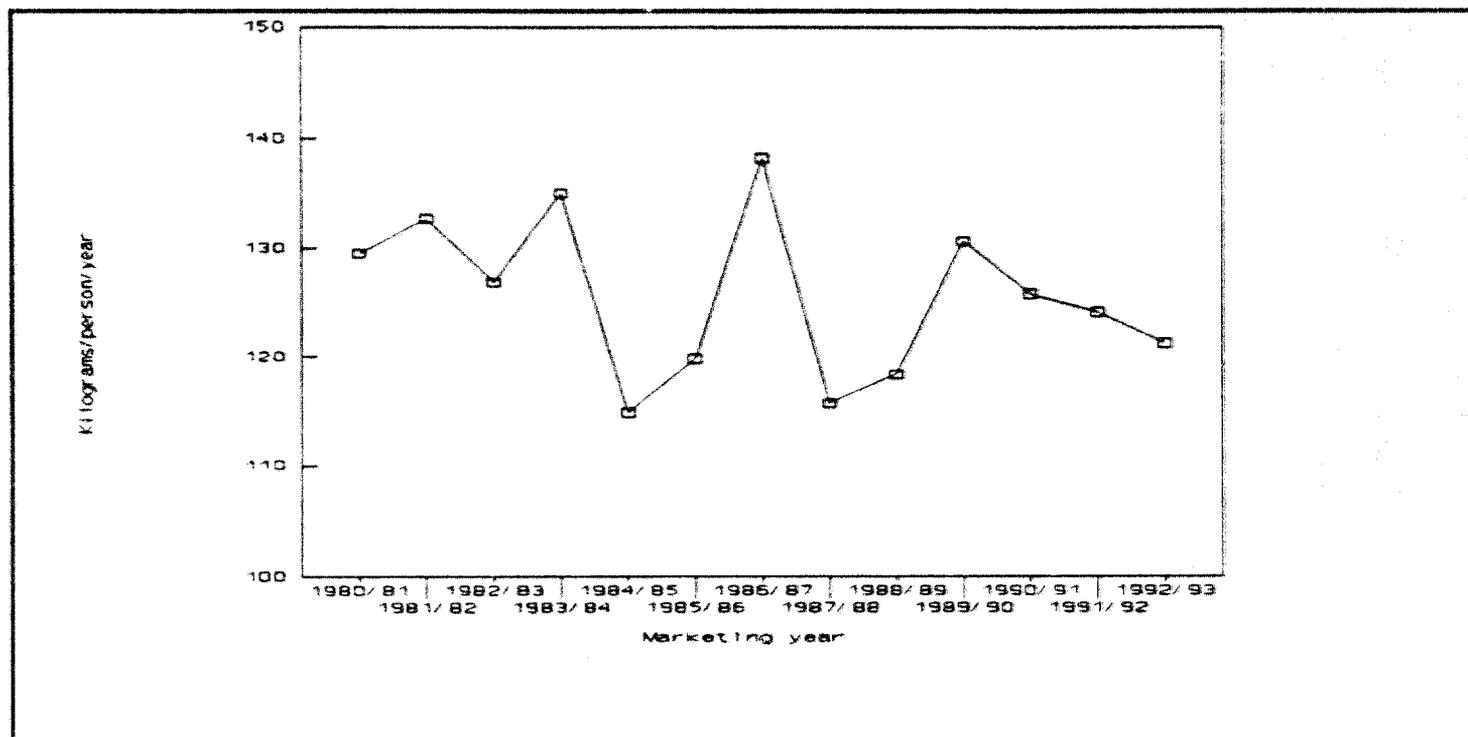
Pakistan is no exception. Azam et al. found that Pakistan generally underinvested in research.<sup>9</sup> In particular, Pakistani wheat farmers need to have varieties that can be planted late after taking several pickings of cotton, as about 40 percent of wheat production comes after cotton. It is heartening to know that the Minister of Food and Agriculture has very recently announced another new package of incentives for agriculture that includes Rs. 200 million for research and Rs. 130 million for mobile soil testing laboratories.<sup>10</sup>

<sup>9</sup> See Azam, Qazi Tauqir, Erik A. Bloom, and Robert E. Evenson. *Agricultural Research Productivity in Pakistan*. Pakistan Agricultural Research Council and Economic Growth Center, Yale University. May, 1991.

<sup>10</sup> Announcement of November 4, 1992.

**Table 8 Pakistan: Nominal Rate of Protection of Wheat**

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
Border Price	2,204	2,952	2,807	2,472	3,132	3,079	3,229	4,197	3,208
Handling and Transport	300	310	300	330	410	360	380	410	430
Import Parity Price at Farmgate	2,504	3,262	3,107	2,802	3,542	3,439	3,609	4,607	3,638
Domestic Producer Price	1,657	1,681	1,901	2,069	2,020	2,140	2,286	2,501	2,708
Price Difference	-847	-1581	-1206	-733	-1522	-1299	-1323	-2106	-930
Nominal Rate of Protection	-34%	-48%	-39%	-26%	-43%	-38%	-37%	-46%	-26%



**Figure 6 Pakistan: Per Capita Wheat Production in the 1980s**

## 4. WHEAT POLICY ISSUES AND OPPORTUNITIES

### 4.1 Stability of Prices

Price stability is sought after by many governments because it has positive effects like removing shocks from the budgets of poor consumers. Unfortunately instability that arises in the system (e.g., a change in production) and would result in price instability is not removed when the Government stabilizes prices; it is only transferred to another point in the system. Thus, because price stabilization is achieved through releases of wheat from stocks built from procurement and imports, it has a destabilizing effect on the Government budget. The instability might then "settle" on other Government programs like education or construction of infrastructure, destabilizing those benefit streams.

Price instability also removes some of the incentive for farmers to produce additional wheat to meet deficits. Instability means both higher and lower prices. If farmers receive true price signals when there is a relative scarcity, then they may be able to respond with higher production. If they do not receive such signals, then even the presence of high technology will not in itself bring forth greater production. No Government would advocate price instability, but the value of price variability in sending appropriate signals to producers should also be remembered and harnessed when possible.

In the past Pakistan generally placed great emphasis on wheat price stability through government intervention, and accepted the consequences. It would now be consistent with the Prime Minister's stated philosophy, however, for the Government to permit the private sector to respond to the price signals generated in the wheat market. In this situation, the "automatic" stabilizing mechanism of the market—promoting higher production and a tendency to lower prices when prices were high—would come into play. Since the Government has a strong interest in ensuring a reasonable level of price stability, it could still play the key back-up role of continuing to hold stocks.

### 4.2 Price Level and Availability to (Urban) Consumers

The Government of Pakistan has been providing a substantial subsidy on wheat, which has grown in the post-rationing period. Who benefited from this subsidy?

Consumers benefited from the subsidy, as shown by the NRP of flour (see Table 2). That is, the price of flour was lower than if there had been no government intervention in the wheat market. While all consumers of wheat got an income transfer, in general they did not spend it on more wheat.<sup>11</sup>

---

<sup>11</sup> See Ender, Wasay, and Mahmood, *op. cit.*

Millers have also benefited from the subsidy. There are several forms of indirect evidence for this. First, there has been rationing of government wheat supplies to mills.<sup>12</sup> Government wheat has been of higher value to millers than the price at which the Government was releasing it, so rationing has been required to allocate it. Thus, mills have incurred full cost on wheat stored by the private sector, but only partial cost on that stored by the Government. Over the marketing year, retail flour prices follow wholesale wheat prices. Thus efficient mills can make economic profits, while inefficient mills are kept in business by the subsidy.

Second, the flour market has the signs of incorporating only limited competition. Flour millers exhibit their market power when they jointly announce a new price. Competition seems to be limited to small quality differences based on a small number of brand names. The overall price level, however, seems to be at least partially under the power of the millers as a group. Otherwise, how could the Government have hoped to affect the price of flour in 1991 when it negotiated a price "cap" with the millers in exchange for a relaxation of its bag cost recovery policy? Millers appear able to capture the reduction in input price the Government passes them without passing all of it on to consumers.

Finally, one can note that the millers are a powerful lobby, but they are not lobbying for the removal of the wheat distribution system.

Over the long run, the Government's promise of unlimited quantities of wheat leads to investment in (or maintenance of rationing-period) mills, but rationing of supply creates unused capacity. This is a "deadweight" efficiency loss. The irony is that even after rationing has been abolished, there is still rationing!

It is also well known that some "mills" are capturing part of the subsidy as part of passing wheat to the poultry feed industry. Maize would be the logical grain to use in poultry feed in Pakistan. That is the international norm, and maize is grown in Pakistan. The Government, however, has made wheat cheaper than maize. It is not clear in the context of a very thin poultry feed industry whether the industry benefited or the benefit was passed through to the poultry industry and/or consumers of poultry products. In any case, the beneficiaries of the wheat subsidy via this route were not poor consumers, as poultry products are relatively expensive forms of animal protein in Pakistan.

The conventional wisdom is that Afghanistan and possibly India also benefited from the low-price policy as well. Because of formidable physical difficulties, however, it does not seem possible that very large quantities of wheat left Pakistan due to these price differences.

Equating average world and domestic price levels would solve the problems of subsidizing poultry feed and unrecorded exports, and of course it would save the Government about Rs. 5 billion per year. A key exogenous factor is that it now seems likely that a General

---

<sup>12</sup> In most years, the Government issues an amount of wheat to each mill that is based on its historical allocation and a number of "hours of operation" that is set by the Government for all mills.

Agreement on Tariffs and Trade (GATT) agreement will be finalized in 1993. Reductions in subsidies by developed countries will probably lead to an increase in the price of imported wheat for Pakistan (as well as increases in the prices of exports like cotton and rice). This argues for prompt action by the Government. Delay will mean higher subsidy costs in the short run and a more difficult time removing the subsidy in the long run.

A reasonable path would be to revise wheat policies to be in line with the Government's new market-based philosophy. The Government could announce that it will rely on the private sector to provide wheat efficiently. The Government would complement this role by providing needed regulation. This would enhance the value of wheat and flour by allowing price premiums to be attached to government grades. The Government's stocks would allow it to prevent dramatic changes in prices. To further reduce fears of market manipulation, the Government could reduce barriers to entry and encourage competition in storage and milling. It should also encourage investment in new technology as part of a much-needed milling industry rationalization.

Demand analysis shows that in the diet of most Pakistanis, there is a key tradeoff between wheat and vegetable ghee in terms of providing calories.<sup>13</sup> In economic jargon, the cross-price elasticity is large. This means that if wheat prices are altered, there will be an impact on ghee consumption, and vice versa. If the price of flour rises as a result of the phasing out of the subsidy, the consumption of flour would not change much,<sup>14</sup> but the consumption of ghee would increase.

The nutritional implications of such a shift (from grain to saturated fat) might be slightly detrimental for well-fed, sedentary individuals. Educated individuals in Pakistan, who constitute most of the well-fed and sedentary, however, are aware of this. They have already begun to shift to less-saturated liquid oils, like sunflower.<sup>15</sup> For the poor in Pakistan, additional consumption of vegetable ghee would be nutritionally beneficial and not a hazard to their health. Many of the poor are not getting sufficient calories; in general, the additional calories would be metabolized at their normal activity level.

---

<sup>13</sup> Bouis reports cross-price elasticities of demand for ghee with respect to the price of wheat for urban areas of about .3 and rural areas, about .2, based on 1978 data. See Bouis, Howarth E. *Food Demand Elasticities by Income Group by Urban and Rural Populations for Pakistan*. Washington, DC: International Food Policy Research Institute. Mimeo. November, 1981. In that draft, Bouis inadvertently used 6,000 calories per kilogram for edible oil, whereas the correct number is about 9,000. Making this change and updating to the 1987-88 HIES data, the cross-price elasticity for Pakistan overall is about 0.5. The author is grateful to Dr. Bouis for rerunning his model with new data in support of this analysis.

<sup>14</sup> For the same reasons that it did not go up when the real price fell during the 1970s and 1980s.

<sup>15</sup> Unsaturated oils are not yet reflected in the HIES. The HIESs over the past 20 years do show, however, that the consumption of edible oil has become much more equal across income classes. In the early seventies, the upper income groups consumed much more oil per capita than did the lower income groups. In the 1987-88 HIES, the consumption of vegetable ghee across income groups is virtually flat.

The increase in the price of flour would cause a decline in real income. This is inevitable when the Government retrieves the subsidy it was giving. It would be only a decline, however, to the extent that consumers were benefiting from the subsidy. Whatever portion was being captured by millers or going into deadweight loss would not be reflected as a decline in consumers' incomes. The net nutritional impact might be small, moreover, due to the availability of cheap calories from ghee. In addition, targeted subsidies could be devised for further protection of the truly needy.

Some evidence for the feasibility of increasing the release price is the increase of almost 20 percent in 1991/92. At the time, many journalists predicted that the public would be outraged and take to the streets, but there was no such reaction.

#### **4.3 Cost**

With the recent increase in the gap between the release and procurement prices, there is likely to be a decline in the domestic portion of the wheat subsidy. Greater purchases by the private sector at harvest time (in 1991 and 1992) led to lower procurement by the Government. However, the Government has not made any clear statement of what its objectives are in altering the price structure, including, in particular, whether it intends to discontinue unlimited releases or not.

Assuming the Government will increase the gap further until its incidentals other than bags are fully covered, the key actions which remain are to eliminate the subsidy on bags and the much larger subsidy on imported wheat. The bag subsidy discourages bulk handling, an efficient process at some points in the current marketing chain. Since there seems to be a scarcity of labor for handling bags of wheat, moreover, it cannot be claimed that this subsidy encourages employment.

The Government already fills its *godams* partly with wheat imported at commercial prices. The Government could put an end to the subsidy on resale by both buying and selling at market prices. At that point the only subsidy in its operations would be the potentially greater cost of the Government's holding stocks than the private sector's.

#### **4.4 Adequacy of Quantities Available to Those at Risk**

A general price subsidy on the staple food has proved to be too broad a tool to effectively assist those at nutritional risk in Pakistan. The evidence for this is the malnutrition that persists, as well as the wheat that goes into poultry feed and the wheat that leaves the country.

Helping those at risk requires both targeted programs and nutrition education. Directly targeted programs may be expensive to operate due to the high cost of gathering information on the indigence of the participants. On the other hand, there are several principles for devising self-targeting programs. Self-targeting can be brought about by building in a substantial

time cost, stigma, or low product quality that will cause the non-poor to exclude themselves. Care must be taken not to set the level of the exclusionary factor so high that the poor are also discouraged from using the program.<sup>16</sup> Targeted programs might be food-based, like food-for-work, or they might entail or more direct income transfer. Reforestation, rural roads, and irrigation canal lining are some prospective areas for food-for-work programs in Pakistan.

Nutrition education is another essential program for enhancing nutritional status in Pakistan. It is known now that some practices common in Pakistan impair the nutritional status of certain groups.<sup>17</sup> Nutrition education might also improve the distribution of food within the household if the implications of maldistribution were fully understood.

#### **4.5 Production and Self-Sufficiency**

The wheat subsidy encourages greater total use (including waste) of wheat, while discouraging additional production. Overall this results in a decline in self-sufficiency, or higher imports. It may make good economic sense for Pakistan to export cotton, rice, and other items and import wheat. The proper framework in which to ascertain the optimal combination of imports and exports, however, is that of international prices. If Pakistan is to pursue its comparative advantage, it needs to send price signals to its farmers that reflect the opportunity cost to the nation of importing wheat and exporting other items. If the demand for wheat in Pakistan exceeds the supply at the world price, then imports are the best way to meet the requirement. Getting prices to the domestic equivalent of the international level would not preclude the Government's importing and selling wheat at these market prices.<sup>18</sup>

#### **4.6 Benefits and Costs of Current Wheat Policies**

What does the foregoing analysis mean to the policymaker? In order for any analysis to be useful, there must be a weighing of the benefits and costs of the policies considered. The objectives covered in this study are quite diverse. As such they do not lend themselves to any kind of quantification that could both encompass all of them and permit the computation of an overall measure of desirability. Nevertheless, it is important to consider the relative effects of the Government's wheat policies in these areas and make some overall assessment.

Among the potential benefits of the Government's wheat policies, it is perhaps most clear that price stability was achieved. Paradoxically, the nature of this benefit is not so clear.

---

<sup>16</sup> See for example, Grosh, Margaret. *From Platitudes to Practice: Targeting Social Programs in Latin America*. Washington DC: World Bank. Report No. 10720-LAC. June, 1992.

<sup>17</sup> Not feeding the very first, rather strange-looking breast milk, called colostrum, when breastfeeding is initiated, is a good example. The immunogens in which the colostrum is high are not transmitted to the infant and higher rates of disease result.

<sup>18</sup> Price policies alone are not likely to solve all wheat production problems, however. Issues like fertilizer use efficiency and appropriate varieties must also be addressed.

Presumably many households benefited from the lack of exogenous shocks to their budgets and expenditures. There is no easy way, however, to measure the extent of this benefit.

While it is clear that the price of flour was depressed for the benefit of consumers, it also is the case that flour millers benefited from the subsidy policy and that there was a substantial loss to society manifested in excess investment in milling capacity. Wheat was diverted into poultry feed and consumers in neighboring countries were also treated to a subsidy. Furthermore, Pakistani consumers who received an income transfer through the lower wheat price did not spend this increase on more wheat. On the other hand, they did use the income increase for those purposes that they judged most important, so this benefit should not be completely discounted. The more important argument against this kind of transfer is its inefficiency. Because all wheat consumers received the transfer, many Pakistanis received an income transfer who were not poor.

The Government's massive involvement in wheat marketing was intended partly to ensure that adequate quantities of wheat reached all consumers, or at least all consumers in urban areas (where Government *godams* tend to be located). There is little in the record to show that this was not achieved. However, the pertinent question is whether the same result would not have been achieved, possibly even at a lower cost, if the private sector had been totally in charge of marketing. A firm answer to this question is not possible given the Government's long-running involvement in marketing. However, it would not be appropriate to credit the Government with achieving a significant benefit in this area without showing that the private sector could not have done better.<sup>19</sup>

The nutritional impact of wheat policies can be examined in two ways. First one can revert to the income transfer that was provided and note that some of this increase would have been expended on foods that would bring additional nutrients into the diet. Much of it was expended on additional freshness or diversity, however, without any direct benefit to calorie sufficiency. Indeed, there was little change in the average level of per capita caloric intake from the early 1970s to the mid-1980s, although there may have been shifts among individuals.<sup>20</sup> Secondly, there may be a cheaper way to achieve a nutritional objective. In particular, targeted subsidies reach only those in need of the subsidy, something that none of the policies reviewed in this study tried to do.

Lower production and self-sufficiency than otherwise would have been the case are the clearest disbenefit of the Government's wheat policies. As long as there is some scope for farmers to respond to price signals, one must believe that the depressed wheat prices brought

---

<sup>19</sup> The primary exception to this statement concerns the supply of remote areas that the Government undertook. Small numbers of people live in these areas, so the private sector might not have had a sufficient incentive to supply them on a regular basis and at an "acceptable" price.

<sup>20</sup> Per capita caloric intakes based on HIESs are reported in Ender, Gary, Abdul Wasay and Akhtar Mahmood, *op. cit.*

forth less production than import parity prices would have done. Thus farm income was reduced both on account of lower prices and lower production. Self-sufficiency was also lower. While self-sufficiency is not always an economically justifiable objective, the important point here is that the higher imports also had to be subsidized. A relevant question for the policymaker in this regard is, Why should the Government pay the Pakistani farmer less for wheat than it pays a foreign farmer.

The cost of the wheat policies examined tended to increase substantially (after the end of rationing) until the Government began to increase the gap between the release and procurement prices. In a country that continues to need investments in development, subsidies that must be paid out year after year and that compete for scarce resources with those potential investments must be examined very carefully.

The overall assessment of this study is that the cost of the wheat subsidy is high relative to its benefits. On the consumption side, the unintended beneficiaries outnumber the intended. On the production side, the negative impact is clear. It is true that the cost of the subsidy has been reduced very recently. The Government, however, has not given any clear signs of its intentions for future changes in wheat policy. Thus the cost could just as easily increase again, particularly if the promise of unlimited releases at a fixed price is maintained.

Although the issue of private sector participation in wheat marketing was not addressed in this study, it should be mentioned here that the Government's wheat policies also had strong effects in this area as well. The initially small gap between the release and procurement prices made it unprofitable for the private sector to perform its normal functions in wheat storage and transport. Recently the enlarged gap has apparently attracted the private sector, as Government procurement at harvest has fallen significantly. The lack of a clear statement from the Government, however, is likely to hamper investment by the private sector in appropriately designed and located storage facilities.

One other impact of the wheat subsidies needs to be mentioned, too. Because the Government persists in subsidizing the cost of bags used in wheat handling, it is providing a disincentive to bulk handling. With the cooperation of PASSCO, the Food Departments, and flour millers, bulk handling has been shown to be very economical for certain parts of the wheat marketing chain. Even in the context of a wheat policy regime that maintained subsidies, it would be highly preferable to structure the subsidy so that this disincentive were eliminated.

#### **4.7 Recommendations**

On the basis of the analysis above, the following actions are recommended for the Government's consideration.

- The Government should make a clear statement of a new wheat policy, as it did when rationing was ended.

**The new policy should include:**

- **Phasing out the subsidy on imported wheat by raising the release price significantly each year for the next two or three years.**
- **Phasing out regular releases into the market,**
- **Reducing the Government role to holding back-up stocks and getting the private sector back into storage.**
- **Transferring storage capacity from the Government to the private sector, initially through leases,**
- **Building government stocks from commercial imports and procurement at market prices,**
- **Permitting the private sector to import wheat (on a permanent basis), and**
- **Targeted subsidies for those at nutritional risk.**

**A clear policy statement would allow the private sector to plan its new activities and would encourage it to make the necessary investments. The lack of a clear statement will leave the most of the private sector on the sidelines and the Government with the same burden of running the wheat market. At this point in Pakistan's development, there are more appropriate functions for the Government to spend its scarce resources on.**

**Although there are some quality issues, Pakistan can be well served by the world wheat market. Crop estimates in Pakistan are becoming more accurate and timely. With good planning, imports can be purchased at near their annual lowest prices. The private sector will be able to import wheat when the domestic and international prices have been equated. At that point, importers, millers and consumers should be able to resolve any quality issues through the pricing system and blending.**

**There may be concern that in the short run, there might be inadequate storage capacity for wheat if the private sector converted some of it to other uses. One alternative is for the Government to rent the storage out with some limitations on its use, but also offer an option to buy. This would restrict the conversion of facilities, allowing new investment to rationalize the size and location of such facilities. The opportunity to purchase well-designed and well-located facilities will be attractive to potential operators because storage would be profitable. Facilities that are not well located for daily market operations could be retained to hold long-term government stocks or disposed of.**

## **5. CONCLUDING NOTES: THE IMPORTANCE OF QUALITY AND A RECOMMENDATION FOR FURTHER RESEARCH**

Much of the discussion in this study has centered around the price and quantity of wheat moving in the different marketing channels in Pakistan. Very limited reference has been made to the quality of that wheat. This note adds some important points about quality that complement those made above.

- Each level of the wheat marketing chain—from the farmer to the flour retailer—can add value to the product by improving its quality. The various agribusinesses that make up that marketing chain could create more employment and generate more income if higher quality were also an objective of the system.
- Currently this objective is impeded by government intervention in the wheat market and by the lack of grades and standards in the grain industries in Pakistan.
- Despite the lack of effective market grades, experiments have already shown that millers are prepared to pay (the Government) more for cleaner wheat. They will do so both because they can produce a higher quality output and because their processing cost will be lower.
- Household consumption data show an average price of flour purchased that rises with income. Anecdotal evidence tends to corroborate the notion that quality is an important consideration in flour buying. Thus even if individuals do not desire higher levels of wheat consumption, their preferences can lead to higher employment and income.

This assessment of wheat policy will end with one recommendation for further research. Knowledge of marketed surplus in Pakistan seems quite outdated and limited. This hinders both policymakers and entrepreneurs. A careful assessment of marketed surplus would contribute to plans for future storage capacity in both the public and private sectors and for any transfers of ownership that would take place. It would also help bankers in the newly-privatized banking sector know how much investment in storage to facilitate and where.