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# PL-480 in Pakistan Looking Ahead

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## Executive Summary

**Study Objective-** The major objective of this study is to examine the financial and policy impact of the Mission PL-430 Title I program and develop a new set of focused Self-Help Measures cast in a multi-year framework. Accompanied by a set of measurable and realistic benchmarks, the SHM's would focus on program areas in which the Mission has or would plan to gain expertise.

**Macroeconomic Imperatives-** The growing budget deficit and large trade imbalance make it imperative for the GOP to broaden its tax base, increase the level of exports, and cut budget expenditures. Although taxation and exchange rate policies are more the domain of the World Bank, USAID can assist in the analysis and identification of policy measures to improve the export base, which are urgently needed. In addition, generalized subsidy programs, such as the wheat price support system, should be carefully examined and if necessary, replaced with a more targeted intervention.

**Commodity Mix-** Although the PL-480 program brought in \$80 million of edible oils last year, this is worth less than \$20 million to the GOP in foreign exchange gain and some \$10 million in net revenue terms. A switch to a different commodity mix could substantially increase the revenue advantages of the program. For example, \$50 million of edible oils and \$30 million dollars of other commodities such as corn, soybean, or timber products would increase the value of the program to the GOP by some \$7.4 million dollars annually. By importing corn to replace the subsidized wheat now being used for chicken feed, the Team estimates that the GOP could save some Rs. 150.6 mil. (\$7.1 mil.) in foreign exchange in one year.

**Self-Help Measures and Benchmarks-** The SHM's and benchmarks are organized into two policy areas: nutrition and trade policy.

- 1) SHM No. 1- Monitor Nutrition Status of Vulnerable Groups and Development Targeted Programs. Benchmarks include the development of nutrition monitoring system and implementation of targeted nutrition programs.
- 2) SHM No. 2- Improve Nutrition Education at Primary and Secondary School Levels. Benchmarks include the incorporation of nutrition education materials into school texts and the expansion of teacher training in nutrition.
- 3) SHM No. 3- Reduce Wheat Import Through More Efficient Use of Existing Stocks. Benchmarks include eliminating the 40% tariff on corn and equalizing tax treatment of wheat and corn.
- 4) SHM No. 4- Reduce Restrictions on Exports. Benchmarks include conducting a study on trade restrictions, and reducing export restrictions.
- 5) SHM No. 5- Institutional Development. Benchmarks include studies and phased improvement of the institutions that regulate exporters, quality control, and forward contracts.

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## I. Introduction

The principal objective of this study is to develop a multi-year approach to the Self-Help Measures (SHMs) under the PL-480, Title I program in Pakistan. At the same time, the possibility of varying the commodity mix is considered and new possibilities are examined. A key consideration in developing the SHMs was the necessity to narrow the focus of these measures so that they follow a multi-year path to more clearly defined long-term goals.

The idea behind developing the multi-year approach, with a few clearly defined long term goals is to provide USAID and GOP with a focus for annual PL-480 negotiations.<sup>1</sup> The recent benchmarks and SHMs have not followed a consistent pattern. It is felt that widely divergent objectives weakened the overall thrust of the measures.

The Terms of Reference of the PL-480 Study Team (to be referred to as the Team) were focused on the development of the multi-year framework. The Team was given several possible areas of focus. These included:

- involvement with Pakistan's small scale industrial sector specially with respect to its employment generation potential;
- continued involvement in programs to improve the nutritional status of the Pakistani populace;
- divestiture/privatization of government-owned entities;
- agriculture productivity and optimal use of inputs;
- examination of the land tenure system in Pakistan and its effect on agriculture productivity.

The team conferred with USAID and U.S. Embassy officials as well as a number of GOP officials. During these discussions, the agriculture productivity issue was narrowed down to agriculture trade issues, since most of the other agriculture issues were being handled under USAID's Agriculture Sector Support Program (ASSP). Agricultural trade does not occur in isolation from

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<sup>1</sup> Pakistan has a Title I program and thus a multi-year agreement cannot be signed. Nevertheless, GOP and USAID can agree to a multi-year strategy for the self-help measures.

other trade and the subject was broadened to trade policy in general. Following further discussions and meetings, the original list of subject areas was narrowed down to two broad areas: trade policy and nutrition. It was decided that the Team would deal with these two areas.

This report includes two complete Appendices: one on trade policy and one on nutrition. The main body of the report includes a section of the importance of trade and nutrition from a macroeconomic perspective; a section on the background of PL-480 in Pakistan; a section on the mix of commodities to be imported under PL-480; a section on the two broad areas for self-help measures; and finally, a section discussing the self-help measures and the specific benchmarks. The appendices have been written as independent reports and are designed to provide background information for the two broad sectors chosen.

## II. Macroeconomic Background

### A. Recent Developments

Pakistan has experienced rapid economic growth, averaging 6.5% per annum since the 1983-84 fiscal year (FY84).<sup>2</sup> The rapid growth can be attributed largely to improvement in economic policies, as well strong demand for Pakistani products and labor in the Middle East. Inflation during the sixth plan period (1983-88) averaged about 5%, down considerably from the 9.3% during the previous plan period. However, the improving growth performance has been clouded by worsening macroeconomic balances.

The most serious macroeconomic problem facing Pakistan by the end of FY88 was the large budget deficit which was greater than 9% of GDP by 1988. The recent deficits have fueled an enormous rise in debt, both domestic and foreign. Domestic debt rose to 42% of GDP from 28% in FY84. External debt also rose to 14% of GDP.<sup>3</sup> The sharp growth in domestic debt is the key macroeconomic issue. The growth in domestic debt was fueled by the government's desire for monetary restraint and the need to maintain Pakistan's international credit standing. This fueled a rise in the average interest rate on domestic debt from 4.5% to 8.3%. Consequently, interest payments on the domestic debt rose rapidly, exacerbating the budget deficit and increasing the need to borrow more. Domestic interest payments rose from Rs.13.4 billion in FY86 to a projected Rs.34.4 billion in the FY90 budget.<sup>4</sup>

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<sup>2</sup> The growth in agriculture during this period averaged 3.7% while manufacturing grew at 7.7% on average and services grew at 7.1%. The agriculture growth rate would have been higher had it not been for crop failures during FY84 and FY87.

<sup>3</sup> In Rupee terms, long-term external debt almost doubled between FY86 and FY87; in dollar terms, it only increased by about 10%. The increase of external debt as a proportion of GDP was fueled by a rise in cross-exchange rates between the dollar and other currencies, as well as the direct exchange rate rupee to dollar.

<sup>4</sup> As a percentage of current expenditures domestic interest rose 13.8% to 24.4% foreign interest rose from 6.6% to 8.0% i.e. from Rs.6.4 billion to Rs.11.6 billion (FY-90 budget). The actual situation may turn out to be much worse as all previous budgets have always underestimated the growth in interest payments.

Table 2.1

Macroeconomic Situation of Pakistan  
(in billions of Rupees)

	1984/85	1985/86	1987-88	1988-89 Preliminary	1989-90 Budget Projection	Average Annual Change '85-'89
GDP in Current Prices	547.1	608.1	685.9	781.1	895.9	13.1%
Government Expenditure	134.5	152.4	179.9	225.7	240.9	15.9%
Development Expenditures	37.4	34.1	53.7	74.3	95.3	28.8%
Current Expenditure	97.1	118.3	126.2	151.4	145.6	11.2%
-Domestic Interest	13.4	16.5	22.2	28.0	35.5	27.7%
-Defense	35.6	41.3	46.6	51.1	51.8	10.0%
-Social Services	10.9	13.5	16.2	19.7	20.1	16.8%
-Foreign Interest	6.4	7.5	8.2	9.8	11.6	16.2%
As Percent of Current Expenditure						
-Domestic Interest	13.8%	13.9%	17.6%	19.5%	24.4%	16.1%
-Defense	36.7%	34.9%	36.9%	33.7%	35.6%	-0.6%
-Social Services	11.2%	11.4%	12.8%	13.0%	13.8%	5.4%
-Foreign Interest	6.6%	6.3%	6.5%	6.5%	8.0%	5.3%
Gross Current Revenues	90.4	103.8	119.1	148.8	155.8	14.8%
-Taxes	63.6	69.5	79.9	95.4	103.6	13.0%
-Non-Tax	17.5	21.0	25.3	38.3	41.6	25.1%
-Surcharges	9.3	13.3	13.9	15.0	10.6	6.5%
Autonomous Bodies' Surplus	2.9	1.8	2.7	4.4	3.5	13.7%
Gross Overall Deficit	-41.2	-46.8	-58.1	-72.6	-81.6	18.8%
Gross Deficit as % GDP	7.5%	7.7%	8.5%	9.3%	9.1%	5.0%
Interest Payments						
-As % Revenue	21.9%	23.1%	25.5%	25.4%	30.3%	8.7%
-As % GDP	3.6%	3.9%	4.4%	4.8%	5.3%	9.8%

## Notes:

1. Provincial and Federal Expenditures and Revenues
2. 1989-90 figures are budget projections and previous experience indicates that they may be optimistic particularly with regard to expenditure reductions.
3. Fertilizer subsidy included in Current rather than Development Expenditures.
4. GDP from new series, hence deficit as % of GDP higher than IMF estimate.

## Sources:

1. World Bank Report No.7591-PAK
2. Economic Survey of Pakistan, 1988-89
3. Pakistan Budget in Brief

The Federal Budget deficit for FY90 is Rs.56.7 billion compared to net federal revenues<sup>5</sup> of Rs.123.7 billion. The deficit is projected to be almost half the total revenues. As a percent of the GDP, the deficit was about 9.3% during 1988-89 according to preliminary estimates.<sup>6</sup> After examining the 1989-90 budget, the Team would expect the deficit to remain higher than 9% of GDP, unless the overall growth rate improves which seems unlikely. To improve the deficit, expenditure cuts will be necessary. But as defense and interest on debt amount to 76% of current government, expenditure deficit reductions through cuts in expenditures will not be easy to achieve.

The macroeconomic adjustments needed to correct such a large fiscal gap will necessarily have an impact on all sectors. The GOP should attempt to ensure that these changes do not affect the sectors that have been the sources of growth nor worsen the conditions of the poorest segments of the population. Investments in health, population, education and population programs received about Rs.2.7 billion in federal outlays last year and should receive about the same this year. Of this over, two billion rupees will be spent on education.<sup>7</sup>

The balance of payments has improved from the 1984-85 period, but the situation has worsened remarkably during the two fiscal years. The worsening situation during the last two fiscal years has been fueled by a sharp increase in imports and by a drop in worker remittances. The deficit fell from \$ 1,680 million in 1984-85 to \$ 719 million in 1986-87. It rose again to \$ 1,265 million according to the preliminary estimates for 1988-89. The increase in deficit despite the growth of exports from U.S.\$3,498 million in 1986-87 to U.S.\$4,437 million during 1988-89. The trade balance worsened during the same period. The most significant long-term trend is the drop in workers remittances over the period. Flows of aid during the period improved

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<sup>5</sup> Excluding foreign transfers and borrowing as well as the value of transfers to provinces. These estimates are derived from USAID estimates referenced PRO/AMHussain:/6/7/89 ID Pakistan.

<sup>6</sup> This percentage is based on the new GDP series calculated by the GOP, which puts this figure higher than those used in the IMF agreement.

<sup>7</sup> Expenditures in the education sector are biased towards expensive higher education and more formalized training. Health sector expenditures are heavily urban biased and focused to the large extent on expensive curative services rather than preventive medicine.

Table 2.2  
Balance of Payments  
(U.S. \$ Millions)

	1984-85	1985-86	1986-87	1987-88	1988-89 Preliminary	Aver. Annual Growth '85-'89	Aver. Annual Growth '87-'89
TRADE BALANCE	(3,532)	(3,042)	(2,294)	(2,006)	(2,684)	-4.4%	10.6%
Exports (f.o.b.)	2,457	2,942	3,498	4,362	4,437	16.3%	13.2%
Imports (f.o.b.)	(6,009)	(5,984)	(5,792)	(6,370)	(7,121)	4.5%	10.9%
SERVICES(net)	(815)	(1,016)	(982)	(1,389)	(702)	3.3%	-4.0%
Invisibles Receipts	941	963	1,013	987	1,419	12.2%	20.6%
Invisibles Payments	(1,756)	(1,979)	(1,995)	(2,376)	(2,121)	5.5%	4.2%
PRIVATE TRANSFERS(net)	2,687	2,822	2,557	2,264	2,121	-5.5%	-8.9%
(Worker's Remittances)	2,446	2,596	2,278	2,013	1,875	-6.2%	-9.2%
CURRENT ACCOUNT BALANCE	(1,680)	(1,236)	(719)	(1,133)	(1,265)	0.2%	34.6%
CAPITAL ACCOUNT BALANCE	892	1,255	953	1,477	1,727	22.1%	36.0%
LONG-TERM CAPITAL(net)	923	1,101	844	1,224	1,667	19.3%	40.6%
SHORT-TERM CAPITAL(net)	(31)	154	109	253	60		
ERRORS & OMISSIONS	(32)	(26)	8	(30)	0		
OVERALL BALANCE	(820)	(7)	242	314	462		
GROSS OFFICIAL RESERVES	668	915	864	461	523		
RESERVES IN WEEKS OF IMPORTS	4.5	6.0	5.9	2.6	2.9		
CURRENT ACCOUNT DEFICIT AS PERCENT OF GNP	4.9%	3.4%	1.9%	4.0%	3.4%		

Sources:

1. World Bank Report No.7591-PAK
2. Economic Survey of Pakistan, 1988-89

the capital account balance from U.S.\$ 953 million to U.S.\$ 1,727 million. However, further increase in the levels of foreign aid cannot be expected. Exports have to grow to finance the external deficit and policies such as export taxes have to be re-examined. At the same time, the tax base must be broadened to replace revenues lost through export tax reform.

### B. Identifying Sectoral Priorities in an Era of Macroeconomic Deficits

Governments respond to fiscal crises by various means. They may cut spending; they may increase taxes; they may create money through pressuring the Central Bank to expand credit; they may borrow in foreign financial markets; or they may borrow in domestic financial markets. The GOP has already borrowed significant amounts of money in the domestic market through high interest bond issues. Foreign borrowing is constrained by the availability of donor resources and also by the need to maintain a strong international credit rating. Expansion of the money supply will have an inflationary effect.

Fiscal prudence dictates that the government reduce the fiscal gap by mobilizing domestic revenue or by cutting spending. The latter is constrained by the fact that almost 36% percent of current government expenditures go towards interest on debt, both domestic and foreign. This cannot be cut. Another 40% goes to defense which also cannot be significantly reduced for a number of political and legitimate defense reasons. The government is forced to cutting either expenditures of social and economic sectors or raising tax revenues. Most of the deficit will have covered by raising revenues though some of it will come in decreased spending. It is essential do so without hurting Pakistan's engines of growth -- agriculture and export industry.

The growth experience of different countries in Asia and elsewhere shows the importance of human capital investments. If Pakistan continues to underfund the social services, the rapid growth in productivity and output will slow down. Furthermore, the earnings potential from Pakistani labor in the Middle East will be significantly reduced. This is particularly true for the future as the Middle East countries are moving from the construction and infrastructure building stages to stages of development where the demand for semi-skilled and skilled workers will be

much more important.<sup>8</sup> Skilled production workers are the very category in which Pakistan faces shortages. Research has proved again and again that workers with a basic primary education (and in good health) are trained more easily. A country such as Pakistan cannot afford to underfund human capital development both in view of it's own needs and in view of the potential earnings from Pakistani labor to the labor short economies of the Middle East. Thus, despite the budget crisis the development of human resources i.e. education, population, health and nutrition cannot be ignored.

The Team, while arguing for the need to expand social sector spending, is also aware that some of the government's financial resources are wasted due to mismanagement or misguided policies. Many such policies such as wheat subsidies, vegetable oil subsidy, fertilizer subsidy, etc.<sup>9</sup> must be examined to see if they are effective. Ineffective programs must be abandoned and phased out. Some of the savings may be diverted to effective social sector programs such as primary education, primary health care as well as direct nutrition interventions targeted to the very poor. Thus, increasing funding for effective social programs need not necessarily mean an increase in overall government expenditures. What is needed is to divert resources from ineffectual programs to these programs. The net effect may even be a decrease in overall government expenditure.

Export taxes and other policies that inhibit the growth of exports must also be changed in view of the severe balance of payments. The current account deficit is presently financed by aid flows. This cannot be continue. The Government seems to be following a policy of export promotion through using the exchange rate which is appropriate but the benefit of exchange reductions are being lost by biases resulting from export taxes. Furthermore, in key sectors such as Basmati Rice, Pakistan has lost market share to India and Thailand due to the export taxes. The government has now eliminated export taxes on rice but those on cotton continue.

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<sup>8</sup> The pattern of the demand for foreign labor is changing as the economies of the Gulf mature. The demand will be moving from unskilled to semi-skilled and skilled workers. The demand for professionals technical as well as administrative and managerial workers will also slow down as more and more UAE, Saudi, Qatari, Kuwaiti & Omani nationals qualify for the high ranking jobs.

<sup>9</sup> The wheat sector intervention costs about Rs.4 to 5 billion i.e. between 3% to 4% of current expenditures. A great part of this is spent by the provincial governments. The exact figure is therefore hard to pin down.

The legal code underlying PL-480 Title I programs require self-help measures in agriculture, food, nutrition and social programs such as public health and family planning programs<sup>10</sup>. In view of the legal requirements and the prevailing macroeconomic situation, the Team and the Mission agreed to focus the self-help measures on Agricultural Trade Policy and Nutrition Policy. These measures will be developed keeping in mind the macroeconomic constraints described here and the need for evolving towards a more efficient economy.

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<sup>10</sup> except when national family planning policies include coercive birth control.

### III. Program Background

#### A. Past Programs

The Public Law 480 or PL-480 program is one of the oldest bilateral food aid programs between the United States and Pakistan. Founded in 1952, the program has provided food aid every year for a total of over \$2.6 billion. The principal commodities offered under the program have been wheat and edible oils.<sup>11</sup>

Although formal Self-Help Measures (SHM's) were not incorporated into the PL-480 program until 1969, there have been policy discussions included in annual agreements from the beginning. For example, the availability of large PL-480 supplies of wheat in the late 1950's and early 1960's were credited by Falcon and Gotsch with several major policy reforms in wheat: 1) the initiation of a process of price decontrol and the lifting of trade restrictions and 2) the freeing of farmers to legally sell wheat into the open market and the lifting of restrictions on private traders.<sup>12</sup> Agreements in the early 1970's emphasized and supported improvements in the irrigation system, increased use of high yielding varieties, a national fertilizer strategy, and price incentives to stimulate increased production of wheat.

In the early 1980's, the emphasis of the PL-480 program shifted to the edible oils sector. The major goals of the program were improving the operation of the vegetable oil sector, reducing the government costs, and reducing increasing expenditures on imported edible oil. The program was designed support the handling and processing of edible oil, particularly by the private sector, but avoided the issue of oilseed production within Pakistan. During the 1980's, the program seemed successful in limiting government expenditures and increasing the private sector role in vegetable oil trade, processing, and marketing. However, price policies for ghee have continued to encourage increasing consumption of imported oils and there has been little increase in local production.

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<sup>11</sup> This section relies heavily on two reports: 1) Newberg, Richard, Consultant Report on the FY 1989 PL-480 Agreement and Suggestions for Future Program Priorities, USAID, Islamabad, September, 1988; and 2) Newberg, Richard and Jones, Allen, PL-480 Title I Case Study, Pakistan, Ronco Consulting Corporation, Washington, D.C., May, 1986.

<sup>12</sup> Cited in Newberg and Jones, 1986, p. 8

In a comprehensive review of the Pakistan PL-480 Title Program, the authors came to a number of conclusions which are relevant for this paper. Briefly stated, they are:

- 1) USAID technical offices should participate in the policy dialogue.
- 2) PL 480 should be integrated with other US assistance to the extent feasible.
- 3) Continuity in SHMs is important.
- 4) Simplicity and a sharp focus on self-help conditions is very important.
- 5) Opportunities to develop clear multi-year programs should be used.

These lessons should be kept in mind as we examine the PL-480 program for 1988-89.

#### B. The 1988-89 Program

##### 1. Commodity Mix- 1988-89

The 1988-89 program was a primarily soybean oil program broken down as follows:

- 6,000 tons of soybean oil cash purchase;
- 124,000 tons financed under Title I terms i.e. a 10 year grace period at 2% followed by a 30 year repayment period at 3%;
- 139,000 tons Usual Marketing Requirements (UMR) under CCC financing at 6.5% repayable over three years with a one year grace period.

Soybean oil from the U.S.A. costs about 25% more than the palm oil from Malaysia. This can be seen as a \$200 dollar loss on every thousand dollar purchase of soybean oil. The grant element in the concessionary Title I financing compensates for this. Thus, despite the \$200 overcharge, the net present value

of the grant component is worth \$563 on every \$1,000 dollars at a 12% discount rate.<sup>13</sup> Thus, despite the higher cost, the grant element in Title I financing more than compensates for it. However, the UMR component ends up costing more despite the CCC financing. For every thousand dollars in UMR, the GOP ends up paying about \$166 dollars more than it would for the same volume of palm oil. Thus, if the UMR were to reach 3.5 times the Title I component, the grant element would completely disappear. These figures will change with the discount rate. If the discount rate is lower, then the grant component is lower and the loss from UMR is higher. The reverse is true when the discount rate is higher. The Team is using 12% as the discount rate of reference for this analysis.

The data in Table 3-1 shows the value of the 1988-89 to the Pakistan government both in foreign exchange terms and in revenue terms compared to the imports of a similar volume of palm oil from Malaysia. At the 12% discount rate, the net foreign exchange benefit of the complete program (including cash purchase requirement and UMR) was \$19.5 million. The total revenue of the program impact was about Rs. 2.3 billion, but if only the grant element of the counterpart fund is considered the net revenue advantage of the PL-480 program is only about Rs. 1.4 billion. The net revenue effect is lower than the net foreign exchange effect because the tax revenues from Palm Oil are higher. The implication of this is that what is originally an \$80 million dollar program is effectively worth less than \$20 million in foreign exchange and just over \$ 10 million in net revenue terms. These figures are likely to be reduced further as UMRs increase.

The overall conclusion is that the net impact of the program as presently constituted is less than \$20 million dollars, thus in discussing policy conditionality and self-help benchmarks, the discussion is really about a \$20 million dollar program and not a \$80 million program.

## 2. Policy Content- 1988-89

The 1988-89 program had six self-help measures. The first one was concerned with the continuation of the long-term policy of liberalized prices of edible oils. The second also dealt with edible oils and stated that the GOP would continue its policy of

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<sup>13</sup> If the U.S.A. were supplying a product in which it is the most competitive supplier the grant component would have been worth \$742.

Table 3.1

Relative Attractiveness of PL-480 Compared to Cash Purchases of Palm Oil  
Assuming Total Purchase of 269,000 Tons

	Economic Cost of PL-480 Soya- bean Oil by Discount Rates			Cash Purchase Palm Oil
	15%	12%	10%	
Base Price and Shipping in thousands of U.S. \$ (2)				
Total Payments	\$221,231	\$221,231	\$221,231	\$104,910
Economic Costs (3)	\$75,551	\$85,367	\$93,967	\$104,910
Effective Grant Percentage	37%	24%	14%	
Net Economic Benefit of PL-480 Package compared to Palm Oil Purchases	\$29,359	\$19,543	\$10,943	\$0
Government Revenues in Millions of Rupees				
Tariffs at Present Rate	807.0	807.0	807.0	941.5
License Fees	49.1	49.1	49.1	37.8
Iqra	122.7	122.7	122.7	94.6
6% Import Surcharge	147.2	147.2	147.2	113.5
Counterpart Fund Total (5)	1,187.4	1,187.4	1,187.4	
Counterpart Fund (Grant Component Only)	435.8	290.1	162.4	
Total Revenue Generation in Millions of Rupees				
inc. Total Counterpart Fund	2,313.4	2,313.4	2,313.4	1,187.3
inc. Grant Component of C'part Fund	1,561.7	1,416.0	1,288.3	1,187.3
Total Revenue Generation in Rupees per Ton				
inc. Total Counterpart Fund	8,600	8,600	8,600	4,414
inc. Grant Component of C'part Fund	5,806	5,264	4,789	4,414
Revenue Generation Advantage of PL-480 mix in Rupees per Ton				
inc. Total Counterpart Fund	4,186	4,186	4,186	
inc. Grant Component of C'part Fund	1,392	850	376	
Total Revenue Generation Advantage of PL-480 (Millions of U.S. \$)				
inc. Total Counterpart Fund	\$51,183	\$51,183	\$51,183	
inc. Grant Component of C'part Fund	\$17,017	\$10,394	\$4,591	

## Notes:

1. Calculated from data attached to letter from Chief/PRO/USAID to Additional Secretary of Finance, Dated January 25, 1989.
2. 269,000 tons soybean oil under PL-480s of which 6,000 tons are cash purchases, 124,000 tons are financed at Title I Credit rates of 10 year grace period at 2% followed by 30 year repayment period at 3%, and 139,000 ton UMR at CCC Rates of one year grace period at 6.5%, followed by a two year repayment period at 6.5%. Palm oil purchases assume 269,000 ton cash purchase from Malaysia.
3. Net Present Value of Total Payments.
4. The UMRs and hence net grant element will vary. As UMRs increase, the net grant element will decrease and eventually be completely off-set by the higher cost of the soybean oil.
5. Counterpart Fund based on Title I financed component only.

progressive privatization of the vegetable ghee industry. These two measures continued in the vein of the recent PL-480 programs.

The next three measures were in different subject areas. One was concerned with employment and small scale industry, stating the the Government of Pakistan "will take steps to improve the economic environment for small industry." Another dealt with nutrition, stating that the Government would endeavor to increase information about the status of the population. A third SHM concerned identifying and removing the constraints to the development of a viable planting seed industry. The benchmarks for these programs were relatively weak and basically concerned with the GOP supplying to USAID reports that were being written by various consultants and agencies.

The final benchmark recommended the establishment of a joint working committee to review the PL-480 program and establish some new directions for the program. As suggested by Richard Newberg in his review of the 1987-88 PL-480 program, the Mission and GOP agreed it was time to to maximize the effectiveness of the PL-480 program and focus the SHM's on a narrow set of issues. The program would be guided by a set of overall goals that are cast in a multi-year framework. The SHM's agreed upon annually should be measurable and realistic benchmarks of policy change that lead towards the stated goals. In order for USAID to propose such benchmarks, the Mission would develop expertise in the chosen policy area(s) by conducting studies and developing in-house experience over a period of years.

#### IV. PL-480 Commodity Mix

The PL-480 Title I program for Pakistan has supplied only edible oils in recent years. This focus on edible oils has created several problems:

- U.S. soybean oil is about 25% more expensive than alternate edible oils (palm oil) supplies available to Pakistan.
- the financial and foreign exchange benefits of the program for the Government of Pakistan are consequently reduced; a program which only included products in which the U.S. was the most competitive supplier would give 49% higher net foreign exchange benefits for the GOP (based on estimated grant element in net present value terms). This is calculated using a 12% discount rate, if the discount rate is lower the differential increases and when the discount rate is higher the differential decreases (see Table 4.3).
- the uniproduct nature of the program has not helped the U.S. to develop markets for other products in which it is a more competitive supplier.
- the Ghee Corporation of Pakistan has been able to help justify its subsidy based on the idea it must accept more expensive U.S. soybean oil when the private sector was able to access cheaper palm oil from Southeast Asia.<sup>14</sup>

Altering the commodity mix is constrained in the short term (or even in the medium term) by the lobbying efforts of the U.S. Soybean Processors Association. Pakistan is their largest overseas market, and they are unwilling to see their market share reduced. At the same time USDA seems to have made it clear to the soybean oil lobby, that they cannot count on getting more than \$50 million of the PL-480 financed exports to Pakistan. The expansion of the program to \$80 million, two years ago, provides the opportunity to diversify the commodity mix without incurring strong opposition from the Soybean Processors lobby who regard the original \$50 million as their share of the PL-480 benefits.

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<sup>14</sup> There are technical reasons for including some soybean oil in vegetable ghee. Thus, the proposed diversified product mix still reserves \$50 million (i.e. about 63%) for soybean oil.

## A. Potential for Changing the Commodity Mix

The commodities that should be considered for inclusion are: maize, soybean-meal and timber (and other wood products). The U.S. is a competitive supplier of all these other products. The alternative commodities proposed here are all commodities for which Pakistan has a great need and could use effectively.

### 1. Corn and Soy-Protein for Livestock and Poultry Feed

Corn and soybean-meal are complementary products for use as poultry and livestock feed. The import of soybean meal would supplement the dwindling supply of Arabian sea fishmeal which is presently used for protein source in livestock feed. This year the Pakistani private sector proposes to import 7,500 tons of soybean meal to supplement dwindling supplies of fishmeal.

Pakistani corn processors have been complaining about a corn shortage in the market, despite claims to the contrary in some parts of the GOP. PL-480 corn would also be imported primarily for use in feed-mills and will be of the Grade II, feedmill variety. These imports would have the dual effect of reducing the use of wheat for poultry-feed thereby increasing food supply for human consumption. It would not have the disincentive effect of reducing agriculture production. In fact, it may even help to expand the demand for corn in the country creating opportunities for local producers as well as importers. By targeting the high-growth poultry industry as market, PL-480 corn would not only stimulate imports of U.S. corn but is also likely to help create the conditions for growth of overall demand for corn which would induce increased local production as well.

The GOP follows a foodgrain pricing policy designed to keep wheat prices relatively low to protect consumers. Pakistan imports wheat at CIF Karachi price of Rs.4.40 per kilogram. Using this as the economic cost of wheat, the Team examined wheat prices prevailing in the major markets of Pakistan. The data is shown in Table 4.1. In all cases wheat prices were below the economic cost of though significantly above domestic procurement prices.

Some have argued that the border price of wheat may be too high to use as its economic cost. An alternate measure of the economic cost of wheat may be the price at which the domestic production will equal domestic demand. This has been estimated by

Table 4.1

Market Prices of Maize and Wheat Compared with Economic Costs  
in Selected Markets

Market/Product	Average Market Price	Economic Costs		Differentials		
		Border Prices	Domestic Equil.(1)	Price and Econ.Cost	Price & Equil.	Maize and Wheat
<b>Faisalabad</b>						
- White Maize	3.00	2.84		5.6%		11.1%
- Red Maize	2.84	2.84		-0.1%		22.7%
- Wheat	2.31	4.41	3.62	-47.6%	-36.1%	
- Superior Wheat	2.70	4.41	3.62	-38.8%	-25.4%	
<b>Lahore</b>						
- Maize	3.00	2.84	3.62	5.6%		23.1%
- Wheat	2.44	4.41	3.62	-44.7%	-32.7%	
<b>Multan</b>						
- Maize	2.44	2.84	3.62	-14.3%		8.9%
- Wheat	2.24	4.41	3.62	-49.3%	-38.3%	
<b>Karachi</b>						
- Maize	2.69	2.84	3.62	-5.4%		3.0%
- Wheat	2.61	4.41	3.62	-40.8%	-27.9%	

## Notes:

1. Economic Costs are based on CIF imports plus transport costs since both corn and wheat are in short supply in Pakistan.
2. The main grain market is Faisalabad.
3. The market prices are obtained from the Business Recorder dated July 23, 1989. U.S. source corn and wheat prices from USDA. The market prices are likely to be higher in October.
4. Equilibrium price based on estimates presented on P.3 of Economic Analysis Network paper on "How much wheat will Pakistan need to import during 1989-90?" This is the price at which domestic production should equal domestic demand.

Source: Team Estimates

the Economic Analysis Network (EAN) Project <sup>15</sup> to be about Rs.- 3.62 per kilogram. Even compared to this lower valuation of economic cost, the market prices are significantly lower than the economic cost, due, at least in part, to GOP marketing interventions.

Maize fetches a premium in the local markets over and above wheat which is unusual particularly in view of Pakistanis strong preference for wheat (at least outside the NWFP). The landed price of corn CIF Karachi is about U.S. \$ 135 per ton or Rs.2.84 per kilogram. The economic cost of wheat is over 54% higher than the economic cost of maize. The premium commanded by the maize is due to two factors: the GOP wheat marketing policies and the 40% tariff on imported maize plus 12.5% sales tax on maize.

As long as the GOP continues its present release price policies, which keep wheat significantly below world market prices, maize will continue to fetch a premium. To keep domestic wheat prices low, the GOP subsidizes imported wheat anywhere from 40% to 50%. Furthermore, the 40% import duty is enough of a barrier to keep imported maize out of the domestic market as the data in Table 4.1 demonstrates. The effect of this policy is to make it much more attractive for Pakistani feed-millers to use wheat rather than maize/corn in the manufacture of feed. This increases the demand for wheat and forces the government to import more. Demand for poultry feed is rapidly growing and, unless relative prices of wheat and corn change, the GOP will be forced to import increasing amounts of wheat just for poultry feed. Each ton of imported wheat carries an effective subsidy Rs. 1,300 to Rs. 1,500. The feed-millers are unlikely to switch to corn at present prices. If maize imports are freed up and the 40% duty withdrawn maize will be a competitive input for poultry feed reducing the wheat import requirements. The economic cost of using corn is significantly less than that of wheat. Corn CIF Karachi is quite competitive with wheat even at the present subsidized price of wheat. Should the wheat subsidy be reduced, the competitiveness of corn as a feed mill input will increase.

Table 4.2 shows the economic costs from using coarse wheat in place of corn in poultry feed. The analysis is done in two scenarios. The economic cost of corn in both scenarios is taken to be the border price of Grade II corn from the U.S.. Under Scenario I, the economic costs wheat used in feed-mill is taken to be border prices (less 10% to allow for the lower grade of wheat used in feed-mills). The volume of feed grains required by

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<sup>15</sup> EAN Paper "How much wheat will Pakistan need to import during 1989-90?". Islamabad, June, 1989.

Table 4.2

Potential Savings to from Switching to Corn in Poultry Feed Mix

	Scenario I	Scenario II
<b>Commercial Poultry Production in Tons</b>		
-1988	57,325	57,325
-1989 Projection	65,179	65,179
-1990 Projection	74,108	74,108
<b>Feedgrain Requirement for Above Production</b>		
-1988	103,185	103,185
-1989 Projection	117,321	117,321
-1990 Projection	133,394	133,394
<b>Economic Cost if Coarse Wheat is Used Rs. Millions</b>		
-1988	409,541.3	336,176.7
-1989 Projection	465,648.4	382,232.9
-1990 Projection	529,442.3	434,598.9
<b>Economic Cost if Grade II Corn is Used Rs. Millions</b>		
-1988	293,045.4	293,045.4
-1989 Projection	333,192.6	333,192.6
-1990 Projection	378,840.0	378,840.0
<b>Economic Loss from Use of Wheat in Poultry Feed</b>		
-1988	116,495.9	43,131.3
-1989 Projection	132,455.8	49,040.3
-1990 Projection	150,602.2	55,758.8

Notes:

1. Approximately, 1.8 tons of grain used per ton of poultry.
2. Projections based on recent trends i.e. post 1981
3. Scenario I economic cost of wheat at border prices less 10% for lower quality. Scenario II Economic price at domestic equilibrium price as in Table 4.1 from EAN Wheat price study.
4. Economic price of corn in both scenarios at border prices.

Source: EAN Poultry Study and Team Research

the feed mill industry is estimated to be less than the volume of wheat imports in a good crop year. Thus, the amount diverted to feed mills can be considered as always coming from the imported margin. In Scenario II, the economic cost of wheat is taken to be the domestic equilibrium price (less 10% for quality differentials) of wheat as shown in Table 4.1.

Comparing wheat and corn at border prices, the Team estimates that the GOP could have saved Rs.116.5 million in 1988 had grade II corn been used instead of wheat. By allowing the import of grade II corn under the PL 480 program the government should save over Rs. 150.6 million during 1990. Of course the feasibility of such import depends on the removal of the 40% tariff on imported corn as well as a slight upward movement in the local price of wheat or a downward movement in the FOB price of corn which is quite likely given better rains in the U.S. Corn belt.

The savings are less when the domestic equilibrium price is used as the basis for the economic cost, but nevertheless, quite substantial. These would have been Rs. 43.1 million in 1988 and could rise to Rs. 55.8 million by 1990, if corn imports were allowed. The calculations in Table 4.2 assume quite high rates of efficiency in conversion of grain weight to poultry weight. They also assume growth rates which are fairly modest in the light of past trends.

The analysis of border prices shown above are useful in assessing economic costs and benefits to society. Businessmen who run the chicken processing industry do not worry about national good but about profitability. If the latter happens to coincide with the national good than, businessmen will be quite happy, but their choice of inputs will depend on financial costs. Pakistan's wheat subsidy policy has been debated in a lot of forums, and the Team does not intend to repeat the same debate here. The Bretton Woods institutions have this on their agenda and they are better equipped to deal with the issue. Rather, the focus here is being put on transferring to using lower economic cost input from higher economic cost inputs when there is no difference in benefit (assuming that chickens have no particular preference between corn and wheat). To avoid the waste in resources two basic steps are needed: first, the corn tariff has to be removed and secondly wheat and corn needed to be treated equally in terms of sales tax. Either the same tax has to be put

on wheat <sup>16</sup> or the tax removed from corn. The irony of the present tax structure lies in the fact that the tax subsidy is going to the superior good (wheat). Presumably, a major objective in the GOP's wheat policy is to help increase the consumption of the poor, but as the discussion in Appendix B of this report notes, assisting the poorer sections of the population requires that any subsidies go to the inferior good (corn) rather than the superior good (wheat).

The tariff on corn is presumably meant to protect domestic growers who are mostly from the North West Frontier Province primarily. The unintended consequence of this tariff has been to divert wheat from human to animal consumption and constrain the demand for corn. Unless the demand for corn grows, farmers in the NWFP may have a hard time finding markets outside their immediate region. The more effective way to assist these farmers would be through a two way strategy. First, the demand for corn should be increased, by making it the cereal of choice in the country's rapidly growing livestock feed industry and secondly, helping farmers directly through incentive packages rather than a general tariff which affects the whole society. The transport cost between Peshawar, the principal city in the NWFP, and Karachi is about Rs.500 to Rs.600 per ton. There is a natural protection of over 20% to NWFP corn growers from transport cost alone. <sup>17</sup> There is also a preference for local corn. Thus, the amount of assistance the farmers would require in place of eliminating the tariff may not be very much.

## 2. Wood and Wood Products

The forestry project paper notes that the forest depletion rate in Pakistan is about 130%. This means that for every 100 acres of forest added every year, 130 acres are harvested. As a result, Pakistan's forest base is rapidly declining. Despite these severe deforestation problems, Pakistani wood remains cheap, because the suppliers are only paying the financial costs of harvesting the wood, not the economic costs which would include a scarcity premium on fast-depleting forest resources. These costs can be included in the suppliers financial costs by regulating or heavily taxing the movement of wood out of the

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<sup>16</sup> This is the more attractive solution in the present macroeconomic situation when the need for domestic resource mobilization is paramount.

<sup>17</sup> The NWFP is the main corn growing and consuming region of Pakistan.

mountain valleys of Northern Pakistan. These taxes and regulations would be easy to enforce in the mountain valleys, because of the limited number of routes out of the valleys.

The inclusion of wood or wood products under PL-480, should not be too difficult. Pakistan is importing at present \$100 million of wood/wood products every year. It would be possible to include forest products under PL-480 for 1989-90, but efforts should be made to bring them as soon as possible. Imported wood products would provide Pakistan the time required to regenerate its forest base.

### B. Financial Implications of Changing Commodity Mix

The change has been proposed in response to GOP/Ministry of Finance complaints about the high cost of soybean oil relative to palm oil from Malaysia. The GOP stands to benefit significantly in the net present value foreign exchange benefits from PL480 if the product mix is changed away from purely soybean oil. As U.S. soybean oil is priced 25% above alternative world market sources (e.g. palm oil), there is effectively a net loss of about \$200 on every \$1,000 purchase of soybean oil. This is compensated by the grant element built into the PL480 Title I interest rate structure.<sup>18</sup> There is a net financial loss on purchasing U.S. Soybean Oil under the UMR arrangement even with concessionary CCC financing (6.5% repayable over three years with a one year grace period). This net loss is also compensated for by the grant element in Title I program. Nevertheless, taking into consideration the fact that the Title I allocation could be used to purchase other products for which the U.S. is a competitive supplier, there is a net loss to the GOP when Title I funds are used to buy soybean oil instead of other essential products.

The simulation in Table 4.3 shows the increase in financial benefits in foreign exchange of moving away from a purely edible oils program. The net foreign exchange benefit to moving to a \$50 million edible oil and \$30 million other products in which the U.S. is competitive is very large. It ranges from 28% when the discount rate is 10% to 11% when the discount rate is 15%. At the most commonly used discount rate of 12% the savings from making such a switch are worth 18% more in foreign exchange.

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<sup>18</sup> Forty year term with a ten year grace period. Interest during the first ten years is at 2% and then 3% for the subsequent thirty years.

Table 4.3

Effect of Changing PL-480 Product Mix on Attractiveness to GDP  
(thousands of U.S. Dollars)

Soybean Oil	Soybean Protein	Corn	Wood	Total Value of Program	Index of Net Foreign Exchange Gain for GDP '88-'89=100
-----					
Discount Rate Equals 12%					
-----					
\$80,000				\$80,000	100
\$70,000		\$10,000		\$80,000	106
\$60,000	\$10,000	\$10,000		\$80,000	112
\$50,000	\$10,000	\$10,000	\$10,000	\$80,000	118
\$40,000	\$15,000	\$15,000	\$10,000	\$80,000	125
\$30,000	\$20,000	\$20,000	\$10,000	\$80,000	131
	\$30,000	\$30,000	\$20,000	\$80,000	149
-----					
Discount Rate Equals 15%					
-----					
\$80,000				\$80,000	100
\$70,000		\$10,000		\$80,000	104
\$60,000	\$10,000	\$10,000		\$80,000	107
\$50,000	\$10,000	\$10,000	\$10,000	\$80,000	111
\$40,000	\$15,000	\$15,000	\$10,000	\$80,000	115
\$30,000	\$20,000	\$20,000	\$10,000	\$80,000	118
	\$30,000	\$30,000	\$20,000	\$80,000	129
-----					
Discount Rate Equals 10%					
-----					
\$80,000				\$80,000	100
\$70,000		\$10,000		\$80,000	109
\$60,000	\$10,000	\$10,000		\$80,000	119
\$50,000	\$10,000	\$10,000	\$10,000	\$80,000	128
\$40,000	\$15,000	\$15,000	\$10,000	\$80,000	137
\$30,000	\$20,000	\$20,000	\$10,000	\$80,000	147
	\$30,000	\$30,000	\$20,000	\$80,000	175

Source: Team Estimates

These simulations assume a one to one ratio between PL-480 Title I financed products and UMRs. UMRs increase over time. The increase of UMRs in soybean oil reduces the net benefits to Pakistan despite concessionary CCC financing. However, when the U.S. product is competitive, then the CCC financing would make even the UMR purchases of the commodity financially beneficial. However, if soybean oil only is brought in under Title I, at a certain point in time the loss from UMR, will eliminate the benefits from Title I.

Despite the financial attractiveness of changing the product mix, the Team recognize the difficulties in changing the product mix. Apart from the U.S. Soybean Processors there are problems in Pakistan itself. These include objections among some quarters in Pakistan to the inclusion of timber and wood products. The present relative prices of wheat and corn, make wheat the more grain for feed-mills. Wheat is used to, produce live-stock and poultry feed, even though the economic price of wheat is almost 40% higher than the economic price of corn. This is because due to GOP's wheat subsidy policy the financial price of corn is higher than the financial price of wheat.

Nevertheless, the Team recommends a change in commodity mix to the following commodities:

Year	Soybean Oil	Soymeal	Corn	Wood
1989-90	\$70 M.	0	\$10 M.	0
1990-91	\$50 M.	\$10 M.	\$10 M.	\$10 M.
1991-92	\$50 M.	\$10 M.	\$10 M.	\$10 M.

The inclusion of corn in the first year presupposes inclusion and implementation of a first year benchmark to either eliminate the corn tariff or increase wheat prices so that corn with its lower economic cost becomes the grain of choice in poultry feed. This switch is expected to save the country over three hundred million rupees in foreign exchange.

## V. Sectoral Analysis

The Team has focused on nutrition and trade as the two sectors of focus. The reasons underlying the choice of these sectors has been discussed in section II.

### A. The Nutrition Sector

Nutrition issues are quite complex, encompassing a whole range of questions from production, to income distribution, to prices and including social and anthropological considerations. These issues are dealt with in Appendix B attached to this report. This section summarizes the key conclusions of that Appendix.

#### 1. Introduction

Pakistan's nutritional well-being has fallen behind its economic well being for a variety of reasons. The results of the Nutrition Survey of 1985-87 showed that the nutritional status of the population more or less remained unchanged during a period in which per capita incomes grew 32% or so. This contradiction can be understood only if understood by analyzing how the poorer sections of the population acquire their food. (See Appendix A, Section I).

According to the National Nutrition Survey of 1985, 15.8% of children under five years of age suffer from acute malnutrition. This shows little change from over a decade ago, despite the fact that the intervening period was characterized by almost a doubling of per capita income and attainment of self-sufficiency in food. The results shown in Table 5.1 shows that during the 1977-85 period, the nutritional status of the population of Pakistan remained unchanged. Pakistan's nutrition sector needs to be looked at carefully and policy alternatives which improve the nutritional status of the population have to be adopted.

Unfortunately, the published report of the National Nutrition Survey does not explore the findings further than reporting average nutritional status of the national population and the provincial population. The policy issue here is why was there no change in the nutritional status of the population during a period in which real per capita income grew over 32%. This should have been explored in the report by reporting nutritional status of various income or landholding groups, as well as that for particularly vulnerable social groups. These important

issues were not explored and the survey report cannot be the basis for specific policy issues. The Team hopes that this key failure can be redressed through a more detailed analysis of the survey results by policy-oriented nutrition specialists.

Table 5.1

Nutritional Status of Pakistan Population 1977 & 1985

Type of Malnutrition	Anthropometric Manifestation	1985	1977
Normal Nutrition	Normal Body Growth	42.9%	41.8%
Chronic Malnutrition	Stunted Growth	41.8%	43.3%
Acute Malnutrition	Physically Wasting	10.8%	8.6%
Extremely Severe Malnutrition	Stunted and Wasting	4.5%	7.2%
Economic Indicator			
Per Capita Income (Constant '59-60 Rupees)		687	910
Increase in per Capita Income			32.5%

Sources:

1. National Nutrition Survey, 1985-87
2. Economic Survey, 1988-89

Neither the old ration shop system nor the present uniform guaranteed price and supply policy of the government have had much effect on the truly needy. This is not surprising in view of the fact that the rationale behind setting them up was to assure supplies to different regions and not the consumption by vulnerable groups. The new system has no built-in mechanism to "cap" its costs and financial pressures may force it back to a form of rationing with all its inefficiencies. Ironically, as a direct consequence of its inefficiencies, the old ration shop system had become a self-targeting system to the poorer segments of the population, because it acquired the reputation of supplying an inferior product. The poor benefited more from it than the better off specially in the urban areas. However, the inefficiencies of the program and its high cost far outweighed any its benefits, intended or unintended.

The key issues in the nutrition sector can be divided into three segments. The first concerns the food distribution among households. The second segment of concern is the distribution of food within the household. The final area of concern is the quality of nutrition.

## 2. Food Distribution among Households

Food distribution among households is best taken care of by a well-functioning market. People with resources buy or produce what food they need to survive. For those households who are able to either purchase or produce (or both purchase and produce) their food, the nutrition issue is one of nutritional quality. Poorer households may need targeted programs to give them access to the minimum survival set of food. These sections of the population are the ones who may need public assistance. Programs should be designed which are specifically for these vulnerable groups, otherwise, the program meant to help the poor turns into an entitlement program for the political elite, and the costs become prohibitive.

Targeted programs are necessary to improve the nutritional well-being of the population. Geographic targeting can succeed only the difference in subsidized price and unsubsidized price is less than the transport cost between the two areas. Thus, these policies will only work in remote and less accessible regions.

Targeting by income and landholding group is difficult to administer because of the near impossibility of identifying the truly needy. A test relief type operation such as food for work may work better. Anybody willing to perform such hard work for payment in food-grains is likely to be quite needy.

A targeted commodity approach under which inferior food goods are subsidized on the assumption that only the poor will want to eat those foods may be successful in targeting the needy. There is a danger that the commodity may also end up as poultry and livestock feed indirectly transferring the benefits of the subsidy to the rich. Some countries have avoided this problem by designing product mixes which while palatable to humans may include items such as hot peppers making the mix unpalatable to livestock.

### 3. Nutrition Quality and Intra-household Distribution Issues

Nutrition quality can be addressed in the long-term through better nutrition education. The short-run solution is more difficult and may need to include price increases and/ or consumption taxes on food products which are not very healthy, if consumed in large quantities e.g. fats, oils, and meats. Another possible short-run solution may be a special targeted training in nutrition issues for mothers in particularly vulnerable households.

Intra-household allocation problems can be addressed in the long run by improving primary and secondary education of women. In the short run, direct feeding of vulnerable groups such as pregnant and lactating women as well as children is a possible approach. One key rule of thumb to be observed in improving the nutritional status of the more vulnerable members of the household is that once average household consumption passes a certain threshold, usually slightly above the average minimum requirement, then even the less favored members of the household receive an adequate intake. Thus, in slightly better off households, the impact of intra-household resource allocation biases will not be picked up by standard anthropometric measures.

### 4. Strengthening Nutrition Sector Institutions and Developing a Measure to Monitor Nutritional Status

Strong institutions provide effective support and continuity for various policies and programs. Policies and programs to improve the nutritional status of the Pakistani population are unlikely to succeed unless there is a strong institutional base. The first priority must be to develop and strengthen the existing institutional base both in the government and in the private sector.

The nutrition sector institutions are at present highly diffused. They are located in the health services; they are in the Planning Commission; and they are located in various donor and international agencies. They do not speak with one voice and often they do not follow a single approach. The lack of the both makes it easier for officials in the Ministry of Finance to ignore their requests for increased funding.

Clinical nutritionists have a highly micro-level patient-oriented approach while at the other extreme are those that believe that nutrition problems can be solved simply by increasing food production and not bothering to give much thought to food consumption, quantity or quality. Researchers have given some attention to demand issues,<sup>19</sup> but all of the material have yet to assembled together and marshalled as one coherent argument. This needs to done and the lead necessarily must come from the Planning Commission. The Nutrition Cell in the Planning Commission is seized of the importance of this issue and is slowly to proceeding to built leadership institutions at the national and provincial level. Appropriately, they have placed nutrition cells in provincial planning departments/boards. These cells are financed by the Federal Government budget. Their task is to build consciousness of nutrition issues within the provinces.

The planning commission while an appropriate agency for developing nutrition sector policy and monitoring nutritional status of the population is not an implementing agency. Implementation of nutrition sector policy requires action by several different government agencies both at the federal and at the provincial level. These agencies range from agriculture and food to health and education. Their activities need to be coordinated but not government agency possesses all the expertise required to do so. Rather, than create a new agency to implement nutrition programs, it would be advisable to set up a nutrition policy implementation cell with authority to direct action by different departments. This unit should be headed by a high ranking official and is best located in the Prime Minister's Secretariat. Consideration needs to be given to setting up such an authority before implementation of nutrition interventions is possible. Outside of government, there is a need to build up non-governmental organizations (NGOs) or private voluntary organizations (PVOs). They can be nurtured and built up through giving them pilot targeted nutrition projects to manage.

The nutrition advocates based in the Planning Commission and Provincial Planning Units face the enormous task of gathering together the evidence necessary for effectively making the case for nutrition sensitive policies and programs. They must be careful to make these arguments in terms comprehensible to economists and financial analysts. Otherwise their requests for more funding will almost inevitably be rejected particularly in an era of tight government budgets.

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<sup>19</sup> For example, under the PIDE/IFPRI project.

Nutritionists have been arguing that there is little or no information on the nutritional status of the population. Monitoring nutritional status of the population through the type of nutrition surveys which gather all the information clinical nutritionists find useful is an expensive and time consuming process. The cost of repeating this survey every year is prohibitive. However, the nutritionists focus on the anthropometric measures, may have led them to ignore exploring carefully the existing data sources on food consumption. The team was even told that there was no data available in Pakistan on food consumption. On exploring the issue the Team found out that the Household Income and Expenditure Survey of Pakistan (HIES) which is now an annual exercise gathers data on the consumption in physical units of over 50 types of food. The physical consumption data is not reported in published reports but is available in the computer data base from which the report is published. The HIES is a nationwide survey of 18,000 households distributed all over Pakistan according to the Census population distribution. The underlying assumption behind all the anthropometric measures used by nutritionists is that there exists a relationship between food consumption (both quantity and quality) and physical well being. The food consumption data gathered by it can be used to estimate anthropometric status of the population.

Fortunately, a functional relationship can be estimated between various nutritional status measures and food consumption. An example of this is an equation linking weight for height to food consumption plus other control variables. This type of equation can be estimated from the results of the nutrition survey. Simplistically, the equation form can be stated below:

$$N = a + b * \log(F) \pm E$$

where, "N" is nutritional status of individual, "a" is an estimated constant, "b" is an estimated parameter, "F" food consumption of the individual and "E" an error term.

The equation noted above or a similar equation can be estimated from the 1988-89 Nutrition Survey.<sup>20</sup> "F" is available yearly from the Household Income and Expenditure Survey (HIES). This survey covers 18,000 households distributed over Pakistan according to the Census population distribution. The survey records the intake of food over thirty categories of food per household. Next year's round is expected to include even more food cate-

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<sup>20</sup> For an example of such an estimate see Khan, Qaiser M. "The impact of household endowment constraints on nutrition and health: A simultaneous equation test of human capital divestment." Journal of Development Economics, 1985

gories. The estimates of "F" from this survey can be input into the above (or similar) equation.

"F" can be caloric intake or a index of micronutrient intake or any other similar measure. The annual HIES provides enough data to measure most food intake quality or quantity variables. The Pakistan Statistical Office has expressed its willingness to release the computer tape of the survey data to any appropriate users whether Pakistani or donor. Some funding needs to be made available for this exercise to be conducted.

Once the equations have been estimated every year nutritional status of the population can be measured by inputting the data from the HIES into the equations. Every decade or so a detailed nutrition survey can be done and the equations updated based on those results.

The HIES also provides lots of other useful measures that are useful to nutrition planners. It provides information on the variation in the consumption of various foods. Using the survey, the impact of various government policies to improve food consumption in different regions can be studied. The sources of systematic undernutrition can also be modelled. To do so effectively, the survey needs to add questions about rented landholdings and sharecropped landholdings. It has been noted already that the those with direct access to food production are less likely to be affected by sudden swings in market prices even if on the average they are less well-off.

There are other indices which can be monitored for assessing the nutritional status of the population. These include neonatal mortality rate, i.e. mortality rate for children between birth and 28 days. This rate is affected by mother's nutritional status as is pregnancy wastage rate though the latter may be impossible to estimate in the cultural conditions of Pakistan. Post-neo-natal mortality rate, i.e. mortality from 29 days to 364 days is affected by household nutrition status. All these variables can be used to monitor impact of specific nutrition programs once they are in place. They are not as suitable for population wide monitoring in the absence of full coverage national vital registration system.

## B. Trade Policy

Problems and Constraints <sup>21</sup> - Despite certain improvements in the trade accounts of Pakistan, there are a number of structural problems which need to be addressed if Pakistan is to achieve the high growth rates in exports necessary to avoid serious balance of payment problems in the near future. The export base remains narrow and is subject to instability. Unit values of many exports remain low, and more value-added products are needed in general. The tax base is too dependent on trade-related taxes leading to a less efficient export structure. There has been a structural bias against exports (exchange rate and tariff policies) which has lowered growth in exports. Administrative barriers (need for export permits, bans on exports), lack of marketing and transportation infrastructure, and insufficient quality control programs have worked against increased exports.

Trade Issues under the PL-480 Program- The Government has of been aware of the problems in the trade sector. Particularly in recent years, the GOP has made a serious effort at putting into practice some of the trade policy reforms necessary to correct the anti-export bias of the tariff regime. The World Bank and the International Monetary Fund have actively worked with the Government to put together a program of trade reforms and a package of financial aid (structural adjustment) to assist in the transition. The main trade policy objective of the program is to improve international competitiveness of industry, reduce the level and dispersion of tariffs, and equalize the relative incentives between producing for the export market and for the domestic market. The IMF and World Bank have also been working with the GOP on exchange rate issues, a critical element in the success of the New Trade Policy, is a benchmark in the World Bank and IMF agreements.

The two most feasible areas for inclusion under PL-480 are an examination of the effect of restrictions of exports on export diversification and growth, and institutional framework needed to improve the quality and efficiency of the trade sector.

### 1. Restrictions on Exports

There are two major types of policy-based restrictions on exports in Pakistan. The first is the ban on the export of products placed on the list under the Export Trade Control Order

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<sup>21</sup> See Appedix B for more details on trade policy and an overview of the trade sector.

of 1987 and subsequent updates by the Ministry of Commerce. The second is a series of export taxes or ad valorem duties that are placed on certain products.

#### a. Export Bans

There are a considerable number of products which cannot legally be exported from Pakistan. This includes certain types of live animals, beef and mutton (except for 50% of the total production of commercial feed lot units, livestock farms and bilateral joint ventures), animal fat, milk and milk products (except cheese), certain types of vegetables, grains, pepper, pulses, beans, bran, fodder, edible oils, gur, charcoal, timber, etc. The following vegetable exports are presently banned:

- a) Fresh tomatoes and fresh green chillies
- b) Spices: ginger (fresh), turmeric (whole), garlic (dry whole) and chillies (dry, red whole)

However, all other fruit and vegetable exports are allowable.

There are several rationales put forth for these bans. One is the perceived shortage of the good in Pakistan and therefore the need to keep available supplies within the country. The shortages of goods, however, are often due to an attempt to keep prices below equilibrium market prices within Pakistan. This is the case for wheat, meat products, edible oils, and timber. Despite these bans, an unspecified amount of wheat leaks over the Afghan border and edible oils over the Indian border. Another policy option beside an export ban to deal with these shortage would be to let domestic prices rise and provide incentive for Pakistani farmers to increase their production of these goods. Adherence to this policy would help to lower imports and might even create the basis for export diversification. If the Government is committed -- as it says it is in the Seventh Plan -- to the policy of increasing yields of agricultural goods to create exportable surpluses, then it must pay attention to domestic price policy and allow prices to rise to equilibrium levels.

Some of the bans are justified on the grounds of price stabilization. Although a ban may accomplish this goal in the short-run, the policy does little to solve problems of domestic availability in the long-run or diversity of the export mix. Higher prices signal producers to put more resources into a crop during the next season. They also encourage the adoption of technological change. A farmer knows that not every year will be a good one for every crop. But technological change is encouraged when there is the hope of high returns in some years. Hence, while price stabilization is perhaps desirable from the point of view of the consumer, price stabilization policies

(including export bans) should be careful not to stifle domestic producers from devoting resources to a crop or undertaking technical innovations to improve productivity.

A problem with export bans is that it can lead to the loss of market share or the flexibility to become established in new market niches as they become available. For example, the ban on US soybean exports to Japan in the late 1970's because of soybean shortages in the United States led to the loss of US market share to Brazil, from which the soybean industry is still recovering. Fresh fruit and vegetable exporters must have the ability to rapidly take advantage of market opportunities with the widest possible range of products. Bans (and even the possibility of bans) may make it more difficult to get established in new markets or even maintain a good reputation in already established markets.

There are clearly reasons for not banning exports of goods, just as the Government has certain concerns in placing these bans. Careful analysis is needed on a commodity-by-commodity basis to set forth the relative gains and losses to the various groups affected by an export ban. A study on the export ban issue, with an analysis of a number of commodities, should take place under the auspices of PL-480.

There have already been a number of commodity studies conducted under the Economic Analysis Network project. For example, a recent study on the dairy industry<sup>22</sup> analyzed the policy options available to improve dairy output in Pakistan. One of these conclusions was that the ban on milk and milk products was counterproductive in promoting the development of the dairy industry. A modern processing sector has been created in recent years; however, there are serious problems of over-capacity especially in the UHT milk processing industry due to the slow growth in domestic demand for UHT milk.

Removing the ban on UHT milk and other processed milk products such as yoghurt would help UHT processors find markets for their product and help to solve the financial problems currently found in the industry. At the same time, exports of UHT milk would have little impact on the domestic industry because exports would only be a small percentage of the market. According to the dairy study, "the entire UHT industry is using only

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<sup>22</sup> Anjum, Muhammad, Lodhi, Kamil, Agha Abbas Raza, Walters, Forrest, and Krause, Stanley, Pakistan's Dairy Industry: Issues and Policy Alternatives, EAN, Islamabad, July, 1989.

less than two percent of the total milk produced in the country." In addition, the ability of the industry to export would allow it to qualify for duty drawbacks on packaging materials, currently one of the main difficulties of many of the UHT processors.

Here is a case where the export of a product is banned, yet it is a value-added product produced by an industry that has the technical capability to compete effectively on international markets. The product also assists in the diversification of the export product mix. Hence, rolling back the ban on UHT milk and products should be one of the benchmarks of the PL-480 program in the first year. There is already sufficient analysis to show this this is a reasonable course of action.

#### b. Export Taxation

Taxes placed on exports can have a detrimental effect on production and on successful marketing. Of course, the major reasons that export taxes have been levied are the amount of revenues collected and the relative ease of collection.<sup>23</sup> However, the question is whether or not the revenue benefits outweigh the long-run costs to producers and exporters?

The Government recently lifted the export duty on basmati rice. It was lifted for several reasons. First, although Pakistan had a pre-eminent position in international basmati markets, the export tax eroded the competitive position of Pakistani producers vis-a-vis Indian producers of basmati rice. The Indians were able to undercut Pakistan and gain market share which may be difficult to win back. In addition, in a competitive international market, exporters, attempting to retain market share, must pass back the export taxes to producers. Lower prices to producers means a lower level of production and stagnation in the industry. This is essentially what has happened in Pakistan's basmati market in recent years, at considerable cost to the industry. The Government's removal of the tax is a step in the right direction, but has not come soon enough to prevent considerable damage.

There are still a number of export duties being levied, including duties on agricultural products such as raw cotton,

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<sup>23</sup> According to the Economic Survey, 1988-89, some Rs. 3.24 billion were collected in export duties, which represents about 3.6 percent of the total tax revenues collected by the Federal Government.

cotton yarn, leather (finished and wet blue), and rice exported in bulk. The costs and benefits of these export levies need to be examined on a case-by-case basis to determine which duties are warranted. Export duties for which the costs outweigh the benefits should be discarded. There may have to be a phased approach to this program, combined with increases in direct taxation.

## 2. Institution Building

Trade policy change must be accompanied by changes in the way institutions function and even the creation of new institutions- both public and private. Well-intentioned policy is of little use if it is not implemented in an efficient and timely manner. As the export sector grows, new institutions may be needed to assure quality control and efficiently functions markets. The PL-480 program, through a series of Self-Help Measures and the provision of technical assistance when needed, can help in this process of institution building.

The first step is to assure that the implementation of new trade policy initiatives is satisfactorily completed. The Minister of Commerce recently announced several institutional changes in regards to the administration of trade policy. These measures should be implemented in a timely fashion. In addition, USAID is undertaking a study to analyze corporate sector constraints in agriculture, which may identify certain problems in the implementation of trade policy. Trade-related constraints and policy solutions to overcome them will be incorporated into the PL-480 program as appropriate.

Quality control for both domestic and international markets is an important issue in Pakistan. The Government should begin to identify institutional weaknesses in its program of quality control and propose measures to improve them. Technical assistance, particularly in the establishment of a quality control program for international markets, can be made available if requested by the Government and the necessary expertise is available to USAID.

The establishment of a futures market for agricultural commodities such as cotton may also be of interest to the Government. There needs to be a study done on this issue to clarify precisely how a futures markets work and the purposes it would serve. US technical assistance may be available to participate in such a study along with local consultants, the private sector, and government officials. The Chicago Board of Trade, which governs the largest commodities futures market in the world, should be able to assist in this effort.

## VI. Self-Help Measures and Benchmarks : A Five-Year Program

The Team has developed a five-year program of self-help measures (SHMs) and benchmarks. Of course, the actual developments over the next five year period may force some modification and re-assessment in these SHMs and benchmarks. But even if changes occur in the specific benchmark, the overall objectives under each of the self-help measures have been laid out in long term perspective and are not expected to change. It is expected that USAID and the GOP will work together to choose the programs under which these goals might be carried out. The Team has grouped these measures into two broad overall categories: nutrition issues and trade issues.

### A. Nutrition Self-Help Measures and Benchmarks

#### SELF-HELP MEASURE No. 1: Monitor Nutrition Status of Vulnerable Groups to Develop Targeted Programs to Replace Existing Generalized Food Subsidies

The objective of this self-help measure is to identify the nutritional status of poorer and socially disadvantaged parts of the population, so that nutrition programs can be developed which are targeted to their needs. The long-term goal is to improve the nutritional status of these vulnerable groups in the absence of generalized food subsidy programs such the GOP's wheat policy. Once the targeted programs have replaced the untargeted programs, the GOP should enjoy large savings in consumer subsidies.

#### FIRST-YEAR BENCHMARK

1. Develop a nutrition monitoring system from existing survey data and with it begin to identify interventions to improve the nutritional status of groups at risk. The monitoring system shall focus on identifying the nutritional status the vulnerable groups. The GOP shall make available the computer data tapes of the nutrition survey of 1985-87, and the annual household income and expenditure surveys (HIES) as soon as they are ready. The data shall be made available to the agency the GOP chooses to implement the nutrition monitoring system. The activities required under this benchmark shall be carried out by the Nutrition Cell of the Planning Commission. USAID may provide technical assistance to carry out this benchmark, if requested to do so.
2. The implementation of targeted nutrition programs requires action by many different government agencies. To coor-

dinate these agencies a National Nutrition Policy Implementation unit shall be set up under a high ranking official in the Prime Minister's Secretariat.

#### SECOND-YEAR BENCHMARKS

1. The nutrition monitoring system should be finalized and in operation. Every year the system will be updated as soon as the data from the latest survey of HIES is available.
2. The results of the nutrition monitoring system shall be used to develop a targeted system to improve nutritional status of the most vulnerable groups. The system could consider including geographic targeting, income or asset group targeting and commodity targeting. Start pilot programs to test the viability of different types of nutrition interventions. These could be run by NGOs/PVOs or by other appropriate agencies.
3. Update nutrition monitoring system with data from latest round of HIES.

#### THIRD-YEAR BENCHMARKS

1. Expand the pilot targeted nutrition programs to improve nutritional status of vulnerable groups.
2. Develop a national plan to replace non-targeted food subsidies by targeted food subsidies based on the findings of the pilot programs.
3. Update nutrition monitoring system with data from latest round of HIES.

#### FOURTH-YEAR BENCHMARKS

1. Start replacing the non-targeted food subsidy program by programs specifically targeted to reach the poor and needy. The budget savings from cutting and eliminating the population-wide plans by targeted plans should more than pay for the cost of the latter.
2. Update nutrition monitoring system with data from latest round of HIES.

### FIFTH-YEAR BENCHMARKS

1. Completely, eliminate non-targeted food subsidy programs. The poor should be assisted by targeted food subsidy program.
2. Update nutrition monitoring system with data from latest round of HIES.

### SELF-HELP MEASURE No. 2: Improve Nutrition Education at Primary and Secondary School Levels

One reason for the poor nutritional status of the population is the lack of understanding of nutrition principles. The best long-term approach is to start inculcating these principles into basic primary and secondary school curricula. No special nutrition courses are required; nutrition education materials need to be included in language or science texts. This has already started. The long-run objective is to have nutrition training integrated into the primary and secondary school curricula of all schools.

### FIRST-YEAR BENCHMARKS

1. Incorporate nutrition education materials in all basic language and science texts at primary and secondary levels.
2. Incorporate nutrition education into the primary and secondary school teacher training programs.

### SECOND-YEAR BENCHMARKS

1. Nutrition education becomes part of the curricula in primary and secondary curricula in some government schools.
2. Retrain already graduated teachers in special sessions on Nutrition Education.

### THIRD-YEAR BENCHMARKS

1. Develop nutrition education requirement in all primary and secondary schools both public and private.
2. Continue expansion of teacher training in nutrition education.

### FOURTH-YEAR BENCHMARKS

1. Start including nutrition materials in secondary school certificate examination syllabus.
2. Continue teacher training in nutrition education.

### SELF-HELP MEASURE No. 3: Reduce Wheat Imports Through More Efficient Use of Existing Stocks

Almost a 100,000 tons of wheat may be used in the feed-grain milling industry this year. Feed-millers prefer wheat because it is cheaper to them than corn in financial prices, although not in economic prices.<sup>24</sup> To help Pakistan move away from this costly anomaly, two benchmarks are proposed. The long-term objective of this program is to save Pakistan almost Rs. 300 million in foreign exchange, make more wheat available for human consumption, and to ease the grain shortages being experienced by the feed-mill industry.

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<sup>24</sup> Pakistan is net importer of wheat and these marginal uses may be thought of as coming from the marginal imports which cost about Rs. 4,600 per ton. These could be replaced by corn at about Rs. 2,800 per ton. The economic cost to using wheat instead of corn for poultry feed is between Rs. 250-300 million per year and rising. However, the financial costs paid by feed-millers is less for wheat than for corn due to a variety of reasons which include subsidies on wheat, a forty percent import duty on corn and a sales tax on corn. This is ironic because nutrition intervention programs meant to help the poor usually subsidize the inferior good (in this case corn) and not the superior good (in this case wheat). The ideal solution would be to eliminate subsidies on wheat (the superior good) and give equal tax treatment to wheat as to other food grains. Elimination of corn tariffs should not hurt corn growers in the long-run. As the demand for corn expands in the feed-mill industry, domestic growers of corn should also benefit, despite the elimination of the protective tariff.

### FIRST-YEAR BENCHMARKS

1. Eliminate the 40 percent tariff on imported corn if consonant with the World Bank/IMF structural adjustment agreements.
2. Either eliminate the sales tax on corn or also put the sales tax on wheat. The latter may be the more attractive solution in an era of budget constraints.

### B. Trade Policy Self-Help Measures and Benchmarks

#### SELF-HELP MEASURE NO. 4: Reduction of Trade Restrictions

The Government of Pakistan will take policy and regulatory measures to reduce restrictions on trade in order to diversify the mix of products exported and reduce reliance on trade taxation. The five-year goal would be to minimize restrictions on exports and reduce average tariffs.

### FIRST-YEAR BENCHMARKS

1. The Ministry of Commerce will abolish the ban on the export of UHT milk and other milk products produced in UHT processing plants by January 1, 1990.
2. With technical assistance provided by USAID, the Government of Pakistan will conduct a study of the effects of export restrictions on specific commodities, including export bans and export duties. This study shall be completed by June 1, 1990.

### SECOND-YEAR BENCHMARKS

1. The Government of Pakistan will implement those policy recommendations of the PL-480 Export Restriction study deemed reasonable by the GOP and USAID. The number of export bans may be reduced and export duties may be abolished if they are not cost-effective.
2. The result of USAID's Analysis of Corporate Sector Constraints in Agriculture study program shall serve as the basis for discussion with the Government about trade-related policy problems. Specific benchmarks for inclusion in the 1990-91 PL-480 program will be formulated. In particular, duty drawbacks or reductions in tariffs on commodities that are used as raw materials in agribusiness enterprises shall be considered.

3. The policy recommendations of the ADB/UNDP timber study shall be considered. Implementation of the economically feasible policies that assure the long-term survival of Pakistan's forests and timber industry shall be commenced.

#### THIRD-YEAR BENCHMARKS

1. The Government of Pakistan will continue to lower the number of export bans on commodities and reduce the level of taxation on exported goods.
2. If supported by the timber study, a tax on timber production to preserve the long-term viability of the industry will be fully implemented and tariffs on imported timber lowered. The PL-480 will bring in timber if available and if acceptable to the Government of Pakistan.

#### FOURTH-YEAR BENCHMARKS

1. The Government of Pakistan will abolish all export bans unless it can be shown that their gains outweigh their costs. Duties on exports shall also be abolished unless economically justifiable.

#### SELF-HELP MEASURE NO. 5 - Institutional Development

Trade policy change must be accompanied by improvements in the way institutions function and even the creation of new institutions. The Government of Pakistan will seek to improve the efficiency of its trade-related institutions with the goal of more efficient and timely service to exporters. In addition, the GOP will improve performance of the institutions that regulate quality control and marketing.

#### FIRST-YEAR BENCHMARKS

1. The Government of Pakistan will undertake a study of its quality control institutions (both domestic and international). Policy measures needed to strengthen the domestic quality control will be undertaken by June 1, 1990.
2. The Government of Pakistan will fully implement by June 30, 1990, the announced program to speed export registration by allowing one registration to cover a number of different products.
3. The Government of Pakistan shall form a working committee to study methods of forward contracting for agricultural commodities such as cotton. The committee shall write a

terms of reference for a professional study of the issue and make a formal request to USAID to technical assistance.

#### SECOND-YEAR BENCHMARKS

1. The Government of Pakistan will continue to strengthen their institutions for domestic quality control. A terms of reference to study the improvements needed in quality control for export markets will be drawn up and an formal request for technical assistance will be sent to USAID.
2. The Government of Pakistan will continue to improve the efficiency of the institutions serving the exporter community. In addition, the result of USAID's Analysis of Corporate Sector Constraints in Agriculture study program shall serve as the basis for discussion with the Government about institutions in the trade sector. Specific benchmarks for inclusion in the 1990-91 PL-480 program will be formulated.
3. With the technical assistance of USAID, the Government of Pakistan shall complete a study of the need for forward contracting mechanisms for agricultural commodities, and include recommendations for action.

#### THIRD-YEAR BENCHMARKS

1. With the technical assistance of USAID, the Government of Pakistan shall complete its study of quality control for international markets and make recommendations for implementation.
2. The Government of Pakistan will continue to improve the efficiency of institutions serving the export community.
3. The Government of Pakistan will implement the recommendations of the forward contracting study.

#### FOURTH-YEAR BENCHMARKS

1. The Government of Pakistan will begin to implement the recommendations of the study on quality control of international markets.
2. The Government of Pakistan will continue to improve the efficiency of institutions serving the export community.
3. The Government of Pakistan will continue to implement the recommendations of the forward contracting study.

## APPENDIX A

### THE NUTRITION SECTOR IN PAKISTAN

#### I. Introduction and Conceptual Background

The economy of Pakistan has been performing extremely well over the last decade. Pakistan has experienced rapid economic growth averaging 6.5% per annum since the 1983-84 fiscal year (FY84).<sup>1</sup> Inflation during the sixth plan period (1983-88) averaged about 5% down considerably from the 9.3% during the previous plan period. Despite the growth performance of the Pakistani economy, most experts tend to agree that the nutrition status of the population, particularly the poorer segments of it has not improved over time.

Table A.1

Nutritional Status of Pakistan Population 1977 & 1985

Type of Malnutrition	Anthropometric Manifestation	1985	1977
Normal Nutrition	Normal Body Growth	42.9%	41.8%
Chronic Malnutrition	Stunted Growth	41.8%	43.3%
Acute Malnutrition	Physically Wasting	10.8%	8.6%
Extremely Severe Malnutrition	Stunted and Wasting	4.5%	7.2%
Economic Indicator			
Per Capita Income (Constant '59-60 Rupees)		687	910
Increase in per Capita Income			32.5%

**Sources:**

1. National Nutrition Survey, 1985-87
2. Economic Survey, 1988-89

<sup>1</sup> The growth in agriculture during this period averaged 3.7% while manufacturing grew at 7.7% on average and services grew at 7.1%. The agriculture growth rate would have been higher had it not been for crop failures during FY84 and FY87.

According to the National Nutrition Survey of 1985, 15.8% of children under five years of age suffer from acute malnutrition. This shows little change from over a decade ago despite the fact that the intervening period was characterized by rapid growth in per capita income and attainment of self-sufficiency in food. The results shown in Table A.1 shows the that during the 1977-85 period the nutritional status of the population of Pakistan remained unchanged. Pakistan's nutrition sector needs to be looked at carefully and policy alternatives which improve the nutritional status of the population have to be adopted.

Unfortunately, the published report of the National Nutrition Survey does not explore the findings further than reporting average nutritional status of the national population and the provincial population. The policy issue here is why was there no change in the nutritional status of the population during a period in which real per capita income grew over 32%. This should have been explored in the report by reporting nutritional status of various income or landholding groups as well that for particularly vulnerable social groups. This important issues were not explored and the survey report cannot be the basis for specific policy issues. It can only be used for platitudinous policy pronouncements which can have no real effect. The Team hopes that this key failure can be redressed through a more detailed analysis of the survey results by nutrition policy oriented specialists.

The key issues in the nutrition sector can be divided into three segments. The first concerns the food distribution among regions and among households. The second segment of concern is the distribution of food within the household. The final area of concern is the quality of nutrition. The issue of food distribution among regions is one that the government of Pakistan focused on and will not be dealt with in detail in this appendix.

#### **A. Entitlements, Food Availability and Food Consumption: Understanding Food Distribution Among Households**

The focus of all food policies in Pakistan seems to be on food availability whether at the regional or national level. The government spent billions of rupees subsidizing the transport and storage of wheat, all from a strong desire to assure that this staple food-grain is available. Billions of rupees are also spent on imports of food products which are in short supply in Pakistan. Consumption is assumed if food is available. This is a

particularly fallacious assumption. Food production and food availability (production minus exports plus imports plus or minus any change in stocks) have been growing rapidly on a per capita basis. Yet the various studies indicate that the food intake of the poorest parts of the population may have worsened despite this spectacular growth in food availability per capita. The reasons underlying this contradiction can be found within the 'entitlement' framework.<sup>2</sup>

The 'entitlement' framework notes that increased availability of food per capita within a country does not necessarily imply that systematic undernutrition will disappear from that society and in fact it may not even be reduced. Per capita food availability is of little consequence to an individual until he/she has some means of acquiring some of that food for his or her consumption. The individual food entitlements are determined by a system of entitlement mapping through which her/his<sup>3</sup> initial endowments are transformed. A simple way to explain entitlement mapping is to take the case of a basically unskilled farm laborer without any land or other productive assets. To acquire food he has to look for some way to gain an income and use that income to purchase food and sustenance. Thus, entitlement mapping for this individual so that he can proceed from his endowment set to a survival set of goods and services, depends on several factors such as the probability of finding employment, the prevailing money wages in the area, the prices of the market basket of commodities that he requires to survive. There are elements of variability involved at all these stages. Therefore, the entitlement mapping of an unskilled agriculture laborer is subject to a great deal of risk. The entitlement mapping of a subsistence farmer is less risky because he owns an asset that produces at least some goods in his consumption basket. He is not very well off in the broader picture but the entitlement mapping process by which he acquires his nourishment is surer than that of the unskilled agriculture laborer. It is possible that on good days the latter will be able to consume more than the former. Similarly, a share-cropper (or a tenant farmer) who earns less on average than an agriculture laborer is in a less risky position vis-a-vis his access to a minimum survival basket.

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<sup>2</sup> For a detailed exposition of the 'entitlement' framework see Sen, Amartya K. Poverty and Famines : An Essay on Entitlements and Starvation, Clarendon Press, Oxford, 1981.

<sup>3</sup> Please note that for the rest of this paper, he will be used in place of he/she and him in place of her/him. The choice of the male pronoun is solely motivated by the fact that it is shorter.

The entitlement approach goes further than a simple income distribution approach because it distinguishes between levels of risk involved in converting an individual's endowment set to a set of goods and services. Thus, a subsistence farmer is better off than an agricultural laborer at the same level of income because his access to a survival set of goods and services is more assured and less risky. The risk decreases in a more diverse economy. Thus, a day wage worker in a rural area where the economy is predominantly agricultural is subject to a lot of risk in securing work. The risk is greater when the agriculture economy itself is a mono-culture crop or a near mono-culture. The risk lessens as the agriculture economy diversifies. In a more diverse economy such as in large urban areas, the risk is reduced further.

To understand systematic undernutrition in an era of adequate and increasing per capita availability of food one needs to examine the income distribution pattern. In urban areas this will generally prove to be a sufficient variable to explain variation in food consumption in rural areas, however, the land distribution pattern is the key variable. Pakistan's land distribution system is even more skewed than its income distribution system. Continuing malnutrition and systematic undernutrition in rural Pakistan can be explained by the land distribution pattern particularly in the context of the entitlement framework.

### B. Food Distribution within the Household

The discussion so far has focused on how food gets allocated among different households. There is also a need to understand food distribution within households. Allocation of food within the household is governed by many economic, cultural and social factors. These factors also need to be understood before a full understanding of the nutrition situation in Pakistan is reached. Any policy change or project to tackle the situation must necessarily take account of these factors, otherwise they risk failure.

Pakistan is one of few countries in the world where the life expectancy at birth for men is higher than for women. Demographic studies have indicated that the life expectancy for women should be higher if biological patterns prevailed. The difference between what would be expected for a population such as Pakistan and what is actually observed may be explained by a bias in the distribution of survival enhancing goods (the most

important of which is food) within the household<sup>4</sup>. Thus, even if the average availability these products in the household seem to be adequate, the more vulnerable (or, culturally less valued) members of the household may not receive adequate sustenance.

The reasons for this bias are both socio-cultural and economic. The economic rationale itself is inter-linked with the socio-cultural bias. If society values male children more and this is reflected in the sex-specific earnings potential in the labor market, then even mothers who personally have no cultural preference for boys will tend to discriminate in favor of their male children.<sup>5</sup> This is particularly true in a society such as Pakistan where old-age security of parents often depends on the economic well-being of their offspring.

The impact of the above-mentioned bias cannot be observed in all households, it can only be seen in the poorer households. The implication of this is that once the felt needs of the priority members of the household have been met, the others receive their shares. Thus, when the overall stock of survival enhancing goods in the household increases, the beneficiaries are more likely to be the household members lower down the preference scale i.e. women and female children.

Various studies indicate that the education of mother reduces the impact of this bias. Two causalities are postulated for this effect. The first suggests that education of the mother increases the efficiency of use of existing resources and the same volume of resources can be stretched out further. The second causality argues that the mother with education is more likely to see the value of female children and would also be in a stronger

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<sup>4</sup> A detailed study of the impact of such bias on female child mortality can be found in Khan, Qaiser M. "Is Mother's Schooling the Key to Reducing Sex Differentials in Child Mortality in South Asia? A Empirical Test of Intra-household Distribution". Paper was presented to the General Conference of the International Union for the Scientific Study of Population in Florence, Italy, June, 1985.

Also see, Chen, Lincoln; E. Huq; and Stan d'Souza. "Sex Bias in the Family Allocation of Food and Health Care in Rural Bangladesh." Population and Development Review, 7 (No.1, 1981)

<sup>5</sup> The bias is not necessarily due to religion. Studies of sex discrimination in intra-household resource allocation have found the bias in favor of male children both in Muslim Bangladesh and Hindu West Bengal.

bargaining position within the household.

The above findings provide certain policy implications. The long-term policy of increasing schooling of mothers is one of the most effective means of improving the nutritional among all members of the household. In the short run to assure that enough gets to the more vulnerable members of the household a larger quantity of food must be available to the household than the minimum survival basket. Direct feeding programs for female children and women is also a possible mode of action. Policy that is designed to improve the nutritional status of the poorer segments of the population cannot be developed without considering the intra-household food distribution issues. The determinants of intra-household distribution must be incorporated into the policy framework for it to be successful in reaching out to the most vulnerable sections of the population.

### C. Issues in Nutrition Quality

Increasing overall food consumption has a great benefit up to a certain point. Beyond that, the benefits reach a plateau and further improvement in health and well-being have to be brought about by improvements in nutrition quality. A study in Morinda in the Indian part of the Punjab found that following the increases in income brought about by the green revolution, the quality of nutrition actually declined. People started consuming more of the luxury but not necessarily healthier foods. Examples include switching from vegetable oil in small quantities to larger quantities of both clarified butter and vegetable ghee. People also switched from whole wheat flour to white flour as well as from vegetables and lentils to more fatty meats. These findings indicate that increased expenditure on food does not necessarily improve nutrition quality beyond a certain point.

Work by Behrman and others indicate that beyond a certain point income increases have little or no effect on nutrition quality and health while education does have a very strong impact. The most effective long term means of improving nutrition quality is health and nutrition education. Long run improvements need to be sought by incorporating these issues in basic primary school texts (in language or science texts not necessarily as separate nutrition courses). At the same time primary and secondary teacher training programs also need to emphasize these issues. More immediate results are to be obtained from adult nutrition and health education targeted at mothers.

The quality of nutrition issue will become more and more important as Pakistan's income continues to grow. To avoid the pit-falls of bad but rich diets, it is necessary to start developing a long-term approach now. Primary and secondary education curricula and teacher training have to incorporate these issues. Of course these changes will mean little if Pakistan's primary and secondary enrolment rates remain as low as they are, particularly for girls.

The focus of nutrition education has to be on improving the quality of diets once consumption has reached or surpassed adequate levels. The benefits to trying to improve nutrition quality for households still below adequate consumption levels will be limited. Interventions targeted to these groups need to focus on raising their consumption to adequate levels. Once that threshold is reached the focus will need to shift to improving quality. Of course the long term goals of improving nutrition through incorporating nutrition and health education into primary and secondary curricula need not be targeted to any particular groups.

## II. Present Programs to Enhance Nutrition Status of the Population and Their Suitability

Historically, the principal means in Pakistan for attempting to ensure acceptable levels of food consumption among various segments of the population has been the Ration Shop System. The system was originally set-up to combat food shortages during the Second World War. It was used by the Government of Pakistan as its principal food policy tool from independence until it was abandoned in from April, 1987. The abandonment of the ration system was replaced by a government policy of keeping prices uniform nationwide through a system of procurement and release prices. The private sector is also free to engage in wheat trade but in view of the manner in which the present system is structured, it is unlikely to find it very profitable to do so particularly if such trade involves significant transport costs.

The present policy and the ration system it replaced generally focused on assuring food supplies rather than targeting needy groups. Over time the ration shop system had become to some extent self-targeting to the poor because of the perceived inferiority of the product. This is particularly true since the ration system no longer supplied sugar. Many of the better-off households who had shopped at the ration shops were primarily attracted by the sugar. Once sugar had been de-rationed, these

Table A.2

## Effectiveness of the Ration System in Targeting Needy Families

	Average Monthly Expenditure Group				
	Below Rs.100	Rs.100 to 150	Rs.150 to 250	Rs.250 to 400	Above Rs.400
% of Households Purchasing Subsidized Flour	50.0%	41.0%	31.0%	29.0%	21.0%
Average Expenditures	84	130	201	325	877
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Ration Users Compared with Others					
-----					
Budget Share to all Flours, Bread and and Wheat					
- Entire Sample	17.7%	14.5%	11.1%	7.9%	4.4%
- Ration Users Only	16.1%	13.7%	10.8%	7.6%	4.3%
Budget Share to all Food Items					
- Entire Sample	56.5%	58.8%	53.8%	47.0%	34.0%
- Ration Users Only	51.2%	57.2%	50.9%	45.8%	32.9%
Budget Share of Ration Flour					
- Entire Sample	5.7%	4.3%	2.2%	1.6%	0.6%
- Ration Users Only	11.3%	10.6%	7.2%	5.4%	2.8%
Calorie Share to all Flours, Bread and and Wheat					
- Entire Sample	58.8%	60.4%	55.4%	50.1%	46.8%
- Ration Users Only	69.1%	62.4%	58.9%	54.1%	49.8%
Calorie Share of Ration Flour					
- Entire Sample	28.8%	20.4%	13.0%	12.0%	7.4%
- Ration Users Only	57.5%	49.7%	41.8%	41.3%	35.4%
Calories per Capita per Day					
- Entire Sample	1,286	1,635	1,934	2,353	2,852
- Ration Users Only	1,111	1,574	1,940	2,397	2,799
Calories Contributed by Ration Flour per Capita per Day					
- Entire Sample	370	333	251	282	212
- Ration Users Only	639	782	811	990	991

Source: International Food Policy Research Institute/Pakistan Institute of Development Economics, "Wheat Flour Subsidy Survey", 1986.

households stopped visiting the ration shops. <sup>6</sup>

The data in Table A.2 shows the distribution of beneficiaries of the system and is taken from the Pakistan Institute of Development Economics/ International Food Policy Research Institute (PIDE/IFPRI) study. The data shows that while the old ration shop mechanism was on balance used more by the poor than by the better-off, even for the poorest segment of the population subsidized wheat flour provided less than 29% of the calories. This drops down to about 5% when monthly expenditures rise above Rs.400.

The PIDE/IFPRI survey found that among households with monthly expenditures below Rs.50 the use of the ration shops was minimal. The results are not shown in the table because the number of such households in the sample is rather small. These results point to the fact even at these subsidized prices, the flour is out of reach of the poorest of the poor. Cheaper commodities must be targeted in order to reach the poor.

Throughout its rather expensive history, <sup>7</sup> the program never had much success in reaching the rural areas where the bulk of Pakistan's population live. Most rural households did not report knowing of the availability of subsidized flour. The IFPRI-Gallup survey in 1986 found that while 76% of the urban households reported availability of the subsidized flour, only 21% of rural households reported such availability and only 5% of the rural population took advantage of it. In urban areas 19% of the households took advantage of the system i.e. in both cases about a quarter of the households who reported knowing of the availability of subsidized flour took advantage of it

Thus, the impact of the program costing over three billion rupees annually is not so impressive. Its abandonment only had a marginal effect on the poor population of Pakistan despite the vast expenditures on it. Whatever positive nutritional effect it had had was balanced out by the widespread inefficiencies and mismanagement of the system. Ironically, the very fact that it had to some extent targeted the poorer segments of the population

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<sup>6</sup> See Alderman, Harold; M. Ghaffar Chaudhry and Marito Garcia, Household Food Security in Pakistan : The Ration Shop System, Pakistan Institute of Development Economics/International Food Policy Research Institute Working Papers on Food Subsidies, Number 4, Washington, May 1988.

<sup>7</sup> For example, in 1973-74 these subsidies amount 13.2% of government current expenditures i.e. about 2.2% of GDP.

was due to its mismanagement. It had not been intended as a program to supply lower grade flour which the better off did not want. Mismanagement led to that unintended though desired effect.

The core of the new system lies in the government purchase, transportation and release of wheat with a view to maintaining the same consumer prices all over the Pakistan. To achieve that goal the federal government buys wheat from Pakistani farmers and imports wheat which is then released to the provincial governments at a fixed release price. The provincial governments undertake to deliver the wheat to millers at an uniform price. This policy has had two related effects.

First, flour millers realized that they could increase their profits by milling locally close to markets as the transportation cost to the mill was to be paid by the provincial government. The result of this was increased excess capacity in the flour milling industry.<sup>8</sup> A second negative consequence was that by products of milling ended up far from where their market as livestock feed leading to shortages of livestock and poultry feed.

The new system while assuring availability of flour in various regions of the country, does little to directly assist the poor and needy. The new system has an even less of an impact on the food consumption of the vulnerable groups than the old system with all its problems. The present system costs the provincial governments approximately Rs. 2.9 billion and the Federal Government spends another Rs.700-1000 million. The total cost the new system is almost as high as the old system. It does have the advantage of reaching a much larger proportion of the population than the ration system. On the other hand, it does have the disadvantage of creating distortions in investment and generating excess capacity in flour milling.

The biggest danger in the new system is that there is no way built in to cap costs except a straight-out refusal by the federal and provincial governments to transport any more wheat to flour-mills once its budgetary allocation has been exhausted. In

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<sup>8</sup> This was not as costly to private investors as would be expected in view of the fact that Pakistan heavily subsidizes investment capital. Also of note is that the repayment rate on investment loans is much lower than would be considered desirable. The economic costs to society of such excess capacity is quite high.

such a case the governments will have to ration among millers bringing back the principal cause of inefficiency in the old system without any of its benefits.

Two areas are subsidized in the present program. The federal government subsidizes imported wheat by selling them below world market prices. It does not lose money on domestically procured wheat because the farmers are paid significantly less than world market prices. The provincial governments subsidize transport. The latter is going to increase as demand for wheat increases and as transport costs rise. The federal portion of the subsidy be driven by three factors: domestic demand, domestic supply and world market prices. As these costs rise to the budgetary limits there will be a need to bring back some form of rationing - in this case provincial government will ration among millers and the federal government will ration among provincial. Rationing is subject to a great many inefficiencies such and political manipulation. Thus, all the inefficiencies of the old system will need to re-introduced.

The system has been in full operation since 1987 and consequently these financial problems have yet to surface. During 1988, the only full year of the program, USAID provided about 900,000 tons of wheat last year under a grant. This amounted to the equivalent of a Rs. 4 to 5 billion transfer to the GOP.<sup>9</sup> Such a large transfer was enough to effectively pay for the costs of the system last year which seems to have been larger than the last full year of the inefficient ration system when one takes into account expenditures by the federal and provincial governments. This year such a grant is unlikely and the system may start feeling the pressure to ration. There is a need to quickly re-examine the system before the financial pressures on the budget creates a crisis.

Neither the old ration system nor its successor have accomplished much in improving the food consumption of the most vulnerable groups. If anything, the old ration system was more effective in targeting the poor. However, any success that it had were far out-weighed by the inefficiencies of the system. Ironically, these successes were unintended and due to the system's own weakness. It was only successful in targeting the poor because in due to its inefficiency it provided what was perceived as an inferior product. Attempts to improve the nutritional status of the poor have to be re-focused and re-

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<sup>9</sup> However, at the rates the Pakistan government normally acquires the grain in the domestic markets, the value of the subsidy from the U.S. was the equivalent of Rs.1.8 billion.

thought. Some possible options are discussed in the next section.

### III. Some Thoughts on Targeted Programs to Improve Nutritional Status in Pakistan

USAID-Pakistan's CDSS targets nutrition as a key sector. The mission's child survival project which is just underway, is expected to include a nutrition component though that has not been included in the original project paper. Micro-interventions such as child feeding is very effective but these types of interventions cannot be nationwide except at a prohibitive cost. The success of these projects depend to a great extent on management capability which is in short supply in Pakistan's health sector. The mission's child health project does have a management component built into it. As health sector managerial capacity expands, direct nutrition interventions such as child feeding can be expanded resources permitting. The broader issue of improving the nutritional status of the whole population needs to be addressed in several ways.

In Section I, three types of nutrition problems were identified: (i) per capita food consumption at less than adequate levels, (ii) issues in nutrition quality even when per capita food consumption is adequate and (iii) problems in intra-household resource allocation which implies that some members of the household may be under-nourished even when the average per capita consumption in the household is adequate.

#### A. Improving per Capita Food Consumption

The analysis in the preceding section showed that the old rationing system did not really succeed in targeting the needy though it did a better job of it than the current system.<sup>10</sup> The four billion or so rupees that were spent on the current system last year in the name of protecting consumers, did not do much for the truly needy of Pakistan whose nutritional status has either remained stagnant or worsened even through a period of rapid economic growth.

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<sup>10</sup> It must be re-emphasized that neither the ration shop system nor the current system were/are meant to be programs targeted to the poor.

The profits from the new system went not to farmers or to consumers but primarily to millers and transporters. Millers benefited from having the transport costs of wheat paid for by the provincial government. Transporters benefited from having to move larger volumes of wheat/flour than they would have without such a program. Excess capacity in the flour milling industry increased and the efficiency of use of the milling by-products declined. The program at great expense did relatively little for the average consumer and almost nothing for the poor consumer. The most ironic part is that it the present system has ended up costing more than the old system when one takes into account the expenditures by the various provincial food departments.

### 1. Geographic Targeting

Transport cost subsidies by themselves are not so bad if they are effectively targeted. A good example of an effective transport cost subsidy is one in which flour is transported to a poor and remote region. Without the transport cost subsidy food supplies would not easily move in and out of the region.<sup>11</sup> Whatever was transported would be available at prices too high for the poor people of the region.

A subsidized commodity sold in a remote area is less likely to be moved to areas with higher prices because the transport cost is likely to make such movements unprofitable. Thus, targeting the poor geographically by providing subsidized food in areas where they live is likely to be successful if the area is remote and transport costs to and from the area are high enough to discourage re-exports for profit to higher priced/unsubsidized areas. Geographic targeting is less likely to be successful if the area is within easy reach of non-targeted areas allowing traders to make a profit by moving the products from subsidized areas to unsubsidized areas. Thus, geographic targeting is recommended for poor areas when the following condition holds:

$$P < P' + T \quad \text{Equation 1}$$

where, "P" is the unsubsidized price, "P'" is the subsidized price and "T" is the transport cost between the subsidized area and the nearest unsubsidized area.

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<sup>11</sup> The private sector moves products in response to markets and the chance to make a profit. The profit potential in a poor remote region is low because after adding on the transport cost the prices at which the private sector would need to sell would probably be beyond the purchasing capacity of the poor.

## 2. Targeting by Income or Landholding Group

Identifying the poor in rural areas is best done through landholding for reasons discussed at the beginning of this appendix while in urban areas this can be done by income and expenditure class.<sup>12</sup> This form of targeting is the ideal solution but it lends itself to abuse unless there is an efficient way to identify the truly poor from among those who are reporting themselves to be poor.

Test relief programs used in parts of South Asia provide food to workers who are willing to work on rural roads and other infrastructure projects. The concept behind these programs are that only the truly needy will be willing to perform such hard-work for commodity payments. The administrative costs for running such a program nationally tends to quite high. However, they are still quite useful programs to run alongside others. These programs may be run as projects in poor areas where food consumption has been identified to be particularly low.

## 3. Targeting by Commodity

Commodity specific targeting has been tried in many countries. The concept behind such a program is that by providing a product that is perceived to inferior at a subsidized price one can reach the needy. The better off are unlikely to want to consume such a product. The experience of the ration system between the derationing of sugar and its ultimate demise indicates that if a product is perceived to be inferior many better off households will prefer not to purchase it even if it is subsidized.

Commodity targeting, however, still ends up benefitting better off households unless precautions are taken. This is because a subsidized cereal will be an attractive livestock or poultry feed. Through this process, the better off still end up benefiting from the subsidy. Many devices have been used to avoid the danger of subsidized inferior cereals benefiting the

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<sup>12</sup> The food stamp program in the U.S. is an example of this type of nutrition intervention.

wealthy through use as livestock or poultry feed rather than the poor as originally intended. These include adding hot pepper to a cereal mix to make it unpalatable to livestock while being palatable to humans. Indonesia went so far as to develop a self-targeting commodity based on rice and cassava and including soya protein and hot peppers.

Commodity targeting while not an ideal solution may still turn out to be best means of reaching the poor and under-nourished nationwide. The experience in Bangladesh where wheat was used as the targeted commodity has been quite successful. The commodity created a demand for wheat in Bangladesh and eventually led to expanded production of wheat (mostly modern HYV varieties). Thus, the targeted commodity had not only the effect of improving the nutrition status of the poor but also was able to further development objectives by diversifying dry season cropping to include high yielding wheat.

### B. Improving Nutrition Quality

Nutrition quality is an important issue particularly for those household's that have passed the threshold of adequate consumption. Nutrition quality encompasses two broad areas: the mix of micro-nutrients in the diet and feeding habits and patterns.

The findings of various nutrition studies in the South Asian Sub-continent have found that increases in food consumption do not necessarily imply increases in nutrition quality. Some studies have found that income growth, unless accompanied by corresponding growth in the education of women, may worsen nutrition quality (e.g. the Morinda study). To improve the quality of micro-nutrients in the diet, nutrition education needs to be made part of the curriculum in primary and secondary schools.

The short run approach to improving the micro-nutrient mix may also be targeted nutrition education for mothers. This approach can also address the child feeding habits which are not the most suitable. The improvement of nutrition knowledge among mothers would necessarily be a selective short-term approach because of administrative difficulties involved.

Another short term approach would be to either raise the prices or tax the consumptions of food stuffs which while

necessary have poor nutritional impact if consumed in large quantities. For example, the Household Income and Expenditure Survey (HIES) has found that the consumption of fats and oils has increased significantly over time. While small quantities of oils are essential and necessary large quantities are superfluous and lead to health problems. Raising the price of ghee would a way to reduce excessive consumption of this product which is culturally viewed as a luxury product. This is an all the more attractive notion when one considers the losses incurred by the Ghee Corporation at the present price as well as the fact that a significant proportion of Pakistani ghee supplies find their way to India due to the higher prices prevailing there. Price increases and consumption taxes are the most effective ways of reducing the consumption of items which when taken in larger quantities are health hazards even when they are essential in smaller quantities.

Nutrition quality can also be improved in the short-run by improving product quality and banning or restricting products with known health hazards. At present there are plans to produce iodized salts. This policy would reduce the prevalence of goitre which is a common ailment in Pakistan. Similarly, detailed lists of ingredients can be listed, on packages of manufactured food products so that consumers may make more informed judgments on whether or not to consume them.

The long-run picture on nutrition quality is more promising, particularly if primary and secondary curricula is changed. Of course changed curricula means little as long the enrolment rates in primary schools remains shockingly low particularly for women. The Government of Pakistan has started to expand the primary education system. USAID is also directly involved in the sector in the NWFP and in Baluchistan. The GOP has a program underway to train primary teachers in nutrition education. School text books have incorporated nutrition lessons in them. The key step left is that of expanding the base of the education so that more children are enrolled in primary and secondary schools.

### C. Problems in Intra-Household Allocation

The evidence of sex-specific mortality in Pakistan shows that anthropological and economic factors combine to override the

biological superiority of women.<sup>13</sup> The origins of the bias are intertwined between economics and anthropology. Women are given a lower preference ranking and the effect of this extends also to female children. The problem is a difficult one to combat in the short term. Over the long term, education can work away at reducing some of the cultural biases but as long as labor markets remain discriminatory, the economic return to male children will be **perceived** to be higher than returns to female children. Families with scarce survival enhancing resources e.g. food, will provide relatively more of these to their male off-spring. Above all, adult males have the first call over these resources.

Intra-household resource allocation is a tricky area to work on for policy makers. It does not lend itself easily to reform through policy change. One key rule of thumb that needs to be used in assessing whether food consumption of the most vulnerable parts of the population is adequate or not is to look for average per capita consumption that is slightly above biological needs. This is necessary to assure that those lower down the pecking order get their requirements. The rule of thumb is derived from research results which show that once households cross a certain average consumption level, the effect of the sex bias disappears.

Research findings also indicate that education of mothers tend to either reduce the sex bias or reduce the observable indicators of the effect of this sex bias such as mortality differentials or weight for height differentials. The long run policy to reduce the impact of sex bias is to increase education of women. This also has the impact of reducing the impact of other proximate determinants of mortality as well as fertility. Primary and secondary education are good policy tools for not only increasing the nutrition quality but also reducing the bias in intra-household resource allocation.

Education of mothers, which will reduce the effect of the sex bias, is however a policy that has a long gestation period. Short-run measures must be in the form of targeted assistance. Direct feeding programs for children particularly female children as well as for pregnant and lactating mothers are the types of measures that will reduce the effect of the bias. Some of these measures may be incorporated into USAID's Child Survival Project.

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<sup>13</sup> See Karol Krotki "Reported Masculinity Ratio in Pakistan: A Triumph of Economics and Anthropology over Biology," Pakistan Development Review, 24 (1985).

#### IV. Strengthening Institutional Measures to Improve Nutrition Status in Pakistan

The nutrition issue in Pakistan is not viewed as having reached crisis proportions by most people in government, though there are certain segments of the government who are concerned and have been lobbying. One reason for this is that the effect of malnutrition is much less noticeable on a day-to-day basis except during a major crisis such as famine. Pakistan has not experienced any such noticeable crises, but everyday poor people wither away through systematic undernourishment. The impact of improved nutrition tends not show dramatic results in terms of deaths averted as a program to vaccinate against yellow fever or meningitis. Pakistan needs to have at various levels of government people who consider are convinced of the importance of the nutrition problem and are willing to work to improve the nutritional status of the population. The institutional strength of the nutrition advocates need to be built up at all levels of government.

Another reason for which nutrition issues are ignored is the non-availability of a regular measure with which policy makers can monitor the nutrition status of the population. Ironically, most of the data necessary for the construction of such a measure exists and is collected regularly. An approach to harness existing data to construct a suitable nutrition monitoring system will be developed in this section. First of all, it necessary to discuss the institutional development of the nutrition sector.

##### A. Institutional Development of the Nutrition Sector

Strong institutions provide effective support and continuity for various policies and programs. Policies and programs to improve the nutritional status of the Pakistani population are unlikely to succeed unless there is a strong institutional base. The first priority must be to develop and strengthen the existing institutional base both in the government and in the private sector.

The nutrition sector institutions are at present highly diffused. They are located in the health services, they are in the Planning Commission and they are located in various donor and international agencies. They do not speak with one voice and often they do not follow a single approach. The lack of the both makes it easier for officials in the Ministry of Finance to ignore their requests for increased funding.

Clinical nutritionists have a highly micro-level patient-oriented approach while at the other extreme are those that believe that nutrition problems can be solved simply by increasing food production and not bothering to give much thought to food consumption, quantity or quality. Researchers have given some attention to demand issues <sup>14</sup> but all of the material have yet to assembled together and marshalled as one coherent argument. This needs to done and the lead necessarily must come from the Planning Commission. The Nutrition Cell in the Planning Commission is seized of the importance of this issue and is slowly to proceeding to built leadership institutions at the national and provincial level. Appropriately, they have placed nutrition cells in provincial planning departments/boards. These cells are financed by the Federal Government budget. Their task is to build consciousness of nutrition issues within the provinces.

The nutrition advocates based in the Planning Commission and Provincial Planning Units face the enormous task of gathering together the evidence necessary for effectively making the case for nutrition sensitive policies and programs. They must be careful to make these arguments in terms comprehensible to economists and financial analysts. Otherwise their requests for more funding will almost inevitably be rejected particularly in an era of tight government budgets.

Nutrition programs require an institutional home for delivery of services. The planning cells do not have the manpower or resources to deliver programs. The discussion in this appendix notes that diversity of the programs required to deliver the myriad of services required to meet the nutritional needs of Pakistan would require implementation by several departments of the government such as agriculture, food, education, health etc.. Departments will need to be involved at both the federal and provincial levels. To coordinate among them is an enormous task and will require a high level official in an implementing ministry. A Nutrition Adviser to the government will need to appointed possibly in the Prime Minister's office. He will be charged with coordinating the nutrition programs.

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<sup>14</sup> For example, under the PIDE/IFPRI project.

## B. Monitoring Nutrition Status

Nutritionists have been arguing that there is little or no information on the nutritional status of the population. Monitoring nutritional status of the population through the type of nutrition surveys which gather all the information clinical nutritionists find useful is an expensive and time consuming process. The cost of repeating this survey every year is prohibitive. However, the nutritionists focus on the anthropometric measures, may have led them to ignore exploring carefully the existing data sources on food consumption. The team was even told that there was no data available in Pakistan on food consumption. On exploring the issue the Team found out that the Household Income and Expenditure Survey of Pakistan (HIES) which is now an annual exercise gathers data on the consumption in physical units of over 50 types of food. The physical consumption data is not reported in published reports but is available in the computer data base from which the report is published. The HIES is a nationwide survey of 18,000 households distributed all over Pakistan according to the Census population distribution. The underlying assumption behind all the anthropometric measures used by nutritionists is that there exists a relationship between food consumption (both quantity and quality) and physical well being. The food consumption data gathered by it can be used to estimate antropometric status of the population.

Fortunately, a functional relationship can be estimated between various nutritional status measures and food consumption. An example of this is an equation linking weight for height to food consumption plus other control variables. This type of equation can be estimated from the results of the nutrition survey. Simplistically, the equation form can be stated below:

$$N = a + b * \log(F) \pm E$$

where, "N" is nutritional status of individual, "a" is an estimated constant, "b" is an estimated parameter, "F" food consumption of the individual and "E" an error term.

The equation noted above or a similar equation can be estimated from the 1988-89 Nutrition Survey.<sup>15</sup> "F" is available yearly

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<sup>15</sup> For an example of such an estimate see Khan, Qaiser M. "The impact of household endowment constraints on nutrition and health: A simultaneous equation test of human capital divestment." Journal of Development Economics, 1985

from the Household Income and Expenditure Survey (HIES). This survey covers 18,000 households distributed over Pakistan according to the Census population distribution. The survey records the intake of food over thirty categories of food per household. Next year's round is expected to include even more food categories. The estimates of "F" from this survey can be input into the above (or similar) equation.

"F" can be caloric intake or a index of micronutrient intake or any other measure. The annual HIES provides enough data to measure most food intake quality or quantity variables. The Pakistan Statistical Office has expressed its willingness to release the computer tape of the survey data to any appropriate users whether Pakistani or donor. Some funding needs to be made available for this exercise to be conducted.

Once the equations have been estimated, every year the nutritional status of the population can be measured by inputting the data from the HIES into the equations. Every decade or so a detailed nutrition survey can be done and the equations updated based on those results.

The HIES also provides lots of other useful measures that are useful to nutrition planners. It provides information on the variation in the consumption of various foods. Using the survey, the effectiveness of various government policies to improve food consumption in different regions can be studied. The sources of systematic undernutrition can also be modelled. To do so effectively, the survey needs to add questions about rented landholdings and sharecropped landholdings. It has been noted already that the those with direct access to food production are less likely to be affected by sudden swings in market prices even if on the average they are less well-off.

There are other indices which can be monitored for assessing the nutritional status of the population. These include neo-natal mortality rate, i.e. mortality rate for children between birth and 28 days. This rate is affected by mother's nutritional status as is pregnancy wastage rate though the latter may be impossible to estimate in the cultural conditions of Pakistan. Post-neo-natal mortality rate, i.e. mortality from 29 days to 364 days is affected by household nutrition status. All these variables can be used to monitor impact of specific nutrition programs once they are in place. They are not as suitable for population wide monitoring.

## V. Conclusions and Recommendations

The key conclusions are as follows:

1. Pakistan's nutritional well-being has fallen behind its economic well being for a variety of reasons which can be understood only if examined in the context of 'entitlement' framework.
2. Neither the old ration shop system nor the present uniform guaranteed price and supply policy of the government have had much effect on the really needy. This is not surprising in view of the fact that the rationale behind setting them up was to assure supplies to different region and not the consumption by vulnerable groups. The new system has no built in mechanism to 'cap' its costs and financial pressures may force it back to a form of rationing with all its inefficiencies.
3. Targeted programs are necessary to improve the nutritional well-being of the population. Geographic targeting can succeed only the difference in subsidized price and unsubsidized price is less than the transport cost between the two areas. Thus, these policies will only work in remote and less accessible regions.
4. Targeting by income and landholding group is difficult to administer because of the near impossibility of identifying the truly needy. A test relief type operation such as food for work may work better. Anybody willing to perform such hard work for payment in food-grains is likely to be quite needy.
5. A targeted commodity approach under which inferior food goods are subsidized on the assumption that only the poor will want to eat those foods may be successful in targeting the needy. There is a danger that the commodity may also end up as poultry and livestock feed indirectly transferring the benefits of the subsidy to the rich. Some countries have avoided this problem by designing product mixes which while palatable to humans may include items such as hot peppers making the mix unpalatable to livestock.

6. Nutrition quality can be addressed in the long-term through better nutrition education. The short run solution is more difficult and may need to include price increases and/or consumption taxes on food products which are not very healthy, if consumed in large quantities e.g. fats, oils, and meats.
7. Intra-household allocation problems can be addressed in the long run by improving primary and secondary education of women. In the short run, direct feeding of vulnerable groups such as pregnant and lactating women as well as children is a possible approach..
8. The institutions dealing with nutrition must be strengthened. Above all, they must learn how to make marshall the existing evidence and make their case in a language comprehensible to economists or financial analysts who ultimately make the resource allocation recommendations.
9. A measure to monitor nutrition can be developed from existing data collection exercises. Detailed food consumption data is collected in the household income and expenditure surveys which are now carried out annually. The data from a decennial detailed nutrition survey may be used to monitor and update the linkage between food consumption and various nutritional indicators.

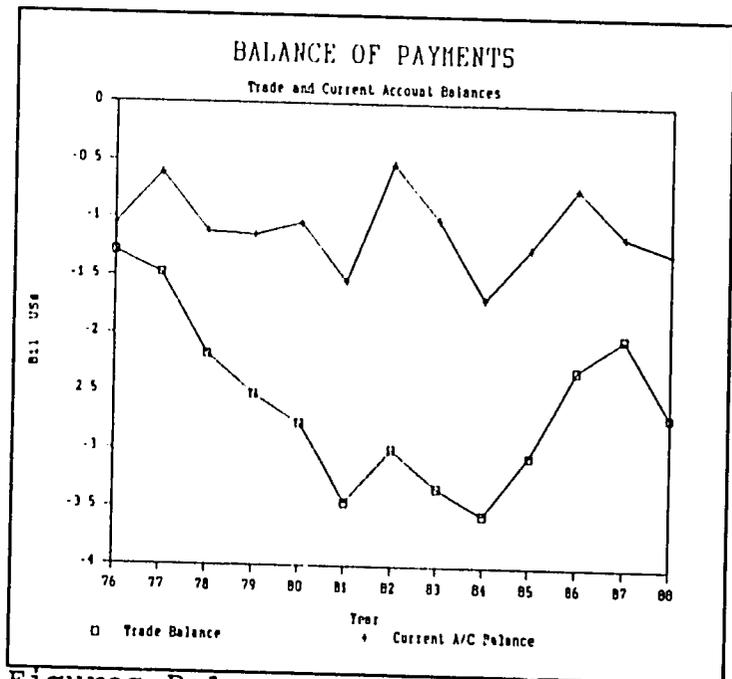
## Appendix B

### Issues in International Trade - Pakistan

#### I. Trade Sector- Overview

##### A. Recent Performance

Balance of Payments- Despite improvements in the the trade balance in FY 1986-87 and 1987-88, the overall balance of payments - as measured by the current account balance - deteriorated in the last half of 1988 and beginning of 1989, as shown in Figure B.1. (Also, see balance of payments table, 2.2 in main text). This was due to a number of factors, including a widening of the trade deficit caused by a surge in imports, declining remittances from workers in the Middle East, increased debt servicing, and lower export prices in general. Exports were adversely affected by a ceiling on duty drawbacks, floods in the Punjab and Sind, and political disturbances. Foreign aid is a major source of funding to finance these deficits, as well as a certain amount of borrowing from commercial banks.



Figures B.1

The GOP estimates that in 1987-88, the debt servicing of the country was some \$1.12 bil. on a total external debt of some \$12.9 bil. Debt servicing as a percent of GNP was 2.8% and as a percent of foreign exchange earnings was some 15.5%. External debt as a percent of GNP represented 32.5%. While these external debt ratios are better than some developing countries, they clearly suggest the urgency of improving the trade deficit, since financing the external debt is becoming a constraint on economic growth and development.

Export and Import Performance- Over the past five years, the value of exports in nominal dollar terms has grown at an average annual rate of 10.0% (See Annex Table B.1). In real dollar terms, the rate of growth has been considerably less, at a rate of 5.0%. The Minister of Commerce recently (June 30, 1989)

announced that exports during the 1988-89 period are estimated at \$4.7 bil., which represents an annual growth rate of 4.7% in current dollar terms since 1987-88. Exports were slow during the first half of the year, growing at 0.7% in dollar terms, while improving to 7.3% during the second half of the year. The export target for 1989-90 has been fixed by the Ministry of Commerce at \$5.07 bil., an increase of 7.8%, which may be somewhat optimistic. (See Figure B.2 for graphic representation of export (and import) statistics and Annex Tables B.2 - B.5)

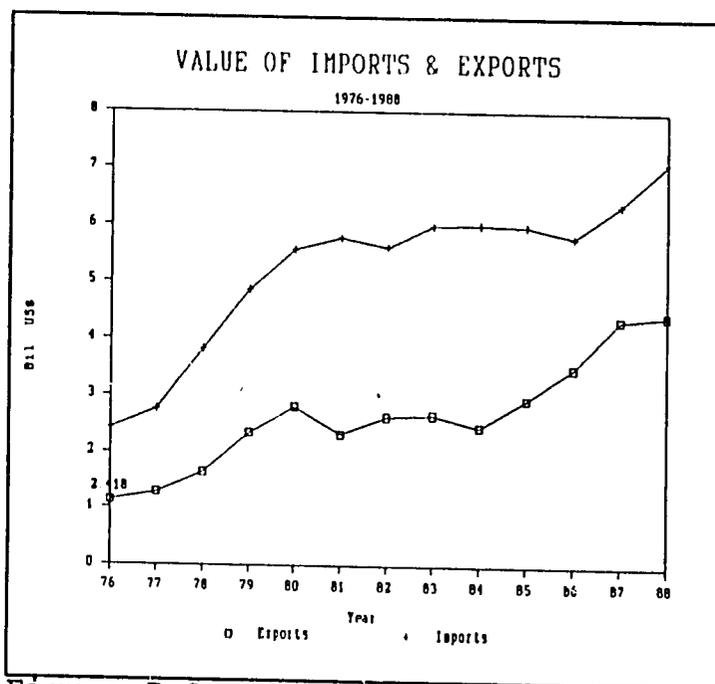


Figure B.2

Imports have grown at an average growth trend of 7.4% over the last eighteen years in nominal dollar terms. In real or constant dollar terms, the annual growth trend in imports has been 2.4%, lower than the growth trend in exports. However, there has continued to be a trade deficit since the export base was considerably lower.

Import figures for 1988-89 are estimated at \$6.9 bil., an increase of some 10.6% over the import bill of 1987-88. The Ministry of Commerce projects an import bill for the 1989-90 year of \$6.8 bil., which if achieved, would mean a decline in the value of imports of 1.4%, again an optimistic goal given historic growth trends. The trade deficit is thereby projected by the Ministry of Commerce to be \$1.73 bil. Given that the deficit has not been below \$2.0 bil. since 1977, this would seem too optimistic.

### B. Structure of Trade

Exports- As shown in Table B.1, Pakistan's exports are dominated by cotton-based products, which averaged some 44.5% of the total annual export value over the last five years. In 1987/88, this category added over Rs. 37.6 bil., or \$1.97 bil. (See Annex Table B.2). Raw cotton was the largest single export category, averaging 12.5% of exports and accounting for a total of \$611 mil. in 1987/88 (See Annex Table B.3).

The large increase in the value of the cotton in the last four years (more than double) has been due "largely to increased

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availability of raw cotton on the domestic market following large crops in the last three production seasons. Of the higher value added cotton-based products, only the garments sector has shown sustained export volume growth that is comparable to that of raw cotton and cotton yarn. While some good progress is being achieved in securing higher value-added exports from abundant domestic supplies of raw cotton, there remains considerable scope for increasing cotton-based exports beyond the raw cotton and yarn stages."<sup>1</sup>

What we have categorized as "Other Textiles," which includes synthetic textiles, raw wool, and carpets, is another major

Table B.1  
Composition of Merchandise Exports  
1984/85-1987/88  
(Percent of Total Exports)

	83/84	84/85	85/86	86/87	87/88	Ave.
Raw Cotton	4.7%	11.5%	16.7%	12.1%	13.7%	12.3%
Cotton Yarn	7.8%	10.5%	9.1%	13.7%	12.1%	11.1%
Cotton Fabrics/Thread	13.8%	12.8%	10.5%	9.6%	11.2%	11.3%
Readymade Garm., Hos.	<u>7.9%</u>	<u>7.0%</u>	<u>8.5%</u>	<u>12.2%</u>	<u>10.9%</u>	<u>9.8%</u>
Subtotal-Cotton Prod.	34.3%	41.7%	44.9%	47.7%	47.9%	44.5%
Synthetic Textiles	3.9%	1.7%	1.6%	4.3%	4.4%	3.4%
Raw Wool	0.5%	0.7%	0.6%	0.5%	0.4%	0.5%
Carpets and Rugs	<u>6.2%</u>	<u>5.3%</u>	<u>5.4%</u>	<u>5.4%</u>	<u>5.7%</u>	<u>5.6%</u>
Subtotal-Ot. Textiles	10.6%	7.7%	7.6%	10.2%	10.5%	9.5%
Rice	15.2%	8.8%	11.1%	8.1%	8.2%	9.8%
Fish, Fish Preparation	2.7%	3.2%	2.7%	3.0%	2.8%	2.9%
Leather, Leather Prod.	6.0%	7.0%	6.6%	7.1%	7.2%	6.9%
Fruits, Vegetables		1.5%	1.4%	1.2%		1.3%
Guar & Products	0.9%	0.9%	0.9%	0.9%	1.2%	1.0%
Tobacco- Raw & Mfd.	<u>0.4%</u>	<u>0.4%</u>	<u>0.4%</u>	<u>0.3%</u>	<u>0.4%</u>	<u>0.4%</u>
Subtotal- Ag. Product	25.2%	21.8%	23.1%	20.7%	19.7%	21.7%
Sporting Goods	1.8%	1.8%	1.6%	1.6%	1.5%	1.6%
Surgical Instruments	1.2%	2.0%	1.7%	1.5%	1.3%	1.5%
Petroleum & Products	1.5%	1.4%	1.0%	0.7%	0.6%	0.9%
Miscellaneous	<u>25.5%</u>	<u>23.5%</u>	<u>20.2%</u>	<u>17.6%</u>	<u>18.6%</u>	<u>20.3%</u>
Subtotal- Other Prod.	29.9%	28.7%	24.5%	21.4%	21.9%	24.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Annex Table B.2

<sup>1</sup> IMG Consultants, Industrial Efficiency Improvement and Development Strategy Study, Volume 2, 1988, p. 4

contributor to export earnings, averaging 9.5% of total export receipts. In 1987/88, this sector contributed some Rs. 8.2 bil. (\$431.6 mil.) to foreign exchange earnings. Synthetic fabrics showed by far the highest growth rate in the category, with raw wool and carpets/rugs falling below the average rate of growth in the rupee value of exports.<sup>2</sup>

Although the value of the agricultural products category has increased in nominal rupee terms, its relative share has fallen from 25.2% to 19.7% over the last five years. Increases in the nominal value of guar products, leather, fish products, and tobacco have all been higher than the average for all exports. Rice, which accounted for 8.2% of total export earnings in 1987/88 or some Rs. 6.4 bil., grew at a rate below the average over the last five years. This reflects to a certain extent the loss by Pakistan of market share in basmati rice to Indian exporters. Fruits and vegetables contributed Rs. 763 mil. or 1.2% of export earnings in 1986/87 and grew at a rate well below the export average.

The last category in Table A.1 "Other Products" accounted for 21.9% of export earnings in 1987/88, or Rs. 17.2 bil. However, growth in the sector was below average, except for surgical instruments. This confirms the conclusion of one report<sup>3</sup>, "For the remainder of the engineering sector, the pattern of export earnings has been very uneven with increased earnings in some years being largely offset by earnings losses in subsequent years...A similar situation exists with exports from the chemicals sector."

In general, exports appear to be a less significant generator of income and employment than in most low-income economies. For example, the ratio of the value of exports to GDP for Pakistan in 1985 was 11%, while this measure was 14% in a weighted average of low-income economies (excluding China and India) and was 21% as a weighted average of all developing countries including the newly industrializing countries. (World Bank, World Development Report, 1987, as reported in IMG, 1987, p. 6). This reflects to a large extent the importance in Pakistan's early years place on import substitution as a strategy for industrialization.

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<sup>2</sup> The last column in Annex Table A.2 gives an estimate of the average growth rate for each category in terms of current rupees. While these growth rates might more appropriately be calculated for dollar values (since the rupee has devalued at a rate higher than 5% per year recently), the figures do provide a means of comparing the growth rate between export categories.

<sup>3</sup> IMG, 1988, p. 5

Destination of Exports- The exports of Pakistan are destined largely for OECD countries -- a 60.4% share in 1987/88)-- while a large range of developing countries account for another 35.3% in the same year. The largest customers in recent years have been the United States and Japan, followed by Saudi Arabia. West Germany, United Kingdom, Italy, and France are the largest European customers, while Hong Kong is the largest Asian client. Pakistan depends on markets in industrialized countries less than most developing countries. At the same time, Pakistan has a problem of "relatively low unit returns on foreign export markets.... Pakistani goods appear to have a consistently lower ranking on the basis of unit values than competing suppliers."<sup>4</sup>

### Imports

Over the past five years, the composition of imports has been on average as follows (See Table A.2):

Capital Goods	34.9%
Consumer Goods	16.0%
Raw Materials	49.1%

The share of capital goods has grown from 31.8% in 1983/84 to 36.2% in 1987/88. During the same time period, the share of consumer goods started at 14.0%, grew to 18.1% and then went back to 14.4%. Raw materials declined in percentage share over the same period from 54.2% to 49.4%.

In terms of nominal rupee value, the highest growth items over the last five years include wheat, power generators, textile and leather processing machinery, chemicals, metals used as raw materials, and fertilizers (See Annex Table B.4). Unusually large imports of wheat were one of the reasons for a growing import bill, as well as increases in edible oils and fertilizer. Petroleum product imports declined in value, helping to offset some the the growth in other categories. A number of other categories were below the average import growth rate, including machinery for special industries, iron and steel products, and petroleum products. Growth of agricultural machinery import value was negative.

Origin of Imports- Again, the bulk of imports (59.8%) come of OECD countries, while developing countries supply 37.% of Pakistan's imports. Japan is the largest single supplier followed by the the United States, France, and the United Kingdom. OIC countries (Organization of Islamic Countries) as a block provide some 19% of Pakistan's imports.

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<sup>4</sup> IMG, 1988, p. 50

Table B.2  
Composition of Imports  
1984/85-1987/88  
(Percent of Total Imports)

	83/84	84/85	85/86	86/87	87/88	Ave.
Iron & Steel Products	3.6%	3.3%	3.4%	3.4%	2.9%	3.3%
Power Generators-Non-Elect	1.6%	3.1%	3.0%	2.5%	3.3%	2.8%
Ag. Machinery	2.9%	2.1%	1.7%	1.7%	1.3%	1.9%
Textile/leather Machinery	1.3%	1.6%	1.9%	2.2%	3.5%	2.2%
Spec. Industry Machinery	3.0%	2.1%	2.0%	2.3%	2.2%	2.3%
Electric Power Machinery	1.3%	1.0%	1.8%	1.1%	0.9%	1.2%
Road motor Vehicles	5.9%	5.1%	5.6%	6.0%	6.3%	5.8%
Others	12.2%	14.0%	16.9%	17.4%	15.9%	15.4%
Subtotal-Capital Goods	31.8%	32.3%	36.5%	36.6%	36.2%	34.9%
Wheat	1.1%	3.1%	5.2%	1.3%	1.7%	2.5%
Other Food	5.8%	5.8%	5.6%	8.5%	5.2%	6.2%
Petroleum Products	2.6%	2.7%	2.3%	2.0%	1.8%	2.2%
Medicines & Drugs	2.3%	2.2%	2.5%	2.9%	2.6%	2.5%
Printed Matter	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
Other	2.0%	2.1%	2.4%	2.7%	2.9%	2.5%
Subtotal-Consumer Goods	14.0%	16.0%	18.1%	17.5%	14.4%	16.0%
Crude Petroleum & Product	22.4%	21.5%	16.2%	13.1%	13.7%	17.0%
Edible Oil	8.5%	7.7%	6.7%	4.4%	7.0%	6.8%
Chemicals	2.0%	1.8%	2.3%	3.1%	3.4%	2.6%
Dyeing/Tanning Materials	0.8%	0.8%	0.8%	1.1%	1.1%	0.9%
Fertilizers	2.0%	2.0%	2.3%	3.5%	2.8%	2.6%
Chem. Materials, N.E.S	1.6%	2.0%	2.3%	2.9%	2.4%	2.3%
Metals (iron-copper, etc.)	1.0%	0.9%	0.9%	1.1%	1.4%	1.1%
Others	15.9%	15.0%	14.0%	16.6%	17.6%	15.9%
Subtotal-Raw Materials	54.2%	51.7%	45.4%	45.8%	49.4%	49.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Annex Table A.4

## B. Problems and Constraints in the Trade Sector

Despite certain improvements in the trade accounts of Pakistan, there are a number of structural problems which need to be addressed if Pakistan is to achieve the high growth rates in exports necessary to avoid serious balance of payment problems in the near future. The export base remains narrow and is subject to instability. Unit values of many exports remain low, and more value-added products are needed in general. The tax base is too dependent on trade-related taxes leading to a less efficient export structure. There has been a structural bias against exports (exchange rate and tariff policies) which has lowered growth in exports. Administrative barriers (need for export permits, bans on exports), lack of marketing and transportation infrastructure, and insufficient quality control programs have worked against increased exports. Finally, new product identification and promotion efforts by the GOP have been relatively ineffective. A brief discussion of each of these problems follows.

### 1. Narrow Export Product Base

Raw cotton and rice make up over twenty percent of total export earnings. Although Pakistani raw cotton has done well over the last few years, the growth potential in the international cotton market, or in traditional commodity markets in general, is not high enough to meet the growing need of Pakistan for foreign exchange.<sup>5</sup> The international market in non-Basmati rice is highly variable, residual market and cannot be counted on for much growth over the long term. Even the Basmati rice market, once an effective monopoly of Pakistan, has not grown rapidly, in part because Pakistan has lost market share to others producers of Basmati rice.

The textile and garments industry account for another 40-45% of total export earnings. Although the growth in these areas has been substantial, protectionism in developed countries will limit the long-term growth prospects for these goods. The best strategy, at least in the short to medium-term for the textile and garment industry, is to improve its per unit earnings in foreign markets. In certain cases, this will necessitate the import of more sophisticated technology to improve Pakistan's competitive position in international textile and garment markets and allow the industry to successfully create higher unit value goods.

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<sup>5</sup> The IMG Industrial Efficiency study (Volume II, 1988 p. 13) estimates that "exports will have to grow over the medium to longer-term in current US dollars terms at a rate of about 12 percent per annum. Even if this rate to be achieved, there would be little improvement with respect to the current external position."

With more than 60 percent of total foreign exchange earnings derived from cotton, cotton-based products, and rice -- commodities that are limited in growth potential-- it is important for Pakistan to seek to expand its export base. The country needs to diversify its export base in those areas where global trade is expanding rapidly and in products which Pakistan can compete internationally. Better utilization of the country's agricultural base through increased production and export of fresh fruits and vegetables and improved agricultural processing facilities is one way of diversifying and increasing exports. At the moment, however, this represents a fairly small portion of total export earnings.

Increasing exports of the manufacturing sector must be one of the country's priorities. The recent IMG study on Industrial Efficiency (1988) identifies a number of potential export opportunities in the chemical subsector (plastics manufacture and plastic products; man-made fibers; and fertilizers) and the engineering subsector (fans, simple structures, sheet metal fabrications, electronic assemblies, and tractors).<sup>6</sup> The study also makes a number of recommendations for the textile sector.

The diversification of the export base is essentially an activity that will be carried out by the private sector. Hence, the major concern of government policy makers should be to provide a policy environment that allows the private sector to compete in world markets. One of the greatest impediments to export diversification has been a trade policy that has favored import substitution activities, which will be discussed in more detail in the next section.

## 2. Protectionism and the Bias Against Exports

Over the last thirty years, Pakistan has generally protected its domestic industry behind a set of measures including quantitative restrictions (the restricted and negative lists published by the Ministry of Commerce) and high tariff barriers. Given the lack of industry in Pakistan in 1947, this type of industrial policy, based largely on infant industry arguments, is understandable. The policy did direct resources towards import substitution industries. At the same time, the Government has attempted to promote exports through a series of export subsidies.

While there is no doubt room for continued expansion in the import substitution sector, the continued high level of protec-

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<sup>6</sup> IMG, 1988, p. 18, Volume II. This study contains lists of products in which it was calculated that Pakistan had significant export potential as given by the domestic resource cost coefficient, which measures comparative advantage.

tion has also led to a certain amount of complacency and inefficiency in Pakistani industry, both in the public and private sectors. The energies and resources of many industrialists have stayed in the import substitution sector, with little incentive to improve efficiency to compete with imports or to compete on export markets.

There have been other justifications for the high level of protection besides the infant industry argument. The GOP has attempted to contain the trade deficit through the restrictions of imports rather than through the promotion of exports. The GOP has also come to rely heavily on trade-related taxes (both import duties and export taxes) as a major source of revenue. Kemal concludes that "the structure of protection is the result of policy measures which have been taken to realise other objectives which are not necessarily consistent with the objective optimal structure of production."<sup>8</sup>

Exchange rate policy has also played an important role in the bias against exports and the need for protective tariffs. Since 1947, Pakistan's currency has often been overvalued, favoring imports and discouraging exports. This is one of the reasons that the country experienced severe foreign exchange shortages in the 1950's, in the late 1970's, and 1980's. In the past, the reaction of the government to low foreign exchange reserves has been to immediately institute policies designed to cut imports. Only in recent years has the Government used exchange rate policy (the managed float of the rupee against a basket of foreign currencies) as one of the tools to manage the trade deficit.

Even with the managed float nominal exchange rate policy, there is evidence that the rupee is still overvalued. One study estimates that the rupee is overvalued by some 26 percent.<sup>9</sup> The exchange rate in the parallel markets is some 15 percent higher, providing some evidence in support of the Dorosh and Valdes paper's hypothesis. The GOP does seem committed to keeping the exchange rate fairly closely in line with the currencies of major trading partners. If the policy of a controlled devaluation of

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<sup>7</sup> See A.R. Kemal, Commercial Policy, International Trade and Structure of Protection, International Food Policy Research Institute, 1988, for a discussion of the history of commercial policy in Pakistan.

<sup>8</sup> Kemal, 1988, p.1

<sup>9</sup> Paul Dorosh and Alberto Valdes, Effects of Exchange Rate and Trade Policies on Agricultural Incentives and Output in Pakistan, International Food Policy Research Institute, 1989, p. 8.5

the past few years is continued, then we could expect to see further devaluation in the near future.

The Government has, to a certain extent, attempted to compensate for the high level of protection on imports by subsidizing the exports of manufactured goods through a variety of export promotion schemes and subsidies. One of the major mechanisms at the moment is to provide "duty drawbacks" to exporters. This is a rather complex system in which exporters can apply to receive a rebate on duties that were paid on intermediate goods and raw materials. Certain industries exporting high value-added goods are accorded tax exemptions. A certain amount of credit is made available to exporters on concessionary terms.

At the same time, exports of major agricultural goods -- in particular, rice and cotton -- have generally been taxed and subject to a number of restrictions. One rationale for this policy has been to "keep the domestic prices of these goods low by maintaining adequate supplies in the domestic market."<sup>10</sup> Price stabilization of food supplies has often been a goal of the Government.

The export of wheat has been banned and the domestic price of wheat has been kept below import parity prices through consumption subsidies. According to the "preliminary" estimates made by Dorosh and Valdes, "Due to the combined effect of trade and exchange rate policies and agricultural price policies, wheat and basmati rice production were 26 and 55 percent lower, respectively, in the 1983-87 period than they would have been under no government intervention. In the absence of direct and indirect price interventions, farm incomes from the five major crops in Pakistan (wheat, cotton, basmati rice, ordinary rice, and sugar cane) would have been increased by 58 percent in the same period....The foregone agricultural production resulting from government trade, exchange rate, and agricultural price policies implies fewer rural employment opportunities, lower labor income and greater incentives for rural to urban migration. Incentives for investment in agricultural capital are reduced as well."<sup>11</sup>

Of course, some sectors of the economy have benefitted from government trade policy. The import substitution sector prospered behind the high implicit imports tariffs. Consumers faced lower and more stable prices for food products, but higher prices for non-food goods and services.

If the Government is to encourage exports, it must correct

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<sup>10</sup> Kemal, 1988, p. 25

<sup>11</sup> Dorosh and Valdes, 1989, p. 8.2 and 8.4

the anti-export bias of trade policy. The goal would be to follow policies that allow export producers to compete in world markets without the cost penalties imposed on them by high tariffs on intermediate goods or without having to be a competitive disadvantage to a protected import substitution sector when vying for scarce domestic resources. Continued devaluation of the rupee, if deemed necessary, is one of the most important tools available to policy makers. The creation of a more neutral tariff regime is another needed policy change. This implies the replacement of quantitative, non-tariff barriers (the restricted and banned lists) with tariffs, and then lowering the average level of tariff. This also implies lowering the level of protection for domestic industries, which will need to improve their level of efficiency over time.

### 3. Narrow Tax Base

The GOP relies heavily on indirect taxes. The World Bank estimates that 85% of the GOP's tax revenues are generated by indirect taxes and import taxes accounted for over half of this amount.<sup>12</sup> As long as import taxes constitute such an important part of tax revenues, it will be very difficult to implement a more neutral tariff regime. For that reason, the GOP is trying to implement a number of changes in taxation policy that rely more heavily on direct, rather than indirect, taxation. These include improved income tax collection and eventually a direct tax on agriculture. Direct taxation of agriculture would be more efficient and equitable than the present situation of indirect taxation on the agricultural sector through price, trade, and exchange rate policies. However, an increase in direct taxation on agriculture implies that the level of indirect taxation should be lowered.

### 4. Infrastructure and Institutional Constraints

Like in many developing countries, the transportation, communications, energy, storage, and marketing infrastructure severely limits the ability of Pakistan to rapidly expand certain export activities. The Government is faced with a wide variety of investment choices in these sector. One can only suggest that these choices be made keeping in mind the needs of the export with some priority weighting. However, incentives to exporters should come in the form of availability of infrastructure and not in the form of subsidized prices for these inputs. The latter option would tend to distort the mix of export activities.

There are a number of different types of institutional barriers to increased exports. First, there are problems in the

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<sup>12</sup> World Bank, Pakistan, Medium-Term Economic Policy Adjustments, Report No. 7591-PAK, March, 1989.

speed of execution of policies. For example, an export permit is required of commercial feedlot producers to sell meat and meat products in foreign markets. One such meat packer stated that it was very difficult to obtain the permit in a timely manner, and that he had lost customers on three different occasions because he did not get the export permit soon enough to meet the customer's requirements. This is a case where the policy needs to be changed or the implementation improved.

Second, there are instances where institutions need to be strengthened or modified. This is the case with the implementation of quality control regulations, particularly for the export of fruits and vegetables. An example of the need for the modification of an institution would be the Export Promotion Bureau (EPB). The EPB is required to take on a number of regulatory and administrative tasks, including the administration of textile quotas. Hence, it does not have the time for real promotion work, particularly on behalf of smaller Pakistani firms that cannot afford their own international marketing efforts. A modification of the role of EPB could have benefits to the international marketing efforts of Pakistan.

Third, there are instances where there may be a regulatory role for the government in certain areas as they are privatized or as new institutions are created to meet the needs of a modernizing economy. For example, there may need to government regulation in the area of quality control and inspection in the growing agribusiness sector. The government would also want to provide at least minimal regulation of a futures market in agricultural commodities.

## II. Trade Policy

### A. Goals

The Government has long been aware of the structural problems of the trade sector and has, at times, made an effort to correct the problem. For example, one of the major themes of the Sixth Five Year Plan was to move agriculture from "self-sufficiency to export." The idea was to diversify agricultural export base and export the assumed surpluses of wheat, rice, sugar, fish, poultry, and fruits and vegetables. These surpluses did not materialize for the most part, and the Seventh Five Year Plan suggested that "export diversification in terms of both commodities and markets remained an elusive goal. The much-hoped-for breakthrough in high-value agricultural exports failed to materialize; yields remained low and the sub-sector continued to be hampered by a host of marketing, infrastructure, and technical inefficiencies." (p. 64)

However, the Government has taken a pro-export stance in the

Seventh Plan. The new Trade Policy, announced in June, 1987, is reaffirmed in the Plan, described as "a major step towards neutralizing the unfavourable impact of domestic protection on exporter's costs and signals a major government commitment to export oriented development. The Plan outlines a number of different trade policy goals including:

- 1) First, in agriculture, a substantial improvement in yields, product quality, marketing efficiency and the development of a complete support system for the grower to exploit fully the potential for exports of high value agricultural commodities will be required
- 2) The enactment of more efficient set of pricing and trade incentives aimed at fostering greater competitive efficiency will be necessary. This will call for a reorientation of the structure of incentives towards exports, combined with measures aimed at improving the domestic policy environment through further deregulation and reductions in sanctioning requirements so as to stimulate international competition and create a more flexible and resilient industrial sector.
- 3) In the area of trade policies, an active exchange rate policy guided by the need to accelerate the flow of exports and diversify its composition and restrain inessential imports, combined with the establishment of a 'free trade' status for exporters and the extension of these incentives to indirect exporters is called for. (p. 65)

These are reasonable trade policy goals in light of the structural trade problems outlined in Section I of this paper. Of course, the implementation of policy during the Seventh Plan period is the real proof the Government's commitment to these goals.

#### B. Trade Policy Implementation

The Government has indeed made a serious effort at putting into practice some of the trade policy reforms necessary to correct the anti-export bias of the tariff regime. The World Bank and the International Monetary Fund have actively worked with the Government to put together a program of trade reforms and a package of financial aid (structural adjustment) to assist in the transition.<sup>13</sup> The main trade policy objective of the

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<sup>13</sup> For a detailed review and assessment of Pakistan's foreign trade regime and industrial policies, see: World Bank, The Trade Regime in Pakistan, November, 1987; World Bank, Pakistan:

program is to improve international competitiveness of industry, reduce the level and dispersion of tariffs, and equalize the relative incentives between producing for the export market and for the domestic market.<sup>14</sup>

The main operational focus of the structural adjustment program is replacement of non-tariff barriers (items on the restricted and negative lists) by tariffs and then rationalizing the tariff structure by lowering the level and dispersion of tariff rates. In 1988-89, significant progress was made towards these objectives through the removal of a large number of commodity categories from the negative (i.e. banned) and restricted lists of imports and reduction of the maximum tariff rate from 150% to 125% except for luxury cars and alcoholic beverages. There were also increase in the value ceilings on imports of machinery and millwork against cash licenses.

The Ministry of Commerce recently announced (June 30, 1989) a series of trade policy changes for 1989-90. These changes constitute a significant step in the deregulation of trade and are in line with the structural adjustment policies of the World Bank and IMF agreements. A summary of the major changes follows:

#### Import Policy Changes

- 1) Reduction of Restricted List- Twenty items have been removed from the restricted list including maize, polyethylene bags, saffron, certain machine-tools, and non-industrial electrical accessories. These items may now be imported by the private sector, but they are still subject to import duties and sales taxes. For example, imported maize is subject to a 40% tariff duty.

There are still 105 line items restricted under broad categories such as: 1) Items (16) importable by public sector agencies only; 2) Items (4) importable by industrial consumers; 3) Items (30) importable subject to specific conditions; 4) Items (52) importable from specified sources; and 5) Items (3) subject to quantitative restrictions. Under the structural adjustment agreement with the World Bank,

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Industrial Regulatory Policies, January, 1988.

<sup>14</sup> See World Bank, Pakistan, Medium-Term Economic Policy Adjustments, March 17, 1989 for a full description of the structural adjustment program that forms the basis of the World Bank and IMF financial assistance. Pages 113-115 of this document provide a summary and time frame for the structural adjustment policies through 1990/91.

further reduction in the maximum tariff to 100 percent is scheduled for 1990, with a further lowering of the import duty structure in subsequent years.

- 2) Reduction of Negative List- The negative (banned) list has been cut down to some 140 items and is to be cut further. The agreement with the World Bank states that the negative list should be reduced to some 80 items by mid-year 1990. While some of the items on the list -- live swine, rhinoceros horn, lard, opium, etc. -- are there for religious or moral reasons, a number of the items are on the negative list on the grounds of protecting local industry. These are the ones that are targeted to be protected by tariff rather than an outright import ban.
- 3) Exemption of Duty on Certain Imported Machinery- Machinery for processing of leather, leather products, fruits and vegetables, and certain textiles have been made eligible for duty-free import and sales tax exemption.
- 4) Import Ceiling Increases- The ceiling for the import of machinery (initial installation) has been raised to Rs. 80 million. The GOP also announced a new system to deliver licenses within two hours to import machinery in the case of a breakdown.
- 5) Open Bonded Warehouse System- The Government intends to introduce and promote an open bonded manufacturing system in which export have access to tax free imported and domestic inputs for exported goods.

### Export Policy Changes

- 1) Income Tax Reductions for Exporters- Thirteen new export goods have have made eligible for a 75 percent tax exemption on income derived from export earnings. These include carpets, linens, and a number of clothing items.
- 2) Duty drawback Simplification- The procedures for the duty drawbacks and sales tax will be simplified.
- 3) Duties on Basmati Rice Abolished- The duty on the export of basmati rice in packets has been abolished. There remains a Rs. .65/kg. export duty on Basmati rice exported in bulk. However, the bulk trade is reserved for the Rice Export Corporation of Pakistan, which is presently deferring the payment of this duty.

In addition, the private sector has also been allowed to export Basmati rice in packets of up to 25 kilograms. Much of the RECP's rice is moved in 25 kg. bags, so this new

regulation should increase the share of the private sector in the rice trade.

- 4) Negative List for Vegetables- A new system to limit certain vegetable exports will be introduced. A negative re-restricted list for vegetables will be published. All other vegetables can be exported freely. The Ministry of Commerce announced that the following vegetable exports are banned:
  - a) Fresh tomatoes and fresh green chillies
  - b) Spices: ginger (fresh), turmeric (whole), garlic (dry whole) and chillies (dry, red whole)
- 5) Cheese Exports Allowed- For the first time, the export of cheese is being allowed. Still on the negative list are milk and other dairy products, live animals (except for certain exotic birds and day-old chicks), meat products (except for 50% of the total production of commercial feed lots, livestock farms and bilateral joint ventures), grains, pulses, etc.<sup>15</sup>
- 6) Private Air Cargo Allowed- The Government encourage the export of perishable commodities such as fruit and vegetables, the Government has decided to allow the setup of private air cargo service. It remains to be seen if this will be profitable enough to be undertaken on a regular basis. However, this type of deregulation may help to set the stage for increased horticultural exports.
- 7) Simplification of Certain Export Procedures- Certain procedures for exporting will be simplified. For example, exporters used to have to obtain a separate registration for every item exported. Now, a new system is being established in which one export registration will cover any number of export items.
- 8) Increase in Credit Ceiling- The existing ceiling on bank credit for exporters under the Export Finance Scheme is to be raised by some 50 percent.

In general, the Ministry of Commerce listed the major goals of the export policy as follows:

1. Fiscal incentives for investment in value-added exports
2. Diversification of export structure by expanding the product coverage.

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<sup>15</sup> See the Export Trade Control Order, 1987 as published in the 1988 edition of the Customs Schedule and subsequent updates by the Ministry of Commerce.

3. Simplification of procedures.
  4. Establishment of institutions for quality control.
  5. Larger role for the private sector.
- C. Comments on Trade Policy Implementation**

In large measure, the Government's trade program is very positive and ambitious, taking many steps to encourage exports and reduce the anti-import bias of the tariff regime. If successfully and fully implemented, the program should be instrumental in bringing about growth of export-oriented activities in Pakistan. It should also help to make Pakistan's domestic industries more modern and more competitive. Of course, policy changes only set the stage for growth; the private sector must respond positively to these policy initiatives. The Government must continue to adjust its macroeconomic policies to changing international economic conditions in order to provide the best economic environment possible.

The continued close management of the exchange rate is of great importance, particularly as protection is being shifted from non-tariff to tariff barriers and overall tariff rates are being lowered. A properly valued currency will discourage imports and enable exporters to remain competitive with other suppliers of industrial and agricultural goods on world market. It also allows exporting firms (and import competing firms) to compete more effectively for non-traded domestic factors of production (labor, certain local raw materials, etc.).

Pakistan has followed a flexible exchange rate policy since 1982, with the cumulative depreciation of the rupee against the US dollar through March, 1989 of 49 percent. However, there is some evidence that the rupee is again somewhat overvalued and needs to be devalued. Perhaps the mix of the currency basket needs to be adjusted. This issue should be looked at carefully by the Government. To be of value to exporters, a devaluation should not be accompanied by an offsetting increase in domestic inflation. Hence, a devaluation should be undertaken, to the extent possible, within the framework of policies that control inflation.

The Government has taken a number of steps to reduce the cost of raw materials to exporters through tariff exemptions and reductions (for both raw materials and manufacturing equipment), a system of duty drawbacks for exporters, and a system of bonded warehouses. Of course, there are improvements needed in all of these areas. For example, there are import restrictions (high tariffs or outright bans) on some goods which might be considered basic raw materials for domestic or export industries. For example, the 40 percent tariff on maize effectively prevents it from being used as a feed for poultry, even though the feed requirements of the poultry industry are being met with increasing difficulty. Continued investigation of individual cases

is needed to assure that the country is following reasonable specific tariff policy.

While the duty drawback system has the merit of specifically targetting exporters, the system is not without problems. There are time delays and administrative hindrances built into the present regulations. The Government is looking at these regulations and should be instituting some changes which improve the efficiency of duty drawback administration.

The duty drawback system also has a difficulty time reaching "indirect exporters." An indirect exporter is a firm which imports raw materials, processes them to some degree, and then sells the products to an exporting firm. It is the indirect exporter which pays the duty on the raw material import and the exporter who receives the rebate. In theory, the indirect exporter will simply include the duty in the price of the intermediate good. In practice, the difficulties in documenting the import duty content of goods becomes so complicated that the exporter tends to do their own importing. Hence, the system does not encourage backward linkages between exporters and other suppliers in the economy.

The duty drawback system may miss other sectors in need of tariff relief. For example, a number of UHT milk plants need a reduction in the tariff on imported packaging materials to be competitive. They would be eligible for a duty drawback if they were allowed to export, but there is a ban on the export of milk. The duty drawback system is clearly a "second-best" solution, with free trade conditions or at least lower levels of tariff being more efficient policy solutions.

Despite the stated commitment of the government to export diversification and the increase of foreign exchange earnings, there are still a number of restrictions on exports such as absolute exports bans and export taxes. These policies may over the long run limit the diversification and growth of export earnings. For example, despite the establishment of a new system for determining which vegetables can and cannot be exported, any absolute ban on food products may harm the long-run interests of the export sector, as well as in the long-run interests of the producers of that agricultural commodity. Although policy makers may view an export ban as beneficial to consumers (at least in the short run), the long run consequences need to be carefully examined. The same is true of export taxes. Although these may be levied to revenue purposes or to keep domestic prices down in the short run, export taxes maybe detrimental to a sector in the long run. A shift to more general tax instruments and away from export taxes will also prove to be more effective.

There are certain institutions that should be improved or developed if Pakistan is to improve its international competitive

position. For example, exporters suggest that the time it takes to procure export permits and registrations hinders their efforts at exporting. The Government has announced a program to speed export registration by allowing one registration to cover a number of different products. This is a positive step, although the Government must follow up to make sure that it is implemented. In addition, the Government must make sure that export registrations are delivered in a timely fashion if exporters are to compete successfully on international markets.

While the Government has a stated goal of establishing quality control institutions, although few details of how this is going to be done have been announced. Controlling the quality of manufactured products is important in domestic markets; adherence to standards in export markets is of crucial importance. The same is true for agro-industrial products and for fresh fruits and vegetables put into export markets.

The Government has a legitimate role to play in setting up certain grades and standards for both agricultural and industrial goods. While some industries can regulate product quality through private industrial organizations, the Government must coordinate the work of these groups and protect the interests of domestic consumers and the reputation of Pakistani exporters.

Another institution that should be considered to improve the efficiency of Pakistani exporters is that of a futures market for certain commodities such as cotton. This would allow textile manufacturers to reduce the risks they face due to price changes and lower their average manufacturing costs. It would also assist in the process of efficient price formation and help link Pakistani exporters into international market.

### **III. Issues in Trade Policy for the PL-480 Program**

A number of the trade policy issues discussed in the previous section are best left to the structural adjustment programs of other institutions. For example, exchange rate policy, a critical element in the success of the New Trade Policy, is a benchmark in the World Bank and IMF agreements. The same is true for the conversion of non-tariff barriers into tariffs and the general reduction in the level of tariffs, although there may be some specific reductions in tariffs on raw materials that could be examined under the PL-480 program. The two most feasible areas for inclusion under PL-480 are an examination of the effect

of restrictions of exports on export diversification and growth, and institutional framework needed to improve the quality and efficiency of the trade sector.

#### A. Restrictions on Exports

There are two major types of policy-based restrictions on exports in Pakistan. The first is the ban on the export of products placed on the list under the Export Trade Control Order of 1987 and subsequent updates by the Ministry of Commerce. The second is a series of export taxes or ad valorem duties that are placed on certain products.

##### 1. Export Bans

There are a considerable number of products which cannot legally be exported from Pakistan. This includes certain types of live animals, beef and mutton (except for 50% of the total production of commercial feed lot units, livestock farms and bilateral joint ventures), animal fat, milk and milk products (except cheese), certain types of vegetables, grains, pepper, pulses, beans, bran, fodder, edible oils, gur, charcoal, timber, etc. The following vegetable exports are presently banned:

- a) Fresh tomatoes and fresh green chillies
- b) Spices: ginger (fresh), turmeric (whole), garlic (dry whole) and chillies (dry, red whole)

However, all other fruit and vegetable exports are allowable.

There are several rationales put forth for these bans. One is the perceived shortage of the good in Pakistan and therefore the need to keep available supplies within the country. The shortages of goods, however, are often due to an attempt to keep prices below equilibrium market prices within Pakistan. This is the case for wheat, meat products, edible oils, and timber. Despite these bans, an unspecified amount of wheat leaks over the Afghan border and edible oils over the Indian border. Another policy option beside an export ban to deal with these shortage would be to let domestic prices rise and provide incentive for Pakistani farmers to increase their production of these goods. Adherence to this policy would help to lower imports and might even create the basis for export diversification. If the Government is committed -- as it says it is in the Seventh Plan -- to the policy of increasing yields of agricultural goods to create exportable surpluses, then it must pay attention to domestic price policy and allow prices to rise to equilibrium levels.

Some of the bans are justified on the grounds of price stabilization. Although a ban may accomplish this goal in the short-run, the policy does little to solve problems of domestic availability in the long-run or diversity of the export mix.

Higher prices signal producers to put more resources into a crop during the next season. They also encourage the adoption of technological change. A farmer knows that not every year will be a good one for every crop. But technological change is encouraged when there is the hope of high returns in some years. Hence, while price stabilization is perhaps desirable from the point of view of the consumer, price stabilization policies (including export bans) should be careful not to stifle domestic producers from devoting resources to a crop or undertaking technical innovations to improve productivity.

A problem with export bans is that it can lead to the loss of market share or the flexibility to become established in new market niches as they become available. For example, the ban on US soybean exports to Japan in the late 1970's because of soybean shortages in the United States led to the loss of US market share to Brazil, from which the soybean industry is still recovering. Fresh fruit and vegetable exporters must have the ability to rapidly take advantage of market opportunities with the widest possible range of products. Bans (and even the possibility of bans) may make it more difficult to get established in new markets or even maintain a good reputation in already established markets.

There are clearly reasons for not banning exports of goods, just as the Government has certain concerns in placing these bans. Careful analysis is needed on a commodity-by-commodity basis to set forth the relative gains and losses to the various groups affected by an export ban. A study on the export ban issue, with an analysis of a number of commodities, should take place under the auspices of PL 480.

There have already been a number of commodity studies conducted under the Economic Analysis Network project. For example, a recent study on the dairy industry<sup>16</sup> analyzed the policy options available to improve dairy output in Pakistan. One of these conclusions was that the ban on milk and milk products was counterproductive in promoting the development of the dairy industry. A modern processing sector has been created in recent years; however, there are serious problems of over-capacity especially in the UHT milk processing industry due to the slow growth in domestic demand for UHT milk.

Removing the ban on UHT milk and other processed milk products such as yoghurt would help UHT processors find markets for their product and help to solve the financial problems currently found in the industry. At the same time, exports of UHT

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<sup>16</sup> Anjum, Muhammad, Lodhi, Kamil, Agha Abbas Raza, Walters, Forrest, and Krause, Stanley, Pakistan's Dairy Industry: Issues and Policy Alternatives, EAN, Islamabad, July, 1989.

milk would have little impact on the domestic industry because exports would only be a small percentage of the market. According to the dairy study, "the entire UHT industry is using only less than two percent of the total milk produced in the country." In addition, the ability of the industry to export would allow it to qualify for duty drawbacks on packaging materials, currently one of the main difficulties of many of the UHT processors.

Here is a case where the export of a product is banned, yet it is a value-added product produced by an industry that has the technical capability to compete effectively on international markets. The product also assists in the diversification of the export product mix. Hence, rolling back the ban on UHT milk and products should be one of the benchmarks of the PL-480 program in the first year. There is a ready sufficient analysis to show this this is a reasonable course of action.

## 2. Export Taxation

Taxes placed on exports can have a detrimental effect on production and on successful marketing. Of course, the major reasons that export taxes have been levied are the amount of revenues collected and the relative ease of collection.<sup>17</sup> However, the question is whether or not the revenue benefits outweigh the long-run costs to producers and exporters?

The Government recently lifted the export duty on basmati rice. It was lifted for several reasons. First, although Pakistan had a pre-eminent position in international basmati markets, the export tax eroded the competitive position of Pakistani producers vis-a-vis Indian producers of basmati rice. The Indians were able to undercut Pakistan and gain market share which may be difficult to win back. In addition, in a competitive international market, exporters, attempting to retain market share, must pass back the export taxes to producers. Lower prices to producers means a lower level of production and stagnation in the industry. This is essentially what has happened in Pakistan's basmati market in recent years, at considerable cost to the industry. The Government's removal of the tax is a step in the right direction, but has not come soon enough to prevent considerable damage.

There are still a number of export duties being levied, including duties on agricultural products such as raw cotton, cotton yarn, leather (finished and wet blue), and rice exported in bulk. The costs and benefits of these export levies need to

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<sup>17</sup> According to the Economic Survey, 1988-89, some Rs. 3.24 billion were collected in export duties, which represents about 3.6 percent of the total tax revenues collected by the Federal Government.

be examined on a case-by-case basis to determine which duties are warranted. Export duties for which the costs outweigh the benefits should be discarded. There may have to be a phased approach to this program, combined with increases in direct taxation.

## **B. Institution Building**

Trade policy change must be accompanied by changes in the way institutions function and even the creation of new institutions- both public and private. Well-intentioned policy is of little use if it is not implemented in an efficient and timely manner. As the export sector grows, new institutions may be needed to assure quality control and efficiently functions markets. The PL-480 program, through a series of Self-Help Measures and the provision of technical assistance when needed, can help in this process of institution building.

The first step is to assure that the implementation of new trade policy initiatives is satisfactorily completed. The Minister of Commerce recently announced several institutional changes in regards to the administration of trade policy. These measures should be implemented in a timely fashion. In addition, USAID is undertaking a study to analyze corporate sector constraints in agriculture, which may identify certain problems in the implementation of trade policy. Trade-related constraints and policy solutions to overcome them will be incorporated into the PL-480 program as appropriate.

Quality control for both domestic and international markets is an important issue in Pakistan. The Government should begin to identify institutional weaknesses in its program of quality control and propose measures to improve them. Technical assistance, particularly in the establishment of a quality control program for international markets, can be made available if requested by the Government and the necessary expertise is available to USAID.

The establishment of a futures market for agricultural commodities such as cotton may also be of interest to the Government. There needs to be a study done on this issue to clarify precisely how a futures markets work and the purposes it would serve. US technical assistance may be available to participate in such a study along with local consultants, the private sector, and government officials. The Chicago Board of Trade, which governs the largest commodities futures market in the world, should be able to assist in this effort.

Annex Table B.1

Year	Current US\$ Bil.				Constant Rs. Mil.		Current Million US Dollars				CPI
	Trade Balance	Current Ac. Balance	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	
1976	-1.286	-1.051	1.132	2.418	2,128	2,901	1,141	2,325	545	1,110	111.77
1977	-1.469	-0.605	1.283	2.751	2,321	3,217	1,311	2,810	583	1,249	120.48
1978	-2.172	-1.114	1.644	3.816	2,431	4,049	1,710	3,676	699	1,502	128.47
1979	-2.516	-1.140	2.341	4.857	3,111	4,267	2,365	4,740	886	1,775	142.23
1980	-2.764	-1.037	2.799	5.563	3,675	4,005	2,958	5,409	1,011	1,848	159.79
1981	-3.451	-1.534	2.319	5.769	3,351	4,016	2,464	5,622	791	1,805	175.79
1982	-2.989	-0.517	2.627	5.616	4,072	4,270	2,694	5,357	859	1,709	183.67
1983	-3.324	-0.997	2.669	5.993	3,945	4,584	2,768	5,685	848	1,741	199.03
1984	-3.552	-1.680	2.457	6.009	3,834	5,049	2,491	5,906	737	1,748	213.87
1985	-3.042	-1.236	2.942	5.984	5,243	5,145	3,070	5,634	893	1,638	224.21
1986	-2.294	-0.719	3.498	5.792	6,021	5,051	3,686	5,380	1,039	1,516	232.88
1987	-2.008	-1.133	4.362	6.37	6,007	4,896	4,455	6,325	1,217	1,727	248.44
1988	-2.684	-1.265	4.437	7.121							
Ave. Growth Trend			9.8%	7.2%	9.4%	4.5%	10.0%	7.4%	5.0%	2.4%	7.5%

Source: Economic Survey, 1988-89

Annex Table B.2  
Composition of Merchandise Exports  
1984/85-1987/88  
(Rs. Mil.)

	83/84	84/85	85/86	86/87	87/88	Ave.	Ave. (1) Growth
Raw Cotton	1,772	4,368	8,291	7,676	10,759	6,573	67.3%
Cotton Yarn	2,931	3,974	4,511	8,709	9,530	5,931	37.9%
Cotton Fabrics & Thread	5,167	4,847	5,229	6,089	8,769	6,020	15.5%
Readymade Garm., Hosiery	2,950	2,662	4,214	7,759	8,521	5,221	35.6%
Subtotal-Cotton Products	12,820	15,851	22,245	30,233	37,579	123,746	31.0%
Synthetic Textiles	1,452	636	802	2,698	3,482	1,814	58.8%
Raw Wool	171	261	274	315	298	264	16.8%
Carpets and Rugs	2,323	2,031	2,693	3,439	4,445	2,986	19.2%
Subtotal-Other Textile	3,946	2,928	3,769	6,452	8,225	5,064	25.4%
Rice	5,688	3,340	5,527	5,139	6,404	5,220	10.4%
Fish, Fish Preparation	1,007	1,231	1,335	1,930	2,186	1,538	22.1%
Leather, Leather Prod.	2,247	2,646	3,251	4,507	5,633	3,657	26.1%
Fruits, Vegetables		570	694	763		676	7.9%
Guar & Products	322	341	444	582	923	522	31.4%
Tobacco- Raw & Mfd.	143	158	195	219	318	207	22.9%
Subtotal- Ag. Products	9,407	8,286	11,446	13,140	15,464	11,549	16.7%
Sporting Goods	665	674	787	1,000	1,145	854	14.9%
Surgical Instruments	430	774	842	956	998	800	26.7%
Petroleum & Products	543	525	507	444	479	500	-2.8%
Miscellaneous	9,528	8,941	9,996	11,130	14,555	110,830	11.9%
Subtotal- Other Products	11,166	10,914	12,132	13,530	17,177	112,984	11.8%
TOTAL	37,339	37,979	49,592	63,355	78,445	153,342	21.0%

(1) Ave. Annual Growth of Export Earnings in Current Rs.- 1983/84-1987/88, except for Fruits and Vegetables for which only three years of data were available.

## VOLUME, VALUE AND UNIT VALUE OF MAJOR EXPORTS, 1977/78-1987/88 /a

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
Raw Cotton											
Volume (M.Kg)	101.00	55.00	251.00	325.00	231.30	254.92	98.22	262.99	638.51	640.96	502.00
Value	110.10	66.20	335.30	525.60	278.50	306.58	131.44	287.94	513.66	446.79	611.30
Price (\$/Kg)	1.09	1.20	1.34	1.62	1.20	1.20	1.34	1.09	0.80	0.70	1.22
Basmati Rice											
Volume (000 MT)	280.00	180.00	320.00	410.00	261.81	237.74	405.93	174.06	260.54	187.65	221.80
Value	124.00	135.40	225.50	290.00	185.42	148.24	243.84	108.66	173.59	133.05	160.70
Price (\$/MT)	442.86	752.22	704.69	707.32	708.22	623.54	600.69	624.27	666.27	709.03	724.53
Other Rice											
Volume (000 MT)	600.00	830.00	770.00	830.00	689.22	667.10	859.10	544.63	1055.48	1052.74	988.40
Value	119.30	206.80	196.70	275.80	205.85	141.49	178.14	111.50	168.86	161.05	203.20
Price (\$/MT)	198.83	248.17	255.45	332.29	298.67	212.10	207.36	204.73	159.98	152.98	205.58
Cotton Yarn											
Volume (M.Kg)	60.00	97.90	99.90	95.20	95.60	134.10	101.81	125.86	157.90	259.67	210.00
Value	107.00	197.60	205.90	207.00	196.67	247.51	217.42	261.93	279.51	506.93	541.50
Price (\$/Kg)	1.78	2.02	2.06	2.17	2.06	1.85	2.14	2.08	1.77	1.95	2.57
Cotton Cloth											
Volume (M.Sq.Mtr)	453.50	531.80	545.80	500.90	584.30	605.33	664.38	687.62	727.35	693.45	848.60
Value	175.70	215.70	244.20	241.40	279.50	281.59	360.24	305.64	314.91	345.23	485.20
Price (\$/Sq.Mtr)	0.39	0.41	0.45	0.48	0.48	0.47	0.54	0.44	0.43	0.50	0.57
Leather											
Volume (M.Sq.Mtr)	8.70	12.70	10.20	8.80	11.01	10.74	16.64	15.67	17.71	19.98	20.10
Value	64.30	124.00	127.70	90.10	109.21	94.02	146.27	153.28	179.68	237.43	286.50
Price (\$/Sq.Mtr)	7.39	9.76	12.52	10.24	9.92	8.75	8.79	9.78	10.15	11.88	14.25
Carpets											
Volume (M.Sq.Mtr)	1.90	2.50	2.70	2.50	1.93	2.23	4.69	2.07	2.57	2.73	3.06
Value	118.30	174.80	222.10	226.60	159.10	150.50	172.31	133.87	166.39	199.76	252.58
Price (\$/Sq.Mtr)	62.26	69.92	82.26	90.64	82.44	67.49	36.74	64.67	64.74	74.82	82.54
Fish and Preparations											
Volume (M.Kgs)	13.40	13.60	13.20	19.70	17.60	16.58	27.63	36.34	35.87	39.95	43.60
Value	34.50	14.70	53.60	56.50	74.87	70.58	74.71	81.15	82.71	112.32	124.20
Price (\$/Kg)	2.57	1.08	4.06	2.87	4.25	4.26	2.70	2.23	2.31	2.81	2.85
Guar & Products											
Volume (MT)	90.00	110.00	90.00	49.00	56.02	62.83	78.68	66.93	72.88	74.00	51.20
Value	20.50	27.50	33.60	28.99	28.93	22.55	23.88	22.48	27.51	33.85	52.40
Price (\$/MT)	0.23	0.25	0.37	0.59	0.52	0.36	0.30	0.34	0.38	0.46	1.02
Readymade Garments											
Volume (M. Doz)	1.93	2.54	3.78	4.51	4.89	4.05	6.79	7.19	10.27	15.44	14.84
Value	29.80	38.10	53.90	75.26	94.15	122.42	162.75	132.71	206.39	354.97	349.80
Price (\$/Doz)	15.44	15.00	14.26	16.69	19.25	30.23	23.97	18.46	20.10	22.99	23.57
Synth. Tex. Fab.											
Volume (M.Sq.Mtr)	31.30	10.30	5.10	90.80	12.30	140.24	66.14	28.60	99.91	277.63	298.10
Value	15.55	6.56	5.45	128.48	23.50	220.12	107.70	41.94	49.68	157.03	197.80
Price (\$/Sq.Mtr)	0.50	0.64	1.07	1.41	1.91	1.57	1.63	1.47	0.50	0.57	0.66
Raw Wool											
Volume (M.Kg)	4.90	5.30	4.20	2.70	5.80	7.14	8.24	10.77	9.78	8.57	6.10
Value	7.37	10.10	9.59	5.05	10.62	12.50	12.71	17.22	16.97	18.32	16.92
Price (\$/Kg)	1.50	1.91	2.28	1.87	1.83	1.75	1.54	1.60	1.74	2.14	2.77
Others											
Value	384.58	492.94	651.16	806.72	818.68	876.90	936.59	832.68	890.14	974.27	1171.90
Total Exports											
Value (c&f)	1311.00	1709.60	2364.70	2957.50	2465.00	2695.00	2768.00	2491.00	3070.00	3681.00	4454.00
Value (fob)				2798	2319	2627	2669	2457	2942	3498	4341.00

/a Values in million US dollars.

Source: Planning and Development Division.

Annex Table B.4  
Composition of Imports  
1984/85-1987/88  
(Rs. Mil.)

	83/84	84/85	85/86	86/87	87/88	Ave.	Ave. (1) Growth
Iron & Steel Products	2,732	2,926	3,062	3,162	3,282	3,033	4.7%
Power Generators-Non-Elec	1,265	2,826	2,738	2,281	3,641	2,550	40.8%
Ag. Machinery	2,226	1,891	1,583	1,588	1,451	1,748	-9.9%
Textile/leather Machinery	997	1,393	1,698	2,034	3,853	1,995	42.7%
Spec. Industry Machinery	2,307	1,912	1,820	2,147	2,424	2,122	2.2%
Electric Power Machinery	999	940	1,629	977	1,048	1,123	8.4%
Road motor Vehicles	4,560	4,552	5,258	5,539	6,969	5,375	11.6%
Others	9,333	12,528	15,406	16,093	17,682	14,208	17.9%
Subtotal-Capital Goods	24,419	28,968	30,194	33,841	40,350	32,154	13.6%
Wheat	858	2,750	4,720	1,184	1,850	2,272	68.4%
Other Food	4,459	5,210	5,131	7,851	5,820	5,694	10.6%
Petroleum Products	1,984	2,418	2,053	1,862	2,054	2,074	1.9%
Medicines & Drugs	1,800	1,974	2,252	2,638	2,852	2,303	12.3%
Printed Matter	98	110	134	186	220	150	22.8%
Other	1,547	1,910	2,142	2,492	3,231	2,264	20.4%
Subtotal-Consumer Goods	10,746	14,372	16,432	16,213	16,027	14,758	11.4%
Crude Petroleum & Product	17,177	19,344	14,722	12,114	15,216	15,715	-0.8%
Edible Oil	6,518	6,954	6,129	4,062	7,767	6,286	13.1%
Chemicals	1,532	1,591	2,070	2,878	3,795	2,373	26.2%
Dyeing/Tanning Materials	613	682	728	1,042	1,204	854	19.2%
Fertilizers	1,539	1,790	2,079	3,247	3,161	2,363	21.5%
Chem. Materials, N.E.S	1,201	1,802	2,090	2,657	2,671	2,084	23.4%
Metals(iron,copper,etc.)	773	786	801	1,052	1,603	1,003	21.8%
Others	12,189	13,489	12,694	15,325	19,585	14,656	13.3%
Subtotal-Raw Materials	41,542	46,438	41,313	42,377	55,004	45,335	8.3%
TOTAL	76,707	89,778	90,939	92,431	111,381	92,247	10.1%

(1) Ave. Annual Growth of Import Bill in Current Rupees- 1983/84-1987/88

Source: Federal Bureau of Statistics in World Bank (1989)

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