

18455

ANNUAL PLAN

1978-79

PLANNING COMMISSION, GOVERNMENT OF PAKISTAN,
ISLAMABAD.



ANNUAL PLAN 1978-79

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PART I
ECONOMIC FRAMEWORK

CHAPTER 1

REVIEW OF 1977-78

At the beginning of fiscal year 1977-78, Pakistan was confronted with various economic problems. First, the growth in output of commodity producing sectors which had been weak for some years, was dismal in 1976-77 with *per capita* GDP falling below that of the recession and drought affected fiscal year 1974-75. Second, exports continued to stagnate for the third successive year contributing to a large trade deficit. Third, the level of national and domestic savings was still low, despite impressive recovery from the trough reached in 1974-75. Fourth, increase in domestic savings was forced through deficit financing with its inflationary consequences; although the pace of inflation slackened in 1976-77, the sharp increases in previous years had still not worked through the system and the heavy deficit financing in 1976-77 threatened to magnify these forces. Fifth, the large project and programme portfolio in the public sector was straining the financial and organizational implementation capabilities leading to delays and waste. Sixth, the performance of public sector corporations displayed low levels of profitability and productivity. Finally, performance, drive and morale of the private industrial sector had been undermined by the extension of nationalization to medium-sized agro-based industries.

2. These deficiencies presented a formidable challenge that could not be overcome immediately especially within the continuing adverse international economic framework and the continuing need to bear the burden of Tarbela repairs. It was in this setting that the Annual Plan for 1977-78 had been formulated.

3. A beginning was made through a series of measures to revive lagging production and exports, improve government finances, and restore the legitimate role of private enterprise. To start with, the Annual Plan and the Budget for 1977-78 included restraints on public sector investment. The containment of public sector development outlay was accompanied by increase in taxes and tariffs and reduction in subsidies.

4. A number of measures were taken in September 1977 in an attempt to restore private sector confidence and revive output and exports, the more important of which included the denationalization of cotton ginning, rice milling and flour milling units; opening up a number of areas which had previously been declared closed under the Economic Reforms Order to private enterprise; simplification of export rebate procedures; removal of fiscal anomalies affecting domestic production, lowering of interest rates for investment credit; and special incentives for the ailing textile industry. Further measures were taken in January 1978 to raise additional budgetary revenues with a view to reducing reliance on deficit financing and containing inflation.

5. The measures mentioned above met with varying degrees of success in each aspect. The GDP registered a growth rate of 6.5 per cent(1), while the GNP was much higher at 9.2 per cent due mainly to the surge in home remittances. Significant advances both in the commodity and services producing sectors assisted in this recovery.

Agriculture

6. The growth rate in agriculture at 4.3 per cent reflected primarily the improved performance of the cotton crop from 2.4 million bales in 1976-77 to 3.2 million bales in 1977-78. Amongst major crops, rice and sugarcane production were better than in the previous year. Wheat output, however, declined due to unfavourable weather around harvesting time and serious 'rust' attack. The actual performance compared with production in the preceding year are given in the following table:

TABLE I
Targets and Production in Agriculture
(1976-77 and 1977-78)

	(Million Tons)	
	1976-77	1977-78
	(Actual)	(Provisional)
Wheat*	9.0	8.15
Rice	2.69	2.85
Sugarcane	28.92	28.97
Cotton (Million bales)	2.45	3.20

(1) Recent but partially revised estimates suggest that the growth rate of GDP was between 6.0 and 6.5 per cent but the sectoral composition differed from the figures quoted later. In particular, agricultural growth was lower and industrial growth higher than mentioned in the text.

*The figures are subject to revision.

Industrial Production

7. The growth in the manufacturing sector at 4.7 per cent was derived mainly from fuller capacity utilization in chemical industries and sharp increase in grain milling, cotton ginning, edible oil processing and sugar output. Output increase in some other industries such as metal products was also satisfactory. The textiles and paper and board sectors did not fully revive. The main problems of the textile sector were poor cotton availability in the first quarter, inadequacy of export demand, deterioration in profitability, liquidity squeeze and decline in efficiency and productivity. As a result of the measures taken in October 1977, production revived somewhat from the low levels reached in the early months of 1977-78 but the total output in the year was still close to the level of 1976-77. Table II gives the details of the production in 1977-78 alongwith the performance in 1976-77.

TABLE II
*Industrial Production of Selected Products**
(1976-77 and 1977-78)

S. No.	Unit	1976-77	1977-78
		(Actual)	(Provisional)
1. Cotton Yarn	(Million kgs)	282	290
2. Cotton cloth (Mill sector only)	(Million sq. meters).	411	400
3. Sugar	('000' M Tons)	736	850
4. Vegetable Ghee	"	324	360
5. Cigarettes	(Billion Nos.)	28	32
6. Paper	('000' M ton)	27	25
7. Board	"	38	35
8. M.S. Products	"	264	280
9. Nitrogenous Fertilizer	"	314	320
10. Phosphatic Fertilizer	"	14	14
11. Cement	"	3,071	3,150
12. Wheat Milling	"	8.3	9.2
13. Rice Milling	"	2.6	2.7
14. Cotton Ginning	('000' bales)	2.1	3.0

Consumption and Prices

8. The per capita availability of 10 basic items of consumption increased by 5.4 per cent over 1976-77. According to the price indicators, the rate of inflation was lower than the one prevailing in 1976-77. The wholesale, consumer and sensitive price indices rose (June, 1978 over June 1977) by 2.51, 7.17 and 3.47 per cent respectively.

Balance of Payments

9. The balance of payments position improved considerably during 1977-78. The year witnessed the first major upturn in export earnings in three years. The value of merchandise exports which had crossed the \$ 1 billion mark in 1973-74 had increased marginally to \$ 1.132 billion by 1976-77. In 1977-78, exports increased by 16 per cent to \$ 1.3 billion. The increase in exports was surpassed by another surge in home remittances which increased by nearly 100 per cent to \$ 1.28 billion in 1977-78. Imports also increased by almost 12 per cent widening the trade deficit to \$ 1386 million. However, despite a sharp increase in invisible payments the current account deficit decreased from \$ 1051 million in 1976-77 to \$ 570 million in 1977-78. Foreign exchange reserves increased by about \$ 300 million.

Savings and Investment

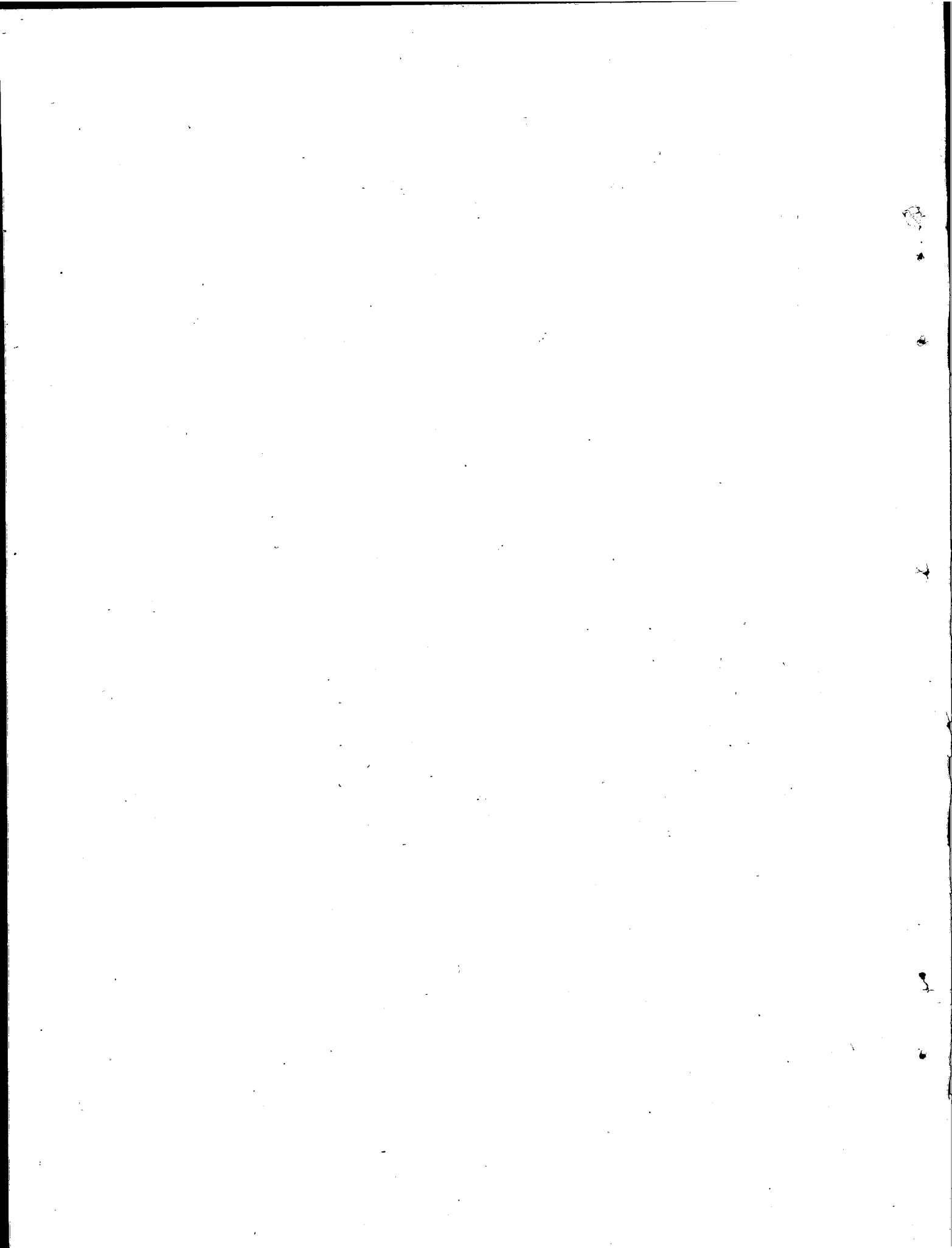
10. There was marked departure from past trends in investment and its financing. Investment outlays had been ascending steeply for some years, having risen from 13.5 per cent in 1973-74 to 19.1 per cent in 1976-77. The rise was primarily due to public investments, increases in which were planned in the expectation that output, public revenue and foreign aid flow would rise. This did not materialise especially during 1976-77, in which year, shortfalls in foreign and non-inflationary domestic resources resulted in a deficit financing of 600 million.

11. The gross investment in 1977-78 was Rs 29.84 billion which was almost the same as in 1976-77. The ratio of GDP, gross investment was 17.7 per cent compared to 19.1 per cent in 1976-77. National savings increased considerably. National savings financed over 80 per cent of gross investment during the year, 1977-78. The sharp increase in national savings, which went up by 37 per cent during the year, 1977-78. The increase in home remittances. However, domestic savings also increased in 1977-78. Details of investment and its financing are given in the following table:

Investment Savings and External Resources

	(Rs. Million)	
	1976-77 (Actual)	1977-78 (Provisional)
Public Investment	19,043	19,709
Private Investment	7,787	9,127
Changes in Stocks	1,000	1,000
Gross Investment	27,830	29,836
Financed by Net External Resources Inflow	10,405	5,643
National Savings	17,425	24,193

12. To sum up, noticeable improvements took place during 1977-78 in respect of output, savings, balance of payments and prices. However, the economic situation continues to be affected by severe strains in these areas. In particular, the decline in wheat output and the financing of government investments will constitute major problems during 1978-79.



MACRO-ECONOMIC FRAMEWORK

GDP growth rate of about 6.5* per cent is estimated to have been realised in 1977-78 as against 1.4 per cent in 1976-77. Compared to GDP, the growth in GNP was much higher at 9.2 per cent because of the surge in home remittances. The commodity producing sectors during 1977-78 increased by over 4.43%—agriculture registering an increase of 4.3%, whilst manufacturing recorded 4.7%. The growth in agriculture reflects mainly a recovery in cotton production from 2.4 million bales last year to 3.2 million bales in 1977-78. Cotton output is, however, still below the peak output levels experienced during 1971 and 1972. Amongst other major crops the output of rice and sugarcane showed improvement over the previous year's output levels. However, the wheat production for 1977-78 shows a substantial decline in the latest estimates.

2. The growth in manufacturing is primarily derived from fuller capacity utilization in chemical industries and sharp increases in sugar, grain milling, cotton ginning and edible oil processing. Output increase in some other industries such as metal products has also been satisfactory. However, the expected revival in the textiles as well as the paper and board sector did not materialise.

3. The Annual Plan for 1978-79 is being prepared within the framework of the Fifth Plan. The GDP growth in 1978-79 is forecast at 6.1% which is below the Fifth Plan average of 7%. The slow start mainly pertains to the large scale manufacturing sector where completion of on-going projects will contribute substantially to economic growth from 1979-80. The commodity and services sectors are expected to grow at 6.4 per cent and 5.8 per cent respectively. The sector-wise growth rates of GDP are shown in Table I.

TABLE I

Growth in gross domestic product at constant factor cost

Sectors	(Percentage)		
	1976-77 Revised	1977-78 Provisional	1978-79 Projected
Commodity Sectors	1.2	4.4	6.4
1. Agriculture	2.1	4.3	6.0
(a) Major Crops	1.4	5.5	7.2
(b) Others	3.1	2.8	4.5
2. Manufacturing	(-) 1.0	4.7	7.4
(a) Large Scale	(-) 2.3	5.3	8.7
(b) Small Scale	3.0	3.0	3.0
Services Sectors	1.6	8.5	5.8
1. Construction	(-) 0.9	8.5	6.4
2. Trade and Transport	(-) 0.3	8.3	6.2
3. Others	3.8	8.6	5.3
Total (GDP)	1.4	6.5	6.1

*The estimate was based on a wheat output figure of 8.8 million tons. In the subsequent estimates lower wheat output has been offset to a considerable extent by industrial data showing larger increases in industrial output. The overall growth rate of G.D.P. would be above 6 per cent, with G.N.P. growth roughly 9%. Agricultural growth would be substantially lower and industrial and services sectors recording higher growth.

4. Growth in agricultural value added is forecast at 6.0 per cent which is equal to the Fifth Plan average. Cotton output is projected to increase during the year by 12.5 per cent to 3.6 million bales. The target compares with the average output of 3.4 million bales during the last seven years and is well below the record crop of almost 4 million bales harvested in 1971-72 and 1972-73.

5. Growth targets for other major crops, ranging from 4.5 per cent for wheat to 4.1 per cent for sugarcane mainly reflect higher fertilizer use and better utilization of irrigation water. The Annual Plan provides for about 14 per cent increase in fertilizer and 2.2% in water usage. Adequate fertilizer supplies are to be made available from imports arranged recently, existing production levels and additional capacity of the Multan Fertilizer Factory which will come into stream during the course of the year. Further more, in order to revive wheat production incentive prices will be set and good quality seed made available.

6. The performance and targets of major crops are shown in Table II.

TABLE II
Agriculture Sector Production Targets (Million Tons)

	1976-77 (Actual)	1977-78 (Revised estimates)	1978-79 (Targets)
1. Wheat	9.0	8.8	9.2
2. Rice	2.7	2.86	3.0
3. Cotton (Million bales)	2.4	3.2	3.6
4. Sugarcane	28.92	28.97	30.15
5. Maize	0.82	0.82	0.87

7. Value added in the manufacturing sector is envisaged to rise by 7.4 per cent compared with a Fifth Plan growth rate of nearly 10 per cent. The large scale manufacturing component is forecast to increase by 8.7 per cent over the year; cotton yarn output by 8.5%, cotton cloth by 12.5%, caustic soda by 25% and paper and board by 20%. Improvement in the rate of capacity utilization would provide the basis for the larger part of this increased output. Fertilizer output is likely to boost up by 44 per cent which is to come from the operation of the Pak-Arab Fertilizer Factory at Multan. This factory is expected to go into production during the first half of the fiscal year. Moderate increase is also anticipated in the manufacturing of cigarettes, soda ash, mild steel products, hydrogenated vegetable oils and the processing of food grains as well as ginning of cotton.

8. Selected targets for large scale manufacturing sectors output are given in Table III.

TABLE III
Large Scale manufacturing Sector Production Targets (000) tons

	1976-77 (Actual)	1977-78 (Revised Estimates)	1978-79 (Targets)
1. Cotton Yarn (Mill. Kgs.)	282	295	320
2. Cotton Cloth (Mill. Sq. Metr.)	411	400	450
3. Sugar	736	850	850
4. Vegetable Ghee	324	360	385
5. Paper	27	25	30
6. Board	38	35	40
7. Soda Ash	55	74	80
8. Caustic Soda	25	32	40
9. Nitrogenous Fertilizer (Nutrient tons)	314	320	420
10. Phosphatic Fertilizer (Nutrient tons)	14	14	60
1. Cement	3,091	3,150	3,200

CHAPTER 1

REVIEW OF 1977-78

At the beginning of fiscal year 1977-78, Pakistan was confronted with various economic problems. First, the growth in output of commodity producing sectors which had been weak for some years, was dismal in 1976-77 with *per capita* GDP falling below that of the recession and drought affected fiscal year 1974-75. Second, exports continued to stagnate for the third successive year contributing to a large trade deficit. Third, the level of national and domestic savings was still low, despite impressive recovery from the through reached in 1974-75. Fourth, increase in domestic savings was forced through deficit financing with its inflationary consequences; although the pace of inflation slackened in 1976-77, the sharp increases in previous years had still not worked through the system and the heavy deficit financing in 1976-77 threatened to magnify these forces. Fifth, the large project and programme portfolio in the public sector was straining the financial and organizational implementation capabilities leading to delays and waste. Sixth, the performance of public sector corporations displayed low levels of profitability and productivity. Finally, performance, drive and morale of the private industrial sector had been undermined by the extension of nationalization to medium-sized agro-based industries.

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5. The measures mentioned above met with varying degrees of success in each aspect. The GDP registered a growth rate of 6.5 per cent(1), while the GNP was much higher at 9.2 per cent due mainly to the surge in home remittances. Significant advances both in the commodity and services producing sectors assisted in this recovery.

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CHAPTER 2

MACRO-ECONOMIC FRAMEWORK

GDP growth rate of about 6.5* per cent is estimated to have been realised in 1977-78 as against 1.4 per cent in 1976-77. Compared to GDP, the growth in GNP was much higher at 9.2 per cent because of the surge in home remittances. The commodity producing sectors during 1977-78 increased by over 4.43%—agriculture registering an increase of 4.3%, whilst manufacturing recorded 4.7%. The growth in agriculture reflects mainly a recovery in cotton production from 2.4 million bales last year to 3.2 million bales in 1977-78. Cotton output is, however, still below the peak output levels experienced during 1971 and 1972. Amongst other major crops the output of rice and sugarcane showed improvement over the previous year's output levels. However, the wheat production for 1977-78 shows a substantial decline in the latest estimates.

2. The growth in manufacturing is primarily derived from fuller capacity utilization in chemical industries and sharp increases in sugar, grain milling, cotton ginning and edible oil processing. Output increase in some other industries such as metal products has also been satisfactory. However, the expected revival in the textiles as well as the paper and board sector did not materialise.

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10. There was marked departure from past trends in investment and its financing. Investment outlays had been ascending steeply for some years, having risen from 13.5 per cent in 1973-74 to 19.1 per cent in 1976-77. The rise was primarily due to public investments, the cases in which were planned in the expectation that output, public revenue and foreign aid flows would rise. This did not materialise especially during 1976-77, in which year, shortfalls in foreign and non-inflationary domestic resources resulted in a deficit financing of 600 million.

11. The gross investment in 1977-78 was Rs 29.84 billion which was almost the same as planned. As a ratio of GDP, gross investment was 17.7 per cent compared to 19.1 per cent in 1976-77. The financing of investment changed considerably. National savings financed over 80 per cent of the investment compared with 62 per cent in 1977-78. The sharp increase in national savings, which went up by 39 per cent during the year, was principally due to the increase in home remittances. However, domestic savings also increased in 1977-78. Details of investment and its financing are given in the following table :

TABLE III
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CHAPTER 2

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TABLE I
Growth in gross domestic product at constant factor cost

Sectors	(Percentage)		
	1976-77 Revised	1977-78 Provisional	1978-79 Projected
Commodity Sectors	1.2	4.4	6.4
1. Agriculture	2.1	4.3	6.0
(a) Major Crops	1.4	5.5	7.2
(b) Others	3.1	2.8	4.5
2. Manufacturing	(-1.0)	4.7	7.4
(a) Large Scale	(-2.3)	5.3	8.7
(b) Small Scale	3.0	3.0	3.0
Services Sectors	1.6	8.5	5.8
1. Construction	(-0.9)	8.5	6.4
2. Trade and Transport	(-0.3)	8.3	6.2
3. Others	3.8	8.6	5.3
Total (GDP)	1.4	6.5	6.1

*The estimate was based on a wheat output figure of 8.8 million tons. In the subsequent estimates lower wheat output has been offset to a considerable extent by industrial data showing larger increases in industrial output. The overall growth rate of G.D.P. would be above 6 per cent, with G.N.P. growth roughly 9%. Agricultural growth would be substantially lower and industrial and services sectors recording higher growth.

4. Growth in agricultural value added is forecast at 6.0 per cent which is equal to the Fifth Plan average. Cotton output is projected to increase during the year by 12.5 per cent to 3.6 million bales. The target compares with the average output of 3.4 million bales during the last seven years and is well below the record crop of almost 4 million bales harvested in 1971-72 and 1972-73.

5. Growth targets for other major crops, ranging from 4.5 per cent for wheat to 4.1 per cent for sugarcane mainly reflect higher fertilizer use and better utilization of irrigation water. The Annual Plan provides for about 14 per cent increase in fertilizer and 2.2% in water usage. Adequate fertilizer supplies are to be made available from imports arranged recently, existing production levels and additional capacity of the Multan Fertilizer Factory which will come into stream during the course of the year. Further more, in order to revive wheat production incentive prices will be set and good quality seed made available.

6. The performance and targets of major crops are shown in Table II.

TABLE II
Agriculture Sector Production Targets (Million Tons)

	1976-77 (Actual)	1977-78 (Revised estimates)	1978-79 (Targets)
1. Wheat	9.0	8.8	9.2
2. Rice	2.7	2.86	3.0
3. Cotton (Million bales)	2.4	3.2	3.6
4. Sugarcane	28.92	28.97	30.15
5. Maize	0.82	0.82	0.87

7. Value added in the manufacturing sector is envisaged to rise by 7.4 per cent compared with a Fifth Plan growth rate of nearly 10 per cent. The large scale manufacturing component is forecast to increase by 8.7 per cent over the year; cotton yarn output by 8.5%, cotton cloth by 12.5%, caustic soda by 25% and paper and board by 20%. Improvement in the rate of capacity utilization would provide the basis for the larger part of this increased output. Fertilizer output is likely to boost up by 44 per cent which is to come from the operation of the Pak-Arab Fertilizer Factory at Multan. This factory is expected to go into production during the first half of the fiscal year. Moderate increase is also anticipated in the manufacturing of cigarettes, soda ash, mild steel products, hydrogenated vegetable oils and the processing of food grains as well as ginning of cotton.

8. Selected targets for large scale manufacturing sectors output are given in Table III.

TABLE III
Large Scale manufacturing Sector Production Targets (000) tons

	1976-77 (Actual)	1977-78 (Revised Estimates)	1978-79 (Targets)
1. Cotton Yarn (Mill. Kgs.)	282	295	320
2. Cotton Cloth (Mill. Sq. Metr.)	411	400	450
3. Sugar	736	850	850
4. Vegetable Ghee	324	360	385
5. Paper	27	25	30
6. Board	38	35	40
7. Soda Ash	55	74	80
8. Caustic Soda	25	32	40
9. Nitrogenous Fertilizer (Nutrient tons)	314	320	420
10. Phosphatic Fertilizer (Nutrient tons)	14	14	60
1. Cement	3,091	3,150	3,200

9. The output targets for agriculture and manufacturing and projections for other components provide the underlying rationale for the growth of 6.1 per cent in GDP (at factor cost) which is being postulated in Annual Plan. The sectoral composition of GDP is presented in Table IV.

TABLE IV
Gross Domestic Product at 1977-78 Factor Cost

							(Million Rs.)	
							1977-78	1978-79
1.	Agriculture	..	..	..	..	..	49,422	52,386
	(a) Major Crops	..	..	..	..	..	27,064	29,013
	(b) Minor Crops	..	..	..	..	..	7,856	8,261
	(c) Others	..	..	..	..	..	14,502	15,112
2.	Manufacturing	..	..	..	..	..	22,735	24,411
	(a) Large-Scale	..	..	..	..	..	17,307	18,820
	(b) Small-Scale	..	..	..	..	..	5,428	5,591
3.	Construction	..	..	..	..	..	8,442	8,982
4.	Trade and Transport	..	..	..	..	..	33,260	35,317
5.	Others	..	..	..	..	..	38,713	40,765
GDP at Factor Cost ..							152,572	161,861

10. Indirect taxes less subsidies are projected to increase by over 14 per cent yielding an increase of 6.8 per cent in GDP at market prices. (Details of the indirect taxes and subsidies may be seen in the chapter on Public Sector Financing). Compared to GDP (factor cost) growth rate of 6.1%, the GNP at factor cost is estimated to increase by 6.3 per cent. The imports of goods and non-factor services are forecast to increase by about 25%. The lower GNP growth is explained by the expected slowing down in the recent increases recorded in the home remittances. Imports of goods and services are, however, anticipated to rise by 25%. Therefore, the total resources to meet the expenditure on consumption, investment and export is likely to increase by 9.4 per cent during 1978-79.

11. The Macro-Economic Framework is presented in the tables below :

TABLE V
GNP at Market Prices (At 1977-78 Prices)

							(Billion Rs.)	
S. No.							1977-78	1978-79
1.	GDP at Factor Cost	..	..	..	..	..	152.57	161.86
2.	Indirect Taxes less subsidies	..	..	..	..	..	15.31	17.43
3.	GDP at Market Prices	..	..	..	..	..	167.88	179.31
4.	Net Factor Income	..	..	..	..	..	9.86	9.76
5.	GNP at Market Prices	..	..	..	..	..	177.74	189.10

TABLE VI
Sources and uses of National Resources

S. No.	(Billion Rs.)	
	1977-78	1978-79
Sources		
1. GNP at MP	177.74	189.10
2. Net Foreign Savings	5.64	11.45
Total ..	183.38	200.55
Uses		
3. Private Consumption Expenditure	134.85	146.24
4. Government Consumption Expenditure	18.28	19.81
5. Total Consumption Expenditure	153.13	166.05
6. Fixed Investment	29.25	32.75
7. Changes in Stock	1.00	1.75
8. Total Investment	30.25	34.50
Total	183.38	200.55

12. The Annual Plan aims at improving the consumption levels and, in keeping with the basic needs objectives of the Fifth Plan, focuses on the essential commodities. During 1978-79, the *per capita* consumption of these key commodities is expected to increase at the rate of 3.54%. The *per capita* availability of the essential commodities is shown below.

TABLE VII
Per Capita Consumption of Essential Commodities

	Unit	1977-78	1978-79
Wheat.. .. .	Kgs	119.50	120.94
Pulses	"	8.21	7.73
Sugar	"	9.92	10.59
Vegetable Ghee	"	5.97	6.36
Milk	"	56.33	57.52
Cloth	Sq. ms.	14.17	15.29

Besides the six consumption items mentioned above, adequate provision has also been made in the Plan to provide for the required *per capita* consumption of other essential commodities *i.e.*, raw sugar, meat, vegetables, tea, rice and miscellaneous foodgrains. The *per capita* consumption requirements of these items would be met largely through domestic production except in the cases of wheat, edible oil and milk where part of the requirements would be met through imports.

13. The Annual Plan provides for an increase of about 14 per cent in the total investment. The fixed investment is envisaged to increase from Rs. 29.25 in 1977-78 to Rs. 32.75 billion in 1978-79. The public sectors share of this total amounts to Rs. 22.5 billion, consisting of a programme of Rs. 19.00 billion to be implemented through Government's budget and the remainder

of Rs. 3.5 billion to be undertaken in the semi-public sector outside the budget mechanism. Investment in the private sector is planned at Rs. 10.25 billion. A table giving the sectoral breakup of investment is given below :

TABLE VIII
Fixed Investment: Sectoral Allocations 1978-79

(Rs. Million)

	Public Sector		Private Sector	Total
	ADP	Outside ADP		
Agriculture	2054.7	60.0	2205.0	4319.7
Industry	4622.1	1581.9	2185.0	8389.0
Fuel and Mining	686.3	450.5	50.0	1186.8
Transport and Communication	3943.0	444.5	1940.0	6327.5
Physical Planning and Housing	1661.9	192.7	2310.0	4164.6
Water	2994.8	—	—	2994.8
Power	3478.1	515.1	—	3993.2
Other/Social Sectors/Services	2447.6	255.3	1560.0	4262.9
Gross Total	21888.5	3500.0	10250.0	35638.5
Less likely shortfall	2888.5	—	—	2888.5
	19000.0	3500.0	10250.0	32750.0

14. About one fourth of the total fixed investment has been allocated to industry in view of capital intensive projects like the Steel Mills, as well as the fertilizer and cement plants. In view of priority being given to development of agriculture an enlarged provision of Rs. 7314.5 million has been made for water and agriculture. Transport and Communication and Power sectors account respectively for Rs. 6327 and Rs. 3,993 millions of the planned investment. Once again the allocations are large due to certain capital intensive projects of national importance such as Port Qasim and the integrated extra high voltage power transmission line. Physical Planning and Housing sector's share stands at Rs. 4165 million; a major part of this is expected to go into the construction of houses in private sector. The allocation for other social sectors have also been raised to Rs. 4263 million. Details of the sectoral investment programmes may be seen in the respective chapters.

15. It is proposed to finance the gross investment by domestic resources of Rs. 18332 million and gross external borrowing amounting to Rs. 14418.00 million; in percentage terms this amount to 56% and 44% respectively. Adjusting for repayment of outstanding foreign loans, the investment is to be financed to the extent of 33.2 per cent by foreign savings; 28.3 per cent by net factor incomes from abroad and 38.5 per cent by domestic savings. The table below indicates the overall financing during 1978-79.

TABLE IX
Financing of Investment 1978-79

(Million Rs.)

Source	Public Sector		Private Sector	Total
	ADP	Outside ADP		
Gross Investment	19000.0	3500.0	10250.0	32750.0
A. Domestic Resources	6862.0	2717.7	8752.3	18332.0
B. Gross Foreign Resources.. .. .	12138.0	782.3	1497.7	14418.0
(i) Loans	12138.0	534.0	1226.0	13898.0
(ii) Equity and Foreign Private Investment	—	248.3	271.7	520.0

16. Reliance on net foreign savings is expected to increase over the much below normal level in 1977-78. This is anticipated despite the 20 per cent projected increase in export earnings for four main reasons. Firstly, large imports of wheat are necessary to compensate for set back to output in 1977-78. Secondly, machinery imports will substantially increase according to the schedule of project implementation. Thirdly, industrial raw material imports are anticipated to rise with output. Finally, home remittances are expected to stabilize around the high levels attained towards the end of 1977-78.

17. The outlook for 1978-79 is, therefore, characterised by a continuation of economic recovery attained in 1977-78 and a transition towards the structure and targets envisaged for the Fifth Plan. But difficulties are likely to be encountered specially in respect of ensuring adequate wheat supplies and in fiscal management. Policies and attention will be focussed on restoring production and meeting essential needs.

CHAPTER 3

PUBLIC SECTOR DEVELOPMENT/INVESTMENT PROGRAMME 1978-79

REVIEW OF 1977-78

The Public Sector Development Programme for 1977-78 envisaged a net development/investment outlay of Rs. 21,000 million, of which Rs. 17,000 million were to be financed from budgetary resources and Rs. 4,000 million from the credit budget by the public sector corporations/agencies. Against the net outlay of Rs. 17,000 million, the Annual Development Programme financed from the fiscal budget envisaged a gross outlay of Rs. 18,585 million. By the end of June 1978, additional budgetary allocations of Rs. 1,760 million had been authorised by the Ministry of Finance for the Federal and Provincial Programmes which raised the gross allocation to Rs. 20,345 million.

2. According to the latest estimates, the development expenditure in the Annual Development Programme is estimated at Rs. 18,000 million during 1977-78 against the target of Rs. 17,000 million which shows an increase of 5.9 per cent. The estimated investment in the semi-public sector programme, outside ADP, is Rs. 3,410 million against the target of Rs. 4,000 million which shows a shortfall of 14.8 per cent. The decline in investment in the semi-public sector is mainly under the Federal Government Programme because of the slower execution of foreign aided projects. In overall terms, the total public sector development/investment expenditure during 1977-78 is estimated at Rs. 21,410 million compared to the target of Rs. 21,000 million which shows an increase of 2 per cent.

3. The original allocations and revised estimates for the Federal and Provincial Governments' Programmes for 1977-78 financed through budgetary resources are summarised below :—

TABLE I

ADP Allocations and Revised Estimates for 1977-78

Executing Agency	ADP allocations	Revised Estimates
A. Federal Government	13,350	14,357
B. Provincial Governments :		
(i) Baluchistan	302	344
(ii) NWFP	617	688
(iii) Sind	743	756
(iv) Punjab	1,988	1,855
Sub-Total—(Provincial Governments) ..	3,650	3,643
Total ..	17,000	18,000

PUBLIC SECTOR DEVELOPMENT/INVESTMENT PROGRAMME 1978-79

4. The sectoral priorities implicit in the Fifth Plan (1978—83) required a net outlay of Rs. 25,150 million (including semi-public) during 1978-79. However, in view of severe resource constraint on the one hand and to avoid serious dislocation to the programme on the other, an absolute minimum allocation of Rs. 22,500 million (Rs. 19,000 million in ADP and Rs. 3,500 million in semi-public sector) has been provided during 1978-79. Sector-wise details are given in Annexure-I.

5. As mentioned in the previous paragraph, the size of the Public Sector Development Programme for 1978-79 has been fixed at Rs. 22,500 million. Allocations by executing authorities are as follows :—

		(Million Rupees)
ADP		
(a) Federal Government		14,900
(b) Provincial Governments		4,100
	Total (a+b) ..	19,000
Outside ADP		
(c) Federal Programme		2,848
(d) Provincial Programme		652
	Total (c+d) ..	3,500
	GRAND TOTAL ..	22,500

6. Annual Development Programme (ADP) 1978-79.—The gross allocation for the ADP 1978-79 is Rs. 21,889 million and the net outlay is Rs. 19,000 million. The operational shortfall is Rs. 2,889 million or 13.2 per cent. The discussion on sectoral allocations is based on the gross programme. Sector-wise details by executing agencies are given in Annexure-II. Relative Sectoral Priorities in the ADP 1978-79 compared with ADP 1977-78 are given in Annexure-III.

7. The main objectives of the Annual Development Programme for 1978-79 are :

- (i) To consolidate the investment so as to reduce the imbalance between commitments and resources, promote quick yielding projects and provide opportunity for a limited advance in new directions in the light of Fifth Plan priorities.
- (ii) To provide adequate funds for on-going projects which are in an advanced stage of execution and other key programmes related to output in short-run.
- (iii) To give priority to foreign aided projects which are in consonance with our national objectives, since any reduction in the expenditure on aided projects would also tend to reduce the resource availability.
- (iv) To defer or restrain such projects/programmes which have not yet reached an advanced stage of execution or are not likely to make a contribution in the short-run and to avoid long-term commitments on projects which have not yet started.
- (v) To make every effort to increase efficiency in implementation and utilization of existing capacity and to stop the taking up of any new project unless it is inescapable.
- (vi) To increase the investment in agriculture (particularly on agricultural inputs) to the extent resources permit.
- (vii) To increase allocation for social sectors in line with Fifth Plan priorities, even though the increases may not be adequate for achieving Plan targets.

8. In the light of the objectives of the Programme and within the overall allocation of Rs. 19,000 million (net) for 1978-79, priorities have been given to certain projects/programmes under the Federal and Provincial ADPs during 1978-79 by either increasing their allocations or providing for their minimum essential requirements in order to protect the Fifth Plan priorities and targets as far as possible.

9. Under the Federal Programme, increased provisions have been made for the following projects/programmes :—

TABLE II
Higher Allocations for Selected Projects/Programmes.

		(Million Rs.)		
S. No.	Major Projects/Programmes	Allocation for 1977-78	Allocation for 1978-79	Absolute increase over 1977-78
1.	Karachi Steel Mills	2,000.0	3,000.0	1,000.0
2.	Indus Basin/Tarbela	350.0	1,173.4	823.4
3.	Subsidy on Fertilizer	664.6	974.6	310.0
4.	Tarbela Hydel Power Station (Units 5—8) ..	150.0	569.0	419.0
5.	Port Muhammad Bin Qasim	530.0	670.0	140.0
6.	Karachi Irrigation Project (Hub Dam)	100.0	240.0	140.0
7.	Guddu Thermal Power Station	100.0	236.0	136.0
8.	Chashma Right Bank Canal	—	110.0	110.0
9.	Khanpur Dam	50.0	90.0	40.0
10.	Railways	935.7	1,000.0	64.3
Total ..		4,880.3	8,063.0	3,182.7

10. As against a net increase of Rs. 1,550 million only in the total size of the Federal ADP for 1978-79, an amount of Rs. 3,183 million has been pre-empted by increased provision for major projects and thus allocations for other sectors and programmes have either been held constant or even reduced.

11. As regards the formulation of Provincial Programmes, the National Economic Council decided that the block allocation to the provinces should be subject to broad directives with regard to priorities of the Fifth Plan. In view of the resource constraint in the provincial sphere also and to protect priority sectors like ground plant protection, seed, livestock, extension services, on-farm-water management, rural water supply and sanitation, primary education and rural health programme, the allocations for these specific programmes will be treated as grants to the provinces and the release of funds would be subject to the observance of accepted priorities. As such the Provincial Governments have allocated an amount of Rs. 854.9 million during 1978-79 in their respective budgets for these priority programmes. Item-wise details of these allocations are given in Annexure-IV.

Broad Features of Sectoral Programme

12. The broad features of sectoral programmes are given below :—

13. *Agriculture.*—The share of Agriculture Sector in ADP allocation (excluding IRDP) has improved from Rs. 1,650.4 million (8.9 per cent) in 1977-78 to Rs. 2,054.5 million (9.4 per cent) in 1978-79. The percentage increase during the same period is 24.5. This is mainly due to increase in the allocation for fisheries (98%), agricultural extension services (88%), forestry (50%), fertilizer (47%) and improved seed (25%).

14. The major physical targets are the distribution of 820,000 nutrient long tons of fertilizer, coverage of 3.60 million spray acres through aerial operations and 8.42 million spary acres through ground operations during 1978-79. Over 2.44 million maunds of improved quality seed are expected to be distributed and the ratio of farm families per field extension worker will improve

from 1,000 farm families at present to 880 farm families in 1978-79. Additional foodgrain storage shall be constructed for 210 thousand tons which will raise the total storage capacity to 2,820 thousand tons by the end of 1978-79. During 1978-79, agricultural credit amounting to Rs. 2,200 million will be given by various institutional agencies such as ADBP, Commercial Banks, Cooperatives and Taccavi loans etc.

15. *Water*.—The share of Water Sector in ADP allocation has increased from Rs. 1957.5 million (10.5 per cent) in 1977-78 to Rs. 2994.8 million (13.7 per cent) in 1978-79. This shows an acceleration of 53.0 per cent mainly due to increased allocation for Tarbela, Hub Dam, Khanpur Dam, Chashma Right Bank Canal Project, On-farm-water Management and Accelerated Programme of Water-logging and Salinity Control during 1978-79.

16. The major physical targets include : an increase in water availability at farm gate from 91.7 MAF in 1977-78 to 93.8 MAF in 1978-79 (including Tarbela releases from 7.4 MAF in 1977-78 to 9.3 MAF in 1978-79) and increase in the number of tubewells to be installed from 8,963 in 1977-78 to 9,291 in 1978-79 (including private, SCARP and Irrigation Department). Under the Accelerated Programme of water-logging and salinity, an area of 0.85 million acres shall be protected during 1978-79. Under the Water Management Programme, the number of water courses improved will increase from 54 in 1977-78 to 185 (besides 1,500 ft. in Baluchistan) in 1978-79 and land levelled from 12,200 acres in 1977-78 to 49,025 acres in 1978-79. Hub Dam Project is expected to be completed by the end of 1978-79 while Khanpur Dam Project is expected to be completed by June 1980. Work on the new Chashma Right Bank Canal Project shall be started in 1978-79. Under on-going flood control works, about 329 mcf. of earthwork and 301.5 mcf. of stone pitching will be done during 1978-79.

17. *Power*.—The allocation for Power Sector has increased by 9.6 per cent from Rs. 3,174.4 million in 1977-78 to Rs. 3,478.1 million in 1978-79. However, in terms of relative share the allocation for this sector has decreased from 17.1 per cent in 1977-78 to 15.9 per cent in 1978-79.

18. The major components of the Power programme consist of WAPDA and PAEC's development programmes. In the Power Generation sub-sector of WAPDA, Gas Turbine Units 3 and 4 at Kotri (50 MW) would be completed and the work would be in different stages of execution in respect of Guddu Thermal Power Station Stage-II (210 MW), Mangla Hydro-electric Power Units 7 and 8 (200 MW), Tarbela Hydro-electric Power Station Units 5-8 (700 MW) and Warsak Hydro-electric Power Station Units 5 and 6 (80 MW). Work on the feasibility of coal mining and utilization of coal for the generation of power in respect of Coal Fired Power Station at Lakhra would also be taken up. In the Sub-sector "Primary Transmission" work on the scheme "500 KV Faisalabad-Multan-Guddu-Karachi Transmission Line" will be progressed. The other major Physical targets are in respect of Secondary Transmission Lines and Grid Stations for drawing 132 KV, 66 KV lines and erecting and augmenting grid stations and the distribution of power for supplying electricity to 80,000 new general consumers, 5000 industrial consumers, 5000 tubewells and electrification of 800 villages during the year 1978-79.

19. *Fuels*.—The share of Fuels Sector in the ADP 1978-79 has remained almost constant at 2.7 per cent of the total allocation as in 1977-78. However, in absolute terms, the allocation of Rs. 595.3 million for Fuels Sector for 1978-79 is 20.9% higher than the allocation of Rs. 492.5 million for 1977-78. The OGDC has been provided Rs. 500 million for undertaking work on three development wells at Toot, one well at Dhodak and 3 exploratory wells. The other programmes in this Sector are in respect of Petroleum Concessions and Oil Operations including Pakistan Oil Fields and Pakistan Petroleum Limited.

20. *Industry*.—The share of Industry Sector in the overall Annual Development Programme has slightly declined from 21.2 per cent in 1977-78 to 21.1 per cent in 1978-79. However, the allocation of Rs. 4622.1 million for the Industry Sector in 1978-79 shows an increase of 17.1 per cent over Rs. 3,947.6 million allocated in 1977-78. The allocations in this Sector are primarily to meet the requirements of the Karachi Steel Mills, fertilizer projects and cement plants. The bulk of investment in industry during 1978-79, amounting to Rs. 4,084.9 million would be undertaken by the State Enterprises.

21. In overall terms, a growth rate of 13.0 per cent is projected for 1978-79 compared with an estimated achievement of 4.7 per cent in 1977-78. The production targets in respect of major commodities for 1978-79 are as follows :

TABLE III
Out put of Major Industrial Products in 1977-78 and Targets for 1978-79.

Items	Unit	1977-78 Revised Estimates	1978-79 Targets	Percentage change
Cotton Yarn	Million Kgs.	272	320	17.6
Cotton Cloth	Million Sq. Meters	371	450	21.3
Hydrogenated Oil	000 tons	376	400	6.4
Sugar	000 tons	850	850	—
Paper and Board	000 tons	60	70	16.7
Cement	000 tons	3,224	3,250	0.8
Nitrogenous Fertilizer	000 Nutrient tons	313	420	34.2
Phosphatic Fertilizer	000 Nutrient tons	15	60	300.0
Soda Ash	000 tons	76	80	5.3
Caustic Soda	000 tons	33	40	21.2
M. S. Products	000 tons	280	300	7.1

22. *Minerals.*—The share of Minerals Sector has declined from 0.7 per cent in 1977-78 to 0.4 per cent in 1978-79. The allocation for the Minerals Sector has reduced from Rs. 129.4 million in 1977-78 to Rs. 91.0 million in 1978-79 showing a decrease of 29.7 per cent. The decrease is mainly due to lesser allocation for Saindak Copper Project and mineral development programmes of PIDC and PMDC.

23. The major physical targets in the Minerals Sector are as follows :

TABLE IV
Estimated Production in 1977-78 and Targets for 1978-79

Minerals	Unit	Estimated Production in 1977-78	Targets for 1978-79	Percent- age change
Coal	000 tons	1,200	1,300	8.3
Rock Salt	000 tons	363	480	32.2
Chromite	000 tons	10	16	60.0
Silica sand	000 tons	63	76	20.6
Gypsum	000 tons	356	450	26.4
Lime stone	000 tons	5,825	6,757	16.0
Marble	000 tons	59	70	18.6
China clay	000 tons	0.28	0.40	42.9
Fire clay	000 tons	45	51	13.3
Fuller's Earth	000 tons	14	18	28.6
Magnesite	000 tons	5	8	60.0

24. *Transport and Communications.*—Although the share of Transport and Communications Sector at 18.0 per cent in 1978-79 is less than 18.5 per cent in 1977-78, the total ADP allocation for Transport and Communications Sector has increased by 15 per cent from Rs. 3429.7 million in 1977-78 to Rs. 3943.1 million in 1978-79. The Programme for 1978-79 provides for the development of Railways, Ports and Shipping (including Port Qasim), Post Offices, Telephone and Telegraph, Civil Aviation, Roads/Bridges including FWC/LTO Roads, widening and improvement of roads and restoration of flood damages and purchase of machinery.

25. The major physical targets in the Transport and Communications Sector for 1978-79 include the procurement of 30 locomotives, and 4 shunters and manufacture of 188 passenger coaches, re-engining of 10 locomotives, construction work on 96 miles of complete track renewal, 35 miles of rail renewal and 99 miles of sleeper renewal for Pakistan Railways. Targets set for the roads programme include the construction of 461 miles of new roads, 509 miles improvement of existing roads and completion of work on two bridges. Under the telecommunication sub-sector, 25,000 new telephones will be installed and 19 existing morse telegraph offices will be converted into teleprinter offices for rapid handling of telegrams.

26. *Physical Planning and Housing.*—The share of Physical Planning and Housing Sector is 7.6 per cent in 1978-79 compared to its share of 8.7 per cent during 1977-78. However, the allocation of Rs. 1661.9 million for 1978-79 is 2.2 per cent higher than Rs. 1625.8 million for 1977-78.

27. During 1978-79 high priority is being given to water supply (particularly in rural areas) and extension of sewerage. The water supply programme is conceived as part of the integrated effort to improve health and living conditions in rural areas. In the urban housing, public funds shall be used exclusively for development of serviced plots leaving actual construction of houses to private sector. In government offices and housing Sub-sector, the emphasis would be on economy and functional utility. The major physical targets for 1978-79 include the development of urban residential plots (70,000). Additional population will be served by urban water supply (2.248 million), by urban sewerage and drainage (1.502 million), by rural water supply (1.827 million) and by rural sanitation (0.353 million). In addition 2,346 houses shall be constructed for government servants and 1.086 million sq. ft. of office space for government offices shall be provided.

28. *Mass Media.*—The ADP allocation for the Mass Media Sector for 1978-79 is Rs. 138.2 million (0.6 per cent) as against Rs. 180.4 million (1.0 per cent) for 1977-78. Pakistan Broadcasting Corporation has been allocated Rs. 43.1 million to complete work on 1000 KW MW Transmitter, Islamabad, Broadcasting House, Islamabad, 300 KW MW Transmitter, Peshawar and 100 KW MW Transmitter, Karachi, and to accelerate progress of work on other projects such as 100 KW MW Transmitter and Broadcasting House, Khairpur, 10 KW MW Transmitter, D.I. Khan and 100 KW MW Transmitter, Muzaffarabad. An allocation of Rs. 92.7 million has been made for Pakistan Television Corporation to accelerate work on Islamabad T.V. Complex and Lahore, Karachi, Quetta and Peshawar T.V. Stations.

29. *Education and Training.*—The share of Education and Training Sector is 4.0 per cent during 1978-79 compared to 4.1 per cent in 1977-78. However the ADP allocation for 1978-79 is Rs. 878.2 million compared to Rs. 766.7 million for 1977-78 which is higher by 14.5 per cent. The ADP for 1978-79 reflects the Fifth Plan priorities and programmes which lay special emphasis on the qualitative improvement and quantitative expansion of primary education, and consolidation of educational facilities at all other levels of education by improving their physical facilities and teaching programmes.

30. The major physical targets during 1978-79 include opening of 1,608 primary schools; construction of 446 primary school buildings; consolidation of 1,090 primary schools; supply of teaching kits to 20,000 primary schools; upgradation of 140 primary schools to middle school level and 61 middle schools to high school level; consolidation of 662 secondary schools; in-service training of 30,000 primary school teachers by radio and correspondence courses by Allama Iqbal Open University, Islamabad, and 2,000 secondary school teachers in the teaching of agro-technical subjects besides training provided under various provincial programmes, continuation of on-going programmes at Nawabshah, Karachi, Lahore and Taxila campuses of existing engineering universities/colleges and to start work on the Baluchistan Engineering College; improvement of 80 existing colleges, continuation of on-going work of construction at campuses of existing universities; award of scholarships/loans amounting to Rs. 59.1 million and continuation of the on-going work of construction of the Sports Complex at Islamabad.

31. *Health*.—The allocation for Health Sector has increased by 11.3 per cent to Rs. 761.3 million in 1978-79 compared with Rs. 684.3 million in 1977-78. However, its relative share in the total Programme has decreased from 3.7 per cent in 1977-78 to 3.5 per cent in 1978-79. The programme for 1978-79 is a step towards accelerating the improvement of health facilities in rural areas. Out of the total development outlay for Health Sector for 1978-79, the rural health programme is allocated Rs. 240.7 million or 31.7 per cent. This will increase the coverage of health facilities (within 3.2—6.4 Km) from 50 per cent in 1977-78 to 58 per cent in 1978-79. In the urban areas, the programmes for strengthening medical education and facilities will be continued during 1978-79.

32. Physical targets for 1978-79 include the construction of 68 rural health centres, 466 basic health units and 2,492 hospital beds, and the production of 2,117 doctors, 4,335 nurses and auxiliaries and 3,190 community health workers.

33. The sub-sectoral priorities in the health sector are rural health programme 31.7 per cent, health manpower development (26.6 per cent), hospital facilities including teaching hospitals (23.0 per cent), preventive programme 15.6 per cent, medical and nutrition research (2.7 per cent) and miscellaneous (0.4 per cent).

34. *Population Planning*.—An allocation of Rs. 210 million (1.0 per cent) has been made for the Population Planning Programme in 1978-79 compared to an allocation of Rs. 243 million (1.3 per cent) during 1977-78. The allocation for 1978-79 may be reviewed after the integration of this Programme with health and other social services which is under consideration of the government. The major physical targets are as follows :

<i>Items</i>	<i>Targets for 1978-79</i>
1. Conventional contraceptives (Gross)	831,000
2. Oral Pills (Million Cycles)	6.4
3. Voluntary Sterilization	40,000
4. IUD Insertion	220,000
5. Liquid Foam (Bottles)	63,000
6. Injectables	94,000

35. *Social Welfare*.—The share of Social Welfare Sector is around 0.1 per cent of the total programme. However, the allocation of Rs. 27.1 million for 1978-79 is 60.4 per cent higher than Rs. 16.9 million provided during 1977-78. Development Programme during 1978-79 envisages the continuation and expansion of 139 on-going projects (Social Service Units)—123 in Punjab, 3 in Sind, 8 in NWFP, 1 in Baluchistan and 4 in Federal Agencies. Besides this, 35 new social service units—15 in Punjab, 5 in Sind, 3 in NWFP, 4 in Baluchistan and 8 in Federal Agencies will be added. Needy children and women will form the two main target groups of beneficiaries under these programmes. Besides, grants-in-aid will be given to 600 voluntary social welfare agencies, 6 university departments of social work, and 30 social welfare education and training units of an equal number of colleges.

36. *Manpower*.—The share of Manpower Sector has increased from Rs. 19.8 million (0.1 per cent) in 1977-78 to Rs. 56.0 million (0.3 per cent) in 1978-79. In percentage terms, the increase is 183. In order to provide job opportunities to educated and technical manpower, the National Development Volunteer Programme (NDVP) would be continued. Under the Federal programme, an allocation of Rs. 8.0 million has been made for Crash Programme for the training of 18, 036 skilled and semi-skilled workers during 1978-79. An allocation of Rs. 7.7 million has been made for the Federal Programme for Skill Development. The physical target of this programme is expected to be achieved by 40 per cent by the end of 1978-79.

37. In the Punjab, the Programme envisages the establishment of Technical Training Centre, Gujar Khan, Staff Training Wing in Technical Training Centre, Gulberg, Lahore, Technical Training Centre, Rahimyar Khan (Phase-III) and setting up of two new Technical Training Centres at Rawalpindi and Sargodha. In Sind, the construction of buildings for new Technical Training Centre at Sukkur and International Weights and Measures Laboratory at Karachi will continue during 1978-79.

38. In NWFP, an allocation of Rs. 5.415 million has been made for Technical Training Centres at D. I. Khan, Peshawar and Mingora. Funds have also been provided for the completion of Vocational Guidance Unit at Peshawar. Mobile Unit for Training of Mine Workers and Occupational Rehabilitation Centre at Khalabat. In Baluchistan, the work on the setting up of Artisan Training School, Quetta, will be completed upto 72 per cent by the end of 1978-79.

39. *Rural Development.*—Rural Development Programme, in view of its multi sectoral nature, has share in the sectors like Agriculture, Water, Power, Physical Planning and Housing, Education, Health, Rural Roads and Small-scale Industries. The allocations and targets for these sectors appear in the relevant chapters. However, a separate allocation of Rs. 281.9 million has been made in the ADP 1978-79 compared to Rs. 195.7 million in 1977-78 for the rural development programmes which are not covered in any other sector. The relative share has increased from 1.0 per cent in 1977-78 to 1.3 per cent in 1978-79 and the overall increase is 44.0 per cent. This allocation will be utilized for carrying out specific functions by the newly set up Rural Development Organizations.

40. In the Punjab, the main physical targets include the construction of 155 miles of metalled roads and soling of 162 miles of Katcha roads under the World Food Programme, the construction of agricultural stores and provision of tractors and marketing facilities at Markaz level, running and maintenance of 5,500 adult education centres and 1,205 industrial homes and renovation of 125 rural development Marakaz. In Sind, "Composite Facilities Units" will be provided in the Marakaz at Taluka Headquarters in Phase-I and Thana level in Phase-II for the development of rural areas. In NWFP, besides renovation/repairs etc. in the Marakaz areas, the Rural Development Programme will also cover the setting up of rural infrastructure like roads in the existing Marakaz areas. In Baluchistan, 46 Marakaz would be established for the uplift of rural life during 1978-79.

Investment Programme Outside ADP 1978-79

41. An investment programme outside ADP of Rs. 3,500 million has been envisaged for 1978-79 against the estimated investment of Rs. 3,410 million during 1977-78. The investment programme of public sector corporations outside ADP is mainly financed from foreign project aid and foreign equity directly committed for projects, borrowing from banks/market and self-financing from own resources. The programme of Rs. 3,500 million for 1978-79 includes various projects/programmes of autonomous and semi-autonomous agencies in the fields of power, fuels, industry, minerals, transport and housing. A statement showing semi-public investment programme for 1978-79 and its financing in respect of various semi-autonomous organizations is given in Annexure-V.

PUBLIC SECTOR DEVELOPMENT INVESTMENT PROGRAMME, 1978-9

(Million Rs.)

Sector	ADP	Outside ADP	Total
Agriculture	2,054.538	60.000	2,114.538
Water	2,994.837	—	2,994.837
Power	3,478.084	515.100	3,993.184
Fuels	595.303	412.000	1,007.303
Industry	4,622.117	1,581.876	6,203.993
Minerals	90.977	38.500	129.477
Transport and Communications	3,943.081	444.480	4,387.561
Physical Planning and Housing	1,661.927	192.700	1,854.627
Mass Media	138.180	—	138.180
Education and Training	878.214	—	878.214
Health	761.297	—	761.297
Population Planning	210.000	—	210.000
Social Welfare	27.082	—	27.082
Manpower	55.982	—	55.982
Rural Development	281.900	—	281.900
Crash Programme	10.000	—	10.000
Miscellaneous/Block Allocation	25.000	255.344	280.344
Total—(Sectoral Programme)	21,828.519	3,500.000	25,328.519
Earthquake Relief and Reconstruction Programme	60.000	—	60.000
Total—(Gross)	21,888.519	3,500.000	25,388.519
Less—Operational Shortfall	(-)-2,888.519	—	(-)-2,888.519
Total—(Net)	19,000.000	3,500.000	22,500.000

Note :—Details of Outside ADPs are given in Annexure V.

**SUMMARY—ADP, 1978-79 : ALLOCATIONS BY EXECUTING AUTHORITIES
(FEDERAL AND PROVINCIAL GOVERNMENTS)**

(Million Rs.)

	Federal		Punjab		Sind		NWFP		Baluchistan		Total	
	Budget Provision	F.E.C.	Budget Provision	F.E.C.	Budget Provision	F.E.C.	Budget Provision	F.E.C.	Budget Provision	F.E.C.	Budget Provision	F.E.C.
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Sectoral Programmes												
Agriculture ..	1,284.866	115.316	473.400	61.485	125.253	54.279	104.200	17.294	66.819	16.477	2,054.538	264.851
Water ..	2,563.131	823.963	228.200	20.000	89.800	—	60.060	5.950	53.646	3.457	2,994.837	853.370
Power ..	3,478.084	1,271.027	—	—	—	—	—	—	—	—	3,478.084	1,271.027
Fuels ..	595.303	330.000	—	—	—	—	—	—	—	—	595.303	330.000
Industry ..	4,489.880	2,325.450	64.200	—	38.050	10.700	22.813	2.220	7.174	2.175	4,622.117	2,340.545
Minerals ..	55.277	7.550	16.700	—	—	—	10.500	—	8.500	3.900	90.977	11.450
Transport & Communications.	3,322.638	1,366.790	251.000	3.000	191.500	—	123.193	—	54.750	—	3,948.081	1,369.790
Physical Planning & Housing.	575.620	16.496	689.602	75.590	182.600	2.900	147.145	—	66.960	—	1,661.927	94.986
Mass Media ..	137.570	37.300	0.610	—	—	—	—	—	—	—	138.180	37.300
Education & Training ..	396.633	123.810	189.100	10.250	99.477	7.518	149.767	3.800	43.237	—	878.214	145.378
Health ..	321.908	91.550	213.700	2.970	76.770	8.450	121.200	4.022	27.719	5.300	761.297	112.292
Population Planning ..	210.000	72.300	—	—	—	—	—	—	—	—	210.000	72.300
Social Welfare ..	5.840	—	15.000	—	1.350	—	3.190	—	1.702	—	27.082	—
Manpower ..	24.700	8.225	17.500	—	1.200	—	7.932	—	4.650	—	55.982	8.225
Rural Development ..	42.100	5.000	140.000	5.181	27.700	—	40.000	—	32.100	—	281.900	10.181
Crash Programme/Block Allocation ..	—	—	25.000	—	—	—	—	—	10.000	—	35.000	—
Total (Sectoral) ..	17,503.550	6,608.877*	2,324.012	178.476	833.700	83.847	790.000	33.286	377.257	31.309	21,828.519	6,935.795*
B. Earthquake Relief and Reconstruction Programme ..	60.000	0.100	—	—	—	—	—	—	—	—	60.000	0.100
Total (Gross) ..	17,563.550	6,608.977*	2,324.012	178.476	833.700	83.847	790.000	33.286	377.257	31.309	21,888.519	6,935.895*
Less—Operational shortfall(—)	2,663.550	—	101.012	—	3.700	—	91.000	—	29.257	—	2,888.519	—
Total (Net) ..	14,900.000	6,608.977*	2,223.000	178.476	830.000	83.847	699.000	33.286	348.000	31.309	19,000.000	6,935.895*

*Includes Rs. 14.1 million for FATADC for which sectoral break-up is not available.

**RELATIVE SECTORAL PRIORITIES IN ANNUAL DEVELOPMENT PROGRAMME 1977-78
AND 1978-79**

	1977-78	Percentage share	1978-79	Percentage share	Percentage Increase/Decrease in 1978-79 over 1977-78
	(Million Rs.)		(Million Rs.)		
Agriculture	1,650.4	8.9	2,054.5	9.4	24.5
Water	1,957.5	10.5	2,994.8	13.7	53.0
Power	3,174.4	17.1	3,478.1	15.9	9.6
Fuels	492.5	2.7	595.3	2.7	20.9
Industry	3,947.6	21.2	4,622.1	21.1	17.1
Minerals	129.4	0.7	91.0	0.4	(-)29.7
Transport & Communications	3,429.7	18.5	3,943.1	18.0	15.0
Physical Planning & Housing	1,625.8	8.7	1,661.9	7.6	2.2
Mass Media	180.4	1.0	138.2	0.6	(-)23.4
Education & Training	766.7	4.1	878.2	4.0	14.5
Health	684.3	3.7	761.3	3.5	11.3
Population Planning	243.0	1.3	210.0	1.0	(-)13.6
Social Welfare	16.9	0.1	27.1	0.1	60.4
Manpower	19.8	0.1	56.0	0.3	182.8
Rural Development	195.7	1.0	281.9	1.3	44.0
Crash Programme	10.4	0.1	10.0	0.1	(-)3.8
Block Allocation	—	—	25.0	0.1	—
Total—(Sectoral Programme)	18,524.5	99.7	21,828.5	99.7	17.8
Earthquake Relief and Reconstruction Programme	60.0	0.3	60.0	0.3	—
Total—(Gross)	18,584.5	100.0	21,888.5	100.0	17.8
Less—Operational Shortfall	(-)1,584.5		(-)2,888.5		—
Total—(Net)	17,000.0		19,000.0		11.8

ALLOCATION FOR PRIORITY PROGRAMMES IN THE PROVINCIAL ADRS DURING 1955-59

(Million Rs.)

Sector/Project	Punjab	Sind	NWFP	Baluchistan	Total
	2	3	4	5	6
I. Agriculture					
1. Ground Plant Protection Operation ..	133.8	40.0	18.9	6.5	199.2
2. IBRD Assisted Seed Industry Project.	43.0	10.0	—	3.0	56.0
3. IBRD Assisted Punjab Livestock Project, Shankarpura ..	25.5	—	—	—	25.5
4. IBRD Assisted Extension and Agricultural Development Project...	10.6	5.5	—	—	16.1
Total (Agriculture) ..	212.9	55.5	18.9	9.5	296.8
II. Water					
On-Farm Water Management ..	30.0	12.8	2.3	2.2	47.3
III. Physical Planning and Housing					
Rural Water Supply and Sanitation ..	72.2	30.0	50.9	6.0	159.1
IV. Education and Training :					
Primary Education ..	41.3	26.0	62.0	8.9	138.2
V. Health					
Rural Health Programme ..	92.3	37.7	62.0	21.5	213.5
Total ..	448.7	162.0	195.1	48.1	854.9

* This allocation relates to Rural Water Supply Schemes (excluding Quetta) to be executed by the Irrigation Department. Allocation for sanitation in rural areas has not yet been determined.

**SEMI-PUBLIC INVESTMENT PROGRAMME FOR 1978-79 ITS FINANAING
(OUTSIDE ADP)**

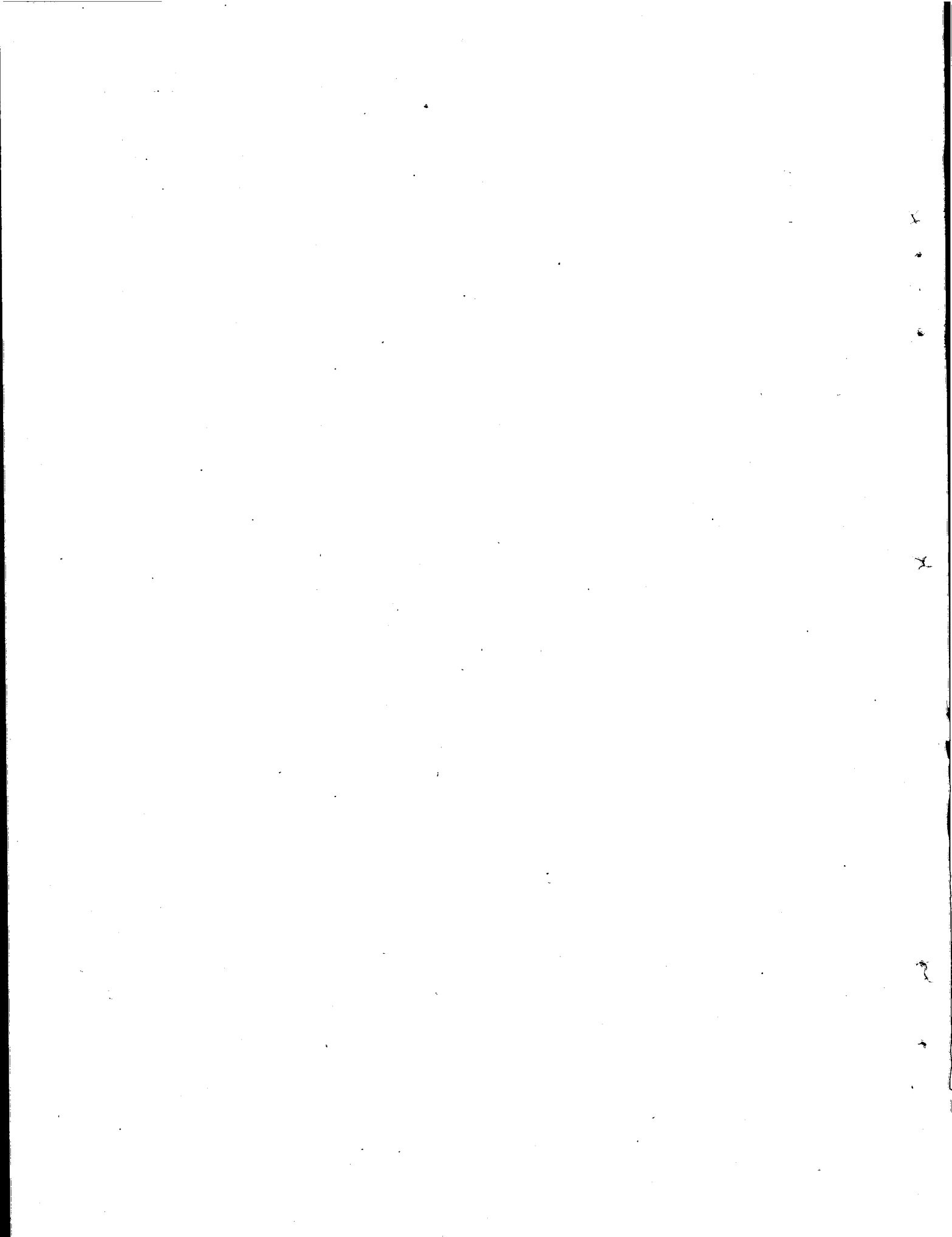
(Million Rupees)

Sl. No.	Sector/Agency	Total Allocation Outside ADP	Local Component			Foreign Component			
			Total (Local)	N.D.F.C.	Bank Credit	Self Financing	Total (Foreign)	Credit	Equity
1	2	3	4	5	6	7	8	9	10
1.	Agriculture ..	60.000	60.000	—	60.000	—	—	—	—
	(a) Federal (PASSCO)	60.000	60.000	—	60.000	—	—	—	—
2.	Power ..	515.100	253.000	—	253.000	—	262.100	262.100	—
	(a) Federal (KESC) ..	515.100	253.000	—	253.000	—	262.100	262.100	—
3.	Fuels ..	412.000	393.200	—	393.200	—	18.800	18.800	—
	(a) Federal ..	412.000	393.200	—	393.200	—	18.800	18.800	—
	(i) Pak Arab Refinery	(300.000)	(300.000)	—	(300.000)	—	—	—	—
	(ii) Gas Companies	(112.000)	(93.200)	—	(93.200)	—	(18.800)	(18.800)	—
4.	Industry ..	1581.876	1340.874	169.000	1171.876	—	241.000	2.500	238.500
	(a) Federal ..	1183.786	945.286	115.000	830.286	—	283.500	—	238.500
	(i) PASSMIC	(500.000)	(500.000)	—	(500.000)	—	—	—	—
	(ii) Bim (Other than PASSMIC)	(453.700)	(415.200)	(115.000)	(300.200)	—	(38.500)	—	(38.500)
	(iii) Other Federal Programme ..	(234.086)	(34.086)	4.000	(30.086)	—	(200.000)	—	(200.000)
	(b) Provincial ..	394.090	392.590	50.000	341.590	—	2.500	2.500	—
5.	Minerals ..	38.500	33.500	11.500	22.000	—	5.000	5.000	—
	(a) Federal (PMDC)	11.500	11.500	11.500	—	—	—	—	—
	(b) Provincial ..	27.000	22.000	—	22.000	—	5.000	5.000	—
6.	Transport and Communications ..	444.480	344.780	—	38.780	306.000	99.700	99.700	—
	(a) Federal ..	430.700	331.000	—	25.000	306.000	99.700	99.700	—
	(i) PIAC ..	(200.400)	(176.000)	—	—	(176.000)	(24.400)	(24.400)	—
	(ii) KPT ..	(205.300)	(130.000)	—	—	(130.000)	(75.300)	(75.300)	—
	(iii) Urban Transport Corporation ..	(25.000)	(25.000)	—	(25.000)	—	—	—	—
	(b) Provincial ..	13.780	13.780	—	13.780	—	—	—	—
7.	Physical Planning and Housing ..	192.700	187.000	—	187.000	—	5.700	5.700	—
	(a) Federal (Tourism)	7.000	7.000	—	7.000	—	—	—	—
	(b) Provincial ..	185.700	180.000	—	180.000	—	5.700	5.700	—
8.	Miscellaneous ..	255.344	105.344	19.500	85.344	—	150.000*	150.000*	—
	(a) Federal ..	85.844	85.844	—	85.844	—	—	—	—
	(b) NDFC ..	150.500*	—	—	—	—	150.500*	150.000*	—
	(c) Other Unallocable	19.500	19.500	19.500	—	—	—	—	—
	Total ..	3500.000	2717.700	200.000	2211.700**	306.000	782.300	543.800	238.500

*Project-wise details of NDFC loan are not yet available.

**The credit allocations given in the above table are on gross basis. The National Credit Consultative Council has approved an allocation of Rs. 2,400 million for Fixed Investment by Public Sector Enterprises during 1978-79. The figure of Rs. 2,211.700 million given above may change during the course of year as additional allocations are made from within the stipulated ceiling of Rs. 2,400 million.

Note :—Although the total size of Programme Outside ADP remains the same as approved by NEC in June, 1978, the sectoral allocations have been revised in the light of decisions made by National Credit Consultative Council in August, 1978..



FINANCING OF PUBLIC SECTOR DEVELOPMENT PROGRAMME

The Public Sector Development Programme for 1977-78 envisaged a net expenditure of Rs. 21,000 million. Out of this outlay, a sum of Rs. 17,000 million pertained to the development expenditure to be implemented *via* the normal budget. The balance of the allocation related to public sector undertakings' programme to be financed outside budgetary resources, including own resources of the public enterprises, foreign equity participation and their direct borrowings. The ADP to be implemented *via* the budget was expected to be financed from Rs. 11,984 million of foreign resources and Rs. 5,017 million of domestic resources including an uncovered gap of Rs. 1,491 million. The new fiscal measures taken in the budget for 1977-78 were estimated to raise additional resources for the programme to be financed through budgetary resources to the extent of Rs. 1,542 million.

REVIEW OF 1977-78

Public Sector Budgetary Outlays

2. The budgetary position deteriorated during the course of the year due mainly to loss of revenue from export duties and profits from cotton, increased expenditures on account of higher wheat imports and payment of subsidies to cotton textile mills. Extra-budgetary allocations for the development programme including Tarbela had also to be made during the course of the year. It was estimated in December, 1977 that as a result of these factors, the budgetary gap would increase from Rs. 1,491 million to Rs. 3,070 million despite an additional revenue yield of about Rs 410 million on account of the levy of import duty on tea and the increase in excise duties on cigarettes consequent upon the increase allowed in the retail prices of cigarettes.

3. Fiscal measures were announced on 1st January, 1978 to improve the fiscal situation. These included the following :

- (a) In order to mobilise additional resources and to reduce personal consumption of the higher income group, a surcharge of 10 per cent was levied on the income tax and super tax payable by all persons liable to tax for the assessment year 1977-78. In the case of companies, however, the surcharge was not levied on retained profits.
- (b) An upward adjustment was made in the import duty on certain items, notably ferrous and non-ferrous metals, man-made yarns, motor cars, auto parts, airconditioners, refrigerators and colour television sets.
- (c) The levy of tax on agricultural incomes was postponed. Instead land revenue at double the previous rates was imposed on land holdings in excess of 25 acres irrigated/50 acres un-irrigated. It was also decided that cesses on land revenue would be charged only from persons assessed to land revenue.
- (d) It was considered that the prevalent rates of abiana were very low and did not cover the working expenses of irrigation works. The water rates were accordingly increased by 25% with effect from Rabi 1977-78.
- (e) Apart from the action taken under Martial Law to tighten up recovery of taxes, further action was taken to streamline tax assessment and recovery machinery in order to ensure realization of additional revenues.
- (f) In order to provide relief to consumers, a number of consumer items including extraction of cotton seed oil, unmanufactured tobacco (used in the manufacture of items other than cigars, cheroots, cigarettes and smoking mixture), woollen yarn, toothpastes, toothpowder, boot polishes, dry battery cells and rubber goods etc. were totally freed from excise duty burden. Relief was also provided to the consumers in the form of exemption/rebate of import duties in case of second-hand clothing and bicycles.

4. The measures above were estimated to yield net additional revenue of Rs. 1,735 million. The overall domestic budgetary resources (excluding deficit financing) available for financing the developmental programme increased from Rs. 3,525 million in the original budget to Rs. 5,275

million in the revised estimates for 1977-78. Table I below indicates the position of financing of the ADP for 1977-78, original and revised both.

TABLE I

Financing of A.D.P. 1977-78

		(Rs in Million)	
		1977-78 Budget	1977-78 Revised
A. Domestic Resources	.. .. .	5,016	9,135
(a) Non-inflationary resources	.. .. .	3,525	5,275
(b) Gap between development expenditure and resources	.. .. .	1,491	3,860
B. Foreign Resources	.. .. .	11,984	8,865
C. Total Financing	.. .. .	17,000	18,000

5. Annexure I indicates broad details of the estimates of resources for financing the ADP. These estimates are discussed in the subsequent paragraphs.

Revenue Receipts

6. The gross revenue receipts of the Federal Government are estimated at Rs 25,389 million in the revised estimates for 1977-78 as compared to the original budget provision of Rs. 23,957 million. The major factors responsible for the improved revenue picture include the reorientation of tax administration to ensure higher collection of major taxes, revenue buoyancy resulting from new measures announced on 1st January, 1978 and rice export profits. Transfers to the provinces (revenue assignments and agricultural income tax) have decreased from Rs. 3,274 million in the original budget to Rs. 3,196 million in the revised estimates for 1977-78 as a result of the deferment of the levy of agricultural income tax. Deducting payments from gross revenue, the net revenue receipts of the Federal Government stand at Rs. 22,193 million in the revised estimates for 1977-78 as against the original budget of Rs. 20,683 million.

Non-Development Revenue Expenditure

7. At Rs. 20,080 million in the revised estimates for 1977-78, the non-development revenue expenditure of the Federal Government is estimated near about the budgetted level (Rs. 20,282 million). While the aggregate level of non-development expenditure has been contained, major components (Annexure I) show wide variations.

Net Capital Receipts

8. As shown in Annexure I, the net capital receipts of the Federal Government are placed at Rs. 2,332 million in the revised estimates for 1977-78 as compared to the original budget provision of Rs 2,047 million. The increase of Rs 285 million occurred mainly due to increased yield from the net proceeds of small savings schemes, an increase in non-bank borrowings, higher recoveries of loans from Provinces/Autonomous bodies partly offset by an increase in the expenditure on loans and advances and other non-developmental capital liabilities.

Provincial Contribution

9. No contribution by the Provincial Governments to the financing of the ADP was assumed in the original budget of the Federal Government for 1977-78. However, taking into account the effect of new measures announced in the federal budget for 1977-78, the provincial contribution to

the financing of the ADP was estimated at Rs. 28 million in the final budget of the Federal Government for 1977-78. As a result of the increase in revenue assignments (other than agricultural income tax) and revival of land revenue system with enhanced rates during the course of the year, the provincial contribution is now estimated at Rs 130 million in the federal budget. The budgets of the Provincial Governments however indicate that their contribution to the financing of the ADP in the revised estimates for 1977-78 would be Rs. 68 million only.

Autonomous Bodies

10. The revised estimates of self-financing by Autonomous Bodies compare with the original budget provision as per details in Table II.

TABLE II
Self-financing by Autonomous Bodies

		(Rs. in Million)	
		1977-78 Budget	1977-78 Revised
WAPDA	.. .. .	608	246
Railways	.. .. .	237	253
BIM Corporations	.. .. .	159	156
C.D.A.	.. .. .	20	20
P.T.V.	.. .. .	25	25
Total ..		1,049	700

11. The self-financing by WAPDA was lower due to decrease in the operating revenue following an increase in power losses, a rise in the operating expenses, and higher payments on account of interest and principal on the borrowings made by WAPDA.

External Resources

12. Against the budget provision of Rs. 11,984 million, the availability of external resources is placed at Rs. 8,865 million in the revised estimates for the year. The difference resulted from lower availability of project assistance, commodity aid and cash loans, offset partly by increased inflow of food aid.

Overall Position

13. Overall, the revised estimates of resource availability (excluding deficit financing) for financing the public sector development expenditure through budgetary resources are placed at Rs. 5,275 million as compared to the original budget provision of Rs. 3,525 million. Although the estimates of non-inflationary domestic resources are significantly higher than the original budget provision, a substantial decline of Rs. 3,119 million in the revised estimates of external resources and an increase of Rs. 1,000 million in the ADP resulted in recourse to deficit financing at a level higher than stipulated. The gap between development expenditure and resources in the revised estimates for 1977-78 as per Federal budget is Rs. 3,860 million as compared to the original estimate of Rs. 1,491 million. However, the data compiled by the State Bank of Pakistan after the close of the year indicates the quantum of deficit financing at Rs. 4,946 million. The increase is due to shortfall in Provincial contribution and a decline in resources of the Federal Government after the framing of revised estimates for 1977-78. The position regarding deficit financing is discussed in the chapter on Monetary Policy and Credit Plan.

Public Sector Undertakings

14. The original net size of the semi-public sector programme was kept at Rs. 4,000 million. The current indications are that investment in the semi-public sector programme outside ADP would be about Rs. 3,410 million. The financing pattern of the original and revised programme compares as under :

	1977-78 Original	1977-78 Revised
	(Million Rs.)	
1. Foreign Resources	1,553	1,160
2. Rupee Resources	2,447	2,250
(a) Internal	143	100
(b) Bank Credit	2,144	2,000
(c) NDFC Loans	160	150
3. Total Financing	4,000	3,410

FINANCING OF PUBLIC SECTOR PROGRAMME FOR 1978-79

15. The public sector programme approved for 1978-79 amounts to Rs. 22,500 million. At this level, 15.2 per cent of the public sector outlay of the Fifth Plan will be implemented. Out of the total programme above, Rs. 19,000 million will be financed through normal budgetary procedure and the balance of Rs. 3,500 million by the public sector enterprises outside the ADP.

Financing of Public Sector Budgetary Outlay

16. The public sector outlay of Rs. 19,000 million to be implemented *via* the budget is proposed to be financed from domestic resources to the extent of Rs. 6,862 million and the balance of Rs. 12,138 million from inflow of foreign assistance. The overall position of financing of the ADP for 1978-79 is shown in Table III.

TABLE III.

Financing of ADP, 1978-79

	(Million Rs.)
A. Domestic Resources	6,862
(a) Without new measures	2,694
(i) Federal Government	1,724
(ii) Provinces	—
(iii) Autonomous Bodies	970
(b) New Fiscal Measures	1,910
(c) Gap between Development Expenditure and Resources	2,258
B. External Resources	12,138
(a) Project assistance	5,776
(b) Commodity Aid	2,020
(c) Food Aid	662
(d) Cash Loans	3,680
C. Total Financing	19,000

17. Annexure I indicates broad details of the various estimates for 1978-79 as compared to the estimates for the year 1977-78. The various components are discussed in the following paragraphs.

Revenue Receipts of the Federal Government

18. The gross tax receipts of the Federal Government for 1978-79 at 1977-78 rates are projected at Rs. 21,897 million as against the previous year's revised estimate of Rs. 19,292 million. Import duties account for an improvement of Rs. 1,190 million, excise duties Rs 653 million, taxes on income Rs. 262 million, sales tax Rs. 86 million and other taxes and surcharges Rs. 414 million. The estimates of tax receipts assume normal growth in the economy and the continuance of a liberal import policy.

19. The non-tax receipts of the Federal Government are likely to improve from Rs. 6,097 million in the revised estimates for 1977-78 to Rs. 6,694 million in 1978-79. The various components non-tax receipts are indicated in Annexure I. As indicated therein, the improvement of Rs. 597 million during 1978-79 has occurred mainly as a result of an increase of Rs 778 million in the recoveries of interest from provinces and autonomous bodies etc. partly offset by a decline in the receipts pertaining to defence services and other miscellaneous items. The trading profits are estimated to decline from Rs. 707 million in the revised estimates for 1977-78 to Rs. 695 million in the budget for 1978-79 as per details below :

TABLE IV
Trading Profits

								(Million Rs.)		
								1977-78	1977-78	1978-79
								Budget	Revised	Budget
Rice .. .. .	..	..	..	..	..	..	—	504	695	
Cotton .. .. .	..	..	..	..	..	..	429	185	—	
Edible Oil .. .. .	..	..	..	..	..	..	—	18	—	
Total ..								429	707	695

20. Transfers to the Provinces out of Federal taxes during 1978-79 are estimated at Rs. 3,694 million without taking into account the effect of new measures taken in the federal budget. Excluding these payments, the net revenue receipts of the federal government during 1978-79 are estimated at Rs. 24,897 million without the effect of new tax measures. This indicates an improvement of Rs. 2,704 million over the revised estimates for 1977-78.

Non-Development Revenue Expenditure

21. Broad details of the non-developmental expenditure of the federal government are shown in Annexure I. Total expenditure is estimated to increase from Rs. 20,080 million in the revised estimates for 1977-78 to Rs. 24,222 million during 1978-79. Defence and debt services would claim 68 per cent of the total provision for 1978-79. Subsidies are likely to increase from Rs. 1,538 million during 1977-78 to Rs. 1,897 million in 1978-79 as a result of increased imports of wheat. The expenditure of administrative departments has been provided at Rs. 2,050 million during 1978-79 as against almost the same provision in the preceding year. The expenditure of development departments is estimated to increase by 10 percent from Rs. 788 million in the revised estimates for 1977-78 to Rs. 804 million in 1978-79. Grants to provinces had to increase from Rs. 1,347 million in 1977-78 to Rs. 1,773 million in 1978-79 in order to meet the increased deficits of the provinces. Other miscellaneous expenditures are likely to increase from Rs. 1,077 million in the revised estimates to Rs. 1,210 million during 1978-79.

Contribution of Provinces

22. The pre-budget discussions indicated that as a result of the increase in their non-developmental expenditures, none of the provincial governments would be in a position to balance its budget. Apart from the statutory grants to the provinces of N.W.F.P. and Baluchistan amounting to Rs. 100 million and Rs. 50 million respectively, the federal budget for 1978-79 includes enhanced grants-in-aid to the provinces for meeting expenditure on pay increases, and covering revenue deficits etc. Taking into account the enhanced grants, the federal budget for 1978-79 (without the effect of the new measure) assumes nil contribution by the provinces for financing the ADP

for 1978-79. An analysis of the provincial budgets, however, indicates that despite the new tax measures taken by the Punjab and N.W.F.P., their non-developmental budgets will be in deficits of Rs. 50 million and Rs. 27 million respectively. The budgets of Sind and Baluchistan also indicate that they would be left in deficits of Rs. 32 million and Rs. 26 million. These deficits should be met by savings in expenditure.

Autonomous Bodies

23. The position of self-financing by autonomous bodies is shown in Table V.

TABLE V
Self-financing by Autonomous Bodies

						(Million Rs.)		
						1977-78 Budget	1977-78 Revised	1978-79 Budget without new Measures
WAPDA	..	..	..	..	..	608	246	419
Railways	..	..	..	..	..	237	253	275
BIM Corporations	..	..	..	..	..	159	156	253
CDA	..	..	..	..	..	20	20	10
PTV	..	..	..	..	..	25	25	—
PMDC	..	..	..	..	..	—	—	13
Total						1049	700	970

24. Self-financing by autonomous bodies at 1977-78 rates is higher by Rs.270 million in 1978-79 compared to the revised estimates for 1977-78. The improvement emerges mainly from WAPDA on the basis of the drive launched by them to reduce losses. WAPDA have estimated that their losses would decline from 37 per cent in 1977-78 to 33 per cent in 1978-79. The net profits of BIM Corporations particularly the State Cement Corporation of Pakistan are also expected to be higher in 1978-79 as compared to 1977-78. Self-financing by the State Cement Corporation of Pakistan is estimated to increase from Rs. 151 million in 1977-78 to Rs. 215 million in 1978-79.

25. It is imperative that the public sector organizations should generate substantial resources for financing their development programmes apart from meeting all their current cost from the receipts derived by them. The operations of public sector corporations were examined from this point of view and modifications were made in some cases in the charges for goods and services provided by them. These changes have been discussed under the portion pertaining to new fiscal measures. It is necessary that the pricing policy of public sector undertakings should be reviewed further and steps should be taken to increase their profits in future for the purpose of implementing their huge investment programmes.

External Resources

26. The estimates of foreign assistance for 1978-79 are placed at Rs. 12,138 million including Rs. 5,776 million of project assistance, Rs. 662 million of food aid and Rs. 5,700 million of non-project aid including cash loans. Detailed projections and assumptions for adopting these estimates are shown in the chapter on balance of payments.

New Fiscal Measures

Federal Government

27. The need for a substantial effort at resource mobilisation was evident for financing the development programme. Without such an effort, there would have been an undue reliance on deficit financing. The new fiscal measures were framed keeping in view their beneficial effect on the economy and the objective of stimulating investment and production. The specific measures are explained below :-

Tax Measures

Customs

- (a) Import duties on textile machinery for balancing and modernisation of textile mills and new machinery imported for manufacture of garments and other textile made up goods have been totally exempted. Airconditioning plants imported for textile and other industries which are necessary for efficient functioning of industrial processes have been allowed to be imported on the normal rates of duty prescribed for machinery. The tariff concession in respect of machinery would be admissible only for those items which are not being manufactured in the country.
- (b) Import duty on wool has been totally abolished in order to encourage the manufacture of woollen yarn for carpet making industry.
- (c) Duty on imported man-made fibres has been increased by Rs. 3 per k.g. in order to compensate for the duty waived on the spinning of such fibres.
- (d) Imports of power tillers and planteres has been made totally free of all duties and taxes and also made importable in the private sector. The import of tractors has also been placed on the free list in respect of five standardised makes.
- (e) The import duty on bus and truck chasis has been reduced from 60 per cent to 50 per cent. In case of imports of chasis for buses and trucks in CKD condition, the import duty has been reduced to 40 per cent. In case of wagons, the rate of import duty has been reduced from 100 per cent to 60 per cent.
- (f) It has been decided that in case of refrigerators, import duty would be assessed on the basis of capacity at the rate of Rs. 250 per cubic foot.
- (g) Import duty on TV and TV components has been unified for both black and white and colour TV at the rates applicable to colour TV.
- (h) Import duty on loose tea has been reduced from 60 per cent to 53 per cent.
- (i) It has been decided that in future all re-rollable scrap would be subjected to a uniform rate of duty at 55 per cent plus sales tax of 10 per cent.
- (j) The baggage rules and the rules regarding sending of gift parcels in Pakistan have been liberalised.
- (k) Duty on photo and thermo-photo copying apparatus has been reduced from 85 per cent to 40 per cent.
- (l) Aircraft and aircraft spares imported by flying clubs for their own use have been exempted from import duties.
- (m) To encourage poultry and dairy industries, import duty on equipment imported for such industry has been totally exempted. This exemption would however apply only to those items of machinery which are not being manufactured in the country.
- (n) The equipment imported by a charitable hospital has been exempted from duty.

Central Excise

- (a) Central excise duty on cotton yarn, cotton cloth and processing of cotton fabrics, other cotton products such as hosiery and towels, spinning of discontinuous man-made fibres and fabrics of man-made yarn whether grey or processed have been totally exempted from excise duty. With this concession and rising trend of international cotton prices, it will not be necessary to give any subsidy on sales of raw cotton to the industry from the next cotton crop.
- (b) It has been decided to do away with the capacity system of taxation in relation to sugar. However, in order to maintain incentive for maximising production, it has been decided that production in a particular year which is over and above the average production in the preceding three years would be charged duty at half the normal rates. In case of new sugar mills, this incentive would be available on completion of three years following the year of their commercial operation.
- (c) Excise duty on restaurants with a turnover of less than Rs. 5 lakhs has been abolished and a uniform rates of 15 per cent has been levied, when the amount of turnover is more than Rs. 5 lakhs.
- (d) To encourage the export of better quality leather, it has been decided to exempt tanned leather from excise duty.
- (e) In order to improve the availability of cement and check black-marketing, its ex-factory price has been increased from Rs. 440 per ton to Rs. 600 per ton.

Sales Tax

- (a) Buses and trucks have been exempted from sales tax.
- (b) As a concession to poultry industry, the levy of sales-tax has been exempted for chicken meat.

Income Tax

- (a) It was decided that the law regarding taxation of agricultural income would remain suspended for 1978-79. Meanwhile, land revenue assessment would continue to be charged at the enhanced rates of 1977-78.
- (b) In order to reduce evasion of payments of income-tax by many owners of trucks, it has been decided that an amount of Rs. 1000 would be charged as advance against tax in respect of every truck, at the time of registration and its annual renewal. This amount would be adjusted at the time of income-tax assessment of the owners of the trucks.
- (c) In order to encourage investment, the exemption of capital gains from tax has been extended upto 30th June, 1981.
- (d) In addition to tax credit equal to 15 per cent of the cost of machinery and plants installed for the purpose of balancing and modernisation or replacement of machinery already allowed by the government, the concession regarding the carry forward of capital loss has been continued. Tax credit concession has been made available in respect of extension to the existing plant to provide incentive for increasing production capacity. As a further incentive for industrial investment, dividend income from industrial undertakings set up by new public companies incorporated between 1st July 1978 and 30th June, 1982 has been totally exempted from tax for a period of five years following the commencement of commercial production. This exemption would apply to all shareholders including companies. It has also been decided that the rates of interest on loans provided on fixed industrial and agricultural investment will be limited to 11 per cent. As a further encouragement to exports, the rate of interest for financing export has been reduced to 3 per cent.
- (e) The existing concession according to which gratuity received by a person on his retirement is not subjected to tax has been extended to commutation of pension also.

- (f) The surcharge of 10 per cent on income tax has been continued. However, individuals with annual taxable income of less than Rs. 50,000 have been exempted from the surcharge. The deduction of income tax @ 3 per cent being made at import stage if the value of import licence is not less than Rs. 1 lakh has been discontinued in case of goods imported under the gift scheme.
- (g) To encourage the establishment of private schools and hospitals in rural areas, their income has been completely exempted from income tax. Donations made to such institutions have also been exempted on the same lines as for charitable institutes.

OTHER MEASURES

- (a) In order to popularise the use of pesticides, a subsidy of 75 per cent of the cost of pesticides has been allowed. Subsidy at the same rate has also been allowed in respect of micro-nutrients like zinc. It has also been decided to allow free imports of pesticides by the private sector.
- (b) A few adjustments have been made in the prices of petroleum products. The selling price of aircraft fuel JP 4 has been raised from paisas 87 per litre to paisas 98 per litre. The price of JPI has been raised from Rs. 1.03 per litre to Rs. 1.57 per litre. This involves extra cost for the PIA and accordingly suitable adjustments in the PIA domestic fares have been made. The price of motor-gasoline has been increased from Rs. 2.80 per litre to Rs. 3.00 per litre and of HOBC from Rs. 3.40 per litre to Rs. 3.60 per litre. The price of furnace oil has been fixed at Rs. 700 per ton.
- (c) Airport fee for international passengers has been raised from Rs. 20 to Rs. 100 and for domestic passengers from Rs. 2.00 to Rs. 5.00.
- (d) In order to accelerate the extension of power network to rural areas, the power rates of both WAPDA and KESC have been revised. WAPDA has introduced a new fuel adjustment clause in respect of all types of consumers except domestic consumers involving an increase of paisas 4 per unit. In addition, WAPDA has increased power rates by paisas 6 per unit for all consumers except domestic consumers and small industries. The 1977-78 rates for domestic consumers were paisas 22 per unit for the first 20 units and paisas 25 per unit thereafter. These rates have been revised to be paisas 25 per unit for the first 40 units and paisas 29 per unit for additional supply over and above 40 units per month. In case of KESC, for domestic consumers the same rates would apply. For small industries, KESC power rates have been increased by paisas 4 per unit and for all other types of consumers the power rates have been increased by paisas 10 per unit.
- (e) In order to compensate for the increase in the international price of edible oil, the price of vegetable ghee has been increased from Rs. 9 per seer to Rs. 10 per seer. Further, in order to ease the supply situation and to bring about a shift in consumption from vegetable ghee to refined edible oil, it has been decided to allow free imports of edible oil for the refiners. It is expected that the refined oil will sell at least at Rs. 2 per seer below the price now fixed for vegetable ghee.
- (f) The telephone call charges have been increased from paisas 35 to paisas 50 per call. Correspondingly, the trunk call rates have also been increased by 40 per cent.

Overall Position

28. The new tax measures taken by the Federal Government are estimated to bring net additional revenue yield of Rs. 1,910 million. This would reduce the gap between development expenditure and resources to Rs. 2,258 million. This residual gap will be covered to the extent feasible by improving tax administration and economising on expenditure so as to limit deficit financing to the irreducible minimum.

PROVINCIAL GOVERNMENTS

29. The new fiscal measures taken by the provincial governments are as follows :

Punjab :

- (a) The motor vehicles tax has been increased by 25 per cent for all categories of vehicles subject to marginal adjustments, where necessary.

- (b) It has been decided to increase the registration fee for motor-cycles from Rs. 10 to Rs. 50, for light vehicles from Rs. 30 to Rs. 150 and for heavy transport vehicles from Rs. 60 to Rs. 300. Fee for temporary registration and transfer of ownership of all categories of vehicles has been increased from Rs. 10 to Rs. 50.
- (c) The rates of driving licence fees have been doubled. These rates would now range from Rs. 20 to Rs. 40 for different categories of driving licences.
- (d) The rates of tax on hotels have been rationalised by relating the same to the amount charged by the hotel owners from the lodgers.
- (e) The rates of entertainment duty on cinema tickets have been increased by 25 per cent on all classes.
- (f) The Arms Licence Fees have been increased at different rates for various categories of weapons.
- (g) A paddy husking tax has been levied at the rate of 1.50 paise per kilogram on the rice husked by the rice husking mills. This tax will not be levied on one huller units where paddy is taken for husking mostly for personal consumption.
- (h) The exemption limit in the case of urban immovable property tax with annual rental value upto Rs. 1000 belonging to permanently incapacitated persons having no other source of income has been raised to annual gross rental value of Rs. 3,600.
- (i) As an incentive for prompt payment of property tax, it has been decided that a rebate equal to 5 per cent of the amount of tax will be given to a person who pays the entire amount of tax in lumpsum within 60 days of the start of the financial year. Similarly a rebate equal to 10 per cent of the tax has been allowed to owner of a motor vehicle who pays the whole amount of the annual tax within the month of July.
- (j) The motor vehicles tax on the small mechanically propelled vehicles used for invalids has been abolished.
- (k) It has been decided that for the purpose of payment of motor vehicle tax, cash payment would also be accepted by the post offices where stamps are not available.
- (l) Contractors enlisted for supplying goods and services to the Federal and Provincial Governments were assessed to tax on persons engaged in professions, trades, callings and employment on the basis of their enlistment irrespective of the value of goods and services actually supplied or work done. It has been decided that from 1st July, 1978, the contractors will be assessed to this tax on the basis of the work done or goods or services supplied during the preceding year.

N.W.F.P.

- (a) The motor car/jeep registration fee has been increased from Rs. 60 to Rs. 76.
- (b) The capacity tax has been increased from Rs. 100 to Rs. 132 per seat per year in respect of buses on 'A' route, from Rs. 72 to Rs. 100 per seat per year for buses on 'B' route and from Rs. 48 to Rs. 60 per seat per year in the case of buses on 'C' route.
- (c) Trucks with different loading capacities have been subjected to increased tax at different rates.
- (d) Drivers examination fee has been increased from Rs. 10 to Rs. 20.
- (e) Copy of the licence fee has been increased from Rs. 10 to Rs. 20.
- (f) The learners licence fee has been increased from Rs. 10 to Rs. 20.
- (g) The driving licence fee has been increased from Rs. 20 to Rs. 50 for light vehicles and Rs. 20 to Rs. 100 for heavy vehicles.

- (h) The renewal of licence fee has been increased from Rs. 10 to Rs. 20 for light vehicles and from Rs. 10 to Rs. 50 for heavy vehicles.
- (i) Fee for renewal of driving licence after 30 days has been increased from Rs. 20 to Rs. 30.
- (j) Fitness certificate fee has been increased from Rs. 20 to Rs. 50. The fitness fee for heavy vehicles has been increased from Rs. 20 to Rs. 100. The fitness certificates renewal if applied within 15 days of its expiry has been increased from Rs. 10 to Rs. 25. The fitness certificate renewal fee if applied after 15 days of its expiry has been increased from Rs. 30 to Rs. 50. The fitness certificate renewal fee for heavy vehicles if applied within 15 days of its expiry has been increased from Rs. 30 to Rs. 50.
- (k) The registration fee for motor-cycle/trailers has been increased from Rs. 10 to Rs. 20, for heavy vehicles from Rs. 60 to Rs. 250 and for other vehicles from Rs. 30 to Rs. 100.
- (l) Transfer fee for motorcycles has been increased from Rs. 10 to Rs. 20, for heavy transport vehicles from Rs. 60 to Rs. 250 and for other vehicles from Rs. 30 to Rs. 100.
- (m) Copy of registration fee if the original one is lost has been increased from Rs. 10 to Rs. 50 for non-commercial vehicles and from Rs. 15 to Rs. 100 for commercial vehicles. In the case of bad shape, the fee increase for non-commercial vehicles is from Rs. 10 to Rs. 20 and for commercial vehicles from Rs. 15 to Rs. 30.
- (n) The Sugarcane development cess has been increased from paisas 12 per maund to paisa 20 per maund. Sugar Beet has also been subjected to this cess at the same rate.
- (o) The mutation fee has been increased.

Relative Contribution of Domestic Resources in financing of ADP

30. The new fiscal measures taken in the budget for 1978-79 reflect Government's long term strategy of financing an increasingly larger part of development outlays through an improvement in domestic resources. During 1978-79, the net utilization of foreign resources (gross foreign resources minus foreign debt servicing provided in the budget) in the public sector is estimated to be Rs. 6,395 million meeting 33.6% of the development programme. The corresponding proportion of net foreign resources to total ADP financing during 1977-78 was 34.7%. Broad details of the comparative position of domestic and net foreign resources for 1976-77 to 1978-79 are shown in Table VI below:

TABLE VI
Financing of ADP during 1976-77 to 1978-79

	(Million Rs.)		
	1976-77 Prov. Accounts	1977-78 Revised	1978-79 Budget
A. Domestic Resources			
(1) Federal Govt. (c + d)	5,234	7,064	8,758
(a) Revenue Receipts (Net)	17,787	22,193	25,438
(b) Non-Development Expenditure (Excluding external debt services)	13,451	17,651	18,759
(c) Revenue Surplus	4,336	4,542	6,679
(d) Net Capital Receipts (excluding external debt repayment)	898	2,522	2,079
(2) Contribution of Provinces	136	130	69
(3) Self-financing by Autonomous Bodies	353	700	1,520
(4) Total Non-Inflationary Resources	5,723	7,894	10,347
(5) Gap between expenditure and resources (including deficit financing)	6,222	3,860	2,258
(6) Total Domestic Resources	11,945	11,754	12,605
B. Foreign Resources (Net of interest and principal payments)	4,294	6,246	6,395
C. Total Financing	16,239	18,000	19,000
D. Proportion of net foreign resources to total financing ..	26.4%	34.7%	33.6%

It may be seen that there has been a steady increase in non-inflationary domestic resources. These are 80.8% higher in 1978-79. Budget estimates compared to actuals of 1976-77. Improvement has been used mainly to reduce the level of deficit financing. Increase in net use of foreign resources has been less than the increase in the size of development programme.

Growth of Public Revenue & Non-Development Expenditure

31. The position of public revenue and non-development revenue expenditure during 1976-77 to 1978-79 is shown in Annexure-II. The annual compound growth rate in revenue receipts of the federal and provincial governments during this period is estimated at 19.3 per cent compared to a growth of 18.3% in the non-development revenue expenditures. Combined tax receipts of the federal and provincial governments are estimated to witness an annual compound growth rate of 17.9 per cent during this period. The total revenue receipts of the Government account for 18.2 per cent of GNP in 1978-79 compared to 18.7 percent in 1977-78. Bulk of the realization during 1978-79 is in the form of taxes (13.0 percent of GNP) supplemented by non-tax revenue (5.2 per cent of GNP). At Rs 33.38 billion, the total revenue receipts of the Government in 1978-79 are estimated to show an increase of Rs 4.14 billion over the revised estimates for 1977-78. The non-development expenditure is estimated to increase from Rs 27.23 billion in the revised estimates for 1977-78 to Rs 31.62 billion in 1978-79. As percentage of GNP, the non-development expenditure comes to 17.2% during 1978-79 as compared to 16.6 per cent in the preceding year.

Public Sector Undertakings

32. The mode of financing of the investment programmes of public sector undertakings amounting to Rs. 3,500 million is indicated in detail in Annexure V to Chapter 4.

FINANCING OF PUBLIC SECTOR DEVELOPMENT EXPENDITURE

(Million Rs.)

	1977-78 Budget	1977-78 Revised	1978-79 Budget (*)
A. DOMESTIC RESOURCES			
(a) Federal Government			
(1) Revenue Receipts (Gross)	23,957	25,389	28,591
(i) Tax Receipts	17,647	19,292	21,897
Import Duties	6,557	7,860	9,050
Export Duties	345	85	35
Federal Excise	5,486	6,184	6,837
Taxes on Income	2,348	2,655	2,917
Agri. Income Tax	250	—	250
Sales Tax	1,450	1,614	1,700
Other Taxes	73	78	82
Surcharges	1,138	816	1,026
(ii) Non-Tax Receipts	6,310	6,097	6,694
Interest Receipts	3,831	3,312	4,090
Post Office and T & T	603	338	417
Currency & Mint.	365	451	415
Defence Services	418	400	222
Trading Profits	429	707	695
Others	664	889	855
Less-Provincial Share in Taxes	3,274	3,196	3,694
Net Revenue Receipts	20,683	22,193	24,897

(*) Excluding the effect of new fiscal measures.

Annexure I contd.

(Million Rs.)

	1977-78 Budget	1977-78 Revised	1978-79 Budget
(2) <i>Non-Development Revenue Expenditure</i>	20,282	20,080	24,222
Defence	9,150	9,400	10,160
Debt Services	5,299	3,934	6,328
(Internal)	(1418)	(1505)	(1615)
(External)	(3881)	(2429)	(4713)
Subsidies	584	1,538	1,897
Administrative Departments	1,897	2,056	2,050
Development Departments	597	728	804
Grants to Provinces	1,423	1,347	1,773
Others	1,332	1,077	1,210
(3) <i>Revenue Surplus</i>	401	2,113	675
(4) <i>Net Capital Receipts</i>	2,047	2,332	1,049
(i) <i>Capital Receipts</i>	5,617	4,045	6,490
Small Savings	937	1,057	1,130
Recoveries of Loans	784	801	826
Accretions to Reserve Funds	3,141	1,533	3,729
Special Treasury Deposit Receipts	320	400	400
Compensation Bonds	10	5	5
Non-Bank Borrowings	200	242	200
Others	225	7	200
(ii) <i>Capital Payments</i>	3,570	1,713	5,441
Non-Development Loans	79	115	86
Repayment of Foreign Debt	2,428	986	3,777
Expenditure from Reserve Funds	824	636	928
Investment in taken-over Industries	10	5	5
Miscellaneous Investments	136	214	153
Other Items	93	(—)243	492
Total—Federal Govt. (3+4)	2,448	4,445	1,724

Annexure I—contd.

(Million Rs.)

	1977-78 Budget	1977-78 Revised	1978-79 Budget
(b) Self-Financing by Autonomous Bodies	1,049	700	970
WAPDA	608	246	419
Railways	237	253	275
BIM Corporations	159	156	253
C.D.A.	20	20	10
P.T.V.	25	25	—
P.M.D.C.	—	—	13
(c) Provincial Contribution	28	130	—
(d) Effect of New Fiscal Measures	—	—	1,910
(e) Total (a to d)	3,525	5,275	4,604
(f) Gap between Development Expenditure and Resources (including deficit financing)	1,491	3,860	2,258
Total Domestic Resources	5,016	9,135	6,862
B. EXTERNAL RESOURCES	11,984	8,865	12,138
(a) Project Assistance	5,478	4,688	5,776
(i) Indus Basin	—	173	580
(ii) Others	5,478	4,515	5,196
(b) Commodity Aid	1,715	1,465	2,020
(c) Food Aid	1,089	1,741	662
(d) Other Loans	3,702	971	3,680
Total (Financing)	17,000	18,000	19,000

RELATIONSHIP OF PUBLIC REVENUES AND NON-DEVELOPMENT EXPENDITURE WITH G.N.P.

(Million Rs.)

	1973-74 Accts.	1974-75 Accts.	1975-76 Accts.	1976-77 Prov. Accts.	1977-78 Revised	1978-79 Budget	Annual Compound Growth Rate % 1978-79 over 1973-74
1. GNP (Current Factor Cost) ..	80413	104651	122634	138318	162430	184491*	18.1
2. Tax Receipts	10485	12846	15598	17715	21114	24067	18.1
(As % of GNP)	(13.0)	(12.3)	(12.7)	(12.8)	(13.0)	(13.0)	
(a) Central Govt.	9444	11429	13915	16112	19292	22097	18.5
(As % of GNP)	(11.7)	(10.9)	(11.3)	(11.6)	(11.9)	(12.0)	
(b) Provincial Govts. ..	1041	1417	1683	1603	1822	1970	13.6
(As % of GNP)	(1.3)	(1.3)	(1.4)	(1.2)	(1.1)	(1.1)	
3. Non-Tax Receipts	3107	3547	4347	5140	6747	7688	19.9
(As % of GNP)	(3.9)	(3.4)	(3.5)	(3.7)	(4.1)	(4.2)	
(a) Central Govt.	2510	2956	3795	4497	6097	7051	23.0
(As % of GNP)	(3.1)	(2.8)	(3.1)	(3.2)	(3.7)	(3.8)	
(b) Provincial Govts. ..	597	591	552	643	650	637	1.3
(As % of GNP)	(0.7)	(0.6)	(0.4)	(0.5)	(0.4)	(0.3)	
4. Total Revenue Receipts ..	13592	16393	19945	22855	27861	31755	18.5
(As % of GNP)	(16.9)	(15.7)	(16.3)	(16.5)	(17.1)	(17.2)	
(a) Central Govt.	11954	14385	17710	20609	25389	29148	19.4
(As % of GNP)	(14.9)	(13.7)	(14.4)	(14.9)	(15.6)	(15.8)	
(b) Provincial Govts. ..	1638	2080	2235	2246	2472	2607B	9.8
(As % of GNP)	(2.0)	(1.9)	(1.8)	(1.6)	(1.5)	(1.4)	
5. Non-Development Revenue Expenditure	13444	18164	20088	21179	25847	29994	17.4
(As % of GNP)	(16.7)	(17.4)	(16.4)	(15.3)	(15.9)	(16.3)	
(a) Central Govt.	10818	14154	15109	15245	18694	21841	15.1
(As % of GNP)	(13.4)	(13.5)	(12.3)	(11.0)	(11.5)	(11.8)	
(b) Provincial Govts. ..	2626	4010	4979	5934	7153	8153	25.4
(As % of GNP)	(3.3)	(3.8)	(4.1)	(4.3)	(4.4)	(4.4)	

(*) Assumes price increase of 7.5%.

(**) As shown in the Provincial budgets. As explained in paragraph 22 of the chapter, the Federal budget for 1978-79 (without the effect of new measures) assumes no deficit in the Provincial budgets after taking into account revenue assignments. The provincial figures shown above, however indicate a deficit after including the revenue assignments. The deficit has to be met by the Provinces by savings in expenditure.

Note :—The figures above exclude inter-governmental transfers relating to revenue assignments and grants to Provinces.

CHAPTER 5

PRIVATE SECTOR INVESTMENT AND ITS FINANCING

According to latest estimates the Private Investment during 1977-78 is likely to be in the region of Rs. 9130 million which shows an increase of 17.3 per cent in current prices over the estimated investment during 1976-77. However, improvement in the private sector investment in real terms is likely to be somewhat modest as compared to the increase in money terms. The sector-wise break-up is as follows.

TABLE I
Private Investment
(Current Prices)

Sector	1976-77	1977-78 (Estimates)	Percentage Increase(+) / Decrease(-)
Agriculture	1619	2046	(+26.4
Manufacturing	1795	1831	(+ 2.0
(i) Large Scale	1210	1189	(-) 1.7
(ii) Small Scale	585	642	(+) 9.8
Fuel, Mining and Quarrying	36	40	(+)11.2
Transport and Communications	1525	1763	(+)15.6
Ownership of Dwellings	1709	2055	(+)20.3
Services, etc.	1103	1395	(+)26.5
Total	7787	9130	(+)17.3

2. The increase in ownership of dwellings and the services sectors reflect the growth in population and the relative prices of construction inputs. The rate of increase in the investment going into the agriculture is impressive. Tractors, other farm machinery, farm buildings, tubewells, and agricultural transport equipment, as well as a certain amount of non-monetized investment constitute the private investment in agriculture. The increased expenditure has been largely for tractors and related machinery and to a lesser extent for tubewells. The other major increase during the year was recorded in the transport and communication sector. Preference for motorized vehicles for goods and passenger transport as a secure, and profitable investment, which may be undertaken with a relatively small capital sum, explains this development. The manufacturing investment has been distributed amongst the major industries in roughly the same proportions as in the previous year and no major shift is perceptible.

ANNUAL PLAN FOR 1978-79

3. Keeping in view the performance during 1977-78 and overall investment target, the private investment for 1978-79 is projected at Rs. 10250 million (1977-78 prices) which shows an increase of 12.3 per cent over the estimated investment during 1977-78. Sectoral details are given in the table below :

TABLE II
Proposed Private Investment in 1978-79
(1977-78 Prices)

Sector	1977-78 Estimate	1978-79 Target	Percentage increase Col. 3 of Col. 2
1	2	3	4
1. Agriculture	2046	2205	7.8
2. Manufacturing	1831	2185	19.4
Large Scale	1189	1485	24.9
Small Scale	642	700	9.1
3. Fuel, Mining and Quarrying	40	50	25.0
4. Transport and Communications	1763	1940	10.1
5. Housing	2055	2310	12.4
6. Services/Others	1395	1560	11.9
Total	9130	10250	12.3

4. The above projections of private investment reflect a combination of Plan priorities for the private sector and the existing policies towards the private sector. These projections are not ceilings in any sense and there is no bar to actual private investment exceeding the projection in any sector or in total. The relatively large increases that are implied in the projections for the manufacturing and the fuel, mining and quarrying sectors are geared in particular to the policy objective of the revival of the private initiative in industry and the accelerated efforts directed at prospecting for petroleum.

Financing of Investment During 1978-79

5. According to tentative estimates the private investment of Rs. 10250 million is proposed to be financed to the extent of 14.6 per cent from foreign resources and 85.4 per cent by domestic resources. The details of financing are given in the table below :

TABLE III
Financing of Private Investment During 1978-79

Source	(Million Rs.)	
	Amount	Percentage of Total
A. Foreign Resources	1498	14.6
(i) Loans	1226	12.0
(ii) Equity and Foreign Private Investment	272	2.6
B. Domestic Resources	8752	85.4
(i) Own savings and capital market	5509	53.8
(ii) Credit	3243	31.6
(a) Non-banking financial institutions	1540	15.0
(b) Banks (Gross)	1703	16.6
Total (A + B)	10250	100.0

6. The foreign loans and equity finance is expected to flow mainly to the manufacturing, fuel, mining and quarrying and the services sectors. Capital market is likely to be instrumental in financing manufacturing sector and to a lesser extent perhaps the services sector. Bank and other institutional finance figures in each of the sectors as does self-financing. The self-financing effort is a particularly important factor in the financing of the ownership of dwellings and the Transport and communications sector.

CHAPTER 6

MONETARY POLICY AND CREDIT PLAN

Monetary and Credit Policy for 1977-78 was devised with the major objective of containing inflationary pressures. In September, 1977, the ceiling of credit expansion was finalized at Rs. 7,500 million. Allowing for a draw-down in foreign exchange reserves of Rs. 500 million, this was expected to result in a monetary expansion of Rs. 7,000 million. Accordingly the credit ceiling for the private sector was fixed at Rs. 5,700 million; of this an amount of Rs. 1,710 million was allocated to public sector enterprises. This amount was raised to Rs. 1,900 million in April, 1978. Credit allocation for the Government Sector was Rs. 1,800 million—Rs. 1,500 million for budgetary support and Rs. 300 million for commodity operations.

REVIEW OF 1977-78

Monetary Assets

2. Latest data indicates that monetary assets, which amounted to Rs. 56868 million at the end of June, 1977, increased by Rs. 11,987 million upto the end of June, 1978, or by about 21 per cent as compared with an increase of Rs. 10,732 million (or 23.4 per cent) in the same period last year. The following table shows changes in monetary assets with the causative factors leading to the change in money stock during 1976-77 and 1977-78 :

TABLE I

Causative Factors Affecting Changes in Monetary Assets

		(Million Rs)	
		July, 77 to June, 78	July, 76 to June, 77
<hr/>			
Expansion—			
Contraction—			
1. Private Sector	.. .. .	+5633	+7143
(a) Private Sector (Proper)	.. .. .	+3504	+5443
(b) Public Sector enterprises	.. .. .	+2129	+1700
2. Government Sector	.. .. .	+4848	+6566
(a) Commodity Operations	.. .. .	—98	+ 385
(b) Budgetary Support	.. .. .	+4946	+6181
3. Foreign Sector	.. .. .	+3706	—2180
4. Other Factors	.. .. .	—2200	—797
Total Causative		+11987	+10732

3. The above table indicates that domestic credit creation, both in the public and private sectors, declined considerably during 1977-78 compared to the preceding year. The impact of this reduction was, however, substantially offset by a major change in the position of the foreign sector. While in 1976-77, there was a large balance of payments deficit and a substantial draw-down of foreign exchange reserves, the addition to foreign exchange reserves in 1977-78 resulted in a major expansion in monetary assets.

4. Credit expansion in private sector (including public sector enterprises) during 1977-78 was originally envisaged at Rs. 5700 million. Of this, Rs. 3,990 million was estimated for private sector proper and Rs. 1,710 million for public sector enterprises. Against this, the actual total expansion in private sector was Rs. 5,633 million. Credit to the private sector proper expanded

by Rs. 3,504 million while credit to public sector enterprises increased by Rs. 2,129 million. It is significant to note that the credit expansion in private sector this year is much below the previous year's level when the expansion was Rs. 7,143 million. Credit expansion in private sector proper was Rs. 5,443 million in 1976-77 while the credit expansion by public sector enterprises was Rs. 1,700 million.

5. The foreign sector was expansionary to the tune of Rs. 3,706 million as against the contraction of Rs. 2,180 million during the corresponding period last year. The expansion in foreign sector is mainly due to home remittances.

6. Component-wise break-down of monetary assets during the year 1977-78 shows that a large part of increase in monetary assets occurred in money supply *i.e.* currency in circulation and demand deposits. During the period under review, money supply went up by Rs. 7,182 million. However, proportionately the increase was larger in time deposits and quasi-money. Therefore, the increase in money supply was 19.5 per cent against 21.0 per cent in monetary assets.

7. Currency in circulation increased by Rs. 2,786 million while demand deposits expanded by Rs. 4,396 million as against Rs. 2,830 million and Rs. 4,858 million respectively during the corresponding period last year. Deposit money went up by Rs. 9,201 million or 76.8 per cent of the total increase in monetary assets as against 73.6 per cent during last year. Currency in circulation went up by Rs. 2,786 million and constitutes 23.2 per cent of the total increase in monetary assets against 26.4 per cent during the fiscal year 1976-77.

8. Component-wise break-up of increase in monetary assets during 1976-77 and 1977-78 is given in the table below :

TABLE II

Component-Wise Break-up of Changes in Monetary Assets

						(Million Rupees)	
						July, 77 to June, 78	July, 76 to June, 77
1. Currency in circulation	..	..	..	..	..	+2786	+2830
2. Demand Deposits	..	..	..	..	..	+4396	+4858
3. Time Deposits..	..	..	..	..	..	+5052	+2947
4. Other Deposits	..	..	..	..	..	- 247	+ 97
Total						+11987	+10732

Credit Control Measures

9. During fiscal year 1977-78, the State Bank of Pakistan introduced the following credit control measures with a view to containing credit expansion within reasonable limits, ensuring use of credit for productive purposes and discouraging hoarding and speculation.

10. Effective from 7th July, 1977, State Bank directed the banks not to charge interest at a rate higher than 8 per cent per annum (previously 10 per cent) on advances for exports against confirmed irrevocable letter of credit or firm export orders in respect of all commodities other than raw cotton, rice, wool, hide and skins and leather wet blue*. Accordingly, the rate of interest on refinance from the State Bank under the State Bank's Refinance Scheme for exports was reduced from 7 per cent to 5 per cent with effect from 7th July, 1977.

11. In order to provide further incentive to exporters, it was decided to reduce the rate of interest on export finance from 8 per cent to 6 per cent per annum with effect from 30th March, 1978. Consequently, banks have been advised to charge interest on export finance falling within the scope of Export Finance Scheme at 6 per cent per annum. The State Bank will provide refinance facilities to the banks, if required, at 3 per cent.

*Interest rate on advances against cotton, rice, wool, hides, skins and leather wet blue's in the range of 11-14 per cent.

12. Also effective from 7th July, 1977, the State Bank directed the banks to reduce the maximum rate of interest from 9 per cent to 7 per cent on their advances against export sales of locally manufactured machinery. The rate of interest on refinance, provided by the State Bank under the scheme for financing locally manufactured machinery, was also reduced from 7 per cent to 5 per cent. As a corollary to the measures amended in March, 1978 the rate of interest on export finance for locally manufactured machinery was reduced from 7 per cent to 5 per cent, refinance being provided by the State Bank at 3 per cent.

13. Penal rates of interest have been provided for certain defaulters under schemes for financing of exports and for financing locally manufactured machinery. The following rates of penal interest will be levied effective from 30th March, 1978, wherever necessary under the Schemes :

A.—EXPORT FINANCE SCHEME

1. In case the borrower fails to effect shipment within due date : 6 per cent above the bank rate.
2. In case the bank fails to repay the refinance of State Bank within 3 days of payment by the exporter : 7 per cent above the bank rate.
3. If the bank verifies wrong entries in Form 'EE' which occasion excess refinance : 7 per cent above the bank rate.
4. In case of shortfall in performance by the exporter : 6 per cent above the Bank rate.
5. In cases where borrowings of the bank under part-II exceed the amount lent to exporters by the bank.

B. SCHEME FOR FINANCING LOCALLY MANUFACTURED MACHINERY

1. Misutilisation of concessional credit by exporters : 6 per cent above the Bank rate.
2. In case of misutilisation of funds by the bank : 7 per cent above the bank rate.

14. 50 per cent of the penal interest recovered from the exporter will be paid to the State Bank within three days of its recovery from the party and the balance will be retained by the bank concerned.

15. Certain changes were made in the margin requirements for opening letters of credit during the year. These included the following :

- (a) There would be no minimum requirements for opening of letters of credit against 'Industrial' or 'Export performance' Import licences for the Import of 'CAPROLACTUM' with effect from 21st July, 1977.
- (b) The minimum margin requirement for opening of letters for import of raw rubber for manufacture of tyres and tubes and raw jute was reduced from 25 per cent to 10 per cent with effect from 28th September, 1977.
- (c) Minimum margin requirements for opening of letters of credit for import of "Jute Bags" were reduced from 40 per cent to 25 per cent with effect from 25th January, 1978.
- (d) Minimum margin requirement was withdrawn for opening of letters of credit for import of "NEWSPRINT" by the NEWSPAPERS, from 26th March, 1978.
- (e) It was decided to withdraw the minimum margin requirement for opening of letters of credit for export of "Rock PHOSPHATE" and "KIESELGHUR" by the manufacturers of fertilizer with effect from 23rd April, 1978.

16. For financing local sales of locally manufactured machinery, the State Bank, effective from 7th July, 1977, directed the banks/institutions that the loans should be given at 2 per cent (as against 1 per cent earlier) below the rate at which foreign currency loans would have been given for the same machinery, the State Bank providing/refinance at 2 per cent per annum below the rate charged by the banks/institutions concerned.

17. In order to encourage industrial investment, it was decided on 5th September, 1977, that the rate of interest, which may be charged by the banks on loans and advances provided to finance fixed investment should not exceed 12-1/2 per cent per annum*.

18. The State Bank has instructed all banks that advances against wheat and wheat flour are now permissible only to flour mills. Relaxation allowed earlier to traders has been withdrawn with effect from 20th August, 1977. Advances to flour mills continued to be subject to a minimum margin of 30 per cent and the minimum period of advance in each case will be 6 months. The existing advances were to be regularised by 30th September, 1977.

19. Advances against paddy/rice (both coarse and superior variety) may also be allowed to rice husking mills. Such advances will be subject to margin requirement of 30 per cent and maximum period of advance in each case will be three months with effect from 22nd September, 1977.

20. Previously maximum advance against Raw Cotton to Textile Mills was restricted to the market value of stocks, equivalent to four months production requirements at any time. It has been decided to withdraw the above restriction with effect from 6th December, 1977.

The Credit Budget

21. The system of credit budgeting as introduced by the Government in 1972, was also followed for the year 1977-78. The National Credit Consultative Council was charged with the responsibility of preparation of credit targets each year in the light of priorities and targets in the Plan. The major objective of credit budgeting is to check undue expansion of bank credit to the private sector, while at the same time ensuring adequate flows of credit to the preferred sectors.

22. As already stated, the revised credit plan envisaged that out of the credit expansion of 5890 million for the private sector, Rs. 3990 million will be earmarked for private sector (proper) and Rs. 1900 million for public sector enterprises. In case of private sector (proper) credit expansion by commercial banks was estimated at Rs. 2690 million and the local currency loans by ADBP, IDBP and State Bank loan to co-operative and non-banking financial institutions at Rs. 500 million, 210 million and 590 million, respectively.

23. Available data for 1977-78 indicates that up to the end of June, 1978 loans by the commercial banks amounted to Rs. 2520 million. Local currency loans through ADBP, IDBP and State Bank Loans to Co-operative and Non-banking Financial Institutions were of the order of Rs. 70 million, 250 million and 670 million, respectively.

24. The credit targets set for preferred sectors and small loans are expected to exceed in almost all the cases. Details of the targets and actual disbursements upto May, 1978 are given the following table :

TABLE III

Mandatory Credit Targets for Commercial Banks and Actual Achievements

(Million Rs.)

	Credit Target for 1977-78	Actual for 1977-78
1. Small Loans :		
(a) For Agricultural Production (Gross disbursements)	+720	+440 (July, 77—March, 78)
(b) Small Business and Industry (net increase)	+850	+871 (July, 77—May, 78)
(c) Housing (net increases)	+110	+112 (July, 77—May, 78)
2. Loans for tractors, tubewells and land improvement etc, (net increase)	+160	+134 (July, 77—May, 78)

*The rate has been reduced in July, 1978 to 11 per cent.

25. Taking eleven-months period ending May, 1978, the annual credit target pertaining to small loans for housing was more than fulfilled. The achievement of credit target for small business and industry was also fulfilled. Figures of credit for agricultural production are available only up to end March, 1978, but it is also expected to achieve the target set for this sector. The targets of credit for purchase of tractors, tubewells and land improvement etc. are expected to be achieved.

26. Available information indicates that as against the credit allocation of Rs. 1900 million for various public sector enterprises, Rs. 2129 million were drawn by the various agencies up to the end of June, 1978.

PROJECTIONS OF MONETARY AND CREDIT EXPANSION, 1978-79

27. With the actual monetary expansion of Rs. 11987 million during 1977-78, the outstanding level of monetary assets reached Rs. 68855 million at the end of June, 1978. As decided by the National Credit Consultative Council. Rate of monetary expansion is planned to be brought down to around 13 per cent during 1978-79, compared to 21 per cent in 1977-78. This would involve an increase of Rs. 8803 million in monetary assets over the year and would permit credit expansion of Rs. 10303 million, on account of likely draw-down of foreign exchange reserves. The major part of the credit availability would be earmarked for working capital and investment requirements of private and public sector industrial and commercial enterprises, as also the credit requirements for the private sector in agriculture, housing and transport. The amount being earmarked for private sector is Rs. 5203 million. Public Sector enterprises are being allocated an amount of Rs. 2600 million. The balance amount is available for utilization by the Government for budgetary support and commodity operations (Rs. 3000 million).

28. As approved by the National Credit Consultative Council, gross credit* requirements for financing the fixed investment of the private and public sector enterprises and working capital requirements of agriculture and industries etc., are spelled out in the following paragraphs.

Agriculture

29. (i) *Long and Medium Term Finance.*—Total fixed investment in the agricultural sector has been placed at Rs. 1,920 million in the Annual Plan for 1978-79. Assuming that non-monetized investment would be about Rs. 200 million, the target for monetized investment can be taken at Rs. 1,720 million. If own savings are assumed to finance 40 per cent of total investment, the requirement for long and medium term loans works out to Rs. 950 million. After making an allowance of Rs. 15 million for taccavi loans and disbursement of long and medium term loans of Rs. 665 million by ADBP and of Rs. 40 million by Federal Bank for Co-operatives, the remaining amount of Rs. 230 million will have to be provided by commercial banks.

30. (ii) *Seasonal Finance.*—The estimate of agricultural credit requirements for financing seeds, fertilizer and pesticides, prepared on the basis of information supplied by the Provinces and using the methodology devised by a Special Committee of Experts constituted by Agricultural Credit Advisory Committee, has been placed at Rs. 1,760 million for 1978-79. These short-term credit requirements will be met partly by institutional and partly by non-institutional sources. In line with the recommendation of the Agricultural Credit Advisory Committee, the share of institutional sources in meeting the gross short-term credit requirements of the agricultural sector at 70 per cent of the total works out to Rs. 1350 million. Of the total institutional finance, Rs. 75 million would be provided by ADBP, Rs. 279 million by the Federal Bank for Co-operatives and Rs. 996 million by the commercial banks.

Manufacturing

31. The target for private fixed investment in the manufacturing sector has been set at Rs. 2,400 million, which is composed of sub-targets of Rs. 1,740 million for large-scale manufacturing and Rs. 660 million for small-scale manufacturing. Private fixed investment in large scale industries is expected to be financed partly through PAYE and repatriable and non-repatriable foreign investment (Rs. 120 million) and foreign (and foreign currency loans of PICIC and IDBP (Rs. 252 million and Rs. 110 million respectively). The need for local currency finance thus works out to Rs. 1,228 million:

*The sectoral targets for private fixed investment have been revised by the Planning Division. The revised allocations are: Agriculture Rs. 2205 million, Manufacturing Rs. 2185 million, Fuel and Minerals Rs. 50 million, Transport and Communications Rs. 1940 million, Housing Rs. 2310 million and Services and others Rs. 1560 million. The credit from banking system has been retained at the level approved by NCCC.

This is expected to be met to the extent of Rs. 350 million through sponsors equity, corporate savings and public subscription. The remaining financing requirements of large-scale industry for fixed investment amounting to Rs. 878 million will be met to the extent of Rs. 58 million through local currency loans by the non-bank financial institutions from their own resources and Rs. 820 million by loans from the banking system.

32. In the case of small-scale industry, resource availability under repatriable and non-repatriable foreign investment is estimated at Rs. 180 million and foreign currency loans by IDBP at Rs. 18 million, while investors' own savings have been placed at Rs. 220 million. The financing by People's Finance Corporation and Equity Participation Fund is estimated at Rs. 24 million and Rs. 13 million respectively. The need for local currency loans from the banking system for fixed investment thus works out to Rs. 205 million.

33. The working capital requirements of industries, estimated on the basis of increase in value added of 10.8 per cent in the case of large-scale industry and 10 per cent in the case of small-scale industry, converted at current factor cost after making an allowance of 5 per cent increase in prices of manufactures as against the actual increase of 8.7 per cent during 1977-78 work out to Rs. 940 million and Rs. 420 million respectively. In computing these estimates it has been assumed that the increase in the needs for working capital is equivalent to roughly 1/3 and 1/2 of the increase in value added in large-scale and small-scale industries respectively. The estimate of Rs. 940 million for increase in working capital requirements of large-scale industry pertains to total private sector and public sector enterprises. The credit requirements of large-scale industries in the private sector for working capital have been estimated at about 60 per cent of the total or Rs. 560 million.

34. The target for private investment in housing sector has been set at Rs. 2,200 million during 1978-79. It is assumed that actual investment in housing would be almost three times the amount loaned by the financial institutions. This assumption is based on the observation that where loans are availed of, owners' contribution is around fifty per cent of the total construction cost. In addition, houses are also constructed without recourse to borrowings from the financial institutions. On this basis, the need for institutional credit for house construction works out to Rs. 733 million. Loans by the Federal and Provincial governments to their employees for housing have been estimated at Rs. 50 million. HBFC has requested for Rs. 920 million as assistance from the State Bank during 1978-79. Last year HBFC had requested for Rs. 535 million against which they were sanctioned an amount of Rs. 400 million. They drew the full amount from the State Bank but their lendings amounted to only Rs. 330 million against the lending target of Rs. 600 million. Keeping in view the overall investment requirements for housing in the country and HBFC's performance in the preceding year, it is proposed that State Bank's assistance to them during 1978-79 may be placed at Rs. 450 million. This, together with ADP allocation of Rs. 80 million would enable them to provide Rs. 530 million for housing during the year. The remaining amount of Rs. 200 million will need to be provided by the commercial banks.

35. It is estimated that gross credit disbursements for construction other than housing would amount to Rs. 140 million.

Transport

36. Private fixed investment in the Transport and Communications sector has been placed at Rs. 1970 million in the Annual Plan for 1978-79. Available data for previous years indicate that in financing fixed investment in the transport and communications sector the private sector had not taken substantial recourse to bank finance. A provision of Rs. 200 million may be made for small loans from the banking system to finance private investment in transport.

Commerce

37. Net increase in bank credit to commerce sector during 1978-79 has been placed at the preceding year's revised estimate of Rs. 400 million. According to its own estimates, the outstanding level of Cotton Export Corporation's borrowings from banks for holding stocks of cotton would amount to about Rs. 927 million at the end of June, 1979, compared to Rs. 1087 million in June, 1978, indicating a net retirement of Rs. 160 million over the year. The increase of Rs. 560 million in credit to the commerce sector, excluding C.E.C. should be adequate to meet its requirements.

Fuel, Mining and Quarrying

38. The target for fixed investment in fuel, mining and quarrying in the private sector has been set at Rs. 60 million for 1978-79. It is evident from the past data that demand for credit in the private sector for the purpose has not been large. Moreover, SLIC intends to provide Rs. 5 million and NIT Rs. 58 million for this purpose during the year, which is more than adequate. Hence there would be no need for credit from the banking system.

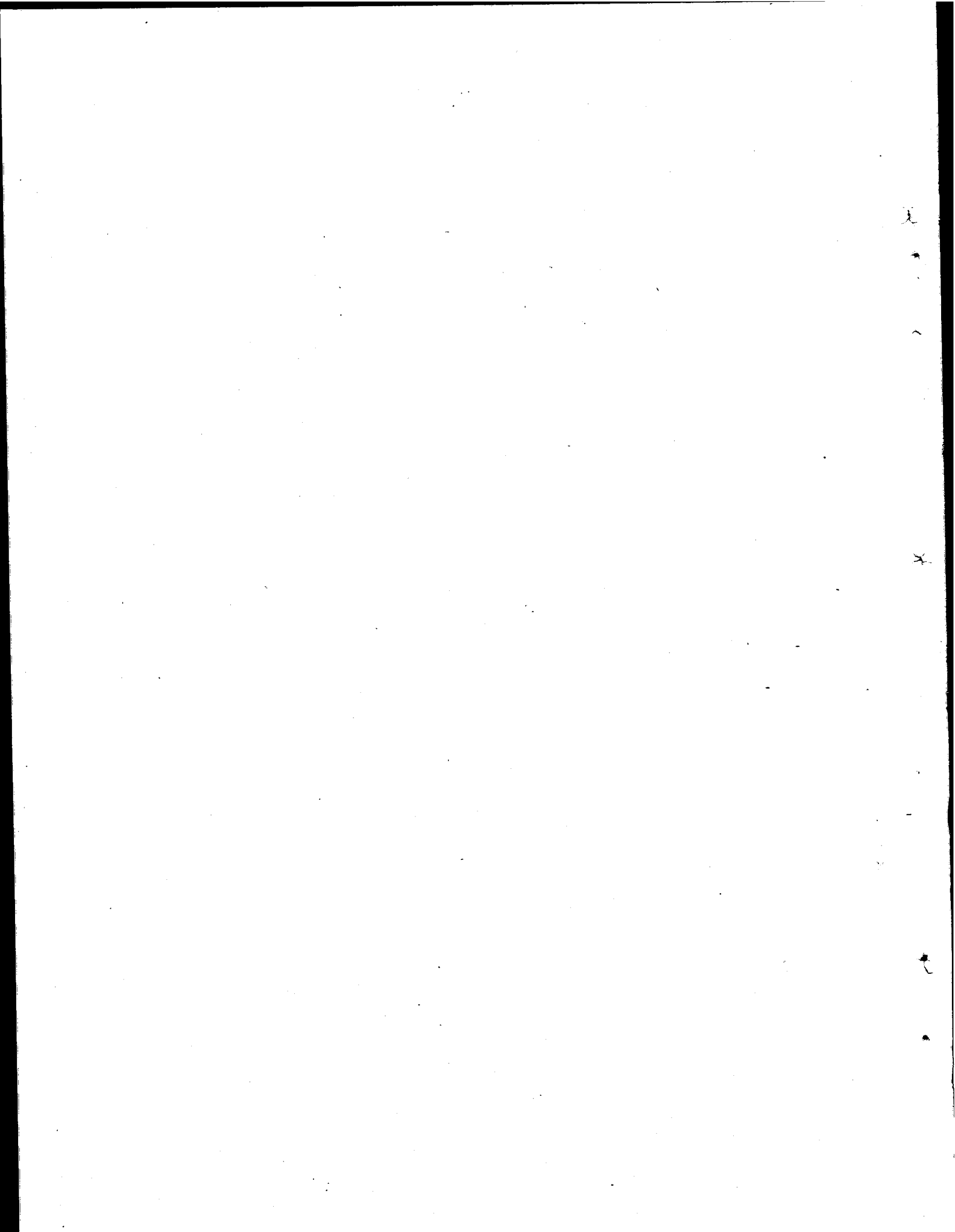
Services and Others

39. The target for private fixed investment in services and other sectors has been set at Rs. 1250 million in 1978-79. The financing requirements of these sectors have been placed at Rs. 650 million. SLIC is expected to finance investment in these sectors to the extent of Rs. 55 million and NIT in an amount of about Rs. 20 million. The remaining amount of Rs. 575 million will be provided by the banking system.

Public Sector Enterprises

40. A provision of Rs. 1900 million of credit was made in the Annual Plan for 1977-78 to finance the public corporations, programme being kept outside the ADP. Final information on actual utilization of credit by various enterprises is not yet available. However, on the basis of latest information, it appears that these allocations are likely to be utilized by most of the enterprises.

41. For 1978-79, the investment outlays of the public sector corporations being kept outside the A.D.P. allocation are estimated at around Rs. 3500 million. The gross credit requirements to finance this programme are currently estimated at Rs. 2600 million. Of this, Rs. 200 million are likely to be provided by NDFC and the balance of Rs. 2400 million will have to be provided by the commercial banks.



CHAPTER 7

BALANCE OF PAYMENTS

The current account deficit in the Balance of Payments showed a marked improvement in 1977-78 over the levels obtaining in recent years. The deficit which had crossed the billion dollar mark in 1974-75 and had covered around a level of \$ 1.1 billion since then, fell to \$ 653 million in 1977-78. The improvement was even stronger when compared with the target of \$ 1234 million for the year. Earnings from merchandize exports rose by 15 per cent while payments for merchandize imports increased by 14 per cent. Nevertheless, the trade deficit went up by \$ 178 million during the year. The dominant cause of the improvement was a doubling in an increase of \$ 590 million, in home remittances. Although inflows of aid and credits were below the level of last year, the foreign exchange reserves rose by over \$ 300 million.

2. The balance of payments strategy for 1978-79 will be to consolidate and improve upon the gains obtained on the exports side and allow liberal imports to increase the supply of raw materials and improve capacity utilization in industry. The simultaneous additional requirement of wheat imports and the anticipated increase in machinery imports will lead to a sharp increase in merchandize imports. Invisible surplus is expected to decline following an increase in freight, interest payments and technical assistance. The projections provide for a moderate increase in home remittances. Although merchandize exports will increase by about 19 per cent compared with 15 per cent in 1977-78, a 2½ per cent increase in merchandize imports will widen the trade gap by about \$ 412 million and the current account deficit by about \$ 512 million.

Review of 1977-78

3. The Annual Plan for 1977-78 had projected a deficit of \$ 1393 million in trade account and \$ 1234 million in the current account. The current account deficit together with the capital account payments of \$ 300 million added upto foreign inflow requirement of \$ 1534 million. The provisional estimates depict a deficit of \$ 1464 million in trade account and \$ 658 million in current account. A shortfall of \$ 198 million is estimated in exports while the payment for imports is estimated to be lower by \$ 127 million; as a result, the trade deficit is \$ 71 million higher than the target. Lower deficit in the current account is due to home remittances which are \$ 501 million higher than the projected level.

Exports

4. The Annual Plan for 1977-78 projected an increase of about 30 per cent in merchandize exports. The target was based on production of 3.5 million bales of cotton, a recovery in the export of cotton yarn, increases in exports of cloth, a larger surplus of certain POL products and continuance of export trends in other items. Exports earnings from rice were expected to decline as the exceptionally large volume of exports attained in 1976-77, especially of the highpriced basmati variety, could not be maintained. The increase in merchandize exports on statistical Division basis during the year was about 15 per cent, indicating a shortfall of \$ 169 million. The shortfall of \$ 134 million in cotton group, \$ 23 million in POL and 47 million in all other items was compensated by an increase of \$ 35 million in earnings from exports of rice. Recovery in world prices enabled the target of earnings from rice exports to be exceeded. Excluding rice, export earnings were \$ 204 million below target of which shortfalls in earnings from cotton and cotton-based exports accounted for 66 per cent, and yarn alone for 46 per cent.

5. The export earnings during 1977-78 compared with 1976-77 and the Annual Plan targets are shown in table below :

TABLE 1
Merchandize Exports

						(\$ Million)		
						1976-77	1977-78	1977-78
						(Actuals)	(Targets)	(Provisional Estimates)
Cotton	..	..	..	..	..	29	135	110
Yarn	..	..	..	..	..	118	200	107
Cloth	..	..	..	..	..	162	192	176
Rice	..	..	..	..	..	226	208	243
(Basmati)	..	..	..	..	..	(139)	(88)	(109)
(Coarse)	..	..	..	..	..	(87)	(120)	(134)
Others	..	..	..	..	..	606	745	675
Total						1141	1480	1311

Source : Statistical Division

6. The Annual Plan for 1977-78 projected cotton output at 3.5 million bales and the exportable surplus at 225 million lbs. Although the volume of raw cotton export almost reached the projected level, the earnings fell short of the target by \$ 23 million due to decline in prices. The earnings from cotton yarn below the Annual Plan target is mainly due to shortfall in volume by about 48 per cent. On the other hand, the volume of cotton cloth export was higher by 24 million sq. yds. while the earning was \$ 25 million below the Annual Plan target due to decline in prices.

7. The earnings from export of rice was projected at \$ 208 million and the volume at 850,000 tons—250,000 tons of basmati and 600,000 tons of other varieties. The volume is estimated to be about 3 per cent below the projected level while the earnings exceeded the Plan target by \$ 35 million due to increase in prices of all varieties. The average export price of basmati and other varieties was higher by about 15 per cent during 1977-78, compared with the prices in 1976-77.

8. Miscellaneous exports which include POL, carpets and rugs, leather and fish are estimated to increase by about 11 per cent during 1977-78 over 1976-77. Although the estimated earning is higher by about \$ 69 million over 1976-77, the earning will be short of the Plan target by \$ 70 million. Delay in the commissioning of the national refinery expansion project resulted in lesser than anticipated POL exports. For a variety of reasons, exports of some traditional commodities and products such as fish and leather fell short of expectations. Carpet exports, on the other hand, continued to expand and crossed the \$ 100 million level, becoming the third largest export earner after rice and cloth.

9. The quantities and prices of the major exports during 1976-77 and 1977-78 are given in the table below :

TABLE II

Quantities and Prices of Major Exports : 1976-77 and 1977-78

	Quantities		Prices	
	1976-77	1977-78	1976-77	1977-78
Cotton (Million lbs)	31	205	.95	.54
Yarn (")	147	132	.81	.81
Cloth (Million sq. yds.)	500	542	.33	.32
Rice (000 tons)	883	823	256	295
(Basmati) (")	(402)	(242)	(345)	(450)
(Coarse) (")	(481)	(581)	(180)	(230)

Source : Statistical Division

Merchandise Imports

10 Merchandise imports (c & f) for 1977-78 were projected to increase by about 19 per cent. The projected increase of \$ 500 million mainly related to fertilizer, POL and project aid imports. The estimated imports (c & f) for 1977-78 are about 14 per cent higher than the 1976-77 level and lower than the Plan targets by \$ 104 million. Higher payments of \$ 275 million were made for wheat, POL, pesticides and private sector imports against a shortfall of \$ 379 million in fertilizers, project aid and other imports.

11. Domestic procurement of wheat fell short of targets necessitating larger imports. Similarly, a shortfall in the cotton crop led to higher import requirements of edible oil which was further aggravated by an increase in world prices. Finally, revival of industrial output and a liberal import policy led to large industrial raw material imports. The substantial shortfall of \$ 250 million in project aid imports were due to delays in shipment. Fertilizer imports were also affected by delayed arrivals.

12. The actual imports for 1976-77, Annual Plan targets for 1977-78 and estimated imports in 1977-78 are given in table below :

TABLE III
Merchandise Imports

	(\$ Million)		
	1976-77 (Actuals)	1977-78 (Targets)	1977-78 Provisional (Estimates)
Wheat	97	71	135
Edible Oil	147	150	148
Fertilizers	34	160	104
Pesticides	31	23	26
POL	412	488	497
TCP Imports	45	83	63
BIM Imports	126	137	88
Imports financed by Project Assistance/Foreign Equity ..	400	749	457
Others	1305	1278	1477
Total Imports (c & f)	2647	3139	3035
Less : Freight and Insurance	229	266	289
F.O.B. Imports	2418	2873	2746

Invisible Transactions

13. A surplus of 159 million was projected on current account invisible transactions during 1977-78 compared with a surplus of \$ 235 million in 1976-77. The revised estimates for 1977-78 show a surplus of \$ 806 million, thus indicating an improvement of \$ 647 million over the target. The improvement reflects higher receipt of \$ 562 million and lower payments of \$ 85 million. On receipt side, home remittances accounted for an excess of \$ 501 million over targets or about 89 per cent of the total. On the payments side, a shortfall of \$ 65 million or about 76 per cent is accounted for by the technical assistance related to slower project aid disbursement and \$ 20 million by other items. Current invisible receipts and payments for the year 1976-77, targets for 1977-78 and estimates for 1977-78 are given in table below :

TABLE IV
Current Invisibles

	(\$ Million)		
	1976-77 (Actuals)	1977-78 (Targets)	1977-78 (Estimates)
RECEIPTS	896	1022	1584
Non-Factor Services	272	319	369
Transportation	128	155	133
Others	144	164	236
Factor Services	624	703	1215
Home Remittances	591	668	1181
Others	33	35	34
PAYMENTS	661	863	778
Non-Factor Services	459	627	559
Freight and Insurance	229	266	289
Others	230	361	270
Factor Services	202	236	219

External Assistance and Other Flows

14. The current account deficit of \$ 658 million together with the payments of \$ 284 million on capital account add upto a total deficit of \$ 942 million in the balance of payments for 1977-78 compared with \$ 1290 million in 1976-77. The aid disbursements in 1977-78 is estimated at \$ 856 million. The disbursements from Consortium and other traditional sources are estimated at \$ 671 million while assistance from OPEC members and IMF Trust Fund is estimated at \$ 185 million. The details for 1977-78 and comparative figures for the preceding year are given in table below:

TABLE V
Disbursements of External Assistance ¹ (1976-77 and 1977-78)

	1976-77	1977-78	%Change
	(\$ Million)		
Consortium	683	565	-17.3
(i) Project	351	327	-6.8
(ii) Non-Project	220	144	-34.5
(iii) Food	112	94	-16.1
Non-Consortium	50	106	112.0
(i) Project	47	101	114.9
(ii) Non-Project	3	5	66.7
Islamic Countries	228	137	-39.9
(i) Project	51	88	72.5
(ii) Non-Project	177	49	-72.3
Others (IMF Trust Fund)	—	48	—
Total	961	856	-11.0

¹Excludes loans/credits of upto one year maturity.

Source : Economic Affairs Division.

15. The burst in home remittances enabled the balance of payments deficit to be covered by the reduced aid flows. However, the final level of remittances could not be anticipated even midway through the year. Besides, Pakistan had drawn down the reserves by approximately \$ 200 million in the previous year and there was a need to replenish them. As such, short-term credits and deposits were negotiated during the year and a postponement of the repayment of debt to Iran was arranged. In addition, net IMF flows were contracted. Together with aid inflows and the home remittances, these capital flows enabled a build-up of reserves of over \$ 300 million during 1977-78.

PROJECTIONS FOR 1978-79

16. The balance of payments for 1978-79 is anticipated to deteriorate despite a 19 per cent increase in export earnings. Merchandise imports are projected to increase by 24 per cent leading to a substantial increase in the trade deficit. Most of the increase, about 65 per cent, pertains to heavier requirements of wheat and larger imports of capital goods. It is expected that much of these additional requirements will be financed from aid and credits. Another departure from recent trends relates to home remittances, the value of which is expected to increase by 4 per cent. The current account deficit in the balance of payments is forecast to increase to \$ 1170 million and the larger repayment of foreign loans and credits would raise the aggregate inflow requirement to \$ 1.6 billion.

Merchandise Exports

17. Merchandise exports are projected to increase from \$ 1311 million in 1977-78 to \$ 1560 million in 1978-79. About 61 per cent of the increase is expected from raw cotton, yarn and cloth ; 20 per cent from rice ; and about 19 per cent from all other items. If cotton group is excluded, the increase in exports earning will be around 11 per cent.

18. The estimates for merchandize exports for 1977-78 and projections for 1978-79 with percentage changes are given in the table below :

TABLE VI
Merchandize Exports

						(\$ Million)		
						1977-78	1978-79	%
						Provisional	(Projections)	Change
						Estimates		
Cotton	..	..	..	..	..	110	205	85
Yarn	..	..	..	..	..	107	160	50
Cloth	..	..	..	..	..	176	180	2
Rice	..	..	..	..	..	243	292	20
(Basmati)	..	..	..	..	..	(109)	(105)	(-4)
(Coarse)	..	..	..	..	..	(134)	(187)	(40)
Others	..	..	..	..	..	675	723	7
Total						1311	1560	19

19. During 1978-79 cotton crop is estimated at 3.6 million bales, of which about 360 million lbs. will be available for exports. At a price of 57 cents per lb. earnings from exports of 360 million lbs. during 1978-79 has been projected at 205 million.

20. The chief shortcoming in the 1977-78 export performance was poor export of yarn much of which was due to cotton shortage in the first quarter of the fiscal year. After October, export contracts recovered and actual exports also picked up with a lag. The target for yarn reflect performance in the latter part of the year. Export earnings from cotton yarn are projected to increase by 50 per cent from \$ 107 million in 1977-78 to \$ 160 million in 1978-79. Although the price has been assumed at a slightly lower level than 1977-78, the quantity has been projected to increase by 70 million lbs. The earning from export of 200 million lbs of cotton yarn at 80 cents per lb during 1978-79, is therefore, projected at \$ 160 million.

21. Exports of cotton cloth increased by about 8 per cent from 500 mill sq. yards in 1976-77 to 542 million sq. yds in 1977-78. During 1978-79 export of cotton cloth has been projected at 600 million sq. yds and the earnings at \$ 180 million. Although the price is anticipated to be lower than the level in 1977-78 by about 6 per cent, the increase in quantity of about 11 per cent assumed for 1978-79 will raise the earnings from this item by about 2 per cent to \$ 180 million. The projections are based upon the large backlog of unshipped contracts at the end of fiscal year 1977-78.

22. Earnings from the export of rice are projected at \$ 292 million in 1978-79 against \$ 243 million in 1977-78. Although the quantity of exports is projected to increase by about 3 per cent, the earning has been projected to increase by about 20 per cent due to increase in prices of both basmati and coarse rice which took place during 1977-78 but were not realized on shipments of earlier contracts. The average price of basmati and coarse rice is estimated to be higher by about 17 per cent during 1978-79. The projected prices, it may be noted, are significantly below the current world price and assume an improved world supply. At the assumed prices, the export earnings would be even higher but for the change in composition of varieties. The export of basmati rice is projected to decline by about 22 per cent while the export of coarse rice is projected to increase by about 14 per cent.

23. All other items which include POL products, fish and fish preparations leather, carpets and rugs, sports goods, tobacco, tents and canvas are projected to increase by about 7 per cent compared with an increase of about 11 per cent during 1977-78. The export earnings from all these items are projected at \$ 723 million in 1978-79 compared with \$ 675 million in 1977-78.

24. The quantities and prices of major exports during 1977-78 and projections for 1978-79 are given in the table below :—

TABLE VII
Quantities and Prices of Major Exports 1977-78 and 1978-79

	Quantities		Price (\$)	
	1977-78	1978-79	1977-78	1978-79
Cotton (Million lbs)	205	360	.54	.57
Yarn (Million lbs)	132	200	.81	.80
Cloth (Million sq. yds)	542	600	.32	.30
Rice (000 tons)	823	850	295	344
(Basmati) (000 tons)	(242)	(190)	(450)	(550)
(Coarse) (000 tons)	(581)	(660)	(230)	(280)

Merchandise Imports

25. The projections for 1978-79 provide for an increase of about 24 per cent in merchandise import payments. Imports (*f.o.b.*) will increase from \$ 2746 million in 1977-78 to \$ 3407 million in 1978-79. About 72 per cent of the increase is due to larger payments for fertilizer, wheat, tractors, transport equipment and project aid imports while the remaining 28 per cent is due to larger payments for industrial raw material imported by the private sector and imports of non-aid financed capital goods by both the public and private sectors. The projections of merchandise imports for 1978-79 compared with the estimates for 1977-78 are given in the table below :—

TABLE VIII
Merchandise Imports

	(\$ Million)	
	1977-78 Provisional Estimate	1978-79 (Projections)
Wheat	135	311
Edible Oil	148	190
Fertilizers	104	160
Pesticides	26	48
POL	497	508
TCP Imports	63	85
BIM Imports (tractors and road vehicles)	88	170
Imports financed by Project Assistance/Foreign Equity	497	690
Others	1477	1561
Total Imports (c & f)	3035	3723
Less : Freight and Insurance	289	316
F.O.B. Imports	2746	3407

26. Given the shortfall in wheat output during 1977-78, import of wheat will have to increase to maintain adequate availabilities. It is expected that two million tons of wheat will be required to be imported. Furthermore, the price of wheat has increased which will add to the import bill. Thus, the payment for wheat alone will claim about 26 per cent of total increase in the import bill.

27. The requirement of edible oil will continue to increase till a breakthrough is attained in the domestic production of oilseeds. Import of 324,000 tons in 1978-79 has been projected to provide an increase of about 6.5 per cent in the *per capita* availability of edible oils including vegetable ghee.

28. The payment for fertilizers import is projected to increase by \$ 56 million. The volume of imports during the year will be substantially higher than in 1977-78 in order to meet the expected increase in fertilizer use. The fertilizer factory at Multan will commence production during 1978-79. The full capacity output will not be attained until the following year. Roughly a significant proportion of the import requirement during 1978-79 will be met through credits that have already been contracted. On the other hand, approximately 40 million of the fertilizers credits disbursed in 1977-78 will have to be repaid in 1978-79. It is assumed that the credits disbursed in the current fiscal year which will have to be repaid in 1979-80 will offset the payments to be made for imports of previous year.

29. An increase of 93 per cent in the imports through BIM has been provided for tractors and road vehicles. The increase is projected mainly in trucks, buses and engines for trucks and buses, from around \$ 10 million in 1977-78 to about \$ 59 million in 1978-79.

30. Finally, the anticipated increase in the disbursement of project aid by about \$ 234 million will raise the imports of capital goods through project aid and foreign equity by about \$ 193 million in 1978-79.

Invisible Transactions

31. The sharp increase in invisible receipts during 1977-78 are not expected to continue in 1978-79. The performance in 1977-78 was dominated by a doubling of home remittances. The inflows of the previous fiscal year suggests, however, that the tempo of increase has slackened and that remittances have plateaued at a level slightly above \$ 100 million per month. The projections assume that the average levels of recent months will be maintained during 1978-79.

32. In the aggregate, invisible receipts are expected to increase by 4.5 per cent only. On the other hand, invisible payments are projected to increase by 27 per cent. The increase is due to higher payments on account of freight and insurance which is linked with imports and technical assistance which is linked with project aid. The factor services payments will increase by about 29 per cent of which the interest payments will account for about 95 per cent.

33. The invisible transactions projected for 1978-79 compared with the estimates for 1977-78 are given in the table below:

TABLE IX
Current Invisibles

	(\$ Million)	
	1977-78 Provisional (Estimates)	1978-79 (Projections)
RECEIPTS	1584	1656
Non-Factor Services	369	386
Transportation	133	160
Others	236	226
Factor Services	1215	1270
Home Remittances	1181	1231
Others	34	39
PAYMENTS	778	979
Non-Factor Services	559	695
Freight and Insurance	289	319
Others	278	378
Factor Services	219	284

External Assistance

34. The current account deficit of \$ 1170 million together with the payments of \$ 452 million on capital account places the gross inflow requirements at \$ 1622 million in 1978-79 compared with \$ 942 million in 1977-78. The aid disbursements visualised at this stage is \$ 1107 million. The project assistance is expected to be \$ 750 million against \$ 516 million in 1977-78, indicating an increase of 45.3 per cent, and non-project assistance including food aid will be \$ 357 million. Foreign equity and private investment is anticipated at \$ 52 million. Thus, the total foreign resources inflow is expected to be around \$ 1159 million against the total requirements of \$ 1622 million. The gap of \$ 463 million will have to be financed by commercial borrowings, draw-down of reserves, or arranging additional net aid flows.

35. The projected disbursements of external assistance are shown in the table below :—

TABLE X
Estimates of Disbursements of External Assistance¹
(1978-79) (\$ Million)

	Consortium	Non- Consortium	Islamic Countries	Total
Project Aid	567	141	42	750
Non-Project Assistance	179	—	36	290 ²
Food Aid	67	—	—	67
Total ..	813	141	78	1107²

¹ Excludes loans/credits of upto one year maturity.

² Total includes \$ 75 million from IMF Trust Fund.

Balance of Payments

36. The balance of payments estimates for 1976-77, targets and provisional estimates for 1977-78 and projections for 1978-79 are given in the table below :

TABLE XI
Summary Balance of Payments (\$ Million)

	1976-77 (Actuals)	1977-78 (Targets)	1977-78 Provisional (Estimates)	1978-79 (Projection)
Merchandise Trade	-1286	-1393	-1464	-1847
Exports (f.o.b)	1132	1480	1311	1560
Imports (f.o.b)	2418	2873	2746	3407
Current Invisibles	+ 235	+ 159	+ 806	+ 677
Receipts	896	1022	1584	1656
Payments	661	863	778	979
Current Account Deficit/Capital Account ..	1051	1234	658	1170
Repayments	-239	-300	-284	-452
Aid	+ 961	+ 1060	+ 856	+ 1107
Short-term Credits	—	—	+ 121	—
Equity/Foreign Private Investments ..	+ 55	+ 24	+ 26	+ 52
Deposits/Defeatment of Iranian Loan ..	—	—	+ 156	—
IMF and Others (including errors and omissions)	+ 90	+ 450	+ 100	+ 463
Changes in Reserves	+ 184	—	-326	—

Source : State Bank.

CONSUMPTION, NUTRITION PLAN AND BASIC NEEDS

I. CONSUMPTION PLAN

REVIEW OF 1977-78

According to official production figures published by the Ministry of Agriculture, the production of wheat was 9.14 million metric tons in 1976-77 which determined foodgrain availability during 1977-78. This production figure suggests an increase of 4.8% in total foodgrain availability (*per capita*). Major increases were recorded in the *per capita* availability of wheat (5.8%) and maize (4.4%). The rise in foodgrain prices in the open market during the closing months of the food year, however, indicates that the wheat crop was in all likelihood smaller (probably closer to 8.84 million metric tons representing no increase over the preceding year's level). This would suggest an increase of 2.5% in *per capita* foodgrain availability.

2. The overall availability of *essential items* increased by 5.4% on a *per capita* basis in 1977-78. This includes the improvement in *per capita* availability of refined sugar and pulses by 1.9% and 2.4% respectively. A major increase was also recorded in the availability of vegetable ghee and edible oils which rose by 8%. Other marked increases in *per capita* availabilities were tea, up by 17% in spite of a substantial price increase, and cloth which rose by 12% in consequence of the higher production of cotton and its manufactures. In the case of both tea and vegetable ghee income elasticity of demand has been quite high. The increase in ghee production, though substantial was not adequate to avoid emergence of shortages.

3. Production figures for major items of consumption during 1976-77 and 1977-78 are given in Table I below :

TABLE I
Production of Major Consumption Items

(000 M. Tons)

Items	1976-77	1977-78	% change
Wheat*	8,691	9,143	5.20
Rice	2,738	2,950	7.74
Pulses (Gram)*	601	649	8.00
Sugarcane	29,522	30,081	1.88
Sugar (Refined)	736	850	15.49
Vanaspati Ghee	324	376	16.05
Cotton Seeds	870	1,150	32.18
Cotton Cloth (Mln. sq. meters)	1,400	1,465	4.64

*In preceding year.

4. Prices of essential consumer goods (wheat/atta, sugar and vegetable ghee), were maintained under strict control. No change was made in the ration price of the wheat and Atta, though there was an increase of 3.7% in open market prices of wheat in June, 1978 compared to June 1977. Sugar prices remained unchanged for sale under rationing arrangements which met the entire requirements of ration areas. Open market prices of raw sugar actually declined. Vegetable ghee prices remained unchanged during the year. The increase in the price of this item announced at the time of the Budget for 1978-79 was withdrawn in August 1978.

5. The consumer price index for food rose by 7.07% in 1977-78 against 10.38% recorded in 1976-77. Similarly the sensitive price indicator of 28 essential commodities showed an increase of only 3.5% against 10.8% in 1976-77. A comparative statement showing retail (open market), prices in 1976-77 and 1977-78 is given in Table II.

5.1 Prices of onions and potatoes declined by 11% and 6%, respectively. The retail price of some other items however, remained under pressure. The sharpest increase in price was recorded in the case of tea (up by 58%), due to the enhancement of import duties and the continuing expansion of demand.

TABLE II
Average Retail Prices of Basic Articles of Consumption

S. No.	Commodities	Unit	1976-77 (Price Rs.)	1977-78 (Price Rs.)	% change in 1977-78 over 1976-77
1.	Wheat	KG.	1.26	1.41	11.90
2.	Rice Basmati (Broken)	"	2.51	2.82	12.40
3.	Pulses (Gram)	"	2.04	3.10	52.00
4.	Sugar Refined	"	4.30	4.30	—
5.	Sugar Raw	"	2.74	2.50	(—)8.80
6.	Vegetable Ghee including Edible oil (open Market)	"	8.63	9.66	11.90
7.	Meat :				
	(i) Beef	"	6.77	6.81	0.60
	(ii) Mutton	"	14.01	15.03	7.28
	(iii) Poultry	"	18.17	20.93	15.19
8.	Vegetables :				
	(i) Onions	"	2.14	1.91	(—)10.75
	(ii) Potato (white)	"	2.11	1.98	(—)6.16
9.	Tea	250 gms.	5.50	8.70	58.20
10.	Milk	Litre	2.95	3.11	5.40
11.	Cloth	Meter	5.76	6.14	6.60

CONSUMPTION PLAN, 1978-79

6. The Annual Consumption Plan for 1978-79 is seeking primarily to meet the serious food situation created by a sharp decline in wheat production during 1977-78. With substantial imports of 2 million tons or possibly more, *per capita* availability of foodgrains is being sought to be protected at the previous year's level. Some increase in *per capita* availability is planned to guard against the possibility that the actual production may be even lower than the present estimates.

7. Government had to import 0.82 million tons of wheat during 1977-78. In spite of these imports, the wheat situation remained tight during the previous year and good quality wheat occasionally disappeared from the open market. Stocks of wheat were slightly increased from 4.57 lakh tons on 1st May, 1977 to 4.64 lakh tons on 1st May, 1978.

8. Government procurement fell by 21% from 2.38 million tons in 1976-77 to 1.87 million tons in 1977-78. In 1978-79, procurement will further decline to about 1.1 million tons, so that there will be a substantial increase in open market operations. On the other hand, Government off-take, which was 2.81 million tons in 1976-77 increased to 2.96 million tons in 1977-78. It is projected that the off-take will be increased to 3.2 million tons in 1978-79.

9. The allowances of rationed wheat/atta were not uniform in the four provinces of the country. The following rates of monthly allowance of wheat/atta were enforced in urban/rural areas in the Provinces before 1st December, 1976.

TABLE III
Rates of Monthly Allowance of Wheat/Atta.

Name of Provinces	Ration per head per month in Kilogram	
	Urban	Rural
Punjab	3.75—7.50	No quota fixed. <i>Ad-hoc</i> arrangements.
Sind	4.67—6.50	1.87—4.67
N.W.F.P.	3.30—7.50	0.93—3.75
Baluchistan	4.67—6.50	No quota fixed. <i>Ad-hoc</i> arrangements.

TABLE IV
Annual Consumption Plan and Basic needs 1978-79
Changes in Per Capita Availabilities

Sl. No.	Commodities Units	PCA* (1976-77)	PCA (1977-78)	PCA (1978-79)	%change in 1977-78 over 1976-77	%change in 1978-79 over 1977-78
1.	Wheat kgs/annum	113.03	119.59	121.00	5.80	1.18
2.	Rice kgs/annum	25.81	26.36	26.74	2.13	1.44
3.	Pulses kgs/annum	8.02	8.21	7.73	2.37	(-)5.85
4.	Sugar (Refined) kgs/annum	9.74	9.92	10.60	1.85	6.85
5.	Sugar (Raw) kgs/annum	22.16	21.95	21.28	(-)0.95	(-)3.05
6.	Vegetable Ghee (including Edible Oil) kgs/annum	5.54	5.70	6.37	2.89	11.75
7.	Milk kgs/annum	55.47	56.33	57.55	1.55	2.17
8.	Meat kgs/annum	9.19	9.38	9.83	2.07	4.80
9.	Vegetables kgs/annum	26.54	28.16	30.45	6.10	8.13
10.	Tea kgs/annum	0.70	0.82	0.86	17.14	4.88
11.	Cloth (syn + Cotton) Sqms/annum	12.83	14.33	14.95	11.09	4.33
Annual Weighted Growth Rate				..	5.38	3.07

*Per Capita Availability.

10. In order to meet demand, a uniform scale of 7.0 kgs per head per month was fixed for all urban areas w.e.f. 1st December, 1976; children below 12 years are allowed half of this quantity.

11. There was a marked increase of 7.7% in the production of rice in 1977-78 over 1976-77. Adjusted for government procurements, exports and changes in stocks, per capita availability of rice increased by 2.1% in 1977-78. Export of rice, however, declined by about 8%, from 8.83 lakh tons in 1976-77 to 8.10 lakh tons in 1977-78, mainly because the carry-over stocks of basmati on 1-7-1977 were 1.07 lakh tons only, against 3.55 lakh tons available on 1-7-1976. During 1978-79 per capita availability of rice has been projected to increase by 1%; exports will rise by about 5%.

Pulses

12. The *per capita* availability of pulses rose from 8.02 kgs in 1976-77 to 8.21 kgs in 1977-78, showing an improvement of 2.4%. During 1978-79 the *per capita* availability will, however, decline by 5.8%; mainly because the estimated production of gram in 1977-78 (available for consumption for 1978-79) decreased by 4.5%. The shortfall is attributed to adverse climatic conditions. The prices of pulses increased by 52 per cent in 1977-78. This was related to increase in support price.

Sugar

13. There was a record sugar production in 1977-78 totalling 8.50 lakh metric tons. Thus, *per capita* availability of sugar increased from 9.74 kgs in 1976-77 to 9.92 kgs in 1977-78; simultaneously it allowed for building up of sugar reserves which increased from 50,000 metric tons to 1,50,000 metric tons in 1977-78. Sugar continues to be sold through the ration depots and *per capita* quota remained unchanged. Some increase in effective quota is being provided through additional supplies for festivals and other special occasions. During 1978-79 *per capita* availability of sugar is projected to increase by 6.9% over the previous year.

14. On the other hand, *per capita* consumption of raw sugar declined by 1.0% during 1977-78 from 22.16 kgs in 1976-77 to 21.95 kgs in 1977-78. The decline in the availability of raw sugar will continue in 1978-79 by about 3.0% which is in line with Government policy of encouraging the production of refined sugar and of discouraging an expansion of raw sugar consumption.

Vegetable Ghee

15. Production of vegetable ghee is estimated to have increased by about 16% in 1977-78 as against about 17% last year. The *per capita* availability of vegetable ghee, including edible oils, increased by 2.9%, from 5.54 kgs in 1976-77 to 5.70 kgs in 1977-78. The share of cotton seeds and other oils produced locally has increased from 2 lakh tons to 2.3 lakh tons primarily due to better cotton crop in 1977-78, while imports remained at about the same level in 1977-78 as compared to 1976-77. During 1978-79, the *Per capita* availability of edible oils is projected to increase by 11.8% to 6.37 kgs.

16. Consumers are being induced to cut consumption of vegetable ghee and use edible oils instead as a cooking medium. The public have however not so far developed a taste for refined oils with a component of imported palm oil. The latter is being popularized by the Vegetable Ghee Corporation by adopting a formula to mix it with other oils and by further refining palm oil. Steps will be taken to popularise the use of refined oils through the mass media.

Milk

17. The *per capita* availability of milk increased by 1.55%, from 55.47 kgs in 1976-77 to 56.33 kgs in 1977-78. Import of powdered milk also rose from 20,300 metric tons to 31,000 metric tons during the same period. Powdered milk is imported free of import duty and during the last year the world milk exporting countries have been facing huge surpluses of milk. These surpluses are now being reduced as a deliberate policy in the respective countries. This may lead to gradual increase in import price. A careful study of the import policy of milk has to be made to streamline supplies in the local market. The *per capita* availability of fresh milk is projected to increase by 2.2%, to 57.6 kgs. in 1978-79.

Meat

18. As wages and income rise there is a general tendency to consume more meat, which is rich in animal protein. Meat prices (mutton and poultry), again remained under pressure during 1977-78. However, *per capita* availability of meat increased from 9.19 kgs in 1976-77 to 9.38 kgs in 1977-78. It is estimated that *per capita* availability will increase further by 4.8% to 9.83 kgs in 1978-79.

19. Meat has an expanding domestic demand as also a substantial foreign market. There is an urgent need to increase domestic production through better breeds, rich pasturing and disease control measures. Research on these aspects is to be taken up by Government.

Vegetables

20. The *per capita* availability of vegetables, including potatoes and onions, increased by 6%, from 26.54 kgs in 1976-77 to 28.16 kgs in 1977-78. Export of potatoes and onions also increased

from 16,000 tons to 55,000 tons in the same period. Prices of onions and potatoes registered a decline of about 17% and 5% in 1977-78 over the previous year. It is estimated that *per capita* consumption of vegetables will rise by 8% to 30.45 kgs in 1978-79.

Tea

21. Tea seems to have assumed an important place in the diet of the common man. Although tea in itself is totally devoid of any nutrition value, yet it provides a stimulant and when mixed with milk and sugar offers some nutritive value. A large amount of foreign exchange is spent on the import of tea and its consumption is expected to continue to rise rapidly. Mainly because prices of close substitutes like milk, and other beverages are much higher.

22. The *per capita* consumption has increased by 17% from 0.70 kgs in 1976-77 to 0.82 kgs in 1977-78. The seventeen per cent rise in the preceding year was partly stock replenishment as world prices came down. It is projected to increase by a further 5% to 0.86 kgs in 1978-79.

Cloth

23. A major breakthrough has been achieved in the production of cotton. Production increased from 2.4 million bales in 1976-77 to 3.2 million bales in 1977-78 in response to various measures taken by the Government to help the cotton textile industry. The performance in terms of *per capita* availability of cloth including synthetic cloth is satisfactory. A significant increase in local *per capita* availability has been recorded. In 1978-79, *per capita* availability has been projected to increase from 14.33 sqms to 14.95 sqms, an increase of 4.3%.

Programmes and Policies

24. In the Annual Plan, policies will be pursued with the primary objective of increasing the protein calorie intake through short and long term measures for increase in the production of livestock, livestock products and pulses so as to ensure that these items are available at reasonable prices. The current prices of meat and milk are high; households in the lower income brackets find it difficult to afford these items in their diet. Therefore, while livestock farms will be expanded and supplies of meat and milk increased through feedlot fattening of cows and buffaloes, attention will also be given to augmenting the production of poultry, eggs and fish. Support prices of major pulses will be maintained and reviewed if necessary, to provide incentive to farmers to increase production, particularly in the barani areas. This will be supplemented by special programmes for supply of improved seeds and credit facilities. Similarly, production incentives will be provided to farmers to grow new oilseed crops such as soyabean and sunflowers and to bring more area under groundnut, especially in the barani tracts so as to gradually improve domestic supplies of oilseeds and edible oils and thereby reduce the heavy dependence on imports.

25. Research and experiments will be conducted for solar dehydration of fruits and vegetables. If successful, wastage of fruits and vegetables will be reduced and will result in higher levels of intake not only through higher availability but through a more even distribution by supplying to areas of low production. The development of high extraction cane crushing machine using local technology is also proposed for use in areas outside the sugar mill zones which will augment village level gur production.

26. Imports of wheat will be continued and rationing maintained; their availability plays a critical role in meeting proteins-calories required. For edible oils, imports will be maintained though at a higher level than in 1977-78. Tea import will however be larger to meet the requirements of an expanding population.

27. Rice exports will be higher in 1978-79 but production will be adequate to ensure larger availability of supplies in the country and also somewhat higher levels of consumption in 1978-79 over 1977-78.

28. Onion and potatoes which are consumed by the low income groups will continue to be exported but subject to quantitative restrictions so that there is no further pressure on the price level obtaining in 1977-78.

29. Recent studies on the marketing of agricultural products in Punjab, NWFP, and Baluchistan reveal high marketing margins between the prices received by farmers and those paid by consumers. Market committees would extend their regulations to livestock, vegetables and other

commodities. To reduce the nonfunctional marketing margins, cooperative marketing arrangements will be initiated for some perishable commodities ; to regulate the marketing of primary commodities, the possibility of establishing commodity boards will be explored.

30. To supplement the existing facilities of ration atta from the depots, roti plants have started supplying roti to people in fourteen major cities of the country. A few other bakery items like 'nans', 'Western breads' etc. have been introduced as well.

31. Government's scheme for the production of awami suits including shirts, bush-shirts, shalwar, trousers and frocks is gaining momentum. Inexpensive readymade garments are being made available through utility stores and fair price shops. The sale of low cost wearing apparel will be accelerated in 1978-79.

32. These policies and programmes will require concerted efforts in their implementation and are vital for meeting basic requirements. Programmes to meet nutritional needs are elucidated in a separate chapter. These programmes, alongwith policies of employment and income generation, improvement in health services and primary education, etc., will improve the standard of living of those groups of society which are presently denied access to these facilities.

REQUIREMENT AND AVAILABILITY OF WHEAT (MAY—APRIL)

(000 Metric Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Opening Stock	395	457	464
2.	Production*	8691	9143	8289
3.	Deduction for Seed and Wastage @ 10%	869	914	829
4.	Imports	540	821	2000
5.	Government Procurement	2377	1871	1077
6.	Off-take from Govt. stock	2806	2959	3198
7.	Closing Stock	457	464	503
8.	Available with Private Sector	5445	6358	6383
9.	Total Domestic Consumption	8300	9043	9421
10.	Population (millions)	(73.43)	(75.62)	(77.86)
11.	<i>Per capita availability :</i>			
	(a) Kgs/annum	113.03	119.59	121.00
	(b) Gms/day	309.67	327.64	331.51

* A one year lag has been taken between production and consumption.

Annexure II

REQUIREMENT AND AVAILABILITY OF RICE
(JULY—JUNE)

('000 ' M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Opening Stocks	676	472	442
2.	Local Production	2738	2950	3068
3.	Deduction for seed & Wastage 6%	164	177	184
4.	International Exports/Procurement by Govt. for Export	883	810	850
5.	Closing Stocks	472	442	394
6.	Net Availability	1895	1993	2082
7.	Per capita availability :			
	(a) Kgs/Annum	25.81	26.36	26.74
	(b) (Gms/day)	70.71	72.22	73.26

Annexure III

PER CAPITA REQUIREMENT AND AVAILABILITY OF TOTAL FOOD GRAINS

(Kgs annum)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)	% change 1978-79 over 1977-78
1.	Wheat	113.03	119.59	121.00	+1.2
2.	Rice	25.81	26.36	26.74	+1.4
3.	Other Foodgrains	16.13	16.50	16.89	+2.4
	Total per capita Availability :				
	(a) Kgs/annum	154.97	162.44	164.63	—
	(b) grams/day	424.58	445.04	451.04	—

**REQUIREMENT AND AVAILABILITY OF PULSES
(JULY - JUNE)**

(000 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Production			
	(i) Gram*	601	649	620
	(ii) Other Pulses	196	194	195
2.	Deduction for Seed, Feed & Wastage			
	(i) Gram @ 31%	186	204	192
	(ii) Other Pulses @ 11%	22	21	21
3.	Net Availability of Gram & other Pulses	589	621	602
4.	Per Capita Availability (kgs/annum)	8.02	8.21	7.73

* A One year lag has been taken between Production & Consumption.

REQUIREMENT AND AVAILABILITY OF SUGAR
(NOVEMBER-DECEMBER)

(000 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
Sugar Cane				
1.	Production	29522	30081	30632
2.	Deduction for Seed, Feed and Wastage 10%	2952	3008	3063
3.	Crushed	8504	8627	9159
4.	Available for raw Sugar Production	18066	18446	18410
Refined Sugar				
1.	Opening Stocks	29	50	150
2.	Local Production	736	850	850
3.	Exports	—	—	—
4.	Closing Stocks	50	150	175
5.	Net Availability	715	750	825
6.	Per capita availability (Kgs/annum)	9.74	9.92	10.60
Raw Sugar				
1.	Production @ 10% recovery	1807	1845	1841
2.	Deduction for animal feeding @ 10%	180	185	184
3.	Net Availability	1627	1650	1657
4.	Per Capita availability (Kgs/annum)	22.16	21.95	21.28
Total Per Capita Availability. (Refined & Raw Sugar) (Kgs/annum).		31.90	31.87	31.88

**PRODUCTION OF VANASPATHI & REQUIREMENT OF EDIBLE OIL
(JULY—JUNE)**

(000 M. Tons)

S.No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
A. Edible Oil Availability				
1.	Opening Stock	65	61	61
2.	Local Production	201	230	253
3.	(i) From Cotton Seed	88	115	129
	(ii) From other Seeds	114	114	124
4.	Imports	290	285	324
	Total (availability)	556	576	638
B. Uses				
1.	Industrial use	55	56	56
2.	Direct Consumption and Refined Poly Unsaturated Oil	83	55	96
3.	Required for Vanaspathi	357 (324)	404 (376)	430 (400)
4.	Closing Stock	61	61	56
	Total (Uses)	556	576	638
C. Per Capita Availability				
1.	Vegetable Ghee (kgs/annum)	4.41	4.97	5.14
2.	Refined Oil including Direct Consumption (kgs/annum)	1.13	0.73	1.23
D. Total Per Capita Availability (1+2) Kgs/Annum				
		5.54	5.70	6.37

Annexure VII

PRODUCTION DATA FOR EDIBLE OIL
(JULY—JUNE)

('000 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Cotton	870	1150	1280
2.	Rape & Mustard	297	240	315
3.	Groundnut	64	72	76
4.	Sesamum	12	12	12
5.	Others	2	2	3

Annexure VIII

REQUIREMENT AND AVAILABILITY OF LIQUID MILK
(JULY—JUNE)

('000 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Production	7036	7181	7511
2.	<i>Per Capita</i> Production (Kgs/annum)	95.82	94.96	96.47
3.	55% Consumed as fresh milk	3870	3950	4131
4.	Dry milk Imported*	203	310	350
5.	Net Availability	4073	4260	4481
6.	<i>Per Capita</i> Availability (Kgs/annum)	55.47	56.33	57.55

*One ton of dry milk is equivalent to 10 tons of liquid milk.

Annexure IX

**REQUIREMENT AND AVAILABILITY OF MEAT AND POULTRY MEAT
(JULY—JUNE)**

('00 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Total Production	675	709	765
2.	Per Capita availability (kgs/annum)	9.19	9.38	9.83

Annexure X

**REQUIREMENTS AND AVAILABILITY OF VEGETABLES
(JULY—JUNE)**

('00 M. Tons)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Total Availability	1965	2135	2431
2.	Exports of Onions & Potatoes	16	55	60
3.	Net availability	1949	2130	2371
4.	Per Capita availability (kgs/annum)	26.54	28.16	30.45

Annexure XI

**REQUIREMENT AND AVAILABILITY OF TEA
(JULY—JUNE)**

(Million Kgs)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
1.	Imports	51.26	61.93	66.99
2.	Per Capita Availability (Kgs/annum)	0.70	0.82	0.86

REQUIREMENT AND AVAILABILITY OF CLOTH
(JULY—JUNE)

S. No.	Particulars	1976-77 (Actual)	1977-78 (Estimate)	1978-79 (Target)
A. Yarn (Million KGS)				
1.	Opening Stocks	13	19	12
2.	Production	282	272	320
3.	Export of yarn	67	60	91
4.	Required for Hosiery	9	10	11
5.	Consumed by mill sector	59	53	64
6.	Closing Stocks	19	12	10
7.	Available for non-mill sector	141	156	156
B. Cotton Cloth (Million SQ. Meter)				
1.	Opening Stocks	75	82	73
2.	Total Production	1400	1465	1542
	(i) Mill Sector*	411	373	450
	(ii) Non-mill sector*	989	1092	1092
	(iii) Export of Cloth.. .. .	417	443	502
3.	Export of Cloth bags/etc Knitted fabrics etc. bed sheet, ready made garments	200	210	215
4.	Closing Stocks	82	73	40
5.	Available for domestic Consumption	776	821	858
6.	Per Capita availability (Sq. meter/annum)	10.57	10.86	11.02
C. Synthetic Cloth				
1.	Production of yarn (mln. kgs)	5.19	5.64	7.00
2.	Import of Yarn (mln. kgs)	10.56	20.08	23.00
3.	Total Yarn (mln/kgs)	15.75	25.72	30.00
4.	Production of cloth (M. sq. meter)**	173.25	282.92	330.00
5.	Exports (M. sq. meters)	7.00	20.90	24.00
6.	Net availability (M. sq. meter)	166.25	262.02	306.00
7.	Per Capita availability (sq. meter/annum)	2.26	3.47	3.93
Total Cloth Per Capita Availability				
	Cotton & Synthetic (sq. meter/ annum)	12.83	14.33	14.95

*One Kg. of cotton yarn=7.0 SQMs of cloth.

**One Kg. of synthetic yarn=11.0 SQMs of cloth.

II. NUTRITION PLANNING

Review of 1977-78

Progress achieved in different programmes of Nutrition during the year 1977-78 is given as under :

I. OPERATIONAL PROBES, FIELD STUDIES AND SURVEYS

2. *Micro-Nutrient Survey*.—In order to update the information, a National Micro-Nutrient Survey has been conducted with a sufficient sample to give the national estimates for future planning purposes. A two-stage stratified random sampling was used to select a sample of 1060 households in four provinces. The 1060 households contacted contained in fact 1095 households consisting of 6733 individuals. The field work of the survey was completed by early 1977, whereas the analysis work including editing, coding and transfer of data to cards continued till the end of 1977. The Survey was designed to yield baseline data for policy and programme planning purposes. Major objective of the survey was to assess the nutritional status of the people of Pakistan by clinical, biochemical and anthropometric and dietary intake measures. Analysis of the data obtained through this survey was planned in two phases—the preliminary analysis and the detailed analysis. Based upon the detailed analysis, the report of the Micro-Nutrient Survey is being published in two volumes. Volume I attempts to describe the nutritional status of the population and their nutrition problems, using straightforward descriptive statistical techniques, whereas Volume II endeavours to analyse the key relationships among the major variables in the Survey. Volume I of the report has been published in June 1978. Some of the findings of this report appear at Annexure I. Work on Volume II of the report is in hand. The results of this survey have been utilized in the Fifth Five Year Plan.

3. *Consumer's reference/acceptability of Crushed Gritty and Iodized Salt*.—This experiment was conducted in the year 1977. Three urban centres and nine semi urban/rural places were selected in the goitre belt (Punjab, NWFP Provinces and the Azad Kashmir). Crushed Gritty and Iodized salt was distributed in these areas. The results indicated that in the urban areas the acceptability of iodized salt was upto 94%, while in the rural areas it was 80%.

4. *National Nutrition Survey*.—The Ministry of Health was planning to undertake a fresh assessment of the nutritional status of the country's population on wider scale through a new survey. Sample design of this survey consists of 5,000 households which covers a population of approximately 40,000 people. Necessary funds were provided for this survey in the ADP 1976-77 & 1977-78, but no progress could be made so far.

5. *Shigar Valley Experiment*.—To have a present status of goitre among preschool children of Shigar Valley of Baltistan area, a survey was planned to be carried out in October—November 1977. Eight out of thirteen educational institutions located in the Valley were covered in this survey. The total number of the students present on the day of visit were examined clinically. In all 208 students were examined against the total enrolled strength of 441 (47% attendance). Based on the data collected, goitre prevalence comes to be 68.2% which is very high.

II. ORGANIZATION OF NUTRITION PLANNING WORKSHOP

6. A workshop on "Nutrition Planning in Pakistan" was organized at Nathiagali from 23—28 July 1977, which was attended by not only the prominent experts on the subject from within the country but also by a team of foreign experts from M.I.T., U.S.A., and the UNICEF mission. After the deliberations the workshop came up with valuable recommendations.

III. FOOD FORTIFICATION AND INTERVENTION PROGRAMMES

7. The following food fortification programmes were pursued during the year 1977-78 :

(i) *Fortification of atta with vitamins and minerals*.—The project has been developed for implementation through the Ministry of Food and Agriculture and stands approved by the competent authority. The Ministry of Food and Agriculture is processing the recruitments of staff for the execution of this project. No physical progress has, however, taken place during the year 1977-78.

(ii) *Iodization of salt*.—The programme has got three distinct components. Progress achieved in respect of each of these components during the year 1977-78 is provided as under:

(a) *Skardu Project*.—Efforts have been made to reactivate the salt iodization plant installed at Skardu which has been lying without operation for quite sometime. A total of 700 maunds of salt were iodized and distributed in the Baltistan district during the period under review.

- (b) *Feshawar Project*.—This scheme pertains to NWFP Province and envisages the supply of iodized salt to Chitral and Swat areas. The Project is jointly sponsored by the Government of Pakistan and the USAID and UNICEF at a total cost of Rs. 1.34 million. Acquisition of land has been made and the machinery for the plant has been ordered.
- (c) *Rawalpindi/Islamabad Project*.—A scheme is being developed for installation of a plant at Rawalpindi/Islamabad area to meet the iodized salt requirements of the goitrous belt viz. upper part of the Punjab, NWFP, Northern Areas and the Azad Kashmir.
- (iii) *Food aid Programme*.—The World Food Programme (WFP) under their Project No. 2237 had donated 11,727 metric tons of wheat, 7,321 metric tons of Dried Skimmed Milk (DSM) and 2,336 metric tons of butter oil. These supplies were to be distributed free of cost through the MCH centres. The Project has, however, achieved limited objectives due to administrative problems.
- (iv) *Weaning Food Programme*.—As a component of the above mentioned WFP Project, a pilot programme for the supply of cheap weaning food was developed. The low-cost protein-rich food called PROTOLAC with protein content of 20% has been formulated. This mixture is based on locally available food ingredients and has got the composition of 44% wheat flour, 44% chick peas, 10% DSM and 2% of vitamins and minerals. The Project is designed to utilize the spare capacity of existing food processing factories for the manufacture of 3,000 tons of PROTOLAC per annum. It was proposed to make use of 5,800 metric tons of WFP supplies. The ration of about 100 grams of weaning food to about 85,000 infants will add 360 calories and 20 grams of protein per child. The Project has, however, failed to make any progress.

Programme for 1978-79

8. The current Annual Plan is a combination of furtherance of applied research, policy formulation and programme development followed in the past few years. The programmes included in the Annual Plan are based on detailed work plan of the Nutrition Cell for the year 1978-79.

9. An amount of Rs. 1.125 million has been allocated to the "Nutrition Planning and Research Scheme" for the year 1978-79. Out of these allocations, a provision of Rs. 0.2 million has been made for pilot scale interventions and research studies. An allocation of Rs. 1 million has also been made by the Health Division for the conduct of National Nutrition Survey during the year 1978-79.

10. The following programmes are included in the year 1978-79 :

- (i) *Macro-Economic Analysis*.—Econometric analysis of the data collected obtained from the Micro-Nutrient Survey is planned to be undertaken during the year 1978-79 for completing the Demand and Target Study which would also include the multivariate analysis of the data.
- (ii) *Food Fortification and Technology Undertakings*.—The Plan envisages further strengthening of the already launched food fortification programmes and related food technology undertakings. Further assistance will be provided to the implementing agencies in the form of evaluation and monitoring of programmes in hand and development of new projects during the year 1978-79.
- (iii) An evaluation and monitoring of the Atta Fortification project will be attempted jointly by the Nutrition Cell, Planning Division and the Ministry of Food and Agriculture.
- (iv) A new project "Development of Weaning Food, based upon indigenous products" is planned to be developed with specific objectives. The Project will be developed in collaboration with the Health Division and will be designed to overcome the administrative problems encountered during the launching of the previous year's Weaning Food Project.

(v) Efforts will be made to finalise the salt iodization programme to be executed by the Pakistan Mineral Development Corporation through the operation of an appropriate sized plant to be installed at Rawalpindi/Islamabad. The Project will be made operative for the supply of iodized salt to Azad Kashmir, Northern Areas and the parts of the Province of Punjab and NWFP. Also the salt iodization plant at Peshawar is expected to become operative during the year 1978-79.

(vi) *Research Studies and Experimentation.*—The Plan includes the following research work to be undertaken during the year 1978-79 :

(a) A baseline survey of salt iodization programme of Northern Areas, Azad Kashmir and parts of the Punjab and NWFP is planned to be undertaken during the year 1978-79 alongwith a marketing research study for finding out the salt distribution pattern, its consumption systems and the extent of marketing margins.

(b) The Plan for the year 1978-79 also includes base line survey for the nutrition education campaign to be conducted through the *mass media*. The nutrition education campaign is planned to be launched in the selected areas of the whole country and will be administered through the radio programmes to be addressed to the specific group of audience. Similarly a nutrition education programme through school system is also included in the Annual Plan for the year 1978-79. These programmes will be developed and launched during the current year.

(vii) *Training programme.*—Financial provision also exists for a training programme to be pursued during the year 1978-79. The programme includes short term training facilities for the staff of the Nutrition Cell as well as the officials of the relevant implementing agencies of different Nutrition Projects. One or two Workshops on the subject are also included in the training programme alongwith a study tour of selected countries for the senior level Nutrition Planners during the year 1978-79.

11. Food Balance Sheets for the year 1977-78 and 1978-79 are given as Annexure II and III, respectively, which show the availability of food and nutrients picture for the country.

TABLE I
Growth Status of Children Under Five

	Height for Age			Weight for Age			Weight for Ht.		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Less than 80% of Standard	13%	13%	13.2%	52%	61%	56.7%	15%	20%	18.3%
80-99% of Standard	78%	79%	78.4%	36%	29%	32.8%	49%	51%	49.4%
100 plus % of Standard	9%	8%	8.4%	12%	10%	10.5%	36%	29%	32.6%
No. of cases	462	464	926	473	474	947	461	463	924

TABLE 2
Per cent Distribution of serum Vitamin A Levels

	Males	Females	Pakistan	Rural	Urban
Above normal (above 30 mg/100 ml.)	43.5	50.1	47.03	44.82	53.31
Normal (20-30 mg/100 ml.)	43.4	37.1	40.04	42.14	34.50
Low marginal (10-19mg/100 ml.)	8.3	9.0	8.64	8.64	8.65
Deficient (less than 10mg/100 ml.)	4.7	3.8	4.28	4.39	3.98

TABLE 3
Per cent Prevalence of Goitre
(WHO classification)

	Grade-I	Grade-II	Grade-III	All Grades
Males	1.5	0.5	0.1	2.1
Females (NPL)*	2.3	1.1	0.4	3.8
Pregnant	3.4	4.4	1.1	8.9
Breast feeding	5.2	0.7	0.4	6.3
Total All Pakistan	2.13	0.8	0.2	3.1
Urban	1.6	0.2	0.04	1.9
Rural	2.2	1.0	0.3	3.5

TABLE 4
Per cent Prevalence of Anaemia as Indicated by Haemoglobin and Haematocrit Levels and Pale Conjunctivae

Haemoglobin Status	Adequate	Marginal	Deficient
Males	54.3	28.5	17.1
Females : NPL	66.8	19.1	14.1
Pregnant	42.5	40.5	17.0
Lactating	58.6	19.6	21.7
Total	59.3	24.5	16.2
Haematocrit status	Adequate	Marginal	Deficient
Males	61.3	29.8	8.9
Females ; NPL	83.8	10.9	5.2
Pregnant	79.1	4.9	15.9
Lactating	87.0	4.5	8.3
Total	72.4	20.2	7.4
Pale Conjunctive	Absent	Present	
Males	85.7	14.3	
Females NPL	86.2	13.8	
Pregnant	73.4	26.6	
Lactating	73.0	27.0	
Total	85.0	15.0	

*Non-pregnant and Non-lactating.

TABLE 5
Per cent Prevalence of Clinical Lesions

S.No.	Clinical Lesion	Present	Absent
1.	Pale conjunctivae	15.8	84.2
2.	Xerophthalmia	0.1	99.9
3.	Keratomalacia	0.1	99.9
4.	Night Blindness	0.9	99.1
5.	Angular Stomatitis	2.7	97.3
6.	Angular Scar's	4.9	95.1
7.	Cheilosis	2.6	97.4
8.	Goitre	3.1	96.9
9.	Xerosis	1.5	98.5
10.	Dispigmentation	0.4	99.6
11.	Poor Skin Turgor	2.0	98.0
12.	Muscle Wasting	0.8	99.2
13.	Finger Nail Clubbing	0.7	99.3
14.	Beeding of Ribs	0.2	99.8
15.	Enlarged Spleen	1.8	98.2
16.	Enlarged liver	0.4	99.6
17.	Bilateral oedema	0.2	99.8

FOOD BALANCE SHEET FOR THE YEAR 1977-78

Unit (000 tons)

Commodity	Available supply	Distribution Losses	Food net	Per Capita consumption		
				Gram/day	Cals./day	Protein/day
Cereals :						
Wheat	9680	884	8796	318.68	1128	33.46
Rice	2093	125	1968	71.30	252	5.35
Maize	348	111	237	8.58	31	0.81
Other cereals (Barley) (Jawar) (Bajra)	744	176	568	20.54	74	1.95
Total Cereals	12865	1296	11569	419.10	1485	41.57
Pulses :						
Gram	649	201	448	16.22	60	3.24
Other pulses	188	21	167	6.05	20	1.39
Total	837	222	615	22.27	80	4.63
Oil Seeds :						
Rape and Mustard	305	305	—	—	—	—
Cotton seeds	1173	1173	—	—	—	—
Sesamum seed	12	12	—	—	—	—
Others	13	13	—	—	—	—
Groundnut	64	56.5	7.5	0.27	1.56	0.07
Total	1567	1559.5	7.5	0.27	1.56	0.07
Fruit and Vegetables :						
Fruit	2210	—	2210	80.07	17.62	1.12
Vegetable	3290	—	3290	86.60	49.00	0.05
Total	6400	—	6400	166.67	66.62	1.17
Sugar :						
Refined	768	—	768	27.8	108	—
Raw	1575	—	1575	57.07	200	—
Total	2343	—	2343	84.90	308	—
Meat :						
Beef	366	—	366	13.26	31.82	2.48
Mutton	314	—	314	11.38	24.12	2.01
Poultry	29	—	29	1.05	1.56	0.19
Total	709	—	709	25.69	57.5	4.68
Eggs	1208	—	57.5	2.08	3.31	0.26
Total	1208	—	57.5	2.08	3.31	0.26
Milk all sources	4352	—	4352	157.67	144	6.08
Total	4352	—	4352	157.67	144	6.08
Fish	198	—	198	7.17	10.68	1.36
Total	198	—	198	7.17	10.68	1.36
Oils and Fats :						
Direct consumption Refined oil	545	—	545	14.93	134	—
Vegetable oil	—	—	—	—	—	—
Total	545	—	545	14.93	134	—

Total calories : 2290.67

Total proteins : 59.82, grams

Animal proteins : 12.38 grams

Foot Note : 1. *Available supply* : Available supply includes total production plus imports minus exports, if any.
 2. *Distribution losses* : Includes animal feed, seed, wastage and extraction rate losses.

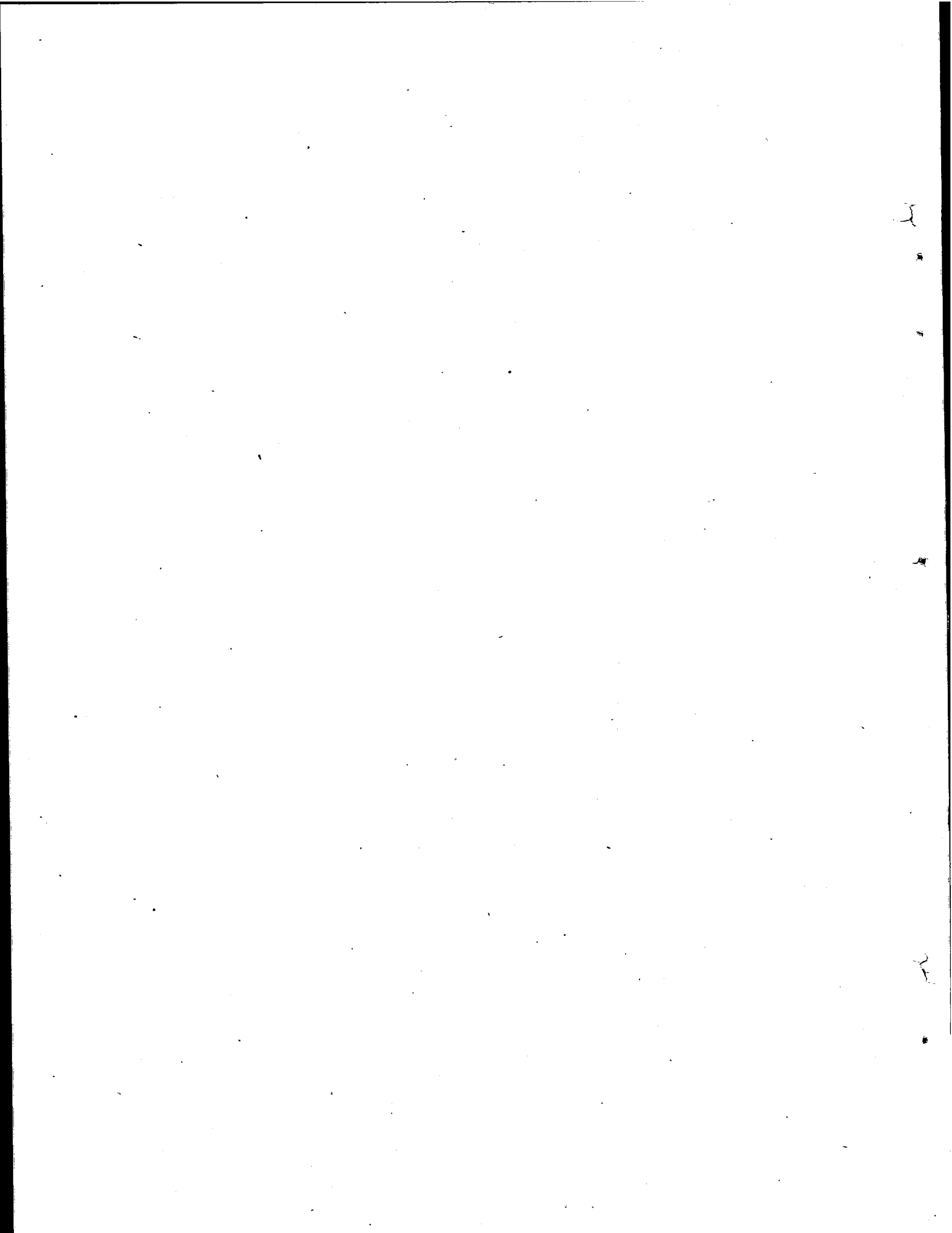
FOOD BALANCE SHEET FOR THE YEAR 1978-79

(000 tons)

Commodity	Available Supply	Distribution Losses	Food net	Per capita consum.		
				Gram/day	Cal/day	Protein/day (gm.)
Cereals :						
Wheat	10700	870	9830	346.01	1225	36.33
Rice	1945	117	1828	64.34	227	4.82
Maize	873	266	609	21.44	78	2.04
Other Cereals (Barley) (Jowar) (Bajra)	720	170	550	19.36	70	1.84
Total (Cereals)	14240	1423	12817	451.15	1600	45.03
Pulses :						
Gram	640	198	442	15.56	57	3.11
Other Pulses	205	22	183	6.62	22	1.52
Total	845	220	625	22.18	79	4.63
Oil Seeds :						
Rape and Mustard	310	305	—	—	—	—
Cotton seeds	1260	1260	—	—	—	—
Sesamum	12	12	—	—	—	—
Others	13	13	—	—	—	—
Groundnut	75	64	11	0.39	2.2	0.11
Total	1670	1659	11	0.39	2.2	0.11
Fruit and Veg. :						
Fruit	2342	—	2342	82.37	57	0.49
Vegetable	2533	—	2533	89.16	45	1.25
Total	4875	—	4875	171.53	102	1.74
Sugar :						
Refined	850	—	850	29.92	116	—
Raw Sugar	2076	—	2076	73.07	256	—
Total	2926	—	2926	102.99	372	—
Meat :						
Beef	380	—	380	13.37	32.0	2.50
Mutton	349	—	349	12.28	26.0	2.17
Poultry	34	—	34	1.20	1.79	0.23
Total	763	—	763	26.85	59.79	3.90
Eggs						
	1413	—	67.25	2.36	3.75	0.30
Total	1413	—	67.25	2.36	3.75	0.30
Milk :						
All sources	7506	—	7506	264.21	239.4	10.00
Total	7506	—	7506	264.21	239.4	10.00
Fish						
	215	—	215	7.57	11.28	1.43
Total	215	—	215	7.57	11.28	1.43
Oils and Fats :						
Direct consumption Refined Vegetable Oil	575	—	575	20.24	182.0	—
Total	575	—	575	20.24	182.0	—

Total : Calories : 2651
 Total Protein : 69.14 gm.
 Animal Protein : 17.63 gm.

- Food Note : (1) *Available supply*
 Available supply includes total production plus imports minus export, if any.
- (2) *Distribution Losses*
 Includes animal feed, seed, wastage and extraction losses.



CHAPTER 9

PRICE SITUATION

The rate of inflation in Pakistan, fairly low in the past, was upset in 1972 by a confluence of factors, which created a hyper-inflationary tendency. The inflation rate averaged nearly 24 per cent during 1972—75. The major contributory factors were a surge in world prices, devaluation of May, 1972, large import requirements of essential commodities due to production shortfalls and sharp monetary expansion. The rate of inflation came down in subsequent years.

Price Trends During 1977-78

2. The rate of inflation during 1977-78 considerably slowed down mainly due to larger production flows. Rate of monetary expansion was reduced to a certain extent and administrative measures were strengthened. The supply position of essential commodities remained satisfactory. During the period under review, the G.D.P. growth rate was 6.5 per cent, (with the production sectors contributing 4.5 per cent) as against a meagre growth rate of 1.4 per cent last year. The growth in G.N.P. was about 9 per cent in 1977-78 against 2.8 per cent in 1976-77. Essential imports were also significantly higher than the last year to augment the domestic production.

3. Table-I summarises the rate of increase in the wholesale price index, consumer price index and the sensitive price index of 28 essential commodities during 1977-78. The month-wise increase in respect of these three indices is given in annexures I to III.

TABLE I

Price Increase during 1974—78 (Base : 1969-70=100)

Period	Wholesale Price Index	Consumer Price Index	Sensitive Price Indicator
June, 1974	186.68	174.94	184.78
June, 1975	227.99	214.39	230.09
June, 1976	241.46	227.01	230.92
June, 1977	260.77	247.40	255.75
June, 1978	268.36	265.15	264.62
1972—75 (June/June) Yearly Average	27.22	24.19	26.67
Percentage Change in 1976-77 over the last year	8.00	8.98	10.75
Percentage Change in 1977-78 over the last year	2.91	7.17	3.47

4. The increase in the general wholesale price index during 1977-78 was a modest 2.9 per cent as against 8 per cent last year. The moderate increase in the wholesale prices was largely due to a decline in the index for manufactures and stability in fuel and energy prices. On the other hand, the food group index rose by 4.3 per cent and the raw materials index by 8.7 per cent. The table II shows group-wise increase of the wholesale price index.

TABLE II

Wholesale Price Index (1969-70=100)

Period	General	Food	Raw Materials	Fuel, Lighting and Lubricants	Manufactures
June, 1974	186.68	189.38	189.10	222.50	172.91
June, 1975	227.99	249.20	207.92	248.80	192.19
June, 1976	241.46	255.05	248.00	263.99	207.38
June, 1977	260.77	274.61	248.48	272.65	237.37
June, 1978	268.36	286.51	270.07	272.63	231.55
1972—75 (June/June) Yearly Average	27.22	31.15	23.32	30.55	21.66
Percentage Change in 1976-77 Over the last year	8.00	7.67	0.19	3.28	14.46
Percentage Change in 1977-78 over the last year	2.91	4.33	8.69	(—)0.01	(—)2.45

Consumer Price Index

5. Based on consumer price index, the rate of inflation works out to 7.17 per cent. During the year under review, the prices of consumer goods like cycles, boot polish, tooth paste/powder, dry battery cells, food stuffs, vegetables and fruits were reduced through fiscal measures, larger availabilities and improvements in distribution.

6. The table below shows the behaviour of consumer price index with its constituent groups:

TABLE III
Consumer Price Index (1969-70=100)

Period	General	Food Beverages & Tobacco	Apparel Tex- tile & Footwear	Housing & Household Operations	Miscellaneous
June, 1974	174.94	181.29	192.04	153.91	162.67
June, 1975	214.39	225.66	228.52	192.64	196.17
June, 1976	227.01	232.00	247.89	213.00	216.79
June, 1977	247.40	256.08	257.29	230.35	233.36
June, 1978	265.15	274.19	270.54	247.50	253.07
1972-75 (June/June) Yearly Average	24.19	27.00	27.68	20.56	18.44
Percentage Change in 1976-77 over last year	8.98	10.38	3.79	8.15	7.64
Percentage Change in 1977-78 over last year	7.17	7.07	5.15	7.45	8.45

Sensitive Price Indicator

7. The sensitive price indicator of 28 essential commodities showed an aggregate increase of 3.47 per cent as against 10.75 per cent last year.

8. It may be added that food items constitute about 42 to 61 per cent of cost of living index for different categories of workers for various income groups. During the year under review, the items which came under pressure were wheat and wheat flour, rice, gram pulse, mutton, mustard oil, salt, soaps and tea. The price of tea was revised from Rs. 6.40 to Rs. 8.70 per 250 gms, as a result of rise in the international auction price of tea. The shortfall in the wheat crop led to an increase in prices which was largely offset by a sharp fall in the prices of onion and red chillies by 50 and 34 per cent respectively due to better supply position. Table IV gives the historical trend of sensitive indicator of 28 essential commodities:

TABLE IV
Sensitive Price Indicator (1969-70=100)

Period	Price Indicator
June, 1974	184.78
June, 1975	230.09
June, 1976	230.92
June, 1977	255.75
June, 1978	264.62
1972-75 (June/June) Yearly Average	26.67
Percentage Change 1976-77 over the last year	10.75
Percentage Change 1977-78 over the last year	3.47

9. The prices of red chillies and onion dropped appreciably due to larger production and increased supply. The prices of cotton cloth declined marginally on account of subsidy provided by the Government on cotton supplies to mills. The trend is indicated below :

TABLE V
Price Trend of four Selected Commodities

Commodities	Percentage decline June, 1978 over June, 1977	Weight
Onion	(-)50.00	0.72
Red Chillies	(-)34.33	0.70
Long Cloth	(-)2.59	1.25
Volls	(-)2.95	0.34

10. Following items showed significant increase in prices during the year.

TABLE VI
Price Trend of 8 Selected Commodities

Commodity	Percentage Increase June, 1978 over June, 1977	Weight
Wheat	12.40	0.49
Wheat Flour (Open Market)	8.21	2.58
Rice Basmati (Broken)	16.86	2.56
Gram Pulse	31.80	0.78
Mutton	13.39	1.48
Beef	25.51	0.94
Mustard Oil	23.83	0.70
Washing Soap	14.53	1.80

11. Month-wise details are given in annexure IV.

Steps Taken to Regulate Prices

12. During the year under review, steps were taken to stabilise prices both through institutional arrangements and administrative controls. The details are given below :

- (i) The price of rationed items *i.e.* wheat flour and sugar and vegetable ghee were kept at the 1975 level.
- (ii) Number of Utility Stores was increased from 500 in 1976-77 to over 750 by the end of June, 1978. These stores sell about 500 items of common use. As a policy measure, Utility Stores are being opened in areas inhabited by people of low income groups.
- (iii) A special cooking oil "PAKWAN" was developed by the Ghee Corporation of Pakistan which has already been marketed at a price 17 per cent lower than the vegetable ghee price.
- (iv) To bring down the prices of various items of common use like, tooth pastes, tooth powder dry battery cells and bicycles, excise duty concessions and rebates were announced in January 1978 by the CMLA.
- (v) With a view to supervising and coordinating the implementation of all price control measures, the Federal Prices and Supplies Board, under the Price Control and Prevention of Profiteering and Hoarding Act, 1977, was reconstituted.

(vi) Strict administrative measures were adopted and enforced by the Provincial Governments. Price Review Committees were formed at district level for keeping a watch on the prices.

(vii) Imports of various food items were allowed to augment domestic supplies.

Forecast for 1978-79

13. The G. D. P. growth rate is estimated at 6.1 per cent during 1978-79 with agriculture and manufacturing sectors contributing 6.0 and 7.4 per cent respectively. The monetary expansion is estimated at 13 per cent as against 21.1 per cent last year and deficit financing is to be contained to the minimum. On the other hand the increase in prices of utilities could lead to some pressure on prices.

14. While the general policies will be non-inflationary the price situation at the end of 1978-79 will depend upon world trends and domestic output of specific commodities, especially wheat. It is, therefore, of utmost importance to monitor the supply of inputs and other determinants of output targets. At the same time the distribution bottlenecks and market imperfections will have to be controlled.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS (1969-70=100)

Month	General	Food	Raw Materials	Fuel, Light- ing & Lubricants	Manu- factures
June, 1977	260.77	274.61	248.48	272.65	237.37
July	263.41	278.88	247.88	272.41	239.60
August	265.84	283.24	247.97	272.41	239.33
September	266.96	283.98	248.16	272.21	242.11
October	264.53	282.13	249.23	272.21	236.38
November	265.24	281.50	259.42	271.22	235.32
December	268.48	287.14	261.43	271.22	235.15
January, 78	269.11	287.14	262.24	271.22	235.39
February	273.64	296.53	262.33	271.23	235.21
March	278.16	305.80	263.73	272.04	232.79
April	273.92	297.28	266.05	272.15	232.83
May	266.17	283.19	265.55	272.60	232.20
June, 1978	268.36	286.51	270.07	272.63	231.55
Percentage Change June, 1978 over June, 1977..	2.91	4.33	8.69	(-)0.01	(-)2.45
Percentage Monthly Change 1977-78	0.24	0.36	0.72	—	(-)0.20

COMBINED CONSUMER PRICE INDEX ALL INCOME GROUPS (1969-70=100)

Month	General	Food Beverage & Tobacco	Apparel Textile & Footwear	Housing & Household Operations	Mis- cellaneous
June, 1977	247.40	256.08	257.29	230.35	233.36
July	254.67	265.56	259.43	232.05	241.59
August	256.91	268.33	260.40	232.95	244.49
September	258.04	268.55	264.19	234.95	246.01
October	259.11	267.31	265.17	236.55	253.27
November	258.70	269.19	267.64	237.90	243.11
December	259.19	268.00	269.44	239.18	247.08
January, 78	259.66	267.98	268.05	241.70	248.01
February	262.51	273.07	270.86	242.95	245.84
March	265.25	277.55	269.24	244.42	248.32
April	267.25	279.45	269.17	245.49	251.13
May	261.92	269.71	268.56	246.38	250.66
June, 1978	265.15	274.19	270.54	247.50	253.07
Percentage Change June, 1978 over June, 1977 ..	7.17	7.07	5.15	7.45	8.45
Percentage Monthly Change 1977-78 ..	0.60	0.59	0.43	0.62	0.70

SENSITIVE PRICE INDICATOR OF 28 ESSENTIAL COMMODITIES

Month	Industrial	Commercial	Government	All Combined
June, 1977	253.38	258.14	253.36	255.75
July	258.50	264.18	259.54	261.58
August	260.92	267.32	261.37	264.22
September	261.92	267.91	263.04	265.17
October	260.30	266.66	261.69	263.80
November	261.63	268.38	262.46	265.19
December	263.15	267.40	263.50	265.31
January, 78	260.57	264.42	261.08	262.61
February	262.61	265.36	261.83	263.80
March	264.32	266.34	263.46	265.13
April	262.78	265.49	263.60	264.32
May	258.30	263.62	261.22	261.63
June, 78	261.85	266.58	263.60	264.62
Percentage Change June, 1978 over June, 1977	3.36	3.27	4.04	3.47
Percentage Monthly Change 1977-78	0.38	0.27	0.34	0.29

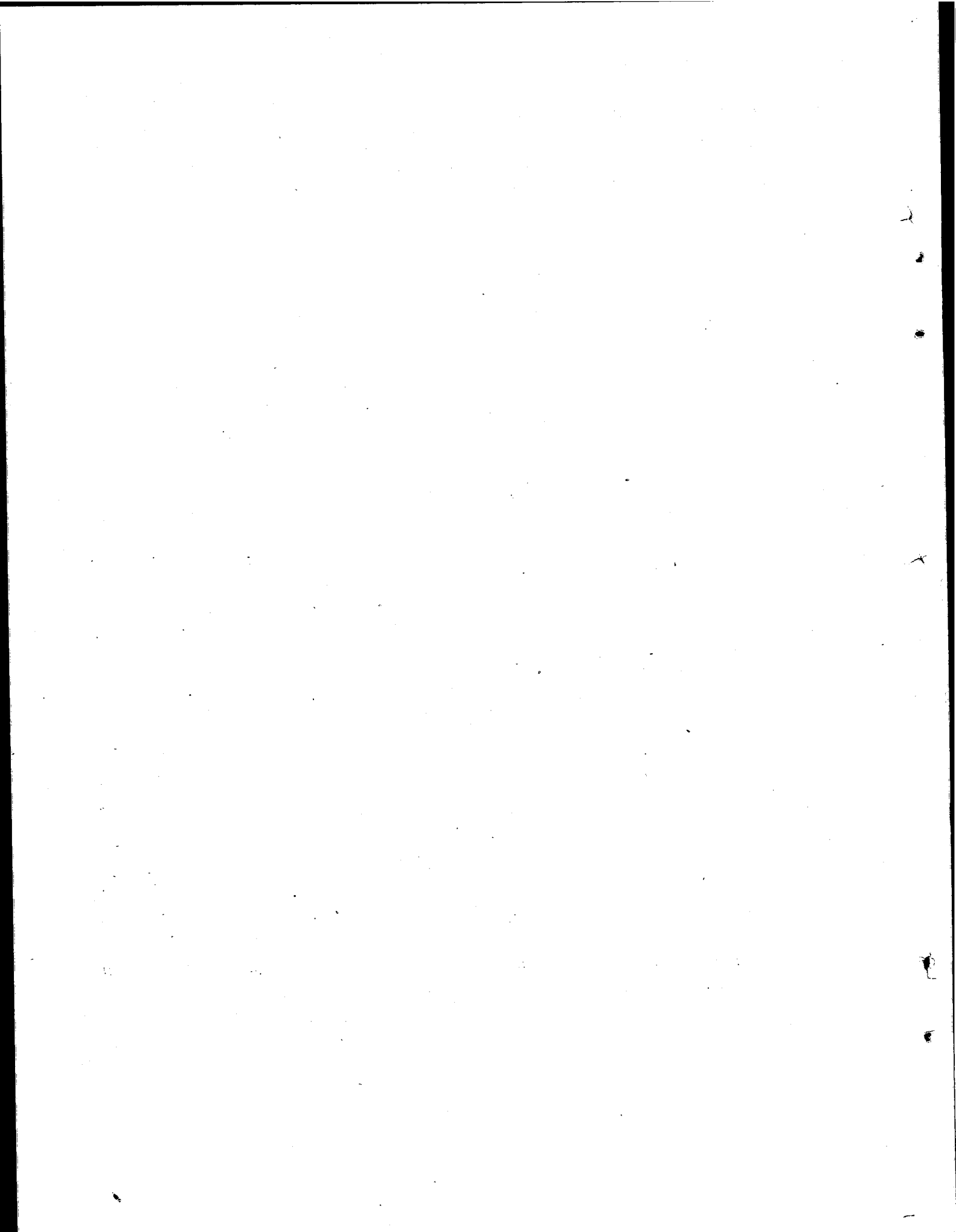
AVERAGE RETAIL PRICE

S. No.	Commodities	Unit	June 1977	July	August	September	October
1.	Wheat (A.Q.)	Kg.	1.21	1.19	1.19	1.21	1.25
2.	Wheat Flour (A.Q.)	Kg.	1.34	1.34	1.33	1.35	1.37
3.	Wheat flour (Ration)	Kg.	0.95	0.95	0.95	0.95	0.95
4.	Rice Basmati (Broken)	Kg.	2.61	2.68	2.63	2.72	2.80
5.	Gram Pulse (A.Q.)	Kg.	2.17	2.22	2.27	2.42	2.68
6.	Beef Cow/Buf (with bone)	Kg.	6.80	6.81	6.63	6.71	6.70
7.	Mutton Goat (A.Q.)	Kg.	14.11	14.39	13.90	14.21	14.53
8.	Potato White (A.Q.)	Kg.	1.96	2.29	2.35	2.37	2.46
9.	Onion Dry (A.Q.)	Kg.	1.90	2.03	3.00	3.15	2.79
10.	Mustard Oil (Mill)	Kg.	6.63	6.69	6.72	6.62	6.54
11.	Ghee Vegetable (Loose)	Kg.	9.68	9.68	9.66	9.66	9.66
12.	Salt Rock (Powdered)	Kg.	0.86	0.90	0.92	0.93	0.93
13.	Red Chillies (A.Q.)	Kg.	15.00	13.82	12.54	11.69	9.48
14.	Sugar (Ration Shop)	Kg.	4.30	4.30	4.30	4.30	4.30
15.	Gur (A.Q.)	Kg.	2.40	2.43	2.40	2.39	2.43
16.	Milk Buffalo (Unboiled)	Ltr.	3.07	3.16	3.12	3.13	3.08
17.	Tea Brook Bond (Gold Label)	250 gm.	6.57	8.27	8.70	8.70	8.70
18.	Cigarettes (King Stork)	10s	0.72	0.72	0.71	0.71	0.73
19.	Tea Prepared	Per Cup	0.52	0.55	0.56	0.56	0.53
20.	Long Cloth 15000	Mtr.	6.17	6.19	6.19	6.20	6.16
21.	Mulls	Mtr.	5.32	5.45	5.52	5.53	5.50
22.	Voils	Mtr.	12.56	12.73	12.75	12.80	12.60
23.	Markin 54 " Khaddi	Mtr.	5.72	5.79	5.81	5.80	5.79
24.	Kerosene Oil (Blue)	1/2 Ltr.	0.62	0.62	0.62	0.62	0.60
25.	Firewood Kikar/Babul	40 Kg.	15.71	15.70	15.67	15.75	16.04
26.	Match Box	Each	0.22	0.22	0.22	0.22	0.22
27.	Washing Soap 707/555	Cake	1.17	1.28	1.32	1.34	1.34
28.	Lifebouy	Cake	1.44	1.51	1.52	1.53	1.53

*Controlled/Rationed Items.

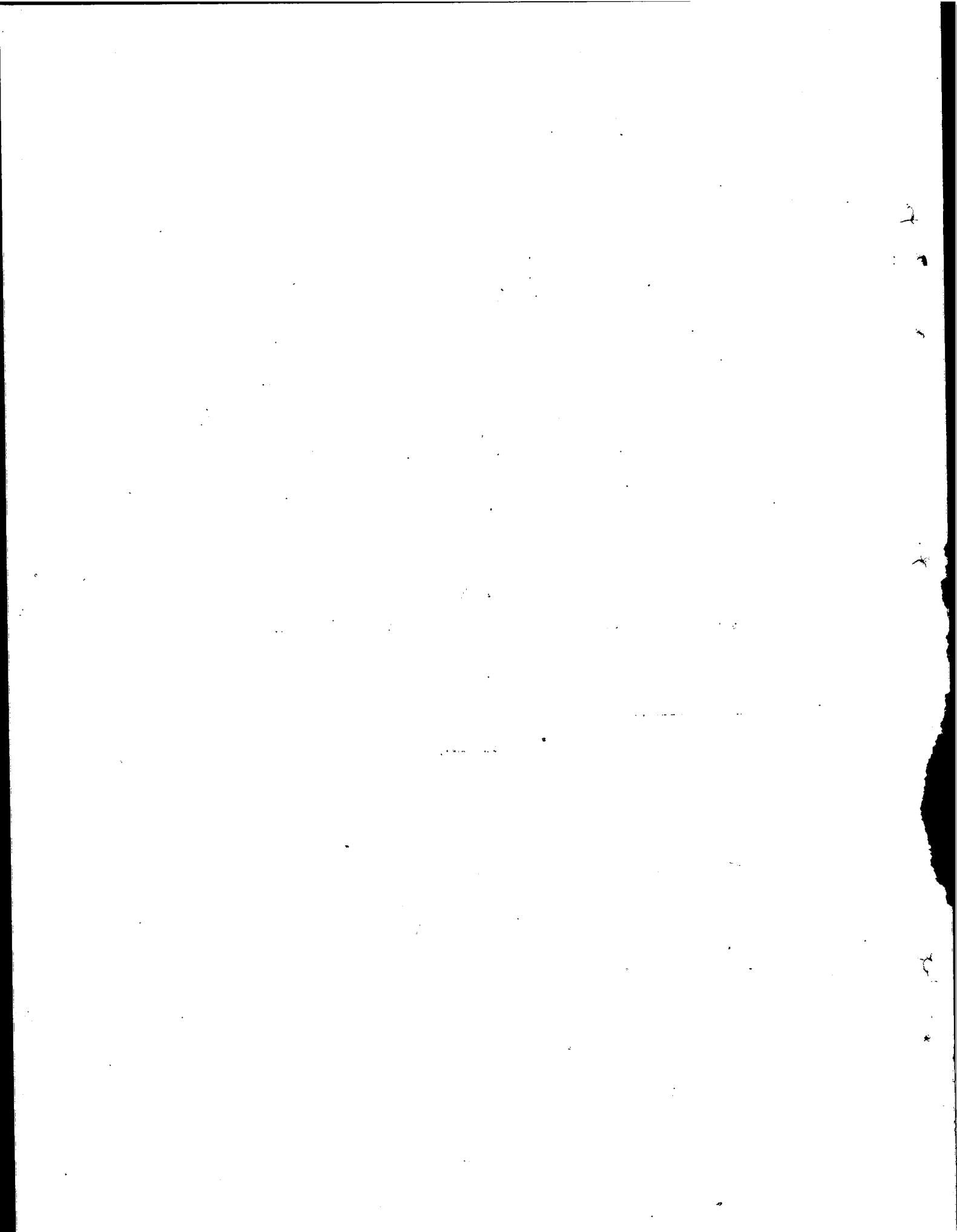
OF ESSENTIAL COMMODITIES (1977-78)

November	December	January	February	March	April	May	June	Average	Percentage Change in Prices June, 78/ June, 1977
1.28	1.42	1.48	1.61	1.79	1.76	1.38	1.36	1.41	12.40
1.38	1.47	1.50	1.62	1.70	1.68	1.48	1.45	1.47	8.21
0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	—*
2.76	2.78	2.78	2.83	2.88	2.94	2.99	3.05	2.82	16.86
2.89	3.40	3.55	3.74	4.11	4.07	2.99	2.86	3.10	31.80
6.72	6.75	6.78	6.85	6.86	6.92	6.96	6.99	6.81	2.79
14.63	15.04	15.24	15.36	15.57	15.66	15.81	16.00	15.03	13.39
2.59	1.89	1.35	1.37	1.48	1.47	1.59	2.46	1.97	25.51
2.71	2.43	1.40	1.24	1.08	1.04	1.01	0.95	1.90	(—)50.00
6.45	6.44	6.51	6.60	6.66	6.76	7.39	8.21	6.80	23.83
9.66	9.66	9.66	9.66	9.66	9.66	9.66	9.68	9.66	—*
0.94	0.96	0.96	0.90	0.99	1.00	1.01	1.02	0.96	18.60
8.88	10.37	11.05	10.86	10.69	10.40	10.19	9.85	10.82	(—)34.33
4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	—*
2.35	2.39	2.31	2.22	2.20	2.24	2.38	2.55	2.36	6.25
3.07	3.09	3.09	3.09	3.09	3.09	3.12	3.18	3.11	3.56
8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	8.70	—*
0.75	0.76	0.77	0.76	0.76	0.76	0.76	0.76	0.75	5.56
0.54	0.53	0.54	0.54	0.54	0.54	0.54	0.54	0.54	3.85
6.17	6.16	6.20	6.18	6.14	6.06	6.01	6.01	6.14	(—)2.59
5.51	5.52	5.52	5.52	5.55	5.50	5.50	5.37	5.49	0.94
12.35	12.35	12.35	12.33	12.33	12.28	12.00	12.19	12.42	(—)2.95
5.78	5.80	5.83	5.80	5.72	5.69	5.71	5.72	5.77	—
0.60	0.60	0.61	0.61	0.62	0.61	0.61	0.60	0.61	—*
16.22	16.55	16.57	16.66	16.69	16.56	16.51	16.51	16.29	5.09
0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	—
1.36	1.35	1.36	1.36	1.35	1.34	1.33	1.34	1.34	14.53
1.56	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.58	11.81



PART II
PRODUCTION PROGRAMMES AND PHYSICAL INFRASTRUCTURE

(91-276)



CHAPTER 10

AGRICULTURE

The year 1977-78 remained generally favourable for agricultural production. Except for wheat, the production of major crops increased significantly over the 1976-77 level. Wheat production is being estimated between 8.1 and 8.2 million long tons, against the target of 9.5 million long tons and the 1976-77 crop of about 9.0 million long tons. Several factors have been identified to be the cause of the decline in wheat production, specially in Punjab. One or the other or combination of these factors may have operated. These factors are : (a) late and abnormally heavy rainfall during March, 1978—grain formation stage (160 mm in Lahore against the normal of 25 mm and 60 mm in Faisalabad against the normal of 20 mm)—promoting rust attack ; (b) low rust resistivity of dwarf wheat varieties ; (c) unavailability especially at right time of good seed of certain varieties ; (d) heavy frost in February, 1978 in some areas ; (e) limited cultivation over the *Katcha* tracts ; (f) below normal rainfall in the *barani* areas ; and (g) temperature fluctuations at the grain formation stage, particularly low temperatures in the beginning and abnormally high temperatures in the later grain formation and ripening stages. (causing shrivelling of the grains). The size of the 1977-78 wheat crop and causes of decline in production are being investigated in greater depth separately.

2. For the 1978-79 wheat crop, all out efforts need to be made to procure and distribute as much of seed of rust resistant varieties as possible, not excepting import from suitable sources. This should be done well in time before the sowing season. Also, a vigorous campaign should be launched for maximum adoption of the recommended practices for each variety, particularly those relating to time of sowing, seed rate, application of fertilizer, etc. Since abundant moisture would be available, efforts should be made to bring maximum area under wheat during 1978-79. Seed of promising and proved wheat varieties under similar conditions should be obtained in reasonable quantities and sown for observation and multiplication. Efforts should be intensified to evolve rust resistant varieties. Trials should start on chemical control of rust attack.

3. The downward trend in cotton production has been arrested and a crop of 3.2 million bales is estimated against the target of 3.5 million bales and the 1976-77 production of 2.45 million bales. A record production of rice *viz.* 2.9 million long tons and of sugarcane *viz.* 29.6 million long tons is estimated for 1977-78. The per acre use of fertilizer increased by about 12 per cent from 32 lbs. per cropped acre in 1976-77 to 35 lbs. per cropped acre in 1977-78. The water availability at farm gate increased from 86.90 MAF in 1976-77 to 91.77 MAF in 1977-78. The plant protection coverage was extended to 9.71 million spray acres during 1977-78, against 11.7 million spray acres (including 3.2 million spray acres sprayed by engaging private aircrafts) covered during 1976-77.

4. During 1978-79, the first year of the Fifth Plan, policies and programmes would be followed to set a base to accelerate growth rate in agriculture with a view to achieving the Fifth Plan targets.

5. Some of the policy decisions recently announced include allowing imports of five standardised makes of tractors by the private sector, in addition to import of these makes under public sector. Furthermore, power tillers and mechanical farming equipments, not manufactured in the country, can now be imported free of duty and taxes in the private sector as well. In addition, a subsidy of 75 per cent on the cost of granular pesticides has been allowed. Free import of pesticides has been allowed under the private sector. A subsidy of 75 per cent has also been allowed on cost of Zinc Sulphate, the source of zinc which is an important micronutrient.

6. Among the major agriculture programmes are the IBRD assisted modern system of extension services based on training and visit system (T & V) and the seed industry projects. In addition, rural development programme will be implemented with a new approach and scope to stimulate agricultural growth. Furthermore, increase in prices of various paddy varieties under the price support programme would help increase agricultural production. Allocation for agriculture sector for 1978-79 has been enhanced by about 25% over the 1977-78 level. The major increases are for agricultural extension (88%), fisheries (90%), forestry (50%), fertilizer (47%), and improved seeds (23%).

7. Details of the agricultural development programmes follow :

Financial Allocation

8. A sum of Rs. 2,054.538 million has been provided in the ADP, 1978-79 for the agriculture sector, against Rs. 1,650.439 million allocated for 1977-78 (an increase of about 25 per cent). It is estimated that a sum of Rs. 1,421.2 million was utilised during 1977-78, which comes to a utilisation of 86 per cent.

9. The break-down of the allocation for 1978-79, by executing agencies, *vis-a-vis* the allocation for 1977-78 is shown below :

TABLE 1
Financial allocation, 1978-79

Executing Agency	A.D.P. 1977-78	Revised Estimates 1977-78	ADP Allocation for 1978-79	Percentage increase in A.D.P. allocation over 1977-78 ADP
				(Per cent)
	—Million Rupees—			
Federal	1,025.561	885.686	1,284.866	25.3
Baluchistan .. .	31.580	14.390	66.819	111.6
N. W. F. P. . . .	57.910	53.933	104.200	79.9
Sind	101.055	94.050	125.253	24.0
Punjab	434.333	373.140	473.400	9.0
Total .. .	1,650.439*	1,421.199	2,054.538	24.5

*Excluding Rs. 46.9 million for IRDP, which were shown in the Annual Plan 1977-78 under Agriculture sector but have now been reflected under Rural Development Sector.

10. The sub-sector-wise details of allocation for 1978-79, by executing agencies, may be seen in Appendices I—VII.

PHYSICAL ARCHIEVEMENTS AND TARGETS**Crop Production**

11. Actual production of major crops during 1976-77, likely achievements during 1977-78, and targets for 1978-79 and bench-marks for 1977-78 for Fifth Plan are shown in Table 2.

TABLE 2
Production of Major Crops 1976-77, 1977-78, Fifth Plan Bench-marks 1977-78 and Targets for 1978-79

Crop	1976-77 (Actual)	1977-78			1978-79 Target	
		Target	Estimated Achievement	Achievement as percentage of target		
1	2	3	4	5	6	7
	—Thousand long tons—			(Per cent)	—Thousand long tons—	
Total Food-grains	13,130	14,077	12,582	89.4	13,100	13,815
Wheat	8,999	9,500	8,158	85.9	8,700	9,200
Rice	2,694	2,832	2,904	102.6	2,900	3,020
Maize	752	935	808	86.4	800	875
Other food-grains	685	810	712	87.9	700	720

1	2	3	4	5	6	7
Sugarcane	29,057	29,500	29,607	100.4	28,000	30,150
Cotton (Lint)	428 (2,446)*	612 (3,500)*	566 (3,233)*	92.5	578 (3,300)*	630 (3,600)*
Oil Seeds	1,223	1,610	1,453	90.3	1,544	1,660
Cotton seed	856	1,225	1,132	92.4	1,156	1,260
Rape and Mustard	292	288	236	82.0	300	310
Groundnut	63	75	71	94.7	63	75
Sesamum	12	12	12	100.0	12	12
Others	—	10	2	20.0	13	3
Pulses	831	825	802	97.2	830	845
Gram	639	630	610	96.8	645	640
Mash	26	30	26	86.7	25	31
Mong	29	35	30	85.7	30	32
Masoor	30	30	33	110.0	30	32
Others	107	100	103	103.0	100	110

*Figures in parentheses indicate production of cotton lint in thousand bales.

12. The input programmes proposed for 1978-79 to achieve the above mentioned crop production targets are described below :

Fertilizer

13. It is planned to distribute 820 thousand nutrient tons of fertilizer during 1978-79 (630 thousand nutrient tons of Nitrogen, 180 thousand nutrient tons of phosphorus and 10 thousand nutrient tons of potash), as against an estimated off-take of 720 thousand nutrient tons in 1977-78. This shows an increase of about 13.9 per cent over the previous year. The province-wise estimated off-take during 1977-78 and the target for 1978-79 are shown in Table 3.

TABLE 3

Fertilizer off-take during 1977-78 and Target for 1978-79

Province	Estimated off-take 1977-78	Off-take target 1978-79
	(000 nutrient tons)	
Punjab	473	549 (67%)
Sind	194	185 (22.5%)
N. W. F. P.	50	74 (9%)
Baluchistan	3	12 (1.5%)
Total	720	820

14. The Fertilizer application per cropped acre is expected to increase from about 35 nutrient lbs. in 1977-78 to about 39 nutrient lbs. in 1978-79.

15. The estimated crop-wise usage of fertilizer for the years 1975-76 to 1978-79 is shown in Table 4.

TABLE 4
Estimated Crop-wise usage of Fertilizer during 1975-76 through 1978-79

Crop	1975-76	1976-77	1977-78	1978-79 (Target)
	(000 nutrient tons)			
Wheat	264	303	346	394
Rice	66	76	87	98
Maize	39	44	50	58
Cotton	88	101	115	131
Sugarcane	60	69	79	90
Others	33	38	43	49
Total	550	631	720	820

Note.—The crop-wise break-down has been based mainly on the estimates of ESSO Pakistan Fertilizer Company, with some adjustments.

16. The estimated availability and import requirements of fertilizer for 1978-79 to meet the above targets are given in Table 5.

TABLE 5
Estimated availability and Import requirements of Fertilizer for 1978-79

	N	P	K	Total
	(000 nutrient tons)			
Expected stocks on 1st July, 1978	68	45	3	116
Estimated local production	420	60	—	480
Estimated total availability	488	105	3	596
Off-take Target	630	180	10	820
Estimated Imports	142	75	7	224

17. To achieve the targeted off-take of 820 thousand nutrient tons during 1978-79, following steps need to be taken or continued :

- (i) A position of over-supply at the aggregate level ;
- (ii) Further improvement in fertilizer distribution machinery through expansion of rural outlets and encouragement of multiple marketing channels for sale ;
- (iii) Maintenance of suitable input-output price relationship ;
- (iv) Special efforts to popularize use of phosphatic fertilizers to further improve N:P ratio ;
- (v) Subsidizing of fertilizer prices ;
- (vi) Special efforts to popularize fertilizer in the *barani* area; and
- (vii) Adequate credit availability.

18. A sum of Rs. 974.600 million has been provided for subsidy on fertilizer distribution during 1978-79, against the revised estimates of Rs. 617.200 million in 1977-78.

19. A National Fertilizer Development Centre has been established in the Planning and Development Division with the assistance from UNDP/FAO/NORAD. The Centre will work out fertilizer demand by type, quantity and source of fertilizer for each province and crop. Marketing of fertilizer will be studied with a view to streamlining the system. The Centre will help conduct fertilizer trials on farmers field and collect and process data for economic studies, particularly on fertilizer prices in relation to agriculture commodity prices. Some international and local staff has joined the project.

Distribution of Improved Seed

20. Province-wise seed procurement and distribution programme for the years 1977-78 and 1978-79 is given in Table 6.

TABLE 6

Province-wise Seed Procurement and Distribution Programme for 1977-78 and 1978-79

	1977-78		1978-79	
	Quantity procured from 1976-77 crop	Quantity distributed	Estimated quantity procured from 1977-78 crop	Distribution target
	1	2	3	4
(000 maunds)				
Punjab				
Cotton	1,013	459	700	700
Paddy	69	67	124	124
Maize	40	21	15	15
Wheat	760	710	700	1,150
Gram	25	18	20	20
Others	30	—	30	30
Sub-total ..	1,937	1,275	1,589	2,039
Sind				
Cotton	523	465	150	150
Paddy	10	10	11	11
Wheat	67	45	64	100
Sub-total ..	600	520	225	261
NWFP				
Maize	5	5	1	5
Wheat	50	33	25	75
Others	4	2	3	24
Sub-total ..	59	40	29	104
Baluchistan				
Wheat	20	13	38	38
Others	2	—	—	—
Sub-total ..	22	13	38	38
Total ..	2,618	1,848	1,881	2,442*

*In addition Government have recently decided to import 30,000 tons (804,000 mds) of Seed of high yielding wheat varieties for sowing of Rabi 1978-79 Crop. Arrangements have been finalized to import 10,000 tons from Mexico and 270 tons from India. Efforts are being made to import remaining quantity of Seed also.

21. *Punjab*.—It may be seen from the data given in Table 6 that against 1,275 thousand maunds of seed of the major crops distributed in 1977-78, the target for 1978-79 has been placed at 2,039 thousand maunds, showing an increase of about 60 per cent. In 1978-79, the main quantitative increase is envisaged for cotton, paddy and wheat seed. The cotton seed distribution would increase from 459 thousand maunds in 1977-78 to 700 thousand maunds in 1978-79 and paddy seed from 67 thousand maunds to 124 thousand maunds and wheat seed from 710 thousand maunds to 1,150 thousand maunds.

22. *Sind*.—Seed distribution target for cotton, paddy and wheat has been proposed at 261 thousand maunds in 1978-79, against 520 thousand maunds distributed in 1977-78. Major short-fall in 1978-79 was in cotton seed distribution. Against 465 thousand maunds of cotton seed distributed in 1977-78, the target for 1978-79 has been placed at 150 thousand maunds. Seed distribution target for wheat has been placed at 100 thousand maunds in 1978-79, against the previous year's actual distribution figure of 45 thousand maunds.

23. *NWFP*.—It is planned to distribute 104 thousand maunds seed of all the major crops in 1978-79, against 40 thousand maunds distributed in 1977-78, showing an increase of about 160 per cent. Distribution of wheat seed is proposed to increase from 33 thousand maunds in 1977-78 to 75 thousand maunds in 1978-79.

24. *Baluchistan*.—Wheat seed distribution target for 1978-79 has been placed at 38 thousand maunds, against 13 thousand maunds distributed in 1977-78.

25. The overall seed distribution target for 1978-79 for all the major crops has been placed at 2,442 thousand maunds, against 1,848 thousand maunds of seed distributed in 1977-78. Thus, the seed distribution target is about 32 per cent higher than in 1977-78. There is a need to increase the efficiency of public sector organizations for procurement and distribution of improved seeds.

26. The rates of subsidy and premium (on purchase of improved seed from registered growers) for various crops in the four Provinces are shown in Table 7.

TABLE 7

Rate of Subsidy and Premium on Purchase of Improved Seeds

Crop	Punjab		Sind		NWFP		Baluchistan	
	Subsidy	Premium	Subsidy	Premium	Subsidy	Premium	Subsidy	Premium
..... Rupees per maund.								
Cotton	10.00	15.00	—	—	—	—	—	—
Paddy	6.50	2.00	—	2.00	—	—	—	—
Maize	6.50	2.00	—	—	14.50	—	—	—
Wheat	7.48	4.00	5.00	3.00	14.50	—	6.00	8.00
Gram	6.50	2.00	—	—	—	—	—	—
Others	6.50	2.00	—	—	14.50 to 22.00	—	—	—

27. The Provincial Governments have made provisions in their Annual Development Programmes for subsidies on procurement and distribution of improved seeds. The provision made for the purpose is Rs. 20.00 million by the Punjab, Rs. 1.00 million by Sind, Rs. 1.63 million by NWFP and Rs. 0.10 million by Baluchistan. These provisions made by the Provincial Governments appear adequate for seed distribution targets of 1978-79.

28. It is estimated that area under high yielding varieties of wheat has increased from 10.70 million acres in 1976-77 (69 per cent of the total wheat area) to 11.30 million acres (72 per cent of the total wheat area) in 1977-78 and would further increase to 11.90 million acres (74 per cent of the total wheat area). Similarly, the area under high yielding rice varieties is estimated to increase from 1.70 million acres (40 per cent of the total rice area) in 1976-77 to 1.84 million acres (41 per cent of the total rice area) in 1977-78 and to further 1.90 million acres in 1978-79.

29. The Federal and the Provincial Governments of Punjab, Sind and Baluchistan have made provision in their Annual Development Programmes 1978-79 for implementation of Seed Industry Projects. In 1978-79, seed processing plants will be imported and installed. Nucleus and foundation seeds of all the major crops would be produced by the Provincial Governments in 1978-79 for further multiplication in 1979-80 as certified seed. The Seed Industry Projects would start yielding high quality seed of all the major crops in 1979-80 and onward.

Plant Protection

30. A sizeable damage is caused to crops by insect pests and diseases and the importance of plant protection measures in minimising losses needs no emphasis. The target for plant protection coverage by curative measures fixed for 1978-79, both through aerial and ground operations is 12.02 million spray acres (3.60 million spray acres by aerial operations and 8.42 million spray acres by ground operations), against an estimated coverage of 9.71 million spray acres (3.25 million spray acres by aerial operations and 6.46 million spray acres by ground operations) during 1977-78. The province-wise break-down of the estimated coverage during 1977-78 and the targeted coverage during 1978-79 are shown in Table 8 below.

TABLE 8

Plant Protection Coverage 1977-78 and 1978-79

Province	Estimated coverage 1977-78			Target for 1978-79		
	Aerial operations	Ground operations	Total	Aerial operations	Ground operations	Total
.....million spray acres.....						
Punjab	1.88	5.00	6.88	1.30	6.60	7.90
Sind	0.61	1.02	1.62	0.97	1.12	2.09
N.W.F.P.	0.73	0.31	1.04	0.99	0.45	1.44
Baluchistan	0.03	0.13	0.16	0.34	0.25	0.59
Total	3.25	6.46	9.71	3.60	8.42	12.02

31. It may be pointed out that the aerial plant protection programme has been kept at about the 1977-78 level while more emphasis is proposed to be placed on control of pests and diseases through expansion of ground operations.

32. Preventive measures consisting largely of seed treatment against soil and seed borne diseases and control of pests through cultural practices will be intensified during 1978-79. The crop-wise break-down of the estimated area covered with plant protection measures during 1977-78 and targets for 1978-79 are shown in Table 9.

TABLE 9

Crop-wise Coverage of Area by Aerial and Ground Operations during 1977-78 and 1978-79

Crop	1977-78 (Estimated)			1978-79 (Target)		
	Aerial operations	Ground operations	Total	Aerial operations	Ground operations	Total
	—000 spray acres—					
Cotton	1,239	3,506	4,745	800	4,356	5,156
Paddy	1,275	562	1,837	1,449	854	2,303
Sugarcane	500	503	1,003	700	772	1,472
Maize	135	221	356	136	468	604
Oil seeds	—	15	15	250	25	275
Orchards	51	466	517	166	599	765
Tobacco	50	102	152	99	90	189
Vegetables	—	382	382	—	457	457
Others	—	706	706	—	797	797
Total	3,250	6,463	9,713	3,600	8,418	12,018

33. The province-wise and crop-wise estimated area covered by ground and aerial operations during 1977-78 and the targets for 1978-79 may be seen in Annexures VIII to XI.

34. To achieve the above targets, the following measures need to be taken :

- (i) Streamlining of the pesticide distribution system ;
- (ii) Supply of spraying equipment to farmers at subsidized cost ;
- (iii) Training of farmers in plant protection operations and handling of pesticides ;
- (iv) Provision of better training facilities for the plant protection staff itself and improved supervision ;
- (v) Improvement in coordination between the aerial and ground operations ; and
- (vi) Expansion of pest identification and warning system.

35. A sum of Rs. 296.360 million has been provided for in the Annual Development Programme 1978-79 for the plant protection sub-sector. The agency-wise break-down of the allocations is as follows :

TABLE 10
Targets and Achievement for Land Development, 1977-78 and 1978-79

Agency	ADP Pro- vision 1977-78	Provision for 1978-79
	— million rupees —	
Federal	98.316	97.160
Punjab	148.551	133.800
Sind	33.000	40.000
N.W.F.P.	17.000	18.900
Baluchistan	6.000	6.500
Total	302.867	296.360

Agricultural Mechanization

36. The Provincial Governments maintain a fleet of bulldozers for hiring out to farmers for land levelling purposes. The targets and achievements for bulldozer procurement during 1977-78 alongwith targets for 1978-79 are shown below :

Agency	Target	1977-78 Achievement	1978-79 Target
	— No. of bulldozers —		
Baluchistan	10	—	10
Sind	70	101	50
Punjab	20	—	397
Sub-Total (Provinces)	100	160	457
F.A.T.A.	15	18	—
Total	115	178	457

In N.W.F.P., about 220 bulldozers were proposed to be procured under non-developmental budget through the Italian Suppliers' Credit and these were duly received.

37. The targets for land development for 1977-78 and 1978-79 alongwith achievement during 1977-78 are shown below :

TABLE 11
Targets and Achievement for Land Development, 1977-78 and 1978-79

Agency	1977-78		1978-79
	Target	Achievement	Target
	—thousand acres—		
Baluchistan	37	29	44
N.W.F.P.	50	8	35
Sind	59	55	78
Punjab	90	114	255
Sub-Total (Provinces)	236	206	412
F.A.T.A.	5	4	8
Total	241	210	420

38. Actual achievement in respect of land levelling was greater than the target for 1977-78 in case of Punjab ; there was a slight shortfall in case of Sind and Baluchistan Provinces, while the performance in case of N.W.F.P. was unsatisfactory. Poor performance in case of N.W.F.P. was mainly because of delay in the arrival of new bulldozers, and engagement of the existing fleet in other activities such as road construction in Tribal Areas and construction of embankments (*bunds*) in D.I. Khan Division to harvest torrent (*Rod Kohi*) waters.

39. The Baluchistan Government proposes to purchase 10 bulldozers and four ten-wheeler transporters. Workshops will be set up at various locations and equipment will be procured for mobile workshops. In N.W.F.P, construction of category II workshops at Manshehra and Timmergarah, in Dir will be initiated. The Sind Government procured 160 light bulldozers during 1977-78 and envisages to purchase 50 heavy bulldozers under U.K. Government credit. In case of Punjab, land for setting up of a workshop at Kasur has been purchased and the construction work will be undertaken while arrangements for the purchase of land for a similar workshop at Vehari are being made. Additional facilities in the form of machinery, repair sheds, foundry shops & storage and office accommodation will be provided at the existing workshops. Vehicles, transportation machinery including tractor trollies will be purchased with a view to maintaining regu ar P.O.L supplies, and promptly attending to the break-downs in the field as well as keeping effective supervisory control. Under the project entitled " Provision of tractor pools at Tehsil Headquarters", about 45 tractors, 30 rotavators and 32 seed drills were purchased during 1977-78 while more machines and equipment will be purchased during 1978-79. The aim is to make available farm machinery to those who cannot afford to purchase their own and also to popularise the use of implements and machines not hitherto used by the farmers. Under the project entitled " Training of young farmers in operating tractors, implements, plant protection equipment, and running of tubewells ", about 500 operators were trained during 1977-78 and the training programme will be expanded during 1978-79. Construction of buildings for offices and workshop for Agricultural Mechanisation Research Institute, Multan will be continued. Machinery would be purchased, additional buildings would be constructed and more staff would be appointed at the *karkhana Aalate Zarae*, Bahawalpur which was transferred to the Agriculture Department by the Small Industries Corporation in November, 1976. This *Karkhana* will be utilised for manufacture of implements and appliances developed by the Agricultural Engineering Organization.

40. An IRRI-Pak Agricultural Machinery Programme has been started as a collaborative programme of the Agricultural Research Council of Pakistan and the International Rice Research Institute, Philippines. The objective is to provide suitable machines for small farmers through local manufacturing channels. The designs developed under this programme are made available free of costs to selected manufacturers in the region.

41. About 12 thousand tractors were imported during 1977-78 for sale to farmers against the target of 15 thousand. The target for import of tractors during 1978-79 would be 15 thousand.

Soil Conservation

42. No soil conservation programmes have been proposed for implementation by Agencies in Northern and Tribal Areas under the development budget. A new project on "Reclamation and Soil Conservation" is to be implemented in Azad Kashmir.

43. Two on-going soil conservation programmes in Kachhi and Chagai Districts and a sand dune stabilization programme in coastal areas of Mekran Coast, which were implemented during 1977-78 in Baluchistan, will be continued during 1978-79 as well. No project on soil conservation was implemented under the development budget in NWFP and Sind Provinces during 1977-78 and the position would remain unchanged during 1978-79 as well. In case of Punjab, new vehicles are proposed to be procured for replacement purpose and work on construction of buildings for offices and stores for Soil Conservation Directorate, Rawalpindi will be continued. Soil conservation activities on an extended scale will be carried out under a new project to be implemented in the Rawalpindi Division and parts of Sialkot, Sargodha, Mianwali and D. G. Khan Districts. Another new project to be taken up for implementation during 1978-79 is known as "Soil Conservation in mini dams on sub-catchment basis". This project would mainly cover Rawalpindi Division and is designed to treat the problem of soil conservation and run-off of water in an integrated manner on sub-catchment area basis through active participation of the people. Run-off of water would be tapped through mini dams, cattle ponds, and fish ponds in the upper reaches of each sub-catchment and will be utilized for agricultural purposes.

Support Price Policy

44. The support/price policy programme has been kept under review to provide necessary incentive for increased production. The existing position of prices of agricultural crops is as follows :

- (i) *Wheat*.—The support/procurement price of Rs. 37 per maund announced for the 1974-75 crop, remained operative for the 1975-76, 1976-77 and 1977-78 crops. For 1978-79 wheat crops the support price has been increased from Rs. 37 to Rs. 45 per maund (announced on 30th August, 1978).
- (ii) *Rice and paddy*.—With a view to maintaining the production of *basmati* rice and to improve relationship between the price of *basmati* and Irri-6 price, the per maund price of *basmati* rice (fair average quality) has been increased from Rs. 95 in 1977-78 to Rs. 110 for the 1978-79 crop. Similarly, the price of Irri-6 rice has been increased from Rs. 46 to Rs. 49 per maund for fair average quality and Rs. 54 to Rs. 56 per maund for superior grade. The per maund *basmati* paddy price has been increased from Rs. 52 in 1977-78 to Rs. 60 for the 1978-79 crop. The price for Irri-6 paddy Rs. 30 per maund announced in 1977-78 will remain effective in 1978-79 also.
- (iii) *Sugarcane*.—The per maund minimum guaranteed prices announced for 1975-76 crop (Rs. 5.50 for NWFP, Rs. 5.75 for Punjab and Rs. 5.90 for Sind) remained operative in 1976-77 and 1977-78.
- (iv) *Cotton*.—The per maund prices of seed cotton 1977-78 crop were raised to Rs. 138 for AC-134, N.T., BS-I; Rs. 149 for B-557, 149F; Rs. 160 for *Surmast*, *Qallandri*, Deltapine, MS 39, MS 40; and Rs. 132 for *desi* varieties, against the price of Rs. 125 per maund for upland varieties and Rs. 120 per maund for *desi* varieties for the 1976-77 cotton crop. The seed cotton prices of various types announced in 1977-78 will remain effective in 1978-79, except for *desi* cotton whose price has been increased from Rs. 132 to Rs. 134 per maund for 1978-79 crop.
- (v) *Maize, potato, Onion and pulses*.—These crops were included in the price support programme in 1976-77. The per maund prices fixed for 1976-77 viz. Rs. 32 for maize, Rs. 25 for potato, Rs. 18 for onion, Rs. 45 for gram (black, whole) and Rs. 70 for *masoor* (whole) remained operative in 1977-78 also.
- (vi) *Oilseeds*.—For the first time, the support price of Rs. 80 per maund for soyabean, Rs. 90 per maund for sunflower and Rs. 75 per maund for safflower for the 1977-78 crops were announced.

Agricultural Marketing

45. The Pakistan Agricultural Storage and Services Corporation was established in 1973 for purchase of agricultural commodities directly from the producers in order to ensure better prices for their produce. The Corporation was asked to procure wheat for supply to NWFP, Azad Kashmir and Defence Forces and about 230 thousand tons were procured against the target of 500 thousand tons for 1977-78. At the start of paddy procurement season, the prices were depressed below the notified prices of IRRI and *Basmati*. PASSCO was directed to enter into paddy marketing and about 138 thousand tons of paddy were procured during 1977-78. PASSCO sold about 5,014 tons of pulses to the Utility Stores Corporation, CSD private dealers etc during the year. The Corporation also procured about 30 thousand tons of various pulses. In addition, 9,856 bags of potatoes were sold in the open market from the produce of last year, while 1,661 tons of potatoes were purchased from the produce of this year and were stored in cold storages.

46. PASSCO completed construction of 140 thousand ton storage capacity for foodgrains. In addition, a target of 160 thousand ton capacity was fixed for 1977-78 of which work on 86 thousand ton capacity is in progress. The progress is slow because of paucity of funds. Construction of a cold storage of 3,000 ton capacity is nearing completion at Lahore. The Corporation also plans to install Dehydration Plant near fruit and vegetable market, Lahore. Construction of two *Pulse (dal)* splitting plants at Lahore and Sargodha has been completed, while land for another plant at Hyderabad has been acquired.

47. PASSCO maintained 20 Agricultural Machinery Pool Centres with a total strength of 115 tractors and 50 threshers. The Machinery Pools are equipped with implements needed by the farmers for primary and secondary tillage, land levelling etc.

48. The Board of Directors of PASSCO has decided that accounting year of PASSCO should be in line with the Banking Institutions *viz.*, January to December; hence they have supplied information for first six months of 1978-79.

49. Under procurement programme of agricultural commodities, PASSCO proposes to procure wheat 50 thousand tons, *moong* and *mash* 7 thousand tons, gram 4 thousand tons, *masoor* 200 tons and paddy 150 thousand tons during the first half of 1978-79. In addition, PASSCO plans to install cold storages at Karachi, Quetta and Peshawar. Also, a Pulse (*Dal*) Plant will be installed at Hyderabad. More tractors and agricultural implements will be purchased during the year.

50. A citrus grading plant established by the Federal Department of Agricultural and Livestock, Products Marketing and Grading at Peshawar was put into commercial operation during 1977-78. Transfer of the plant to NWFP Government is being negotiated. Work on the Federal Government scheme "Development of Agricultural Marketing in Pakistan will commence during the year. It is expected that grading of bones for export will be introduced during 1978-79. The market and laboratory research on various agricultural commodities continued during 1977-78 and grades for mango, walnut, etc. were formulated. In addition, grade standard and grading and marking rules were drafted during 1977-78 for frozen and canned shrimps and prawns. The programme will continue during the year. It is expected that the Government of Punjab will initiate their programmes relating to "Creation of Commodity Marketing Board" and "Processing of mangoes and citrus" during the year.

Agricultural Credit

51. The farmers need credit for purchase of production inputs. The volume of institutional credit available to the farmers is far less than their requirement. To alleviate this situation the Government have taken several measures *viz.*: induction of commercial banks in agricultural financing, introduction of "Pass Book System" and increased allocation in the credit plans. A target of Rs. 2,200 million has been fixed for institutional agricultural credit during 1978-79, against

Rs. 1,496. 4 million disbursed during 1977-78. The details regarding disbursement of loan to farmers through institutional credit agencies during 1977-78 and target for 1978-79 are given below :

TABLE 12
Institutional Credit to Farmers

Year	Institutional Credit Agencies				
	ADBP	Agri. Coops.	Taccavi	Commercial Banks	Total
	— million rupees —				
1977-78 (estimated disbursement)	430.53*	280.12*	6.09**	779.80	1,496.54
1978-79 (target)	690.00	319.00	15.00	1,176.00	2,200.00

*Up to March 1978.

**Excluding N.W.F.P.

52. Out of Rs. 430.53 million disbursed by the ADBP during 1977-78, the short, medium and long term loans were of the order of Rs. 47.72 million, 14.53 million and Rs. 371.53 million, respectively. Two bank branches sub-branches were added to the previous number of 174, while the number of regional offices remained at 17. During the last few years, the bank had opened branches at tehsil level on the request of Provincial Governments. The policy is to strengthen the existing branches rather than to open new ones, except for a few branches to be opened in the IRDP markaz during 1978-79.

53. *Cooperatives*.—The Federal Bank for Cooperatives established in 1976 is the principal loaning agency for cooperative banks in the country. It provides the cooperative banks guidance in improving flow of credit to small farmers through the cooperative societies. The bank sanctioned Rs. 203.8 million as production loans to agricultural cooperative societies during 1977-78. The target for disbursement of loan for 1978-79 has been fixed at Rs. 319.00 million.

54. *Baluchistan*.—Due to financial constraints, establishment of a cooperative farm could not be organised during 1977-78. Three cooperative farms are proposed to be established during 1978-79.

55. *N.W.F.P.*—Four cooperative farms were established in 1977-78, one each in D.I. Khan, Bannu, Peshawar and Mardan Districts under the national scheme of cooperative farming. Consolidation and development of these farms will continue during 1978-79. Under the scheme "Dissemination of Cooperative Education and Publicity", construction of 3 residential flats, installation of tubewells, sewerage system and construction of internal roads were undertaken during the year. Training classes for Cooperative Inspectors and Sub-Inspectors and managerial staff of cooperative societies will be held during 1978-79. In addition, four divisional level seminars will be organized during the year. Under the cooperative soil conservation project for Peshoongari area of Peshawar District, 5 tubewells will be operated to reclaim 500 acres of water logged agricultural land. Building for Women Handicraft Marketing Centre will be completed and equipment will be purchased. About 10 thousand tons of fertilizer and 36 thousand tons of cement will be distributed through the primary cooperative societies under the project entitled "Revitalization of Rural Supply Cooperative Corporation". A sum of Rs. 10 lakh will be spent on construction of Cooperative Chamber.

56. *Sind*.—Development and consolidation work on the already established cooperative farms continued during 1977-78. It is envisaged to provide machinery to these farms during 1978-79.

57. *Punjab*.—Agricultural machinery such as tractors (20), cultivators (15), threshers (60), rotavators (5) and tubewells (6) were provided during 1977-78 to the five cooperative farms already established under the national scheme for cooperative farming. Six tubewells will be installed by these societies in 1978-79. Small implements will also be supplied and construction of godowns and offices for cooperative farming societies will be undertaken during the year. Under the "Cooperative Sheep Shearing Scheme", 1440 sheep were supplied to the members and 3,383 maunds of wool

was procured and marketed during 1977-78. The programme relating to procurement and marketing of wool will continue during the year. Installation of tubewells initiated under the project "Cooperative Farming for Sugarcane Production in Pasrur during 1977-78" will continue during the year. It is expected that about 500 acres of sugarcane will be raised for supply of cane to the sugar mill at Pasrur. A dairy cooperative farming society will be organized in Rawalpindi District for supply of fresh milk to the Islamabad Milk Plant.

Government Foodgrain Storages

58. The storage capacity available with the public sector (upto June, 1978), storage under construction and storage target for 1978-79 are shown below :

TABLE 13
Storage Capacity

Agency	Estimated capacity in June 1978	Target for 1977-78 likely to be completed by end of June, 1979	Target for 1978-79	Total capacity by the end of 1978-79
—————thousand tons—————				
Provincial				
Punjab	973	150	145	1,268
Sind	395	40	7	442
NWFP	142	25	7	174
Baluchistan	79	21	14	114
Sub-Total	1,589	236	173	1,998
Federal				
Food Wing (Food Directorate)	25	—	—	25
A.K. and N.A.	20	—	—	20
Defence Division	50	—	—	50
Commerce Division	688	—	37	725
Sub-Total	783	—	37	820
Total	2,372	236	210	2,818

59. A sum of about Rs. 90 million for construction of new storages and about Rs. 30 million for completion of the on-going schemes has been provided in the Annual Development Programme, 1978-79. The funds provided for new storages in 1978-79 will be adequate to construct about 210 thousand ton capacity. By the end of 1978-79, the total storage capacity available in the public sector would be 2.818 million tons (2.093 million tons with the Provincial Governments and Food and Agriculture Division for wheat, 0.688 million tons with Rice Export Corporation for rice and 37 thousand tons with the Cotton Export Corporation to store about 200 thousand bales of cotton).

60. With the expected increase in production of foodgrains, the demand for storages would increase. A comprehensive plan on future need of storages for all agricultural commodities and inputs is being prepared by a Canadian Consultant firm. The plan is expected to be ready by the end of December, 1979.

Research on Crop Production

61. Following new high yielding varieties were evolved/selected for general cultivation during 1977-78 :

Punjab .. .. .	..	Rice Pak. 177 (released).
Sind .. .. .	..	Barley T.J. 70 (released), Rice IR-156 (Selected), Cotton K-68 (Approved).
NWFP .. .. .	..	Barley Beacher (released), Tobacco Varieties Coker- 213 and Speight G-28 (recommended for release).

About 7000 lines of wheat were collected from all over the world and efforts were made to develop varieties with better yield potentials by incorporating divergent genes for resistance to all prevalent races of rusts. As a result of these efforts, a few varieties of wheat have been developed and many advance lines are under trials for release to the farmers.

62. The Agricultural Research Council of Pakistan has launched a number of cooperative research programmes. These programmes include wheat, barley and triticales, maize, sorghum and millets, rice, oil seeds forage and fodder crops. In addition, cooperative research programmes on pulses, vegetables, sugar crops, cropping pattern, soil micro-nutrients, post harvest losses, and barani farming have been formulated for implementation during 1978-79. Work on the establishment of Pakistan Agricultural Research Centre, of the Agricultural Research Council will continue. Facilities will be further expanded at the existing Agricultural Research Institutes located in the various provinces. Work will continue on evolution of high yielding, salt tolerant, fertilizer responsive early maturing and disease resistant varieties of wheat, rice, maize, cotton, oilseeds, pulses, fruits and some other minor crops. Also, research on evolution of high yielding and frost resistant varieties of sugarcane will continue. Some success has been achieved in the introduction of tea, coffee and other special crops and it has been planned to continue the work.

63. A joint Indus Basin Research Assessment Group was constituted under the aegis of the Planning Division with the active participation of the Ministry of Agriculture, Ministry of Irrigation and Power and the Ford Foundation. The objective of this assessment is to identify basic scientific public policy issues which affect the long term potential and stability of the Indus Basin agricultural system. The Group identified scientific and technical as well as economic research areas and suggested appropriate means for addressing major research tasks.

64. A sum of Rs. 84.082 million has been provided for the sub-sector in the ADP 1978-79 against Rs. 61.581 million allocated for 1977-78.

Agricultural Education

65. In Azad Kashmir, work on the establishment of an Agricultural Training Institute was started sometime ago. This work will continue during 1978-79. Training and educational programme will continue in Diamir in the Northern Areas. Scholarships will continue to be awarded to students from the Tribal Areas for studies in agriculture.

66. Baluchistan Government do not propose to implement any agricultural education programme during 1978-79 under the development budget. Scholarships will be awarded to students of Malakand Division of N.W.F.P. for studies at Agricultural College, Peshawar. Facilities in the form of equipment, buildings and furniture would be provided at Agricultural Training Institute, Peshawar. Pre-service training of Field Assistants as well as Stock Assistants, in-service training of Agriculture and Field Assistants of Agriculture Department and Stock Assistants of Animal Husbandry Department was continued at that Institute. Refresher courses for farmers were also organised. Equipment, buildings, furniture and other facilities will be provided under the Third Education Project at the Agricultural Training Institute, Sakrand, Sind, Sargodha and Rahim Yar Khan, Punjab. Hostel buildings, laboratories, classrooms, teaching equipment, furniture and teaching staff would be provided at Agriculture University, Tandojam to increase admission capacity and to start certain new courses at this institution. New books would be purchased for the library at the Agriculture University, Faisalabad and more facilities will be provided for faculties of science and

rural home economics at this institution. Work on the remaining items under the Revised Supplementary Scheme (Phase-III) for Agricultural University, Faisalabad will be completed. Preliminary work in connection with the establishment of an Agricultural College for Barani Area will be taken in hand.

Agricultural Extension

67. A sum of Rs. 45.920 million has been allocated for the sub-sector during 1978-79, against Rs. 24.468 million provided for 1977-78, which shows an increase of 88 per cent. The agency-wise breakdown is as follows :

TABLE 14
Allocations for Agricultural Extension

Agency	1977-78	1978-79
	(Million Rupees)	
Federal	10.000	8.000
Baluchistan	—	4.300
N.W.F.P.	1.100	3.240
Sind	0.500	5.500
Punjab	12.868	24.880
Total ..	24.468	45.920

68. Programmes of maximization of cotton production would be extended to cover nearly 240 thousand acres (180 thousand acres in the Punjab and 60 thousand acres in Sind) to increase acre-yield of lint by 1.3 mds. in the Punjab and 1.7 mds. in Sind.

69. In the Northern Areas, provision has been made for setting up of extension service in Skardu and Gilgit agencies, while in Azad Kashmir, it has been planned to strengthen the agricultural extension service alongwith continuation of on-going programmes of production of vegetables, potato and apple and establishment of experimental demonstration farms under the Co-operative, Maize Production Programme.

70. In Baluchistan, funds have been provided for strengthening of agricultural extension service in the province including irrigated areas of Hub Dam. Farmers training programme would also be implemented during the year. It has also been planned to initiate work on development of *barani* agriculture. In addition, programmes for construction of stores and residential accommodation have been included for implementation during the year.

71. In N.W.F.P., it has been proposed to lay 5 707 demonstration research plots both by the Department of Agriculture and under the *Barani* Agricultural Development Project during 1978-79, against 4,880 plots laid out during 1977-78. The Department of Agriculture held 14 shows and *melas* at various levels during 1977-78 and it has been planned to hold 39 shows and *melas* during 1978-79. In addition, programme for strengthening of agricultural extension service in D.I. Khan, Swat and Mardan SCRAP areas has been proposed for 1978-79.

72. The Government of Sind has allocated a sum of Rs. 5.5 million for launching IBRD assisted Extension and Agricultural Development Programme during the year.

73. A sum of Rs. 10.586 million has been allocated for launching of IBRD assisted Extension and Agricultural Development Programme in the selected districts of the Punjab. It has also been programmed to initiate work on a new programme of green belts. In addition to on-going programmes for development of *barani* agriculture, vegetable cultivation, setting up of information and publicity cell and strengthening and making extension service more mobile will be continued during the year.

74. Provincial Governments have planned to strengthen the agricultural extension service as indicated below :

TABLE 15
Agricultural Extension Service Staff

Province	Staff employed during 1977-78			Staff strength proposed for 1978-79		
	EADA	Agriculture Officers	Field Asstt.	EADA	Agriculture Officer	Field Asstt.
	—Number—					
Baluchistan ..	13	54	366	15	78	385
N. W. F. P. ..	18	159	598	18	159	598
Sind ..	12	203	723	12	203	723
Punjab ..	43	480	2,487	62	543	2,580
Total ..	86	896	4,174	107	983	4,286

Agricultural Economics and Statistics

75. Preliminary work on the Third Census of Agriculture initiated during 1977-78 will continue during the year. Work on establishment of Planning Cells in Baluchistan and Sind will be initiated during the year. Wheat survey on 148 sample *dehs* was done by the Statistical Organisation of Sind Government. The sample survey work on 125 sample *dehs* of cotton is in progress. The organisation will be strengthened with US AID assistance and necessary equipment will be supplied during 1978-79. Under the Government of Punjab project "Economic Study Cell", five studies relating to various aspects of agriculture were carried out during 1977-78. The Cell proposes to undertake more studies during 1978-79.

Animal Husbandry

76. Greater Emphasis has been laid on implementing programmes to increase production of milk, meat and eggs. Priority will be given to those measures which would produce quicker results. The major programmes will include improvement and expansion of facilities for prevention and control of diseases, opening of new veterinary hospitals/dispensaries, setting up of diagnostic laboratories at strategic places and opening of new livestock farms. Details of the programmes for the various administrative units/provinces are described below :

MILK AND MEAT PRODUCTION

77. *Federal*.—In the Federally Administrated Tribal Areas, about 179 bulls and 180 rams were provided for breed improvement during 1977-78. The programme for 1978-79 provides addition of 60 new rams and continuance of direct breeding facilities.

78. Free breeding service facilities were provided in Azad Kashmir through provision of 51 cow/buffalo bulls and 48 rams and bulls maintained under subsidy programme during 1977-78. This facility will continue for breed improvement in 1978-79.

79. *Baluchistan*.—The on-going programme for range and sheep/goat development will continue in Baluchistan. The existing dairy farm at Quetta will be further developed to start supply of processed milk in the city. Another dairy farm opened in the province during 1977-78 will also be improved and one more dairy farm will be opened at a suitable place in 1978-79. For breed improvement, 170 rams were supplied to promising breeders in 1977-78 in important breeding areas. Ten breeding bulls and 300 rams will be supplied during 1978-79. Three centres for artificial insemination were continued and 400 cases were inseminated during 1977-78. About 500 cases will be inseminated at 4 centres during 1978-79.

80. *N. W. F. P.*—Breeding facilities will continue to be provided in the N.W.F.P. to increase potential for milk, meat and wool production during 1978-79. About 80 bulls and an equal number of rams/bucks will be maintained under subsidy programme during 1978-79, against 4 bulls and 107 rams/bucks maintained during 1977-78. The programme for 1978-79 also proposes to expand the artificial insemination coverage to about 14,000 cows/buffaloes through 10 centres against 958 cases actually inseminated at these centres during 1977-78.

81. *Sind.*—The work on the improvement of cattle, buffalo and sheep breeds was continued in Sind through supply of 7 cow bulls, one buffalo bull and 8 rams during 1977-78. Ten cow bulls, 5 buffalo bulls and 20 rams will be supplied for strengthening direct breeding facilities. The artificial insemination technique will be expanded to larger area to provide insemination facility to about 6,000 cows/buffaloes at 5 centres during 1978-79, against 1,542 cases inseminated at 3 centres during 1977-78.

82. *Punjab.*—In the Punjab, the work initiated during 1976-77, under the scheme entitled "Punjab Livestock Project" for increasing milk and beef production through Village Livestock Associations, will be activated during 1978-79. For providing direct breeding facilities in the areas not covered by the artificial insemination programme, 10 cow bulls, 25 buffalo bulls and 178 rams were supplied under maintenance subsidy programme during 1977-78. The programme for 1978-79 proposes supply of 15 cow bulls, 60 buffalo bulls and 210 rams, during 1978-79. In addition, artificial insemination coverage will be provided to about 171 thousand cows/she buffaloes from 86 centres during 1978-79. About 77 thousand cases were inseminated at 72 centres in 1977-78.

POULTRY PRODUCTION

83. *Federal.*—The scheme entitled "Coordinated National Programme for development of rural poultry in Azad Kashmir" started during 1976-77 will be continued to expand and improve facilities for prevention and control of poultry diseases and multiplication of quality cockerels to improve the rural poultry.

84. *Baluchistan.*—The Government poultry/broilers farms in Baluchistan propose to produce about 3.00 million eggs, 20 thousand each of layers and broilers during 1978-79, against 2.00 million eggs, 11 thousand layers and 10 thousand broilers produced during 1977-78. In addition, it is proposed to open a new poultry farm during 1978-79 against three such farms opened during 1977-78.

85. *N. W. F. P.*—In N. W. F. P. about 80,000 eggs and 20,000 poultry meat birds and 6,000 layers will be produced at the Government farms during 1978-79. About 76,600 eggs, 1,100 poultry meat birds and 5,200 layers were produced in 1977-78.

86. *Sind.*—In Sind, it is estimated that about 6.65 million broilers and 3.02 million layers were produced during 1977-78. The production targets for 1978-79 is 7.26 million broilers and 3.11 million layers.

87. *Punjab.*—The Government poultry farms of Punjab will be fully utilized for the development of rural poultry through increased supply of hatching eggs and quality birds, at cheap rates. The Government of Punjab has started a programme for supply of poultry feed at cheap prices by establishing a poultry feed mill. The production targets for layers, broilers and eggs for 1978-79 under the 'Increased Poultry/Broilers Production Programme' in the Punjab are 2.00 million layers, 4.00 million broilers and 832.00 million eggs against 1.64 million layers, 3.78 million broilers and 684.22 million eggs estimated to have been produced during 1977-78.

ANIMAL HEALTH (DISEASE CONTROL)

88. In order to increase production of livestock by-products on a short term basis, full attention will be given to disease control and eradication of epidemics.

89. *Federal.*—In the Federally Administered Tribal Areas, 7 veterinary dispensaries were opened during 1977-78, while 8 new dispensaries will be opened during 1978-79 to improve veterinary aid facilities.

90. For improving veterinary coverage in the Azad Kashmir, buildings will be constructed for 8 veterinary dispensaries during 1978-79, against 4 dispensaries constructed during 1977-78. About 0.48 million animals and poultry birds were treated and 2.21 million were inoculated during 1977-78. The programme for 1978-79 proposes treatment of 0.60 million cases and inoculation of 3.45 million cases.

91. *Baluchistan*.—The veterinary aid facilities in Baluchistan will be improved by opening two hospitals during 1978-79. Five veterinary dispensaries were opened during 1977-78. About 7.00 million cases of livestock and poultry will be treated and 6.00 million cases inoculated/vaccinated during 1978-79, while 4.00 million cases were treated and 3.00 million cases were inoculated in 1977-78. About 0.50 million doses of sera/vaccine were produced during 1977-78. The target for 1978-79 is to produce 1.00 million doses.

92. *N. W. F. P.*—In N. W. F. P., about 0.48 million animals/poultry birds will be treated and 2.3 million will be vaccinated during 1978-79, against 0.79 million treated and 2.18 million vaccinated during 1977-78. Facilities for treatment of animals and birds will be improved by constructing buildings for 6 veterinary dispensaries during 1978-79. Ten veterinary dispensaries were opened and buildings for 7 dispensaries and 2 veterinary centres were constructed during 1977-78. The production of sera and vaccine at the Veterinary Research Institute, Peshawar will be about 9.1 million doses in 1978-79, against 8.6 million doses estimated to have been produced during 1977-78.

93. *Sind*.—In Sind, about 1.40 million animals/poultry will be treated and 2.5 million will be inoculated/vaccinated during 1978-79, against 1.20 million animals/poultry birds treated and 1.66 million inoculated/vaccinated during 1977-78. In addition, work on the construction of four veterinary hospitals started during 1976-77 will be completed and work will start on construction of 4 new buildings at other sites.

94. *Punjab*.—In the Punjab, 3 veterinary hospitals/dispensaries and 33 veterinary centres were opened during 1977-78. About 5.6 million cases of livestock/poultry were treated and 33.20 million were given preventive inoculation/vaccination during 1977-78. About 9.20 million cases are proposed to be treated and 40.80 million inoculated during 1978-79. Production of sera and vaccines in the Punjab during 1977-78 was 58 million doses. The target of sera and vaccine production during 1978-79 is 55 million doses.

EDUCATION AND TRAINING

95. *Federal*.—In FATA, funds will be provided for 5 scholarships to B.V.Sc./DVM course students during 1978-79, against 3 scholarships awarded during 1977-78.

96. In Azad Kashmir, Stock Assistants will be trained during 1978-79 to provide vaccination facilities under the programme for development of rural poultry.

97. *Provinces*.—In Baluchistan, interested young breeders of livestock will be trained as veterinary auxiliaries. In N.W.F.P. 18 B.V.Sc./DVM course students availed of the scholarships facilities during 1977-78. Seventeen such scholarships will be provided during 1978-79.

Range Management

98. Great potential exists for increase in livestock production through proper management of range lands. Some suitable programmes have been implemented in four provinces and Azad Kashmir and Northern Areas. In Azad Kashmir, about 6,205 acres of range lands were developed upto 1977-78 and a target to develop 2,500 acres has been proposed for 1978-79. A similar programme for the same purpose will be started in Baluchistan during 1978-79.

99. In Sind, 1,250 acres were reseeded and one *Toba* (water pond) excavated in addition to maintenance of 4 *Tobas* excavated during 1976-77. In addition to maintenance of the previous works, the programmes for 1978-79 includes reseeded over 1,600 acres and excavation of 8 *Tobas*.

100. In the Punjab, programmes for development of range land were implemented in Cholistan, Thal, D.G. Khan and Pothwar areas. In addition to reseeded of 2,879 acres, about 2,597 acres of the reseeded area were maintained during 1977-78. Also, two *Tobas* were excavated and 25 *Tobas* were maintained. It has been planned to reseed about 2,500 acres and to excavate 2 *Tobas* during 1978-79.

101. In N.W.F.P., it is proposed to survey 50,000 acres to identify suitable areas for proper development of range lands, of which about 6,000 acres will be developed in 1978-79. Pasture management will be undertaken over 1,000 acres in Hazara Division under the Watershed Management Programme.

Forestry

102. The data relating to industrial and fuel wood production given in Table 16 show that country on an average produces about 29.1 million cubic feet of wood, against the annual estimated requirements of 52 million cubic feet.

TABLE 16
Industrial and Fuel Wood Production for 1971-72 to 1977-78

Year	Industrial Wood	Fuel Wood	Total
	(million cft)		
1971-72	12.0	24.0	36.0
1972-73	15.5	18.0	33.5
1973-74	12.3	18.7	31.0
1974-75	7.8	14.2	22.0
1975-76	8.4	18.6	27.0
1976-77	11.1	22.2	33.3
1977-78	4.8	16.0	20.8
Average per annum	10.3	18.8	29.1

103. To help meet the wood deficit, programmes of accelerating the pace of afforestation especially through planting fast growing species such as Robinia, poplar, mulberry, eucalyptus etc. instead of conventional hard and soft wood tree species are under implementation. Productivity from the existing forest is expected to increase under systematic management. Afforestation along canals, roads, rail roads and in blocks are being undertaken. Irrigation facilities are being provided wherever feasible. In Azad Kashmir and Hazara Division of NWFP, programmes to improve the management of the existing forests, introduction of industrial forest plantation and introduction of intensive exploitation of the forests have been prepared with the assistance of World Bank and are likely to be implemented during 1978-79.

104. The achievements under afforestation during 1977-78 and targets for 1978-79 are given in Table 17.

TABLE 17
Province-wise Achievement and Targets of Afforestation for 1977-78 and 1978-79

Province	Compact Plantation		Linear Plantation			
	Targets 1977-78	Achievements 1977-78	Targets 1978-79	Targets 1977-78	Achievements 1977-78	Targets 1978-79
	—Acres—		—Avenue Miles—			
(i) Baluchistan	—	54	40	—	30	20
(ii) NWFP	15,011	1,160	3,860	317	342	463
(iii) Sind	1,290	1,841	4,169	—	—	—
(iv) Punjab	3,795	3,555	5,794	1,525	1,635	2,011
Total	20,096	6,610	13,863	1,842	2,007	2,494

105. The data given in Table 11 show that the achievements during 1977-78 under compact afforestation is about 33 per cent, mainly due to poor performance of the programme in NWFP. It is suggested that Government of NWFP may make efforts to improve the situation through winning the cooperation of people in raising and maintenance of trees. The achievement under linear plantation has exceeded the target by about 9 per cent. Programmes for raising commercial plantation by the industrialists for meeting their requirements of soft wood needs to be given due consideration. It is planned to raise compact plantation over 13.9 thousand acres during 1978-79 against the estimated achievement of about 6.6 thousand acres, while targets for linear plantation during 1978-79 is fixed at 2,494 avenue miles against 2,007 avenue miles planted during 1977-78. Furthermore, forest nurseries for supply of planting stocks would be raised on about 960 acres during 1978-79 against 909 acres of nurseries raised during 1977-78.

106. In Azad Kashmir about 12,000 acres were closed while the net area planted is estimated at about 6,000 acres. Furthermore, forest nurseries were established over about 115 acres. It is planned to plant about 6,000 acres and to raise sapling/planting material over about 115 acres during 1978-79.

107. Under the scheme, "Introduction and Establishment of Sericulture in Sind" about 17.73 ounces silk seed was procured. Furthermore, 4 acres of mulberry nursery and 44.5 acres mulberry plantation were raised during 1977-78. It is planned to procure 15 ounces of silk seed, to establish mulberry nursery over 5 acres and to raise 40 acres of mulberry plantation during 1978-79. In the other provinces, similar projects are under implementation to supply disease free silk seed and other facilities for enhancing silk production.

108. It is planned to improve the existing national parks game sanctuaries and game reserves in all the provinces as well as in Azad Kashmir and Northern Areas during 1978-79.

Watershed Management

109. Under the Watershed Management and Forest Extension Programme launched in NWFP about 10,943 acres were afforested, and about 203 thousand fruit plants were planted during 1977-78. It is planned to expand this programme to cover Swat and Dir Areas during 1978-79. Under both the on-going and new programme it is proposed to afforest 20,000 acres and to establish nurseries on about 220 acres during 1978-79. In addition, it is envisaged to establish fruit nurseries on 28 acres and to plant 447 thousand fruits plants during 1978-79.

110. In Azad Kashmir about 126 acres were afforested and nearly 124 acres were sown under the watershed management programme during 1977-78. It is planned to plant 500 acres and to sow seed on another 500 acres during 1978-79.

111. In Punjab, under the Watershed Management Programme launched in the Lehtrar Valley, afforestation was undertaken on 450 acres, and soil conservation works were carried over 3,600 acres during 1977-78. It is planned to carry out anti-erosion works on 975 acres and afforestation on 900 acres during 1978-79.

Fisheries

112. *Federal.*—The fisheries development programme aims at to exploit the fish resources both from the marine and inland waters. The production of fish is expected to increase from 253 thousand metric tons in 1977-78 to about 263 thousand metric tons in 1978-79.

113. Under the Federal Government scheme "Cured Fish Investigation", junior staff has already been appointed and equipment such as jeep, chemicals and furniture have also been purchased. Senior technical staff could not be appointed due to non-finalization of recruitment rules during 1977-78. Work relating to site selection and provision of other facilities will be undertaken during 1978-79.

114. Construction work on the Karagh, Bara Ghanche and Ghizar trout fish farm was completed during 1977-78. Also, equipment and material were purchased for fish disease research and treatment laboratory. About 30 thousand green trout were produced through artificial hatching during 1977-78. In addition, 15 thousand trout fingerlings were liberated in Satpara, Kachura and Sarfranga lakes during 1977-78. About 35 thousand green trout eggs and 25 thousand trout fingerlings will be produced for liberation into trout waters of Ghizar district during 1978-79.

115. *Baluchistan*.—Preparation of layout plans for jetties at Pasni and Sonmiani remained under progress during 1977-78 and the work is expected to be completed during 1978-79.

116. *N.W.F.P.*—Under the trout development programme, about 287 thousand eggs of trout were produced and about 225 thousand fries/fingerlings of trout were stocked during 1977-78. Under the warm water fisheries programme, about 75 thousand common carp fries were produced, while fish seed stocking was of the order of 185 thousand during the year. Construction of 76 ponds, one hatching room, one egg taking room and seven other buildings was completed.

117. During 1978-79, emphasis will be placed on commercial fish farming and utilization of dams and reservoirs for fish culture. The main activity during 1978-79 will be to establish 26 ponds. About 530 thousand eggs of trout and about 850 thousand fries of common carp will be produced and about 900 thousand fish seeds will be stocked in dams and reservoirs during 1978-79.

118. *Sind*.—Under the scheme "Carp fry collection and distribution facilities", a site covering 7 acres for establishment of fish nursery was acquired and construction of ponds started during 1977-78. Land has also been acquired for establishment of large hatcheries and layout plans of buildings and tanks were finalised. Exotic fish *Cyprinus carpio* was reared. Arrangements for electricity and water supply etc. were finalised.

119. During 1978-79, farm ponds will be stocked with brooder fishes. Exotic fishes will be raised and acclimatised during 1978-79. Under the scheme "Carp fry collection", four sets of fry farms will be constructed and about 1,000 thousand fish fries will be collected and distributed during 1978-79. In addition, garrage sheds will be constructed and more vans will be purchased.

120. *Punjab*.—Work on the development of small dams, reservoirs, lakes, waterlogged areas and village ponds etc. was intensified during 1977-78. Work on establishment of fish hatcheries at Chenawan, Faisalabad and Mian Channu continued during 1977-78.

121. There were about 1,600 commercial fish farms in Punjab as on June 30, 1978.

122. Special emphasis was placed during 1977-78 on stock replenishment programme of natural resources and their judicious management and exploitation. About 2.9 million fish were stocked under the extension programme. A training programme was undertaken at the Fisheries Training Institute, Qadirabad for 242 persons during the year.

123. During 1978-79, fish production programme will be further strengthened and efforts will be made to utilize untapped fish resources in private and public sectors. Work on establishment of fish hatchery, Chenawan will be completed during 1978-79, while work on fish hatcheries at Mian Channu and Faisalabad will continue. About 200 private fish farms will be established during the year.

124. The exotic fish, *Cyprinus carpio* has shown encouraging results in departmental farms and 1,400 thousand fries were obtained during 1977-78. About 7,000 thousand fish seed of common carps will be produced during 1978-79.

125. The Chinese grass carp and silver carp have spawned successfully during July, 1978. The programme will be intensified during 1978-79.

ANNUAL DEVELOPMENT PROGRAMME, 1978-79, AGRICULTURE

SUMMARY—PAKISTAN

Sub-Sector/Category	A.D.P. 1977-78	Revised Estimate 1977-78	Provision for 1978-79			
			On-going	New	Total	
		(Rs.	Million)			
I. Crop Production Sub sector.						
1. Fertilizers	667.020	619.061	975.636	—	975.636	
2. Improved Seed	84.382	57.550	88.963	15.129	104.092	
3. Plant Protection	302.867	319.340	295.860	0.500	296.360	
4. Soil Surveys	2.650	2.731	1.313	—	1.313(a)	
5. Mechanization	(a)	50.932	37.475	8.150	45.625	
	54.758				45.625	
6. Soil Conservation	3.635	2.111	2.418	6.400	8.818	
II. Infra-structure and Institutional Arrangements						
7. Agricultural Marketing	1.100	1.067	3.250	0.900	4.150	
8. Cooperatives	3.937(b)	4.918	9.115	4.580	13.695(b)	
9. Government Foodgrain Storages	134.481	25.614	7.499	80.434	87.933	
10. Research on crop Production	61.581	52.747	70.782	13.300	84.082	
11. Agricultural Education	17.287(c)	12.813	20.541	1.146	21.687(c)	
12. Agricultural Extension	24.468	18.483	27.534	18.386	45.920	
13. Agricultural Economics and Statistics	1.000	1.195	1.496	1.132	2.628	
14. Consolidation of Agri. Land Holdings	0.100	0.100	—	—	—	
III. Other Sub-Sectors						
15. Animal Husbandry	108.371	84.409	89.661	18.178	1 07.839	
16. Range Management	3.027	2.408	4.805	0.500	5.305	
17. Forestry	49.633	35.734	55.959	18.332	74.291	
18. Watershed Management	8.117	8.117	7.242	3.300	10.542	
19. Fisheries	12.568	8.957	20.798	3.058	23.856	
Total	1,540.982	1,308.287	1,720.347	193.425	1,9 13.772	
Commerce Division	30.000	30.000	23.000	—	23.000	
Pakistan Tobacco Board	2.000	2.004	2.800	—	2.800	
Science and Technological Division	1.300	0.776	—	0.200	0.200	
Statistics Division	1.400	1.177	1.400	—	1.400	
Finance Division	20.000	20.000	22.500	—	22.500	
Planning Division	4.000	5.002	7.400	—	7.400	
Kashmir Affairs Division	34.980	33.449	49.700	—	49.700	
State and Frontier Regions Division	14.777	12.604	21.266	—	21.266	
Interior Division	1.000	7.900	5.000	—	5.000	
Industries Division	—	—	—	7.500	7.500	
Grand Total	1,650.439	1,421.199	1,853.413	201.125	2,0 54.538 (d)	

Note : A sum of Rs. 46.900 million was provided in the ADP 1977-78, for IRDP which has now been transferred to rural Development sector.

(a) Excludes provision for tubewells and minor irrigation schemes reflected under Water Resources Sector as under:

1977-78 Baluchistan Rs. 6.238 million ; NWFP Rs. 3.450 million ; Sind Rs. 7.700 million ; and Punjab Rs. 31.950 million.

1978-79 Baluchistan Rs. 2.162 million ; NWFP Rs. 10.000 million ; Sind Rs. 13.800 million and Punjab Rs. 55.700 million.

(b) Excludes provisions made for scheme " subsidizing the installation of tubewell/centrifugal pumps on cooperative basis in N.W.F.P. reflected under Water Resources Sector as under :

1977-78-Rs.—0.640 million.
1978-79-Rs.—0.800 million.

(c) Includes provision for the scheme relating to Agricultural University at Tandojam shown under Education and Training in the Sind Government's A.D.P. Relevant provisions were ; Rs. 5.153 million during 1977-78 and Rs. 7.653 million during 1978-79.

(d) Includes Rs. 13.300 million shown under Murree-Kahuta Development Authority for Agriculture Sector Programmes.

**ANNUAL DEVELOPMENT PROGRAMME, 1978-79, AGRICULTURE
SUMMARY—ALL PROVINCIAL PROGRAMMES**

Sub-Sector/Category	1977-78		1978-79		
	ADP	Revised Estimates	On-going	New	Total
	(Million Rupees)				
I. Crop Production Sub-sectors					
1. Fertilizers	2.420	1.861	1.036	—	1.036
2. Improved Seeds	81.882	52.618	84.663	15.129	99.792
3. Plant Protection	204.551	225.840	198.700	0.500	199.200
4. Soil Surveys	1.050	1.131	1.313	—	1.313
5. Mechanization	54.758(a)	50.932	37.475	8.150	45.625(a)
6. Soil Conservation	3.635	2.111	2.418	6.400	8.818
II. Infra-structure and Institutional arrangements					
7. Agricultural Marketing	—	—	—	0.900	0.900
8. Cooperatives	3.937(b)	4.918	9.115	4.580	13.695(b)
9. Govt. Foodgrain Storages	34.481	12.614	7.499	70.434	77.933
10. Research on Crop Production	25.731	19.137	28.532	11.300	39.832
11. Agricultural Education	17.287(c)	12.813	20.541	1.146	21.687(c)
12. Agricultural Extension	14.468	12.483	19.534	18.386	37.920
13. Agricultural Economics and Statistics	1.000	1.195	1.496	1.132	2.628
14. Consolidation of Agri. Land Holdings	0.100	0.100	—	—	—
III. Other Sub-Sectors					
15. Animal Husbandry	106.371	82.682	87.661	18.178	105.839
16. Range Management	3.027	2.408	4.805	0.500	5.305
17. Forestry	49.633	35.734	55.959	17.982	73.941
18. Watershed Management	8.117	8.117	7.242	3.300	10.542
19. Fisheries	12.430	8.819	20.608	3.058	23.666
Total ..	624.878	535.513	588.597	181.075	769.672(d)

Note:—A sum of Rs. 38.200 million was provided in the ADP 1977-78 for IRDP, which has now been transferred to Rural Development Sector.

(a) Excludes provision for tubewell and minor irrigation schemes reflected under Water Resources Sector as under:
1977-78: Baluchistan Rs. 6.238 million; NWFP Rs. 3.450 million; Sind Rs. 7.700 million; and Punjab Rs. 31.950 million.

1978-79: Baluchistan Rs. 2.162 million; NWFP Rs. 10.000 million; Sind Rs. 13.800 million; and Punjab Rs. 55.700 million.

(b) Excludes provision for scheme "subsidising installation of tubewells/centrifugal pumps on cooperative basis" reflected under Water Resources Sector as under:

1977-78 Rs. 0.640 million
1978-79 Rs. 0.800 million

(c) Includes provision for the scheme relating to Agricultural University at Tandojam shown under Education and Training in the Sind Government's A.D.P. Relevant provisions were; Rs. 5.153 million during 1977-78 and Rs. 7.653 million during 1978-79.

(d) Includes Rs. 13.300 million shown under Murree-Kahuta Development Authority for Agriculture Sector Programmes.

**ANNUAL DEVELOPMENT PROGRAMME, 1978-79, AGRICULTURE
SUMMARY—BALUCHISTAN**

Sub-Sector/Category	1977-78		1978-79		
	ADP	Revised Estimates	On going	New	Total
(Million Rupees)					
I. Crop Production Sub-sectors					
1. Fertilizers	—	—	—	—	—
2. Improved Seeds	10.001	3.699	5.000	0.600	5.600
3. Plant Protection	6.000	4.330	6.000	0.500	6.500
4. Soil Surveys	—	—	—	—	—
5. Mechanization	2.292(a)	2.688	1.550	4.150	5.700(b)
6. Soil Conservation	0.435	0.301	0.600	—	0.600
II. Infra-structure and Institutional Arrangements					
7. Agricultural Marketing ..	—	—	—	—	—
8. Cooperatives	0.583	0.583	0.834	1.500	2.334
9. Govt Foodgrain Storages ..	3.657	0.434	0.633	6.500	7.133
10. Research on Crop Production.	—	—	—	3.000	3.000
11. Agricultural Education ..	—	—	—	—	—
12. Agricultural Extension ..	—	—	—	4.300	4.300
13. Agricultural Economics and Statistics	—	—	—	0.782	0.782
14. Consolidation of Agri. Land Holdings	—	—	—	—	—
III. Other Sub-sectors					
15. Animal Husbandry	6.316	0.866	4.958	11.100	16.058
16. Range Management	—	—	—	0.500	0.500
17. Forestry	1.594	0.896	1.651	3.260	4.911
18. Watershed Management ..	—	—	—	—	—
19. Fisheries	0.702	0.593	8.901	0.500	9.401
Total ..	31.580	14.390	30.127	36.692	66.819

(a) Excludes Rs. 6.238 million for 2 schemes relating to Water Resources Sector.

(b) Excludes Rs. 2.162 million for "on farm management" reflected under Water Resources Sector.

Note :—A sum of Rs. 5.200 million was provided in the ADP 1977-78 for IRDP, which has now been transferred to Rural Development Sector.

ANNUAL DEVELOPMENT PROGRAMME 1978-79, AGRICULTURE
SUMMARY - NWFP

Sub-Sector/Category	1977-78		1978-79		Total
	ADP	Revised Estimates	On-going	New	
	(Million Rupees)				
I. Crop Production Sub-sectors					
1. Fertilizers	0.120	0.120	—	—	—
2. Improved Seeds	2.832	0.920	3.281	13.179	16.400
3. Plant Protection	17.000	17.000	18.900	—	18.900
4. Soil Surveys	—	—	—	—	—
5. Mechanization	0.820(a)	0.326	—	3.800	3.800(b)
6. Soil Conservation	—	—	—	—	—
II. Infra-structure and Institutional arrangements					
7. Agricultural Marketing	—	—	—	—	—
8. Cooperatives	0.854(c)	1.066	3.561	2.600	6.161(d)
9. Govt. Foodgrain Storages	0.824	0.800	—	3.300	3.300
10. Research on Crop Production	4.840	5.218	5.002	2.500	7.502
11. Agricultural Education	2.250	2.250	3.578	—	3.578
12. Agricultural Extension	1.100	1.100	1.240	2.000	3.240
13. Agricultural Economics and Statistics	—	—	—	—	—
14. Consolidation of Agri. Land Holdings	0.100	0.100	—	—	—
III. Other Sub-sectors					
15. Animal Husbandry	8.899	11.741	11.131	3.078	14.209
16. Range Management	0.257	0.132	0.250	—	0.250
17. Forestry	10.111	5.748	10.108	5.384	15.492
18. Watershed Management	6.065	6.065	6.642	3.000	9.642
19. Fisheries	1.838	1.347	1.266	0.400	1.666
Total	57.910	53.933	64.959	39.241	104.200

(a) Excludes Rs. 3.450 million relating to schemes of Water Resources Sector.

(b) Excludes Rs. 10.000 million relating to schemes of Water Resources Sector.

(c) Excludes Rs. 0.640 million relating to scheme "subsidizing installation of tubewells/centrifugal pumps on cooperative basis" of Water Resources Section.

(d) Excludes Rs. 0.800 million provided for scheme "subsidizing installation of tubewells/centrifugal pumps on cooperative basis of Water Resources Sector."

Note :- A sum of Rs. 20.000 million was provided in the ADP 1977-78 for IRDP which, has now been transferred to Rural Development Sector.

ANNUAL DEVELOPMENT PROGRAMME 1978-79, AGRICULTURE
SUMMARY—SIND

Sub-Sector/Category	1977-78		1978-79		Total
	ADP Allocation	Revised Estimates	On-going	New	
(Million Rupees)					
I. Crop Production Sub-sectors					
1. Fertilizer	—	—	—	—	—
2. Improved Seeds	8.500	2.800	11.000	—	11.000
3. Plant Protection	33.000	34.500	40.000	—	40.000
4. Soil Surveys	—	—	—	—	—
5. Mechanization	29.803(a)	32.600	15.000	—	15.000(b)
6. Soil Conservation	—	—	—	—	—
II. Infra-structure and Institutional Arrangements					
7. Agricultural Marketing	—	—	—	—	—
8. Cooperatives	—	—	0.200	—	0.200
9. Govt. Foodgrain Storages	—	—	—	3.000	3.000
10. Research on Crop Production	7.400	5.787	12.150	—	12.150
11. Agricultural Education	6.653(c)	6.253	10.153	—	10.153(d)
12. Agricultural Extension	0.500	0.500	5.500	—	5.500
13. Agricultural Economics and Statistics	0.800	0.900	1.200	0.350	1.550
14. Consolidation of Agri. Land Holdings	—	—	—	—	—
III. Other Sub-sectors					
15. Animal Husbandry	6.050	3.913	4.872	—	4.872
16. Range Management	0.606	0.606	2.615	—	2.615
17. Forestry	5.553	5.320	13.229	0.185	13.414
18. Watershed Management	—	—	—	—	—
19. Fisheries	2.190	0.871	4.899	0.900	5.799
Total	101.055	94.050	120.818	4.435	125.253

(a) Excludes provision of Rs. 0.500 million for installation of 2,000 tubewells under subsidised scheme and Rs. 7.200 million for on farm water management project, reflected under Water Resources Sector.

(b) Excludes provision of Rs. 13.800 million reflected under the programme of Water Resources Sector.

(c) Includes Rs. 5.153 million for Agricultural Education shown under Education and Training.

(d) Includes Rs. 7.653 million for Agricultural Education shown under Education and Training.

Note :—A sum of Rs. 5.400 million was provided in the ADP 1977-78, for IRDP, which has now been transferred to Rural Development Sector.

ANNUAL DEVELOPMENT PROGRAMME 1978-79, AGRICULTURE
SUMMARY—PUNJAB

Sub-Sector/Category	1977-78		1978-79		Total
	ADP	Revised Estimates	On-going	New	
	(Million Rupees)				
L. Crop Production sub-sectors					
1. Fertilizers	2.300	1.741	1.036	—	1.036
2. Improved Seeds	60.549	45.199	65.382	1.350	66.732
3. Plant Protection	148.551	170.010	133.800	—	133.800
4. Soil Surveys	1.050	1.131	1.313	—	1.313
5. Mechanization	21.843(a)	15.318	20.925	0.200(b)	21.125
6. Soil Conservation	3.200	1.810	1.818	6.400	8.218
II. Infra-structure and Institutional Arrangements					
7. Agricultural Marketing	—	—	—	0.900	0.900
8. Cooperatives	2.500	3.269	4.520	0.480	5.000
9. Govt. Foodgrain Storages	30.000	11.380	6.866	57.634	64.500
10. Research on Crop Production	13.491	8.132	11.380	5.800	17.180
11. Agricultural Education	8.384	4.310	6.810	1.146	7.956
12. Agricultural Extension	12.868	10.883	12.794	12.086	24.880
13. Agricultural Economic and Statistics	0.200	0.295	0.296	—	0.296
14. Consolidation of Agri. Land Holdings	—	—	—	—	—
III. Other Sub-sectors					
15. Animal Husbandry	85.106	66.162	66.700	4.000	70.700
16. Range Management	2.164	1.670	1.940	—	1.940
17. Forestry	32.375	23.770	30.971	9.153	40.124
18. Watershed Management	2.052	2.052	0.600	0.300	0.900
19. Fisheries	7.700	6.008	5.542	1.258	6.800
Total ..	434.333	373.140	372.693	100.707	473.400(c)

(a) Excludes Rs. 31.950 million for schemes of Water Resources Sector.

(b) Excludes Rs. 55.700 million for schemes of Water Resources Sector.

(c) Includes Rs. 13.300 million shown under Murree-Kahuta Development Authority for Agriculture Sector Programmes.

Note:— A sum of Rs. 7.600 million was provided in the ADP 1977-78 for IRDP, which has now been transferred to Rural Development Sector.

**ANNUAL DEVELOPMENT PROGRAMME 1978-79, AGRICULTURE
SUMMARY—FEDERAL PROGRAMME**

Annexure VII

Sub-sector/Category	1977-78		1978-79		
	ADP Allocation	Revised Estimate	On-going	New	Total
I. Crop Production Sub-sectors					
(Million Rupees)					
1. Fertilizers	664.600	617.200	974.600	—	974.600
2. Improved Seeds	2.500	4.932	4.300	—	4.300
3. Plant Protection	98.316	93.500	97.160	—	97.160
4. Soil Surveys	1.600	1.600	—	—	—
5. Mechanization	—	—	—	—	—
6. Soil Conservation	—	—	—	—	—
II. Infra-structure and Institutional arrangements					
7. Agricultural Marketing	1.100	1.067	3.250	—	3.250
8. Cooperatives	—	—	—	—	—
9. Govt. Foodgrain Storages	100.000	13.000	—	10.000	10.000
10. Research on Crop Production	35.850	33.610	42.250	2.000	44.250
11. Agricultural Education	—	—	—	—	—
12. Agricultural Extension	10.000	6.000	8.000	—	8.000
13. Consolidation of Agri. Land Holdings	—	—	—	—	—
III. Other Sub-sectors					
14. Animal Husbandry	2.000	1.727	2.000	—	2.000
15. Range Management	—	—	—	—	—
16. Forestry	—	—	—	0.350	0.350
17. Watershed Management	—	—	—	—	—
18. Fisheries	0.138	0.138	0.190	—	0.190
Total	916.104	772.774	1131.750	12.350	1144.100
Statistics Division	1.400	1.177	1.400	—	1.400
Commerce Division	32.000	32.004	25.800	—	25.800
Science and Tech : Division	1.300	0.776	—	0.200	0.200
Finance Division	20.000	20.000	22.500	—	22.500
Planning and Development Division	4.000	5.002	7.400	—	7.400
Kashmir Affairs Division	34.980	33.449	49.700	—	49.700
State and Frontier Regions Division	14.777	12.604	21.266	—	21.266
Interior Division	1.000	7.900	5.000	—	5.000
Industries Division	—	—	—	7.500	7.500
Grand Total	1025.561	885.686	1264.816	20.050	1284.866

Note.—A sum of Rs. 8.700 million was provided in the ADP 1977-78 for IRDP which has now been transferred to Rural Development Sector.

ESTIMATED CROP-WISE COVERAGE BY GROUND OPERATIONS IN VARIOUS PROVINCES OF PAKISTAN DURING 1977-78

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Crops	Punjab		Sind		N.W.F.P.		Baluchistan		Total	
	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres
Cotton ..	719	2,876	210	629	1	1	0.3	0.3	930.3	3,506.3
Paddy ..	198	395	45	134	20	20	6.6	13.1	269.6	562.1
Sugarcane ..	168	336	31	93	37	74	—	—	236.0	503.0
Maize ..	65	195	—	—	25	25	0.5	0.5	90.5	220.5
Oil Seeds ..	—	—	2	7	6	6	2.3	2.3	10.3	15.3
Orchards ..	133	400	3	9	19	38	10.4	18.8	165.4	463.8
Tobacco ..	—	—	—	—	51	102	0.2	0.2	51.2	102.2
Vegetables ..	92	275	18	54	18	35	9.0	18.0	137.0	382.0
Others ..	525	525	31	93	8	8	65.7	79.5	629.7	705.5
Total ..	1,900	5,002	340	1,019	185	309	95.0	132.7	2,520.0	6,462.7

'000 acres

TARGETS OF CROP-WISE COVERAGE OF AREA BY GROUND OPERATIONS IN VARIOUS PROVINCES OF PAKISTAN DURING 1978-79

Crops	Punjab		Sind		N.W.F.P.		Baluchistan		Total	
	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres
Cotton	950	3,800	183	550	5	5	0.7	0.7	1,138.7	4,355.7
Paddy	275	550	218	218	25	50	17.8	35.6	535.8	833.6
Sugarcane	250	500	81	162	55	110	—	—	386.0	772.0
Maize	119	356	26	26	43	85	0.7	0.7	188.7	467.7
Oil Seeds	—	—	10	10	12	12	2.6	2.6	24.6	24.6
Orchards	150	450	20	40	22	45	38.4	64.1	230.4	599.1
Tobacco	—	—	—	—	45	90	0.6	0.6	45.6	90.6
Vegetables	100	300	23	47	23	45	29.9	65.2	175.9	457.2
Others	650	650	65	65	6	6	69.5	76.2	799.5	799.5
Total	2,494	6,606	626	1,118	236	448	160.2	245.7	3,516.2	8,417.7

ESTIMATED CROP-WISE COVERAGE BY AERIAL OPERATIONS IN VARIOUS PROVINCES OF PAKISTAN DURING 1977-78

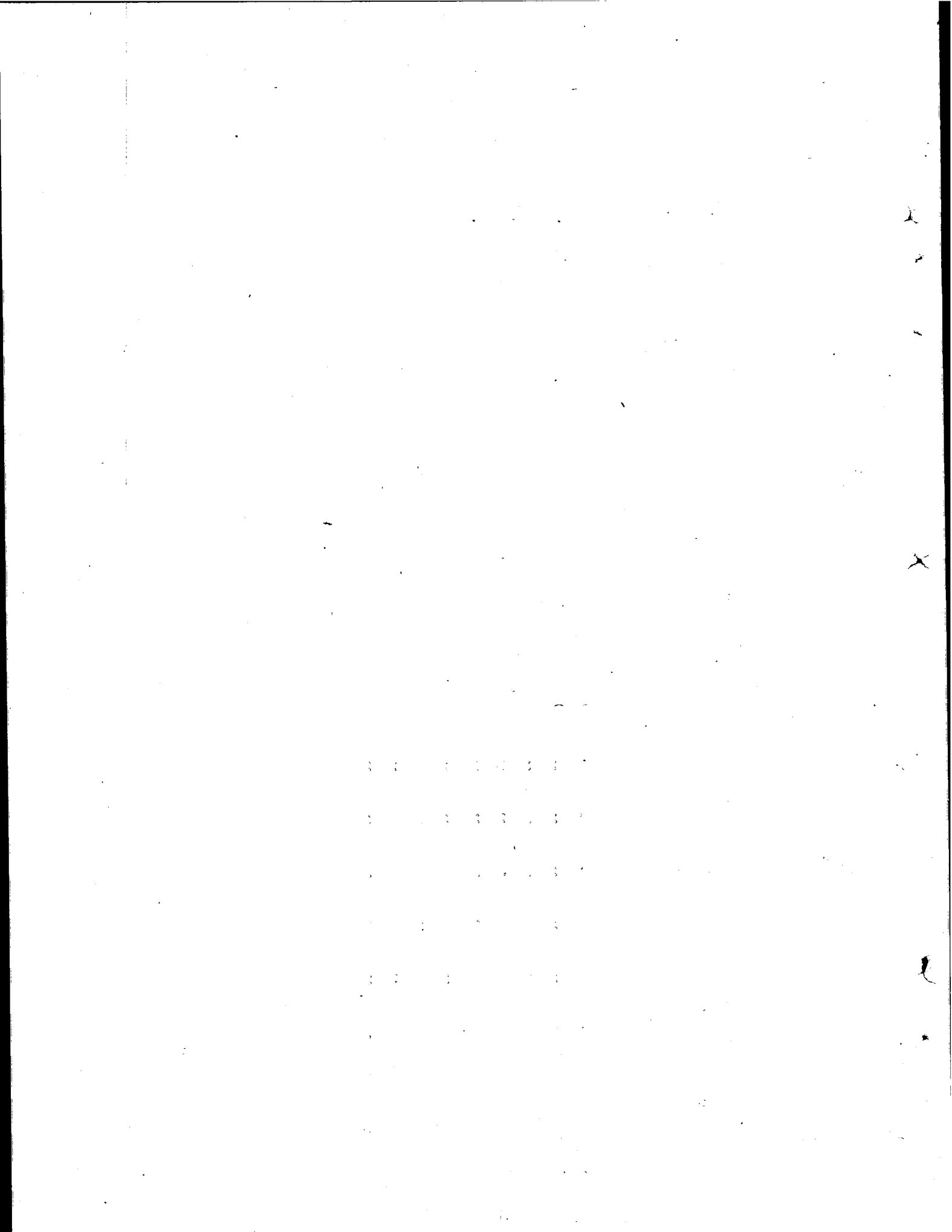
Crops	Punjab			Sind			N.W.F.P.			Baluchistan			Total		
	Actual Acres	Spray Acres	Actual Acres	Actual Acres	Spray Acres	Actual Acres	Actual Acres	Spray Acres	Actual Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres
Cotton	225	804	177	435	..	..	..	..	..	..	..	402	1,239
Paddy	595	1,975	172	172	..	..	28	..	..	..	..	285	1,275
Sugarcane	215	..	..	..	..	215	500
Maize	135	..	..	..	..	135	135
Oil Seeds
Orchard	21	10	..	..	..	31	51
Tobacco	50	..	..	..	..	50	30
Vegetables
Others
Total ..	820	1,879	349	607	794	449	10	30	1,628	3,300					

(* 000 ' acres)

TARGETS OF CROP-WISE COVERAGE BY AERIAL OPERATIONS IN VARIOUS PROVINCES OF PAKISTAN DURING 1978-79

Crops	Punjab		Sind		N.W.F.P.		Baluchistan		Total	
	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres	Actual Acres	Spray Acres
Cotton ..	99	400	99	400	—	—	—	—	198	800
Paddy ..	450	900	151	299	50	50	99	200	750	1,449
Sugarcane ..	—	—	89	270	215	430	—	—	304	700
Maize ..	—	—	—	—	136	136	—	—	136	136
Oil Seeds ..	—	—	—	—	74	151	50	99	124	250
Orchards ..	—	—	—	—	59	121	15	45	74	166
Tobacco ..	—	—	—	—	50	99	—	—	50	99
Vegetables ..	—	—	—	—	—	—	—	—	—	—
Others ..	—	—	—	—	—	—	—	—	—	—
Total ..	549	1,300	339	969	584	987	164	344	1,636	3,600

(' 000 ' acres)



WATER RESOURCES DEVELOPMENT

Notwithstanding the fact that the rim-station inflow of western rivers during 1977-78 was 6.5% less than that of 1976-77, yet the surface and groundwater availability at farmgate increased by 10% and 3% respectively. The comparative increase in surface water availability was owing to the fact that the canal withdrawals during 1976-77 were below average due to canal closure caused by disastrous floods of 1976. The increase in groundwater availability during 1977-78 is attributable to growth in number of public and private tubewells.

2. At the farmgate, the total water availability during 1977-78 was 91.77 MAF as compared to 86.90 MAF in 1976-77. Proportionate increase in surface and groundwater availability at farmgate during 1976-77 and 1977-78 is brought out below :

	1976-77	1977-78	% Increase
Surface water (MAF)	58.32	61.25	+ 5.0
Groundwater (MAF)	28.58	30.52	+ 6.8
Total (MAF)	86.90	91.77	+ 5.6

During 1977-78, of 99.13 MAF Kharif river inflow, canals diverted 64.45 MAF, whereas in rabi though the river inflow was 23.30 MAF, the canals withdrew 37.63 MAF. The excess diversion of water through canals during rabi was due to Tarbela releases (6.63 MAF), and system gains (4.52 MAF).

3. The annual river inflows at rim-stations from 1965-66 to 1977-78 are given in Annexure VII which shows that there was a decrease of about 4% in the river flows during 1977-78 as compared to the average of last 10 years. Water availability at farmgate since 1965-66 is shown in Annexure IX. Source-wise water availability during 1977-78 is shown in Annexure X.

4. During 1977-78 an additional areas of about 0.85 million acres (MA) were protected under the Accelerated Programme for waterlogging and salinity control, as given below :

	<i>Acres</i>
Punjab	340,000
Sind	340,000
N.W.F.P.	150,000
Baluchistan	20,000
Total	850,000

5. During 1977-78, for the development of water resources, an amount of Rs. 1957.48 million was allocated which was 12% less than that allocated during the year 1976-77. According to the revised estimates, Rs. 2240.25 million (14% above the allocated amount) were utilized. The percentage utilization was the same as in 1976-77. Agency-wise financial details are given in Annexure I.

REVIEW OF 1977-78

6. During 1977-78 the expenditure in water resources development is brought out in the following table :

TABLE 1

Financial outlay on Water Resources Development

	1976-77 Revised Estimate	1977-78 Revised Estimate	% increase Change
	—Rs. million—		
Water Development	1422	1309	-8
Flood Control	430	248	-73
Tarbela/IBP	646	683	+6
Total	2498	2240	-10

7. On account of overall financial stringencies there was a decrease in expenditure on water development compared to 1976-77. However the restoration of work damaged by 1976 floods was given top priority and the major approved on-going works were protected. For Tarbela/IBP increased allocations were made which were required for urgent repairs to spillway.

8. Details of the amounts allocated to various sub-sectors during 1976-77 and 1977-78 (and percentage) are given below :

TABLE 2

Sub-Sector-wise Allocations for water

S. No.	Sub-sector	1976-77 Revised Estimates		1977-78 Revised Estimates	
		Amount (M. Rs.)	% of water sector	Amount (M. Rs.)	% of water sector
1.	Irrigation	483	19	351	16
2.	Drainage and Reclamation	755	31	727	32
3.	Flood Control/protection	430	17	248	11
4.	Research	29	1	45	2
5.	Water Management	4	—	17	1
6.	Survey and Investigation	105	4	127	6
7.	Miscellaneous	46	2	42	2
8.	Tarbela/IBP	646	26	683	30
	Total	2498	100	2240	100

9. The revised estimates for 1977-78 agency-wise and programme-wise were as follows :

TABLE 3

Programme Agency-wise Details of Expenditure 1977-78

(Million Rs.)

S. No.	Sub-sector	Federal	Provincial	Total	% age
1.	Irrigation	214	137	351	16
2.	Drainage and Reclamation	712	15	727	32
3.	Flood Control/protection	—	248	248	11
4.	Research	44	1	45	2
5.	Water Management	—	17	17	1
6.	Survey and Investigation	70	57	127	6
7.	Miscellaneous	1	41	42	2
8.	Tarbela/IBP	683	—	683	30
	Total	1724	516	2240	100

10. The principal physical achievements for 1977-78 are compared with targets below:

TABLE 4

Major Physical Targets

S. No.	Item	Unit	Target	Achievement
1.	Construction, remodelling and enlargement of canals.	Miles	506	385
2.	Construction and remodelling of irrigation structures.	Nos.	551	233
3.	Earthwork :			
	(a) Hub Dam	MCF		21028
	(b) Khanpur Dam	"		18.5
	(c) Flood embankment	"		
	(d) Drains	"	207	206
4.	Tubewells :			
	(a) Public sector	Nos.	1430	1463
	(b) Private sector	"	7500	7500
5.	Water courses improved	"	180	54
6.	Area precisely levelled	Acres	47350	6908
7.	Area protected from waterlogging and salinity	"	800,000	850,000

11. A brief review of progress in Federal and Provincial programmes is given in the subsequent paragraphs.

Federal Programmes

IRRIGATION

12. *Tarbela/IBP*.— During 1977-78 an amount of Rs. 683.45 million was spent. A breakdown of expenditure is given below:

	(Million Rs.)
(i) Main project:	
(a) Main Dam	527.49
(b) Compensation and rehabilitation	67.46
(ii) Fifth tunnel	9.01
(iii) Other IBP works	79.49
Total	683.45

13. Tarbela reservoir was filled in early Rabi and releases were made satisfactorily. A total of 7.42 MAF was released with 6.63 MAF in Rabi and 0.79 MAF in early Kharif. Details are shown in Annexure VIII.

14. *Hub and Khanpur Dams*.— The initial allocation of Rs. 150 million for the two projects were increased by about 25% to Rs. 188 million. The physical targets have been substantially achieved. Hub dam will be completed by 1978-79 and Khanpur dam by 1979-80. However, arrangements by user agencies have lagged behind and delay in the utilization of water from the dams is likely.

15. *New major dams*.— Investigations on new multipurpose dams continued. A sum of Rs. 14 million was spent on Kalabagh and other Post-Tarbela storage investigations.

SCARPs AND DRAINAGE

16. This top priority programme within the Water sector included 35 projects under implementation by WAPDA. The expenditure incurred during 1977-78 was Rs. 712.13 million of which 96% was for project implementation and 4% on project planning. The scope of work undertaken and the actual achievements during 1977-78 are given below:

Item	Target of 35 projects	Progress or completion in 1977-78
Area (M. acres)	0.80	0.85
Tubewells (Nos.)	1280	1313
Pumpage (MAF)	0.88	0.94
Drains (Miles)	358	357
(MCF)	207	206

17. The progress during 1977-78 ranged between 99% to 106% of aggregate project targets. The details of the progress are given in Annexure XII. The progress of those projects which are aided by foreign agencies has been brought out separately in Annexure XVII.

RESEARCH

18. The important Federal projects in research/data collection are given below :

<i>Scheme</i>	<i>Scope</i>	<i>1977-78 Revised Est. (Rs. M)</i>
(i) Central Monitoring Organization.	Monitoring and evaluation of SCARPs.	15.0
(ii) Mona Reclamation Experimental Project.	Intensive research on SCARPs.	7.2
(iii) Irrigation Research Council ..	Mono-discipline research.	2.9
(iv) Alluvial Channel observation programme.	Channel hydraulics.	2.8
Total ..		27.9

19. It will be noted that nearly 80% of the resources have been concentrated on the problems relating to anti-waterlogging and salinity control.

SURVEY AND INVESTIGATION

20. On survey and investigation an expenditure of Rs. 69.86 million was incurred in the federal programme. The details are given below :

TABLE 5

Survey and Investigation programme, 1977-78

<i>Scheme</i>	<i>Scope</i>	<i>Expd. in 1977-78 Revised Est. (M. Rs.)</i>
Master Planning	Preparation of revised Action Plan	34.3
Surface Water Hydrology and expansion of basic hydrologic network.	Continued activity.	12.5
Kalabagh Dam investigation	Detailed Investigation (Feasibility studies).	8.1
Post-Tarbela works	General investigations and project preparation.	2.5
General consultancy services	Vetting projects and plans.	6.0
FATA	Groundwater investigation.	6.5
Total		69.9

Provincial Programmes

IRRIGATION

21. In the four provinces, an amount of Rs. 137 million was spent on irrigation projects. The provincial programmes consisted mainly of improvement, re-conditioning, re-modelling and extension of existing canal systems. The detailed achievements are given in Annexure IV. Brief comments on the major schemes of each province are given below:

22. *Punjab*.—The expenditure of Rs. 48.44 million was incurred on extension, remodelling and enlargement of 150 miles of channels and 95 structures to benefit an area of about 5,000 acres. Increased water availability has not been reported.

23. *Sind*.—The expenditure of Rs. 42.47 million was incurred in Sind for the extension and reconditioning of 95 miles of channels mainly in the Kotri Barrage area. In addition, 30 structures were remodelled/constructed. This benefited an area of 38,000 acres.

24. *N.W.F.P.*—An expenditure of Rs. 22.16 million was incurred on construction and remodelling/extension of canals in different parts of the provinces involving about 26 MCF of earth work. As a result, 4,475 acres received increased water supplies.

25. *Baluchistan*.—An expenditure of Rs. 22.93 million was made for construction and remodelling/extension of irrigation channels and for the installation of tubewells in Bela Plain and other projects.

SURFACE DRAINAGE

26. An expenditure of Rs. 15.14 million was made for surface drainage projects outside the accelerated programme. The details of expenditure incurred and progress made for 1977-78 is given below:

Province	Scope	Expend. incurred (Rs. M)	Physical progress
Punjab	Raiwind Drainage system, Satiana-Sammu-dri drains etc.	12.55	50 miles
Sind	Open drains in Dehlib and other areas.	69	54 miles
NWFP	Surface drains Rodkohi	1.9	14 Miles

FLOOD PROTECTION

27. The expenditure on flood control in the provinces was Rs. 247.97 million. A large portion of this was utilized for restoration of the damages caused by heavy floods of 1976. The allocation was utilized mainly for earth work except Rs. 6.5 million in NWFP which was utilized for machinery. The province-wise position is as follows:

Province	Amount (Rs. M.)	Embankment improved
Punjab	133.25	25 miles
Sind	90.00	54 miles
NWFP	14.93	7 miles
Baluchistan	9.79	N.A.
Total	247.97	—

WATER MANAGEMENT

28. The On-Farm Water Management programme which began in Sind and Punjab last year was also introduced in NWFP and Baluchistan this year. An expenditure of Rs. 9.99 million in the Punjab, Rs. 4.58 million in Sind, Rs 0.71 million in NWFP and Rs. 1.285 million in Baluchistan was made. Progress has been made mainly in the Punjab where 51 watercourses were improved. In Sind, only 3 watercourses have been taken up and the project appears to be moving very slowly. In NWFP, one watercourse was improved and 448 acres precisely levelled.

ANNUAL PLAN 1978-79

29. For 1978-79 the water resources development sector has been allocated Rs. 2997.16 million which is about 3% more than revised estimates 1977-78. The allocations in 1978-79 for the key programmes in the water sector namely, water development and drainage and reclamation have been increased over the last year. There is a substantial increase in the water management programme. There is also an increased allocation for Tarbela/IBP works. There is however, a decrease in the allocation for flood control/protection, survey and investigation and miscellaneous schemes.

30. The allocations by broad categories are analysed below :

	1977-78 (revised estimates)	1978-79 (budget)	% change + or —
Water development	1308.83	1684.22	+ 29
Flood protection	247.97	137.22	—45
Tarbela/IBP	683.45	1173.40	+ 72
Total ..	2240.25	2994.84	+ 34

31. The basic objectives of the water development strategy remains un-changed though progress will be slower in 1978-79 due to shortage of resources. The objectives are briefly re-capitulated below :

- (i) A massive assault will be made on the problems of waterlogging and salinity. Schemes for useable ground water areas (amounting to 48% of irrigated area) would be completed within 5 years. Full protection to saline area would then be possible in a period of 11 to 12 years.
- (ii) The availability of water would be steadily increased at approximately 2.3% per annum.
- (iii) The water management programme already launched will be substantially increased.
- (iv) Phase I of the flood protection programme would be completed in the shortest possible time and work started on phase II of the programme.
- (v) Backward areas, outside the Indus Basin irrigation system, will receive special attention.

32. The sub-sector-wise allocations for 1978-79 are analysed below :

TABLE 6
Sub-Sector-wise Allocations 1978-79

Sub-Sector	1977-78 (revised Est.)	1978-79 (Budget)	% Change + or —
	Rs. million		
Irrigation	350.59	638.25	+ 82
Drainage and Reclamation	727.27	815.22	+ 12
Flood protection/control	247.97	137.22	— 43
Research	44.51	61.83	+ 39
Water Management	16.56	47.26	+ 185
Survey and Investigation	127.34	100.36	— 21
Miscellaneous	41.55	21.30	— 49
Sub-total	1556.80	1821.44	+ 17
Tarbela/IBP	683.54	1173.40	+ 61
GRAND TOTAL	2240.25	2994.84	+ 34

33. Broadly, allocation for irrigation has been increased to provide for full requirement for the completion of Hub dam and initiation of Chashma Right Bank Canal project. There is a slight increase for drainage and reclamation which has been made to provide for the new projects such as Panjnad Abbasia Unit II, SCARP D.I. Khan and to accelerate East Khairpur Tile Drainage. The largest increase is in water management programme which has been necessitated due to the increasing pace of the programme. The decrease in provision for flood protection is apparently due to the fact that the Master Plan is under preparation and the schemes have not yet been identified for federal financing. Cuts have also been made in survey and investigation and miscellaneous schemes.

34. The allocations by administrative agencies, are given in Annexure II and summarised below :

A. Federal Government		(Rs. Million)
1. WAPDA		1316.40
2. Flood Commission		5.18
3. Other agencies		68.15
4. Tarbela/IBP		1173.40
	Sub-Total	2563.13
B. Provincial Governments		
1. Punjab		228.20
2. Sind		89.80
3. NWFP		60.06
4. Baluchistan		53.65
	Sub-Total	431.71
	Grand Total	2994.84

35. The physical targets for 1978-79 are given in Annexures XII to XV. These are compared with achievements for 1977-78 in the following table :

TABLE 7
Physical Targets for 1978-79

	Achievements 1977-78	Targets 1978-79
1. Area protected from Waterlogging and salinity (MA)	0.85	0.85
2. No. of tubewells (Nos)		
(a) Private	7500	8100
(b) SCARPs	1313	971
(c) Others	150	220
3. Length of surface drains (miles)	357	384
4. Flood control, earthwork (MCF)	NA	329
5. Water Management :		
(a) Watercourses improved (No)	54	180
(b) Land levelled (Acres)	6908	47350

36. A broad summary of the targets for the anti-water logging and salinity programme which forms the major component of the ADP 1978-79 (apart from Tarbela/IBP) is compared with 1977-78 below :

	1977-78	1978-79
Area protected (m. acres)	0.85	0.85
Tubewells (Nos.)	1313	971
Length of surface drains (miles)	357	384

37. The substantial decrease in the number of tubewells to be energized in 1978-79 is due mainly to the resource constraint. Secondly, it is due to a larger emphasis on private tubewells. Thirdly, this is also due to the fact that WAPDA will ensure that tubewells already installed would be energized first before any new tubewells are sunk.

Federal Programme 1978-79

IRRIGATION

38. Tarbela/IBP.—An amount of Rs. 1173.40 million has been allocated for Tarbela/IBP works details of which are given below :

	Allocation (Rs. M.)
(a) Tarbela Dam (Main Project) :	
1. Dam	1019.61
2. Re-settlement and compensation	81.97
Sub-Total	1101.58
(b) Other IBP works	71.82
Grand Total	1173.40

39. *Hub Dam.*—During 1978-79, it is proposed to complete this project and consequently Rs. 240 million have been provided. The major targets are 46 MCF of earth work and some concrete work which will require 22,100 tons of cement (3200 tons per month). The requirement of steel has also been estimated at 22100 CWT. The major work will be concentrated on completion of spillway and dam closure. The project on completion, will supply water for municipal and industrial needs of Karachi city and Baluchistan (96 MGD and 15 MGD respectively). Irrigation water will also be made available to about 22,000 acres (21,000 acres in Baluchistan and 1,000 acres in Sind). The Governments of Sind and Baluchistan have to ensure that arrangements for receiving the water are completed in time.

40. *Khanpur Dam.*—Rupees 90 million have been provided during 1978-79 for continuing work on the canal system including canal lining. Orders will also be placed for the radial spillway gates which are estimated to cost Rs. 10 million. It is expected that dam will be completed in June, 1980.

41. *Chashma Right Bank Canal Project.*—Rupees 110 million have been provided for the new Chashma Right Bank Canal project for procurement of earthmoving equipment including duties and taxes, construction of colony and to initiate work on construction of the main canal.

DRAINAGE AND RECLAMATION (SCARPs)

42. With the main objective of utilization of the entire fresh groundwater potential within five years, work would be accelerated as far as possible within the resource limitation. A sum of Rs. 797 million (67.9% of total water sector excluding Indus Basin Works) has been allocated during 1978-79 to the accelerated programme for waterlogging and salinity control. Out of this, an amount of Rs. 782 million or 98% will be for project implementation and Rs. 15 million (or 2%) will be for project planning and preparation. The overall physical targets are shown in Annexure XVI, and include drilling of 500 tubewells and energization of 971 tubewells which include replacements of 120 tubewells. Excavation of about 296 miles of drains is also envisaged. It is expected that about 0.9 million acres will be given protection during the year. Some of the major projects to be undertaken in each province are listed below :

(a) Punjab	..	..	..	SCARP II, Punjnad-Abbasia, Unit II, Anti-waterlogging along links.
(b) Sind	..	..	..	East Khairpur Tile Drain, LBOD, Ghotki, Larkana-Shikarpur II and Rohri South.
(c) N.W.F.P.	..	..	..	Mardan and Bannu SCARPs, SCARP D. I. Khan, and Peshawar SCARP.
(d) Baluchistan	..	..	..	Hairdin Drain.

FLOOD CONTROL

43. Till such time as the National Master Plan for Flood Control is prepared, allocations have been made for flood control works in the provincial ADPs. There is an allocation of Rs. 5.177 million in the Federal ADP for completion of the Master Plan which is expected by December, 1978. The overall allocations are insufficient and the question of an increase may have to be considered in the course of the year.

RESEARCH

44. The allocations for major research schemes under the Federal programme are given below :

						<i>Allocation (Rs. M.)</i>
Central Monitoring Organization	..	..	..	..	..	19.00
Mona Project and Research on Water Management	..	..	..	..	..	8.80
Alluvial Channel observation project	..	..	..	..	..	2.30
Irrigation Research Council	..	..	..	..	..	8.25
					Total ..	38.35

45. It will be seen that nearly 94% of the allocation is for conducting research on problems relating to waterlogging and salinity.

OTHER FEDERAL PROGRAMMES

46. The allocation to the other federal agencies excluding WAPDA, IDFC, Northern Areas and the Federal Flood Commission is Rs. 60.3 million as shown below :

Agency	Allocation (Rs. M.)
1. FATA D.C.	31.45
2. Pakistan Met. Department	21.00
3. Survey of Pakistan	1.00
4. Northern Areas	5.75
5. Azad Kashmir	1.10
Total	60.30

47. The programme of FATA includes survey and investigation of groundwater potential in Kurram agency which will be completed during the year. In addition 9 miles of new channels will be constructed and 18 miles of old channels will be improved in Bara river canal project, Spin plain, Shalozan, Sateen, Kharseen and Sein tangi areas. Some of the groundwater schemes in Bajaur, Dattakhei, Hasan Khel, Left Bank Kurram and Chashmai areas will be completed where it is expected that about 89 tubewells will be energized. The Pakistan Meteorological Department will utilize bulk of its allocations for providing better meteorological facilities for air craft operations in the Northern Areas and aeromet facilities at important air ports. The work relating to weather surveillance radar at Sialkot and Satellite read-out station at Lahore alongwith river flow and flood forecasting model being set-up under WMO-UNDP assistance will be completed. Work on the agricultural meteorology station at Tandojam will continue and the seismic observatory at Khuzdar, a UNESCO project, will be completed. The Survey of Pakistan will complete the scheme of Multipurpose Geodetic Survey bench-marks by installing 100 such benchmarks. Details are given in Annexure XVIII.

SURVEY AND INVESTIGATION

48. During 1978-79, an allocation of Rs. 51.8 million has been made for completion of the Master Planning activity undertaken by WAPDA under UNDP assistance with IBRD acting as executing agency. Other programmes such as Post Tarbela works, Kalabagh Dam, etc. will continue. Details are as follows :

TABLE 7
Survey and Investigation programmes

Scheme	Scope	ADP Allocation
1. Master Planning	Preparation of Action Plan	20.0
2. Surface Water Hydrology and expansion of Hydroment network.	Continuing activities.	7.2
3. Kalabagh dam investigation	Feasibility Studies	9.0
4. Post-Tarbela works	Project Planning of various schemes	6.5
5. General consultancy	Vetting of projects	6.0
6. Survey and investigation in Tribal Areas.	General investigations and project preparation.	2.9
Total		51.6

Provincial Programmes

IRRIGATION

49. Rupees 165.1 million have been allocated to the four provinces for continuing work on canal re-modelling, construction of new channels, structures, etc. The allocations for Punjab, Sind, NWFP and Baluchistan are Rs. 50.3 million, Rs. 53.7 million, Rs. 42.4 million and Rs. 18.7 million, respectively. The details of work to be under taken by the provinces are shown below :

TABLE 8
Provincial Irrigation Programmes

Provinces	New Channel (miles)	Re-modelled channels (miles)	New & remodelled structures (Nos.)
Punjab ..	10	161	68
Sind ..	29	144	35
NWFP ..	13	31	43
Baluchistan ..	5	—	6
Total ..	57	336	152

DRAINAGE AND RECLAMATION

50. For improving the surface drainage system constructed by the Provincial Governments and constructing new drains an amount of Rs. 18.4 million has been allocated. Of this, Rs. 12.6 million, Rs. 2.2 million and Rs. 3.6 million will be spent in Punjab, Sind and NWFP respectively. In all about 110 miles of surface drains will be constructed to protect about 167040 acres of land. In the Punjab work will continue on Raiwind, Hinjrai, Tadjadkholi and drains for disposal of hill torrents. A new scheme of Ratta-Gujranwala drainage system will also be undertaken. In Sind, work will continue on Guddu Groundwater scheme and a drain near Deh Lib. Two new schemes for soil and water sampling, and water table depth observations have also been included. In NWFP the surface drains for Rod Kohi water will be completed.

FLOOD CONTROL/PROTECTION

51. As mentioned earlier the provinces have allocated funds for continuing the on-going flood control works. In all, about 329 MCF of earth work will be done as detailed below :

Provinces	Earth work (mcf)	Stone pitching (mcf)
Punjab ..	25	300.0
Sind ..	300	0.5
NWFP ..	2	14 miles
Baluchistan ..	2	1.0
Total ..	329	

WATER MANAGEMENT

52. An amount of Rs. 47.3 million has been provided for the On-Farm Water Management Programme under the USAID assisted programme. It is expected that the following works will be undertaken.

TABLE 9
On-Farm Water Management Programme

Province	Allocation (Rs. M.)	Watercourse improvement (Nos.)	Land levelling (Acres)
Punjab	30.0	120	30,000
Sind	12.8	55	16,000
NWFP	2.3	10	2,525
Baluchistan	2.2	(1500 ft.)	500
Total	47.3	185 (1500 ft)	49,025

SURVEY AND INVESTIGATION

53. An allocation of Rs. 48.58 million has been made for continuing survey and investigation work in the provinces. Details are given below :

TABLE 9
Provincial Survey and Investigation Programmes

Province	Scope	Allocation (Rs. M.)
Punjab	Riverain areas, new dam sites, drainage and reclamation schemes, groundwater investigation.	10.43
Sind	Project Planning for remodelling of Rohri, NW & Dadu canals, Makhi-Farash and Nara-Jamrao-Kotri links, hydrological survey, contour survey of riverain areas, model experiments for Sukkur barrage and ACOP.	12.94
NWFP	General investigation of small dams, groundwater irrigation in NWFP.	3.40
Baluchistan	Groundwater investigation by WAPDA-UNDP and other small schemes.	21.81
Total		48.58

ANNUAL DEVELOPMENT PROGRAMME 1977-78

(Million Rs.)

	Allocation	Revised Estimate	% age + or -
A. Provincial Government :			
(a) Baluchistan	78.95	83.88	+6.2
(b) NWFP	60.58	44.41	-26.7
(c) Sind	137.80	150.12	+8.9
(d) Punjab	160.80	237.17	+47.5
B. Federal Government :			
(a) WAPDA	948.40	988.90	+4.2
(b) IBP	350.00	683.4	+95.1
(c) Other agencies	220.95	52.35	-76.3
	<u>1957.48</u>	<u>2240.25</u>	<u>+14.4</u>

ANNUAL DEVELOPMENT PROGRAMME 1978-79

(Rs. Million)

Sponsoring Agency	Revised Estimates 1977-78	Allocation 1978-79	Percentage Increase(+) Decrease(-)
Federal Government:			
(a) WAPDA	988.90	1316.00	+33.1
(b) Other Division	52.32	73.31	+40.1
Sub-Total	1041.22	1389.73	+33.5
(c) Indus Basin/Tarbela	683.45	1173.40	+71.7
Total—Federal Govt.	1724.67	2563.13	+48.6
Provincial Governments :			
A. Baluchistan			
(a) Irrigation & Power Deptt.	82.60	51.48	-37.7
(b) Agriculture Department	1.28	2.16	+68.8
Total—Baluchistan	83.88	53.64	-36.1
B. N.W.F.P.			
(a) Irrigation & Power Deptt.	41.66	49.26	+18.2
(b) Agriculture Department	2.75	10.80	+292.7
Total—N.W.F.P.	44.41	60.06	+35.2
C. Sind			
(a) Irrigation & Power Deptt.	145.04	76.00	+47.6
(b) Agriculture Department	5.08	13.80	+221.5
Total—Sind	150.12	89.80	-38.5
D. Punjab			
(a) Irrigation & Power Deptt.	206.83	172.50	-16.6
(b) Agriculture Department	30.34	55.70	+82.9
Total—Punjab	237.17	228.20	-3.9
GRAND TOTAL	2240.25	2994.83	+33.8

ANNUAL DEVELOPMENT PROGRAMME 1978-79

FEDERAL GOVERNMENT

(Rs. Million)

Agency	A.D.P. Allocation 1977-78	Revised estimated 1977-78	Allocation for 1978-79	Percentage Increase(+) / Decrease(-)
1. Aviation Division, Pakistan Meteorological Department ...	18.00	15.73	21.00	+33
2. Science & Technology Division :				
(a) IDFCR Council ...	5.00	2.90	8.25	+184
(b) Survey of Pakistan ...	1.01	1.01	1.00	-1
3. Water & Power Division :				
(a) WAPDA ...	948.40	988.90	1316.00	+33
(b) Indus Basin/Tarbela Works ...	350.00	683.45	1173.40	+71
4. Federal Flood Commission ...	170.00	N.A.	5.18	-
5. Kashmir Affairs Division :				
(a) Azad Kashmir ...	0.10	0.10	1.10	+100
(b) Northern Areas ...	3.40	3.40	5.75	+69
6. State & Frontier Regions Division :				
FATA Development Corporation ...	23.44	29.18	31.45	+8
TOTAL ...	1519.35	1724.67	2563.13	+48.6

DISTRIBUTION OF EXPENDITURE FOR 1978-79 AND ALLOCATION FOR 1978-79

(Sub-Sector and Agency-wise)

Sub-Sector	Federal		Punjab		Sind		N.W.F.P.		Baluchistan		Total	%	change + or -
	Revised Estimates 1977-78	A.D.P. 1978-79	Revised Estimates 1977-78	A.D.P. 1978-79	Revised Estimates 1977-78	A.D.P. 1978-79	Revised Estimates 1977-78	A.D.P. 1978-79	Revised Estimates 1977-78	A.D.P. 1978-79			
Irrigation	214.392	475.415	48.440	50.300	42.475	53.718	22.157	42.447	22.927	18.694	350.591	638.247	+83
Drainage and Recla- mation	712.127	797.000	12.550	12.460	0.690	2.153	1.900	3.606	—	—	727.267	815.219	+12
Flood Protection/Com- trol	—	5.177	133.250	110.667	90.000	7.000	14.933	6.172	9.789	8.2	247.972	137.216	-45
Research	43.619	59.350	0.500	1.990	0.387	0.487	—	—	—	—	44.506	61.827	+39
Water Management	—	—	9.990	30.000	4.575	12.800	0.713	2.300	1.285	2.162	16.563	47.262	+185
Survey and investiga- tion	60.867	51.789	14.600	10.430	9.699	12.935	1.750	3.400	31.424	21.809	127.340	100.363	-21
Miscellaneous	1.010	1.000	14.940	12.150	2.299	3.237	2.958	2.135	18.455	2.781	41.552	21.303	-49
Total	1041.215	1989.731	237.170	227.997	150.125	92.330	44.411	60.060	83.880	53.646	1356.801	1821.437	
Tarbel/HBP	683.45	1173.400	—	—	—	—	—	—	—	—	683.45	1173.400	+72
Grand-Total	1724.665	2563.131	237.170	227.997	150.125	92.330	44.411	60.060	83.880	53.646	2240.251	2994.837	+33.8

ACCELERATED PROGRAMME OF WATERLOGGING AND SALINITY CONTROL 1978-79

(Million Rs.)

Sr. No.	Name and Status of the Scheme	Estimated Cost	Estimated expenditure upto 1976-77	Revised estimate for 1977-78	Provision for 1978-79	Percentage Increase (+) Or Decrease (-)
1	2	3	4	5	6	7
I. Accelerated Programme						
A. BALUCHISTAN						
<i>(a) On-going Schemes</i>						
1.	Hardin Drainage Project. (A)	32.09	19.63	15.00	23.00	+53.3
	Total. (Baluchistan)		19.63	15.00	23.00	+53.3
B. N.W.F.P.						
<i>(a) On-going Schemes</i>						
2.	Anti-waterlogging, Peshawar (NA)	—	7.65	8.70	5.00	-42.5
3.	Kafir Dheri (NA)	41.47	29.67	8.10	4.00	-50.6
4.	Pabbi Pilot Project Phase-II (A)	16.11	34.65	15.00	5.00	-66.7
5.	Jui Sheikh Unit (A)	28.36	21.7	6.00	4.00	-33.3
6.	Mardan SCARP (A)	99.10	16.76	20.00	40.00	+100.0
7.	Bannu SCARP (NA)	93.80	9.05	13.30	20.00	+50.4
<i>(b) Project Planning</i>						
8.	Project Planning of various SCARP in N.W.F.P.	—	17.99	8.90	5.00	-43.8
	Total (NWFP)		137.47	80.00	83.00	+3.8
C. SIND						
<i>(a) On-going Schemes</i>						
9.	SCARP-Rohri North (A)	500.07	406.99	30.00	5.00	-83.3
10.	Sukkur Right Bank (NA)	170.70	117.64	30.00	3.75	-87.5
11.	Left Bank Outfall Drain (A)	1111.16	144.38	45.00	60.00	+33.3
12.	Larkana Shikarpur Stage-II (A)	130.98	151.26	30.00	35.00	+16.7
13.	Kotri Surface Drain (NA)	936.40	33.12	28.50	20.00	-30.8
14.	Khairpur Tile Drain (A)	330.48	1.34	42.80	110.00	+157.0
15.	North Dagan (A)	321.13	8.45	16.20	17.00	+4.9
16.	Khankot Tubwells	9.89	3.00	6.00	—	—
17.	Rohri South Tubewells (A)	626.83	25.00	22.20	22.00	—
18.	Ghotki (F.G.W.) (A)	428.55	17.71	37.60	50.00	+33.0
19.	Replacement of Danayal and deteriorated Tubewells	—	—	—	5.00	—
	Total (On-going Schemes)		922.00	288.30	327.75	+13.7

1	2	3	4	5	6	7
<i>(b) Project Planning</i>						
20.	Project Planning of various SCARPs in Sind	—	14.85	4.00	3.25	—18.7
	Total (SIND) ..		936.85	292.30	331.00	+13.2
D. PUNJAB						
<i>(a) On-going Schemes</i>						
21.	SCARP-II (Chaj Doab) (A)	743.33	801.70	81.00	87.00	+7.4
22.	SCARP-III (Lower Thal) (A)	407.15	442.77	7.00	9.00	+28.6
23.	Pilot Project Shorkot Kamalia (A)	35.15	51.46	7.80	4.00	—48.7
24.	SCARP Panjnad-Abbasia Unit-I (A)	194.59	132.56	64.00	30.00	—53.1
25.	SCARP Shahpur (A)	125.42	57.56	22.82	10.00	—56.2
26.	SCARP Fordwah (A)	60.95	27.72	17.46	30.00	+71.8
27.	Pilot Project Satiana	28.10	22.97	6.05	1.00	—83.3
28.	Pharang Drain (A)	56.40	75.76	15.00	10.00	—33.3
29.	Replacement of Damaged and deteriorated Tubewells (NA)	400.00	92.95	60.00	45.00	—25.0
30.	Anti waterlogging measures along Chashma-Jhelum Link	44.50	0.35	4.90	30.00	+512.0
31.	Anti-waterlogging along T.P. Link	21.76	10.35	17.79	5.00	—71.9
	Total (On-going Schemes) ..		1670.15	304.73	261.00	—14.4
<i>(b) New Schemes</i>						
32.	Panjnad-Abbasia Unit-II (NA)	—	—	—	50.00	—
33.	D. G. Khan-Jampur Pilot Project (NA)	195.40	—	—	10.00	—
34.	Small Surface Drainage Scheme of I and P Department	200.00	—	—	4.00	—
35.	Anti-waterlogging along TSMB Link (NA)	—	—	—	13.00	—
36.	Anti-waterlogging along RQB Link (NA)	61.27	—	—	10.00	—
	Total (New Schemes) ..		—	—	87.00	—
<i>(c) Project Planning of various SCARPs Punjab</i>						
	Total (Punjab) ..		1727.61	324.73	360.00	+10.9
	Total (Accelerated Programme)		2821.56	712.13	797.00	+11.9

ACHIEVEMENT UPTO 1971-78 AND TARGETS FOR 1978-79

	Achievements						Targets for 1978-79
	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	
1. Water Availability at Farmgate (MAF)	..	..	..	..	..	..	..
(i) Canal withdrawals (Canal Head)	(86.7)	(100.9)	(96.1)	(86.4)	(98.9)	(97.2)	(102.08)
(ii) Groundwater Farmgate	52.9 19.1	60.5 20.7	57.6 22.4	51.9 25.1	59.4 26.6	58.3 28.6	61.2 30.5
Total (Farmgate)	71.1	81.2	80.0	77.0	86.0	86.9	91.7
2. Tubewells (Nos.)							
(i) Private Tubewell	9,865	8,200	8,300	8,200	8,394	7,500	7,500
(ii) SCARP Tubewell	280	1,948	114	520	415	1,265	1,313
(iii) Deptt. Tubewell	199	112	63	143	40	100	150
3. Length of Drains (Mc/Miles)	..	..	..	..	..	..	..
4. Area Protected against waterlogging and salinity (MA)	..	..	..	..	..	..	..
5. Tubewell Subsidy (Rs. Million)	..	..	..	..	..	..	..
Punjab	..	2,014	2.54	27.0	12.00	24.40	12.4
Sind	..	..	..	6.93	3.0	3.0	0.5
N.W.F.P.	..	..	..	0.0	1.71	2.37	2.1
Baluchistan	..	2.54	3.37	2.92	4.42	5.25	—
Federal	..	..	..	0.0	21.13	35.02	15.0
6. Tarbela releases (MAF)	..	..	..	..	..	..	..
7. Area benefited.							
(i) Existing Area	..	..	..	..	..	..	..
(ii) New Area	..	..	..	..	1.7	7.76	7.42

It is not possible at this stage to know-how much area has been benefited.

RIM STATIONS INFLOWS OF WESTERN RIVERS

(Million Acres feet)

Year	Indus at Kalabagh (Above)			Jhelum at Mangla (Above)			Chenab at Marala (Above)			Total		
	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
	1965-66	76.36	12.86	89.22	22.23	4.22	26.45	18.57	3.98	22.55	117.16	21.06	13.22
1966-67	77.40	13.91	91.31	17.59	5.52	23.11	21.48	4.35	25.83	116.47	23.78	14.25
1967-68	81.61	14.91	96.52	18.41	5.44	23.85	20.00	5.15	25.15	120.02	25.50	14.52
1968-69	78.71	14.40	93.11	16.40	5.21	21.61	20.37	3.5	23.87	115.48	23.11	13.84
1969-70	74.22	12.97	87.19	20.09	4.09	24.18	19.84	2.63	22.47	114.15	19.69	133.84
1970-71	60.75	10.13	70.88	12.32	3.02	15.34	16.52	2.73	19.25	89.59	15.88	105.47
1971-72	62.12	9.29	71.41	10.05	3.32	13.37	15.77	3.00	18.77	87.94	15.61	103.55
1972-73	66.96	12.61	79.57	17.80	7.20	25.00	16.76	4.77	21.53	101.52	24.58	126.10
1973-74	94.48	11.45	105.93	22.01	4.32	26.33	27.41	3.44	30.85	143.90	19.21	163.11
1974-75	53.32	9.07	61.39	12.74	3.56	16.30	14.40	3.34	18.24	79.46	16.47	95.93
1975-76	66.31	11.78	78.09	20.29	5.09	25.38	27.75	5.08	32.83	114.35	21.95	136.30
1976-77	65.07	11.37	76.44	20.62	4.03	24.65	25.43	3.40	29.17	111.12	19.14	130.26
10 Year Average	70.26	11.80	82.06	17.07	4.52	21.59	20.42	3.19	24.21	107.75	20.11	127.86
1977-78	62.97	13.02	75.99	14.54	5.07	19.61	21.62	5.1	26.73	99.13	23.20	122.33

RELEASES FROM TARBELA RESERVOIR, RABI 1977-78

Month	Release (MAF)
October	2.28
November	1.48
December	0.13
January	0.40
February	1.82
March	0.52
	<hr/> 6.63

Note : Total releases during 1977-78 were 7.42 MAF including 0.79 MAF releases during Kharif 1977.

OVERALL WATER AVAILABILITY AT FARMGATE

Annexure IX
(Million Acre feet)

Year	Surface Water				Groundwater		Total Availability
	At canal Heads	At farm-gate	Punjab T/wells	Private T/wells			
1	2	3	4	5	6		
1965-66	Kharif	65.08	39.05	1.24	3.32	43.61	
	Rabi ..	26.17	15.70	1.23	3.33	20.26	
	Total	91.25	54.57	2.47	6.65	63.87	
1966-67	Kharif	66.37	39.82	0.87	4.12	44.61	
	Rabi ..	29.59	17.75	0.86	4.12	22.73	
	Total	95.96	57.75	1.73	8.24	67.54	
1967-68	Kharif	61.72	37.03	0.99	4.87	42.89	
	Rabi ..	32.98	19.79	0.98	4.88	25.65	
	Total	94.70	56.82	1.97	9.75	68.54	
1968-69	Kharif	66.37	40.04	1.41	5.49	46.94	
	Rabi ..	31.58	18.95	1.41	5.49	25.85	
	Total	98.31	58.99	2.82	10.98	72.79	
1969-70	Kharif	69.19	41.51	1.77	6.03	49.31	
	Rabi ..	30.66	18.40	1.77	6.02	26.19	
	Total	99.85	59.91	3.54	12.05	75.50	
1970-71	Kharif	60.83	36.50	2.17	6.60	45.26	
	Rabi ..	26.53	15.92	2.16	6.60	24.69	
	Total	87.36	52.42	4.33	13.20	69.95	
1971-72	Kharif	60.60	36.36	2.24	7.32	45.92	
	Rabi ..	26.05	15.63	2.24	7.31	25.18	
	Total	86.65	51.99	4.48	14.63	71.10	
1972-73	Kharif	68.67	41.21	2.41	7.91	51.53	
	Rabi ..	32.23	19.33	2.40	7.91	29.64	
	Total	100.90	60.54	4.81	15.82	81.17	
1973-74	Kharif	63.42	38.05	2.70	8.51	49.26	
	Rabi ..	32.65	19.59	2.70	8.51	30.80	
	Total	96.07	57.64	5.40	17.02	80.06	
1974-75	Kharif	62.84	37.70	3.48	9.10	50.28	
	Rabi ..	23.59	14.16	3.47	9.11	26.74	
	Total	86.43	51.86	6.95	18.21	77.02	
1975-76	Kharif	62.91	37.75	3.62	9.71	51.02	
	Rabi ..	36.00	21.60	3.61	9.72	34.93	
	Total	98.91	59.35	7.23	19.43	86.01	
1976-77	Kharif	58.40	35.04	4.03	10.26	49.33	
	Rabi ..	38.80	23.28	4.03	10.26	37.57	
	Total	97.20	50.00	8.06	20.52	86.90	
1977-78	Kharif	64.45	38.67	4.46	10.80	53.93	
	Rabi ..	37.63	22.58	4.45	10.81	37.84	
	Total	102.08	61.25	8.91	21.61	91.77	

Water Losses : (i) From canal head to outlet = 25% of canal head
(ii) From outlet to farmgate = 15% of canal head
Total = 40% of canal head

WATER AVAILABILITY 1977-78

(MAF)

Source	At Canal Head			At Farmgate		
	Kharif	Rabi	Total	Kharif	Rabi	Total
Surface Water	64.45	37.63	102.08	38.67	22.58	61.25
Groundwater :						
1. Private T/W	—	—	—	10.80		
2. Public T/W	—	—	—	4.46	4.45	8.91
Sub-Total	—	—	—	15.26	15.26	30.52
Total	64.45	37.63	102.08	53.93	37.84	91.77

EXPECTED WATER AVAILABILITY DURING 1978-79

(MAF)

Source	At canal head			At farmgate ***		
	Khari	Rabi	Total	Khari	Rabi	Total
Surface Water						
1. Canal Withdrawals (bench-mark) *	64.50	29.93	94.03	38.70	17.72	56.42
2. Tarbela **	1.00	6.90	7.90	0.60	4.14	4.74
3. Canal Remodelling	—	—	—	—	—	—
4. Watercourse improvement	—	—	—	0.05	0.04	0.09
5. Small Irrigation schemes	0.12	0.06	0.18	0.07	0.04	0.11
6. Hub and Khanpur Dam	—	—	—	—	—	—
Sub-total	65.62	36.49	102.11	39.42	21.94	61.36
Groundwater						
1. Private Tubewells (149000+8100)	—	—	—	11.40	11.39	22.79
2. SCARP Tubewells (11037+1000)	—	—	—	4.51	4.51	9.02
3. Other than SCARP (1173+220)	—	—	—	0.30	0.30	0.60
Sub-total	—	—	—	16.21	16.20	32.41
Grand Total	—	—	—	55.63	38.14	93.77

*Average 9 year canal withdrawal (1966/67—1974/75).

** 15% conveyance losses in rivers have been deducted.

*** Delivery losses upto farmgate.

A. Canal water :

Canals and Distributries	25% at canal head
Sanctioned Watercourse	15% at canal head
	40% at canal head

B. Groundwater :

Private Tubewells (Q=1.05 cs. F— 20%)	— 5%
SCARP Tubewells (Q=2.00 cs. F— 50%)	— 15%
Other Public T/W. (Q= 1.5 cs. F— 50%)	— 15%

PHYSICAL TARGETS AND ACHIEVEMENTS FOR 1977-78 AND 1978-79 - PUNJAB

Sub-Sector	Units	1977-78		Targets for 1978-79
		Targets	Achievements	
1. Survey and Investigations				
(a) Reconnaissance Survey	Sq. mile	140	180	42.6
(b) Topographic Survey	Sq. mile	200	5,325	5,322
(c) Detailed Investigation (Dam Sites)	Sq. mile	—	—	—
(d) Investigations for Surface Water Development Schemes	Sq. mile	16	14	15
2. Irrigation				
(a) Extension of Canals	Miles	29.5	14	10
(b) Remodelling of Canals	Miles	—	—	—
(c) Enlargement of Canals	Miles	45	136	50.6
(d) Remodelling of Structures	No.	294	95	116
(e) New Schemes	No.	182	80	68
(f) Residential Accommodation	No.	0.72	0.5	0.8
(g) Small Dams (E/Work)	MCF	—	—	8
(h) Public Tubewells	No.	1,160	1,304	1,350
(i) Subsidised Tubewells	No.	2,000	10,000	10,100
(j) Cropped Area Benefitted	Acres	36,000	40,000	10,100
(i) Surface Water	Acres			
(ii) Groundwater	Acres			
3. Drainage and Reclamation				
(a) Extn. and Remodelling of open drains	Miles	193.5	50	2
(b) Area protected	Sq. miles	100	45	2
4. Flood Protection				
(a) Extension of Flood Embankment	Miles	118	25	3
(b) Stone Pitching	Miles	—	20	25
(c) Strengthening/Restoration	Miles	650	90	90
(d) Structures	No.	—	30	30
5. Water Management				
(a) Water courses Improved	No.	65	51	120
(b) Precision Land Levelling	Acres	74,100	6,460	30,000
(c) Field Team	No.	10	10	15
6. Requirement of Material				
(a) Cement	Tons	1,250	1,100	1,350
(b) Bricks	'000' No.	32	31	3,000
(c) Reinforcing/Structural Steel	Tons	24	22	35
(d) Timber	CFT	24	23	22
7. Plant and Machinery				
(a) Pumps	No.	—	—	8

PHYSICAL TARGETS AND ACHIEVEMENTS FOR 1977-78 AND 1978-79—SIND

Sub-Sector	Units	1977-78		Targets for 1978-79
		Targets	Achievement	
1. Survey and Investigation				
(a) Reconnaissance Survey	Sq. miles	48	48	174
(b) Topographic Survey	Sq. miles	137	137	—
(c) Project Planning for Makhi-Farash	No.	40%	40%	19.6%
(d) Project Planning for Remodelling of Rohri Canal System	No.	30%	60%	34%
(e) Project Planning for Nara-Jamrao-Kotri Link	No.	1.25%	1.25%	18.75%
(f) Project Planning for N.W. Canal	No.	46.5%	56.5%	43.5%
(g) Project Planning for Dadu Canal	No.	3.4%	3.4%	25%
2. Irrigation				
(a) Extension of Canals	Miles	14.14	12.84	28.60
(b) Remodelling of Canals	Miles	114.46	81.76	144.40
(c) Remodelling of Structures	Miles	9	9	9
(d) New Structures	No.	23	21	26
(e) Residential Accommodation	No.	113	87	34
(f) Cropped Area Benefitted :				
(i) Surface water	Acres	38,000	38,000	29,000
(ii) Groundwater	—	—	—	—
3. Flood Protection				
(a) Extension of Flood Embankment	Miles (E/W (MCF))	11.5	10.5 343	21.00
(b) Strengthening/Restoration	Miles	452.6	400.2	166.0
(c) Stone Pitching	Miles (MCF)	38.1	33.6 1.8	15.4
(d) Structures	No.	5	5	5
4. Water Management				
(a) Water Courses Improved	Nos.	3	2	55
(b) Precision Land Levelling	Acres	—	—	16,000
5. Requirement of Material				
(a) Cement	Tons	20,000	15,000	20,000
(b) Reinforcing/Structural Steel	Tons	65	65	2,560
(c) Timber	CFT	—	—	3,800
6. Drainage and Reclamation				
(a) Extension and Remodelling of open drains	Miles	43.8	53.8	102
(b) Area Protected	Sq. Miles	70	78	150

PHYSICAL TARGETS AND ACHIEVEMENTS FOR 1977-78 & 1978-79—NWFP

Sub-Sector	Units	Targets for 1977-78	Achievements during 1977-78	Targets for 1978-79
1. Survey and Investigation				
(a) Reconnaissance Survey	Sq. mile	88	87.80	42.04
(b) Topographic Survey	Sq. mile	28.05	28.05	30
(c) Detailed Investigations (Dam sites)	No.	3	3	3
(d) Investigations for Surface Water Development schemes	No.	6	5	21
2. Irrigation				
(a) Extension of Canals	miles	34.79	32.79	13.21
(b) Remodelling of Canals	miles	17.94	15.40	31.39
(c) Enlargement of Canals	miles	—	—	—
(d) Remodelling of structures	No.	6	6	25
(e) New structures	No.	47	28	18
(f) Residential Accommodation	No.	1	1	1
(g) Metalled Road	Sq. ft.	6,64,900	6,86,942	8,11,200
(h) Small Dams (E/Work)	mcf.	—	—	—
(i) Public Tubewells	No.	9(reboring)	9	3(rebored)
(j) Pumping Stations	No.	2	2	5
(k) Subsidised tubewells	No.	150	150	170
(l) Cropped area benefitted :				
(i) Surface Water	Acres	5,543	657	7,790
(ii) Groundwater	Acres	18,598	3,818	
	New Exist	—	—	900
	New Exist	3,295	3,295	
3. Drainage and Reclamation				
(a) Extension & Remodelling of open drains	miles	22	14	8
(b) Area protected	Sq. miles	25	16	9
4. Flood Protection				
(a) Extension of Flood embankment	miles	6.086	6.086	0.18
(b) Stone Pitching	miles	6.464	6.464	14
(c) Strengthening/Restoration	miles	0.675	0.675	0.25
(d) Structures	No.	12	12	1
5. Water Management				
(a) Water-courses improved	No.	2	1	5
(b) Precision Land levelling	Acres	400	448	1,350
6. Requirement of Material				
(a) Cement	tons	9,254	7,934	11,060
(b) Bricks	'000' No.	50	50	—
(c) Reinforcing/Structural Steel	tons	30	30	83
(d) Blind Pipe and Strainer	ft.	350	350	—
(e) Timber	cft.	1,200	1,200	1,100
7. Plant and Machinery				
(a) Drilling Rigs	No.	5	4	4
(b) Pumps	No.	3	3	3
(c) Draglines	No.	—	—	—
(d) Scraper	No.	1	—	1
(e) Dozer	No.	4	—	4
(f) Compressor	No.	1	—	1
(g) Hy : excavator	No.	1	—	—

PHYSICAL TARGETS AND ACHIEVEMENTS FOR 1977-78 AND 1978-79—BALUCHISTAN

Sub-Sector	Units	1977-78		Targets for 1978-79
		Targets	Achievement	
1. Survey and Investigations				
(a) Reconnaissance Survey	Sq. Miles	7,960	7,690	2,740
(b) Groundwater Survey	Sq. miles	5,369	4,876	6,140
(c) Geo-physical Survey	Sq. miles	6,919	6,869	14,244
(d) Soil Survey	Sq. miles	2,070	2,100	7,234
(e) Monitoring of groundwater	Sq. miles	7,844	7,844	5,629
(f) Test-holes	No.	76	84	79
(g) Tubewells	Do.	40	34	35
(h) Dam site investigations	Do.	1.5	1.5	0.5
(i) Surface Schemes	Do.	—	—	3
2. Irrigation				
(a) New Canals	Miles	9.81	9.33	5.0
(b) Remodelling	Do.	21.4	21.4	—
(c) New Structures	Nos.	1	1	2
(d) Remodelling of structures	Nos.	3	3	4
(e) Residential Accommodation	Nos.	1	1	1
(f) Small Dams	MCF	—	—	7
(g) Public Tubewells	No.	9	7	20
(h) Pumping Stations	No.	32	32	15
(i) Subsidised Tubewells	No.	35	28	50
(j) Cropped Area Benefitted	Acres	5,500	4,500	6,000
(i) Surface Water	Acres	3,500	3,000	4,000
(ii) Groundwater	Acres	2,000	1,500	2,000
3. Drainage and Reclamation				
4. Flood Protection				
(a) Stone Pitching	Miles	1.3	1.3	2.0
(b) Strengthening/Restoration	Miles	5	5	1
(c) Structures	No.	2	2	14
5. Water management				
6. Requirement of Material				
(a) Cement	Tons	4,000	2,500	5,000
(b) Bricks	Nos.	200	200	150
(c) Steel	Tons.	200	200	200
(d) Blind Pipe and Strainer	Feet	10,000	10,000	15,000
(e) Timber	CFT	500	500	500
7. Plant and Machinery				
(a) Drilling Rigs.	No.	6	4	2
(b) Pumps	No.	—	—	200

ACHIEVEMENTS OF SCARPS 1977-78 AND TARGETS FOR 1978-79

Sr. No.	Name of Project	SCOPE																	
		Achievement during 1977-78								Targets for 1978-79									
		Drains				Drains				Drains				Drains					
Area CCA (M.A.)	Tube wells (Nos.)	Length (Mills)	E/W (Mcf.)	Area CCA (M.A.)	Tube wells (Nos.)	Pump- age (MAF)	Length (Miles)	E/W (Mcf.)	Area CCA (M.A.)	Tube wells (Nos.)	Pump- age (MAF)	Length (Miles)	E/W (Mcf.)	Area CCA (M.A.)	Tube wells (Nos.)	Pump- age (MAF)	Length (Miles)	E/W (Mcf.)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
..	1. Hairdin Drainage	0.09	—	632	77	0.02	—	—	131	16	0.02	—	—	—	123	15			
..	Sub-Total (Baluchistan)	0.09	—	632	77	0.02	—	—	131	16	0.02	—	—	123	15				
N.W.F.P.																			
..	2. Anti-waterlogging, Peshawar City	—	32	1 tile	NA	—	13	0.019	—	—	—	—	—	—	—	0.01	—	—	4
..	3. Pabbi Unit	0.02	40	54	55	0.01	10	0.01	25	25	—	—	—	—	—	—	—	—	—
..	4. Kafur Dheri Unit	0.03	64	43	6	—	—	—	11	10	—	—	—	—	—	—	—	—	—
..	5. Jue Sheikh Unit	0.06	32	59	79	0.01	2	0.001	8	9	—	—	—	—	—	—	—	—	3
..	6. Warsak Unit	3.10	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
..	7. Mardan SCARP	0.16	45	172	114	0.10	50	0.04	14	9	0.05	—	—	—	—	—	—	—	60
..	8. Baamu SCARP	0.09	176	NA	4	0.04	45	0.03	—	—	0.04	40	0.03	NA	5				
..	Sub Total (NWFP)	0.470	419	329	258	0.16	120	0.10	58	53	0.09	50	0.04	67	53				
Sind																			
..	9. SCARP North Rohri	0.79	1392	—	—	0.09	149	0.11	—	—	—	—	—	—	—	—	—	—	—
..	10. Sukkur Right Bank	0.015	408	—	—	0.05	142	0.10	—	—	—	—	—	—	—	—	—	—	—
..	11. Rohri South	0.54	1692	—	—	0.02	69	0.05	—	—	0.05	118	0.08	—	—	—	—	—	—
..	12. Ghoiki F.G.W.	0.44	1015	—	—	0.04	107	0.07	—	—	0.09	191	0.14	—	—	—	—	—	—
..	13. Khandkot Pilot	0.013	36	—	—	0.01	26	0.02	—	—	—	—	—	—	—	—	—	—	—
..	14. Larkana Shikarpur Sigs. II	0.69	—	550	315	0.05	—	—	51	29	0.07	—	—	60	34				
..	15. L. B. O. D. Phase-I	1.81	—	1003	1759	0.01	—	—	8	15	0.03	—	—	14	25				
..	16. Kotri Surface Drain	3.00	—	2045	2506	0.04	—	—	62	37	0.03	—	—	57	33				
..	17. North Dadu Drain	0.51	—	501	498	0.03	—	—	36	36	0.02	—	—	15	15				
..	18. Khairpur Tile Drain	0.04	—	1632	—	—	—	—	—	—	—	—	—	0	10				
..	19. R/R of Tubewells	—	—	NA	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—
..	Sub Total (Sind)	7.983	4543	5731	5078	0.34	493	0.35	157	117	0.28	349	0.22	156	117				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Punjab															
20.	SCARP-II	2.42	2205F	375	430	0.20	189	0.14	4	7	0.12	142	0.10	17	20
21.	SCARP-III	1.28	7178	150	125	—	1	—	—	—	0.12	—	—	15	12
22.	Shorkot Kamalia Pilot	0.17	92	—	—	—	—	—	comple- ted	—	—	—	—	—	—
23.	Panjnad Abbasia Pilot	0.02	633	—	—	0.07	292	0.20	—	—	0.05	150	0.10	—	—
24.	Shahpur	0.11	263	—	—	0.04	125	0.08	—	—	—	—	—	—	—
25.	Forawah Saditgia Pilot	0.08	188	—	—	0.02	23	0.02	—	—	0.05	119	0.09	—	—
26.	Satiana Pilot	0.12	69	—	—	—	—	—	Comple- ted	—	—	—	—	—	—
27.	Antiwaterlogging along T.P. Link														
28.	Anti-water logging along T.S. Link		NA				70	0.05	—	—	0.05	30	0.02	—	—
29.	Anti-water logging along RQB		NA				—	—	—	—	0.02	25	0.02	—	—
30.	Pharang Drain	0.04	—	52	102	0.01	—	—	6	13	0.05	—	—	4	7
31.	Small Surface Drains (I & B)		NA				—	—	—	—	—	—	—	2	4
32.	R/R of tubewells		(800)				(337)	—	—	—	—	(80)	—	—	—
Sub-Total (Punjab)		4.45	5902	577	677	0.34	700	0.49	11	20	0.48	572	0.35	38	43
Total (PAKISTAN)		12.993	10,864	7269	6090	0.85	1313	0.94	357	206	0.85	971	0.61	384	228

PROGRESS OF FOREIGN AIDED PROJECTS

Name of Project	Source & amount of foreign aid 1977-78	1977-78		Physical Achievements
		A.D.P. allocated (M. Rs.)	Revised estimate (M. Rs.)	
Master Planning	UNDP (13.0)	30.0	34.3	Salinity survey for 61 w/c completed, Data for agronomy, reclamation/drain- age, Agr. economics etc. collected. Sample Private Tubewells studied. Potential storage sites identified.
Expansion & modernization of Basic Hydrological data collection system.	Dutch (5.1 Million Rs.)	8.6	8.1	Finalised location of 18 automatic gauge recorders.
Accelerated Programme ..	Dutch, IDA, Danish Germany, UK (103.5 Million Rs).	728.0	712.1	T/W Energized (No.) = 1295 T/W drilled (No.) = 465 Drains (mcf) = 207
Groundwater Investigation in Baluchistan.	UNDP (4.5 Million Rs.)	26.5	29.9	Reconnaisance Survey = 7690 sq. miles Groundwater Survey = 4876 " Geophysical Survey = 6869 " Test holes .. = 84 No.
On-Farm Water Manage- ment Project.	USAID	23.83	15.7	Watercourse 54 PLL 7000

PROGRAMMES OF FEDERAL AGENCIES OTHER THAN
WAPDA AND FFC

1. FATA Development Corporation

FATA D.C. has been allocated Rs. 31.45 million for its schemes in the water sector. During the year the major emphasis will be on completing some of the ground water irrigation schemes for which Rs. 19.809 million has been earmarked. The main schemes are in Dattakhel, Hassankhel, L.B. Kurram and Chashmai. Work will also continue in the Bajaur Agency about 30 tubewells are expected to be energised. For surface irrigation schemes Rs. 8.752 million have been allocated to complete the Bara River Canal project, Spin plain, Shalozan, Sateen, Kharseen, Sein Tangi and to carry out improvements in existing channels. A total of 9.0 miles of new channels will be constructed and 17.5 miles of old channels will be improved. Rs. 2.889 million have been allocated for survey & investigation of ground water potential in Kurram agency which will be completed during the year. In addition, investigations will continue for 24 surface irrigation schemes. It is expected that during the year, about 12,000 acres will benefit from new additional water supplies.

2. Pakistan Meteorological Department

The programme for 1978-79 comprises Rs. 21.0 million to be spent mostly on improvement of meteorological forecasts for aviation purposes (Rs. 10.23 million) improvement of surface observation network and river & flood forecasting (Rs. 8.77 million), installation of Agricultural Meteorological station Tandojam and Seismic Observatory, Khuzdar (Rs. 1.9 million) and miscellaneous buildings (Rs. 0.1 million).

3. Irrigation, Drainage & Flood Control Research Council

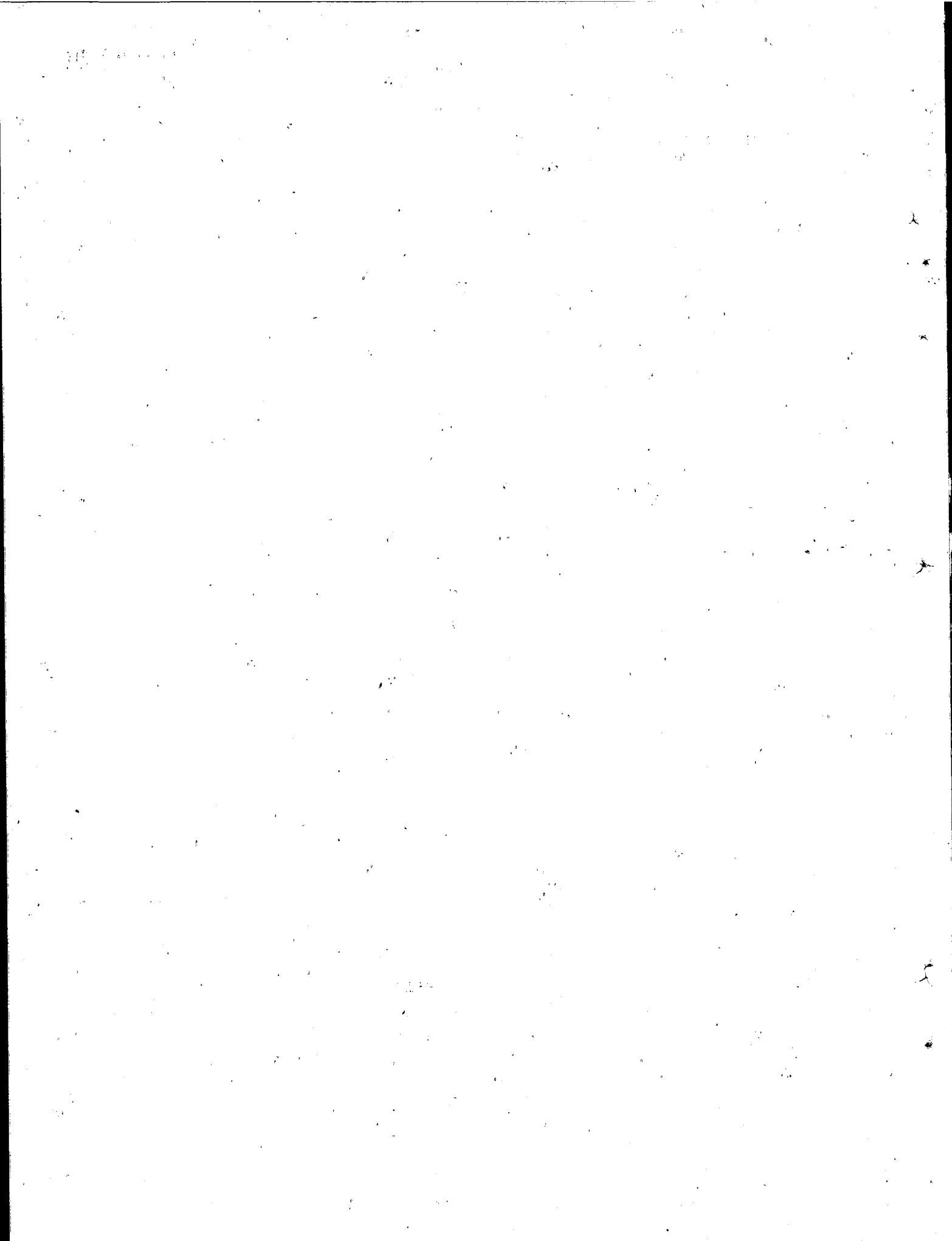
The Irrigation Drainage & Flood Control Research Council has been provided an amount of Rs. 8.25 million as in the past, the bulk of this expenditure will be utilised on studies at the Drainage & Reclamation Institute of Pakistan (DRIP). Lysimeter studies will be continued in Sind & Punjab. Work will be initiated on a centre for Desertification Studies and a study in Evaporation losses.

4. Northern Areas

The provision of Rs. 5.754 million will be utilised on construction of 20 small surface irrigation schemes out of which nearly half are expected to be completed during 1978-79. These schemes are in Gilgit, Hunza/Nagar, Ghizer, Chilas, Astore, Skardu and Ghanche districts.

5. Azad Kashmir

During 1978-79, an amount of Rs. 1.1 million will be utilised on Jari-Bhumber irrigation scheme and for reclamation of waterlogged lands in Bhimber & Khari areas.



MINERAL DEVELOPMENT

Mineral Industry in Pakistan is still in a nascent stage of development. Pakistan is far behind most countries in metallic mineral reserves and production, though a fairly large number of metal minerals showings have been reported from various parts of the country. Geologically, more than 80% of the land area of Pakistan is occupied by the sedimentary of rocks ranging in age from Pre-Cambrian to recent, hence our major mineral resources are of non-metallic nature. Large quantities of non-metallic minerals used for agriculture, glass and ceramic industry, refractory industry, construction industry and metal moulding materials have been discovered and are being mined. Similarly, large quantities of many other minerals such as rock salt, bayrite, soapstone, etc., used in chemical and other industries have been established and also are being mined. Efforts are also being made to bring sub-marginal low grade ores within the consumer's specifications by using mineral dressing techniques. Government is placing more emphasis on the development and processing of known minerals. In this connection the Government has recently constituted a Pakistan Gemstone Corporation as a joint venture between PMDC and the Sarhad Development Corporation for the mining, cutting, polishing and marketing of gemstones on the lines of the Gemstone Corporation of Sri-Lanka.

REVIEW OF 1977-78

Investment

2. Against an allocation of Rs. 164.36 million, actual investment in 1977-78 is likely to be about Rs. 87.68 million. The details are given in Table 1.

TABLE 1

ADP allocation and expenditure in 1977-78

	1977-78 Allocation	1977-78 Estimated Expenditure	Percentage Implemen- tation
(Rs. Million)			
A. Federal			
(1) Ministry of Petroleum & Natural Resources :			
(a) GSP	8.18	2.34	29
(b) PMDC	56.99	51.17	90
(c) RDC	34.20	15.12	44
(2) Production Division :			
PIDC	25.00	6.82	27
(3) AKMIDC	1.64	0.87	53
(4) FATADC	6.65	2.05	31
Total—(Federal) ..	132.66	78.37	
B. Provincial			
(a) Baluchistan (BDA)	—	0.51	—
(b) NWFP (SDA)	13.25	2.18	16
(c) Sind	—	—	—
(d) Punjab (PUNJMIN)	18.45	6.62	36
Total—(Provincial) ..	31.70	9.31	29
Total—(Federal and Provincial) ..	164.35	87.68	53

3. The above table shows that except for PMDC, none of the agencies were able to fully utilize their ADP allocations during 1977-78. The reasons for the shortfalls were the non-availability of technical manpower, procedural bottlenecks in obtaining the mining leases and restricted movements of geo-scientists in the Tribal Area etc.

Projects Completed

4. During the year 1977-78 various mineral sector projects were completed. The project for development of rock salt mines in Punjab was completed at a cost of Rs. 19.89 million (FEC Rs. 8.01 million). This project has raised the production capacity of these mines from 0.308 million tons per annum to 0.540 million tons per annum. The other mineral sector projects completed during the year 1977-78 related to the Pre-investment Study Work in Saindak for Copper, Groundwater Investigations in Saindak, exploration of China Clay in Nagar Parker and Chromite in Malakand. Total expenditure incurred on the completion of these exploration and investigation schemes was Rs. 55.66 million.

Production

5. Actual figures for output of various minerals in 1977-78 are not available as yet. The preliminary estimates are given in Table 2 which indicate an increase in some important minerals like coal, chromite, rock salt, china clay, magnesite, gypsum etc :

TABLE 2

Production estimates of some important minerals during 1976-77 and 1977-78

Sl. No.	Minerals	('000' Tons)		
		1976-77 (Revised Estimates)	1977-78 (Estimated)	% growth over 1976-77
1.	Coal..	1,120	1,200	7
2.	Rock Salt	336	363	8
3.	Chromite	8	10	25
4.	Silica Sand	60	63	5
5.	Gypsum	287	356	24
6.	Limestone	5,000	5,825	16
7.	Marble	51	59	16
8.	China Clay	0.21	0.28	33
9.	Fire Clay	40	45	13
10.	Fuller's Earth	12	14	17
11.	Magnesite	3	5	66

Source : (i) C.S.O. for 1976-77.
(ii) Planning Commission 1977-78.

ANNUAL PLAN, 1978-79

Production

6. The targets of production for some of the major minerals in 1978-79 are given in Table 3.

TABLE 3

Production Targets for 1978-79

		(000 tons)		
Sl. No.	Minerals	1977-78 Estimated production	1978-79 Targets	Percentage growth
1	2	3	4	5
1.	Coal.. ..	1,200	1,300	8
2.	Rock salt	363	480	32
3.	Chromite	10	16	60
4.	Silica Sand	63	76	21
5.	Gypsum	356	450	26
6.	Lime stone	5,825	6,757	16
7.	Marble	59	70	19
8.	China Clay	0.28	0.40	43
9.	Fire Clay	45	51	13
10.	Fuller's Earth	14	18	29
11.	Magnesite	5	8	60

7. In 1978-79, the emphasis will be on the production of those minerals which have been proven and the completion of on-going projects for improving the operation of existing mines by expansion and modernization. Several coal and rock salt mines have been expanded and it is expected that during 1978-79, work on these projects would be completed. This will enable an increase of 8% in coal production and 32% in rocksalt production during 1978-79.

Investment

8. In 1978-79, it is proposed to implement an investment programme of Rs. 90.98 million in the Public Sector. This includes an allocation of Rs. 11.50 million to be financed from NDFC

and Rs. 33.00 million from Bank borrowing. The details of agency-wise ADP allocations are given in the Table 4 :

TABLE 4
A.D.P. Allocation 1978-79

(Million Rs.)

	1977-78 Revised estimates	1978-79 Allocation	% change
1	2	3	4
A. Federal			
1 Ministry of Petroleum and Natural Resources :			
(a) GSP	2.34	7.50	320
(b) PMDC	51.17	38.18	(-) 25
(c) RDC	15.12	11.00	(-) 27
2. Production Division :			
Nokundi Iron Ore Project	6.82	4.50	(-) 34
3. AKMIDC	0.87	1.53	176
4. FATADC	2.05	4.07	198
Total—(Federal) ..	78.37	66.78	(-) 15
B. Provincial			
(a) Baluchistan (BDA)	0.51	8.5	1,667
(b) NWFP (SDA)	2.18	22.5	932
(c) Sind	—	—	—
(d) Punjab (PUNJMIN)	6.62	36.7	454
Total—(Provincial) ..	9.31	67.7	627
Total—(Federal and Provincial) ..	87.68	134.48	53
<i>Note.—Sources of Financing</i>			
(i) ADP	Rs. 90.98	million	
(ii) Bank borrowing	Rs. 43.50	million (including 5.00 million in FEC)	
Total	134.48	million (including 5.00 million in FEC)	

9. In 1978-79, an increase of about 27% is being provided over the estimated investment in 1977-78. However, the level of investment is still small. Much larger investment would be required to exploit the potential of the mineral sector. Investment in this sector will increase when the mining operations of new minerals such as rock phosphate, gypsum, chromite, copper and iron ore, etc. are undertaken. Investment in the private sector in 1977-78 was Rs. 40.0 million. In 1978-79, private investment in minerals is projected at Rs. 50.0 million. To attract increased investment in the private sector, it is proposed to improve the procedures for obtaining mining leases and to encourage financial institutions to take a greater interest in this sector.

MAJOR PROJECTS IN THE FEDERAL PROGRAMME

I. Geological Survey of Pakistan

10. The main functions of the GSP is to study the geology of the whole country and explore its mineral resources. The area so far covered by reconnaissance geological mapping is about 512,000 sq. kms., whereas the total area of Pakistan is 785,774 sq. kms. The G.S.P. has carried out regional geological mapping on 1 : 50,000 and or 1-in. = 1.6 km. scale over an area of 113,920 sq. kms. The regional break-up of the geological mapping coverage is as follows : Baluchistan 26,240 sq. kms., NWFP 28,160 sq. kms., Sind 17,280 sq. kms., Punjab 39,680 sq. kms. and Azad Kashmir and Northern Area 2,560 sq. kms. As a result of this geological mapping, significant mineral reserves have been established. Mineralized areas or belts known as Mineral Districts or Mineral Regions have been delineated. In the ADP for 1978-79, a sum of Rs. 7.50 million has been provided for three exploration projects namely, the Chagai Mineral District Exploration Project ; Mineral Exploration in Lasbela/Khuzdar Region, Baluchistan, and Aeromagnetic Survey and Follow-up Ground Investigations in various Districts of Baluchistan. These are briefly discussed in the following paragraphs :

- (i) *Mineral Exploration in Chagai Mineral District, Baluchistan.*—This scheme envisages detailed geological mapping, geophysical and geochemical surveys in the whole region of Chagai District. The total cost of the scheme is Rs. 34.13 million with a foreign exchange component of Rs. 12.13 million. Expenditure upto the end of 1977-78 was Rs. 14.46 million. An allocation of Rs. 5.40 million has been made in the ADP 1978-79 for the implementation of this scheme. The scheme is expected to be completed in June, 1979.
- (ii) *Mineral Exploration in Lasbela/Khuzdar Region, Baluchistan.*—This scheme envisages detailed geological mapping of 17,920 sq. kms., geophysical survey and geochemical study in the whole region of the Lasbela/Khuzdar mineral district covering an area of about 20,480 sq. kms, followed by trenching, pitting and test drilling at appropriate places. The total cost of the scheme is estimated at Rs. 14.00 million including a foreign exchange component of Rs. 4.77 million. An amount of Rs. 12.96 million had been spent on the implementation of this scheme upto June, 1978. An allocation of Rs. 1.40 million has been made in the ADP for 1978-79. The scheme is scheduled to be completed in June, 1979.
- (iii) *Aeromagnetic Survey in various Districts of Baluchistan and Follow-up Ground Investigations.*—The total cost of the scheme is Rs. 11.98 million including a foreign exchange component of Rs. 9.11 million. Expenditure upto the end of 1977-78 amounted to Rs. 5.41 million. The allocation for 1978-79 is Rs. 0.7 million. The scheme is scheduled to be completed in June 1979. Partial survey was completed with Canadian Assistance. The follow-up ground investigations programme planned to be taken up in 1977-78 was carried out according to schedule. During the year 1978-79 interpretation of data will be completed.

II. Pakistan Mineral Development Corporation

11. The total investment programme of PMDC during 1978-79 is Rs. 38.18 million. PMDC will be implementing eleven schemes, four schemes for the development of coal mines, one for the development of salt mines and the rest for the exploration of various minerals. The major schemes to be implemented during 1978-79 by PMDC are given below :

- (i) *Development of Sharigh Collieries.*—This scheme is for expansion of Sharigh Collieries from its present level of production of 50,000 tons per annum to a level of 100,000 tons per annum to feed the coal washing plant being established simultaneously. The capital cost of the project is Rs. 32.51 million. During 1977-78, an expenditure of Rs. 9.00 million was incurred on this scheme. Regarding physical progress the total drivage made in 1977-78 in the country rock was 10,000 ft. and about 7,20,000 cu. ft. of stones were removed. Detailed planning and designing and other works have been completed and orders for machinery have been placed. An allocation of Rs. 7.00 million has been made in the ADP 1978-79 for the project. Another allocation of Rs. 11.50 million has been made for this project outside the ADP. The project is expected to be completed in 1979-80.

- (ii) *Coal Washing Plant Sharigh.*—The project is for producing 75,000 tons of washed coking coal for use in Karachi Steel Mills. The total capital cost of the scheme is Rs. 25.28 million including an FEC of Rs. 19.12 million. During 1977-78, soil survey investigations, preliminary designing of the plant, and construction of washing plant building and foundation was completed. About 70% of the machinery has been procured. The tender for construction and erection of coal washing plant and foundation has been finalized and the actual work will start by the middle of September, 1978. An expenditure of Rs. 18.70 million had been incurred upto June, 1978. An allocation of Rs. 4.10 million has been made in ADP 1978-79 for the project. The project is expected to be completed in 1979-80.
- (iii) *Development of Gullakhel/Makerwal Collieries, Punjab.*—The project is for expansion of Gullakhel/Makerwal Collieries in Punjab to raise its production capacity from current level of 0.16 million tons to 0.30 million ton per annum. The capital cost of the project is Rs. 44.64 million. Almost all machinery and equipment for the first phase has been procured and installed at the mines. Haulages and compressors have been transported to the site and their foundation work has been completed. Power line has been extended upto inclines in Makerwal Collieries. In 1977-78 the mining development works were continued and 7,960 feet were driven partly through country rock and partly through coal. An expenditure of Rs. 11.49 million was incurred on the project upto 1977-78 and an allocation of Rs. 8.0 million has been made in ADP 1978-79. The project is expected to be completed in 1982.
- (iv) *Technical and Management Study of Coal and Salt Mines.*—To improve productivity and profitability of coal and salt mines of PMDC, PD-NCB Consultants of UK have been engaged to undertake a detailed study. A team of the British experts completed the field studies in May, 1978 and collected requisite data of the coal and salt mines. They are expected to submit the final report of their findings in December, 1978. An allocation of Rs. 0.2 million has been made in the ADP 1978-79 for this study.

III. Resource Development Corporation

12. *Saindak Copper Project, Baluchistan.*—Resource Development Corporation (RDC) was formed in July, 1974 to undertake the exploration and evaluation of the Saindak Copper Deposits. RDC carried out topo-geological mapping of copper mineralization area to the scale of 1:2000, diamond core drilling of 45,607 meters for proving and delineating the copper bearing areas, collection of samples for metallurgical tests and proving the groundwater reservoirs in Tahlab Basin; 15,000 samples of core were collected and 1,25,000 chemical determinations were carried out. This resulted in the assessment of 412 million tonnes of copper ore of 0.364% grade containing gold, silver, magnetite and pyrite in recoverable quantities. Moreover, copper and zinc deposits of 0.9% and 3.4% grade have also been established in Talaruk and Makki Chah deposits, respectively. RDC initiated the work in 1977-78 to obtain precise information on the percentage recovery of valuable minerals in Saindak Copper ores, engineering properties of rocks for mine design, and other related matters. This work is still continuing.

13. Pre-investment feasibility study to investigate the economic viability of the Saindak project on the basis of the evaluation work done by RDC was carried out by Seltrust Engineering Ltd. of UK (SEL) as Consultants and Mountain States Research and Development, Arizona, USA (MSRD) as clients' consultants selected by the UNDP. SEL's recommendations are to mine the south ore body in the first instance at a production rate of 12,500 tonnes per day. Three products will be produced by the processing of this ore. The results of metallurgical tests being carried out on 56 tonnes samples in a pilot plant are likely to confirm the possibility of producing from the south ore body 15,000 tonnes of blister copper, 77,000 tonnes of steel billets and 158,000 tonnes of sulphuric acid per annum. Blister Copper will be exported while steel billets and sulphuric acid will be consumed locally. The total capital investment of the scheme has been estimated at Rs. 2,000 million including Foreign Exchange Component of Rs. 1160 million. Based upon the recommendations of SEL, RDC have submitted a PC-I scheme that is under consideration of the Government. Total expenditure of Rs. 15.124 million was incurred during 1977-78 (including Rs. 0.134 million as US-NSF grant). During 1978-79, an allocation of Rs. 11.00 million has been made to continue the 'left over' jobs of 1977-78.

IV. Pakistan Industrial Development Corporation

14. *Iron Ore Exploration Work, Chigendik/Pachinkoh, Nokundi, Baluchistan.*—Evaluation of geological, geophysical drilling, test mining and laboratory studies have confirmed 10 million tons of iron ore in Pachinkoh and Chigendik, Nokundi (Baluchistan) with an average iron content of 45% to 50%. There is a possibility that the proven reserves may be enhanced if the geophysical anomalies prove productive. PIDC is carrying out a study on the various processes of iron and steel making with an out-put of 100,000 to 400,000 tons per year. In 1977-78 five exploratory adits of total footage of 1000 and a number of prospecting trenches were dug, for the collection of samples.

15. According to the results obtained from PSSIR laboratories, it has been possible to upgrade the ore to 64 per cent iron by wet magnetic separation, which is one of the most economical processes of iron ore beneficiation. The Government of the People's Republic of China is giving technical and financial assistance for this project. Geological reports have been prepared both by PIDC and the Chinese. The Chinese report contain the mineralogical, petrological and geo-magnetic studies done by the Chinese team and elaborate technical drawings. During 1977-78, an expenditure of Rs. 14.42 million was incurred on the project. An allocation of Rs. 4.50 million has been made in ADP 1978-79 for doing the geological, geophysical drilling and hydro-logical work. Problems such as isolation of area, non-availability of drilling rigs, shortage of technical personnel etc. have retarded the progress of this project.

V. Azad Kashmir Mineral and Industrial Development Corporation

16. A provision of Rs. 1.38 million has been made in the ADP 1978-79 for this Corporation to continue work on their on-going projects namely : (i) Detailed Survey and Mineral Investigation of Poonch and Kotli districts and (ii) Exploration of Graphite Deposits of Mohriwali (A.K.) in association with PMDC. The expenditure incurred on these schemes during 1977-78 amounted to Rs. 2.99 million. The work done in Poonch and Kotli districts has resulted in the establishment of the probable reserves of bauxite as 20.0 million tons, fire clay as 18.0 million tons, coal as 0.15 million tons, dolomite as 6900 million tons, quartzite as 8.0 million tons and marble as 50,000 tons. Geological mapping of 3.5 square miles to the scale of 1:5000 and study of a number of samples of graphite have confirmed the presence of graphite deposits. Beneficiation studies undertaken in PCSIR laboratories have reported that the up-gradation of carbon content from 14% to 84% is possible.

17. Another sum of Rs. 0.15 million has been provided in the ADP 1978-79 for AKMIDC to carry out detailed survey and mineral investigation around Muzaffarabad.

VI. Federally Administered Tribal Areas Development Corporation

18. The Federally Administered Tribal Areas Development Corporation is entrusted with the assignment of exploration and development of mineral resources in these tribal areas. An amount of Rs. 6.65 million was allocated in the ADP 1977-78 for the mineral development in FATADC. Major projects were (i) Investigation and large scale mapping in mineral bearing areas in FATA (ii) Exploitation of soap-stone in Daradar Valley, Kurram Agency (iii) Detailed investigation and exploration of prospective areas in FATA. Many mineral deposits have been estimated by geological mapping and drilling. Tenders have also been invited for the purchase of Diamond Core Drilling Rig machine, and geophysical and laboratory equipments. Detailed investigations in certain areas could not be conducted for want of clearance to these areas for the free movement of geoscientists. An allocation of Rs. 4.07 million has been made for these projects in the ADP 1978-79.

VII. Baluchistan

19. Mining activities of the Provincial Government in Baluchistan during 1978-79 would be confined to the implementation of the following projects :

Name of the Project	Total Cost	Allocation 1978-79
(i) Fluorite Exploration/Mining	10.00	1.00
(ii) Chromite Exploration/Mines in Zhob/Lasbela/Khuzdar	15.00	3.00
(iii) Magnesite Exploration/Mining in Muslimbagh	5.00	1.00
(iv) Quartzite Exploration/Mining in Lasbela	2.00	1.00
(v) Magnesite Dead burning Plant Muslimbagh	3.50	2.50

20. The total provincial allocation for mineral sector in Baluchistan, in ADP 1978-79, is Rs. 8.50 million as against actual expenditure of Rs. 0.5 million incurred in 1977-78,

VIII. Sarhad Development Authority

21. An amount of Rs. 13.23 million was allocated to SDA for the development of minerals in the ADP 1977-78. The main provincial activity in the mineral sector in NWFP comprises of three schemes under implementation with the SDA. These are : Hazara Phosphate Exploration ; Phosphate Mines in Kakul ; and Phosphate Cutting and Grinding Unit Kakul. Total capital outlay in all these schemes is Rs. 79.45 million (FEC Rs. 32.06 million). Expenditure incurred upto 1976-77 was Rs. 12.90 million. During 1977-78 work on Hazara Phosphate Exploration Project continued and the expenditure was Rs. 0.33 million. This work is being done in association with British Consultants over an area of 153.60 kms. The report on this phase has been received. The other scheme relating to the mining of phosphate in Kakul-Mirpur area is to meet the total rock phosphate requirements of the SSP factories of the NFC at Faisalabad and Jaranwala. The total annual requirement of rock phosphate for these factories is about 61,000 tons. SDA plans to produce rock phosphate from Mirpur-Kakul mines at the rate of 120 tons per day. Present production at the mines is about 600 tons per month. Necessary equipment for the development of the mines have been imported and is now being installed. Development work at the mine is progressing rapidly and the target of production of 120 tons per day of rock phosphate is expected to be achieved. An allocation of Rs. 9.00 million has been made in the ADP 1978-79 for all the three phosphate projects in Hazara.

IX. Punjab Mineral Development Corporation

22. The Corporation has been allocated a sum of Rs. 26.7 million in the ADP for 1978-79. During the year 1977-78, certain objectives have been achieved by spending Rs. 5.90 million on its six on-going mineral exploration and development schemes. Achievements and future programmes of some of the major schemes are discussed below :

- (i) *Detailed investigation and Preparation of Feasibility Study for Economic Minerals in Mianwali District.*—The total area under investigation is 180 sq. miles. Topogeological mapping over an area of 135 sq. miles have been completed and 300 samples of limestone, fireclay, silica sand, and gypsum have been collected and analysed. Upon completion of exploratory work this project is expected to prove enough reserves of clays, silica sand, gypsum and limestone for mining and their utilization in industries based on these minerals. Actual expenditure incurred during 1977-78 on this scheme was Rs. 0.80 million. An allocation of Rs. 1.68 million has been made for this project in the ADP 1978-79. The total estimated cost of the scheme is Rs. 25.70 million. The report of the mining consultants is expected soon containing the delineation of mineralized zones.
- (ii) *Development of Dolomite Quarry at Paikel, Mianwali District.*—About 12.57 million tons of good quality dolomite of an average chemical composition, (Calcium Oxide 27.32%, Magnesium Oxide 18.64%, loss on ignition 45.92%, Silicon dioxide 1.33%, Sodium Oxide + Potassium Oxide 1.34%) has been proved. Access roads to the quarry site, purchase of machinery, construction of explosive magazine, and development of quarry benches has been completed. The project is nearing completion and it will give an annual output of 40,000 tons of dolomite. The expenditure incurred during 1977-78 is Rs. 2.00 million. Total estimated cost of the scheme is Rs. 8.93 million (FEC Rs. 3.32 million) and the expenditure incurred upto end of 1977-78 was Rs. 8.23 million. Thus the allocation made for the scheme in ADP 1978-79 of Rs. 0.89 million should be able to complete the scheme by end of 1978-79.

CONCLUSION

23. With a view to achieving the physical targets, both for 1978—83 period and the year 1978-79, several measures are required for solving the problems constraining the development of the mineral industry. A major difficulty in the planning for mineral development is the non-availability of relevant mineral statistical data. Other problems include the shortage of qualified and trained manpower, cumbersome procedures for obtaining prospecting licences and mining leases, lack of inland communications, shortage of railway wagons etc. Several remedial measures are being taken for alleviating these problems. For example, a mineral statistical programme proposed for the collection, consolidation and publication of all the aspects of mineral statistics, has yielded good result. Efforts will be made to overcome the shortage of geo-scientists and technical manpower by enlarging the scope of education and training facilities and to retain the services of high quality geologists, mining engineers and metallurgists in the industry. Proposals for making the mineral concession rules less cumbersome, simple, speedy and development oriented are underway. Efforts are also being made to acquire much needed mining equipment and to ensure its efficient utilization.

CHAPTER 13

INDUSTRY

REVIEW OF 1977-78

In the Annual Plan 1977-78, a growth rate of 15 per cent was projected for the large scale manufacturing sector. The major contribution to growth was expected from vegetable ghee, cotton textiles, paper and board, and fertilizer. While the production of vegetable ghee, and fertilizers increased, the production of cotton textiles, paper and paper board was not in line with the targets. The production of cotton cloth in fact was 9.7 per cent less than the production in 1976-77. As a result, industrial production as a whole increased only by 4.7 per cent in 1977-78. The output of major industries in 1977-78 is shown in Table 1. The details are given in Annexure I.

TABLE 1

Output of Major Industries

Industry	Unit	1976-77 (Actual)	1977-78 (Revised Estimates)	Change(%)
1. Sugar	000 M. tons	736	850	15.4
2. Cotton yarn	Million kg	282	272	(-3.5)
3. Cotton cloth	Million sq. metres	411	371	(-)9.7
4. Vegetable Ghee	000 M. tons	324	376	16.0
5. Paper and Board	000 M. tons	65	61	(-)6.2
6. Cement	000 M. tons	3091	3224	4.3
7. Fertilizer	000 M. tons	328	328	—

2. The level of production in different industries depends on the installed capacity, the availability of raw materials and the demand for the output. In 1977-78, no major addition of new capacity was made except for the completion of the Dadu Sugar Mill and two textile mills in the public sector namely People's Textile Mill, Bahawalpur and A. K. Textile Mill.

3. In 1977-78, increase in capacity utilization was recorded in vegetable ghee, cigarettes, cement, soda ash and sugar. However, the low level of capacity utilization persisted in major industries like textiles, paper, board and caustic soda. Several measures were taken to help the textile industry to increase production. A number of fiscal concessions and credit facilities were given to industries in general including the textile industry. In addition, financial assistance was given to a number of textile mills with severe liquidity problems. Also a subsidy of Rs. 45 per maund on lint cotton was given to the textile industry to improve its competitiveness in the international markets. However, the underlying problem of the textile industry of low productivity and efficiency was so severe that its competitiveness was not restored. In the case of paper, the problems of the biggest

paper mill at Charsada relating to the availability of raw material and technical difficulties continued to depress production. The details of capacity utilization in major industries are given in the following table :

TABLE 2
Capacity Utilization in Major Industries

(Output as % of capacity)

Industry	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78 Revised Estimate
1. Sugar	157	134	77	85	112	77	87	10	113
2. Vegetable Ghee.	69	64	76	83	74	89	80	95	104
3. Cigarettes	65	71	65	70	68	68	70	70	80
4. Cotton Yarn	90	92	93	92	90	81	79	61	60
5. Cotton Cloth (Mill Sector)	78	87	83	81	81	76	71	63	57
6. Paper	23	33	53	53	48	44	41	53	53
7. Board	86	92	78	62	72	68	64	62	55
8. Caustic Soda	102	120	132	120	101	99	78	71	67
9. Soda Ash	86	99	97	94	103	97	99	62	90
10. Fertilizers	88	89	65	84	90	96	100	98	98
11. Cement	85	86	83	83	91	96	92	90	95

Investment

4. Total investment in industry in 1977-78 is estimated at Rs. 8522 million, showing an increase of 35% over the investment in 1976-77. As can be seen from the following table, the major contribution to this increase was in the public sector.

TABLE 3
Investment in Industry

	1976-77 (Actual)	1977-78		Increase in 1977-78
		Annual Plan targets	Estimated Achievment	
Public Sector				
A.D.P.	3,466	3,948	5,211	50
Outside A.D.P.	1,094	1,662	1,480	35
Sub-Total	4,560	5,610	6,691	47
Private Sector				
(a) Large Scale Manufacturing	1,162	1,300	1,189	2
(b) Small Scale Manufacturing	585	600	642	10
Sub-Total	1,747	1,900	1,831	5
Total—(Investment)	6,307	7,510	8,522	35

PLAN FOR 1978-79

Industrial Production

5. Industrial Production in large scale manufacturing is projected to increase by 13% in 1978-79. The major increases are expected in vegetable ghee, cotton textiles, paper, board, fertilizers and mild steel products. The targets for 1978-79 for major industries are shown in following table. The detailed production targets are given in Annexure III.

TABLE 4
Production Targets for Major Industries

Industry	Unit	1977-78 (Revised Estimates)	1978-79 (Targets)	Increase (%)
1. Sugar	000 M. Tons	850	850	—
2. Cotton Yarn	Million kg.	272	320	17.6
3. Cotton Cloth	M. sq. metres	371	450	21.3
4. Vegetable Ghee	000 M. Tons	376	400	6.4
5. Paper and Board	000 M. Tons	61	70	14.8
6. Cement	000 M. Tons	3,224	2,250	0.8
7. Fertilizer	000 N. Tons	328	480	46.3

6. The output of cotton yarn is projected to increase from 272 million kilograms in 1977-78 to 320 million kg. in 1978-79, an increase of 17.6%. At the same time, the production of mill-made cloth is expected to increase by 21.3% from 371 sq. metres in 1977-78 to 450 million sq. metres in 1978-79. The projected targets are well within the capacity available in the country. However, special efforts would be needed to increase production and exports. Some incentives for increasing production were provided in the Budget for 1978-79. Excise duty on cotton yarn, cotton cloth and processing of cotton fabrics, other cotton products such as hosiery and towels, spinning of discontinuous man-made fibres and fabrics of man-made yarn whether grey or processed have been abolished. The textile machinery for balancing and modernisation of textile mills and new machinery imported for manufacture of garments and other textile made-up-goods have been totally exempted from excise duty. In addition, the import duty on wool has been abolished in order to encourage the manufacture of woolen yarn for carpet making industry. A comprehensive policy to boost industrial production and exports is being framed to enhance the incentives already given for increasing industrial output.

7. The production of paper and board is projected to increase by 14.8% in 1978-79. The production of vegetable ghee is projected to increase by 6.4% from 376,000 metric tons in 1977-78 to 400,000 metric tons in 1978-79, which is in line with the demand projections. The fertilizer production is expected to increase from 328,000 N. tons to 480,000 N. tons showing an increase of 46.3% as a result of the completion of the Pak-Arab Fertilizer Factory.

8. *Sugar*.—The present installed cane crushing capacity is 57,150 tons per day. In terms of sugar this gives a capacity of 730,000 tons per annum based on a crushing season of 150 days and at an average recovery rate of 8.5 per cent. In addition about 34,000 tons of sugar can be produced from the existing beet diffusion capacity. In 1978-79, three new sugar mills namely Pattoki, Pasrur and Thatta will start trial production. These mills can produce 32,000 tons of sugar at 50 per cent utilization of rated capacity. Thus effective production capacity in 1978-79 will be near 796,000 metric tons. In 1977-78, the production of sugar was 850,000 tons. This

was an exceptionally good year for sugar production, as the mills were able to crush cane for nearly 210 days. Keeping in view the past trend of sugar production and availability of sugarcane to mills, the target of sugar production for 1978-79 has been fixed at the last year output level of 850,000 tons.

9. *Vegetable Ghee.*—The installed capacity in the vegetable ghee industry is 360,000 M. Tons per annum. During 1978-79 two new factories at Dargai and Haripur, each having a capacity of 9,000 M. tons will come into production. In addition, some new capacity will be raised by balancing and modernisation of existing facilities. The constraint in this sector at the moment is not the manufacturing capacity but the ability of the country to import edible oil. The future of this industry depends on the progress that can be made in increasing the production of oil seeds in the country. The target for vegetable ghee production in 1978-79 is 400,000 Metric tons.

10. *Cigarettes.*—There are 21 cigarette factories with an effective capacity of 40 billion cigarettes per annum (on two shift basis). Demand in 1978-79 is expected to be around 34 billion cigarettes and this has been taken as the production target for 1978-79. If export demand can be generated production could be substantially higher.

11. *Cotton Textiles.*—The installed capacity in the mill sector is 4.6 million spindles and 30,000 looms. It is expected that four public sector textile mills namely Lasbella, Bolan, D.G. Khan and Shahdadkot will start trial production during 1978-79. In addition, some new capacity will come on stream in the private sector. Thus the total installed capacity will be 3.8 million spindles and 32,750 looms by the end of 1978-79. Using an annual output rate of 127 kilogram per spindle and 21,740 square metres per loom, the installed capacity would be capable of producing nearly 480 million kilograms of yarn and over 700 million square metres of cloth. Due to weak export demand for Pakistani textiles, demand will remain the basic constraint on output. The production targets for 1978-79 of yarn and cloth have been taken at 320 million kilograms and 450 million square metres respectively. These targets imply a significant growth in output compared to 1977-78 though production would still be below capacity.

12. *Soda Ash.*—The installed capacity for the manufacture of soda ash is 84,000 tons. The production in 1977-78 was 76,000 tons. The demand for soda ash is expected to increase by 6 per cent in 1978-79 and the production has been taken at 80,000 tons.

13. *Caustic Soda.*—The installed capacity for caustic soda manufacturing in the country is 49,000 tons. The production in 1977-78 was 33,000 tons. Due to increase in the production of textile industry, the demand for caustic soda should increase substantially. In view of this the production target has been fixed at 40,000 tons.

14. *Cement.*—The installed capacity of cement is 3,400 thousand M. tons. During 1977-78, the production was around 3,224 thousand M. tons. No new capacity is expected to be added during 1978-79. The production targets for 1978-79 has been taken as 3,250 thousand M. tons. implying a slight improvement in capacity utilization.

15. *Paper and Board.*—The installed capacity in the country for the manufacture of writing and printing paper is 48,000 tons per annum. Actual production in 1977-78 was around 27,000 M. tons. The paper Mill at Charsada having a capacity of 30,000 tons is facing problems relating to shortage of bagasse. With the commissioning of the Larkana sugar mill the situation has improved and further improvement is expected in 1978-79. The production target for paper for 1978-79 has been taken as 30,000 tons. The installed capacity of boards paper straw and chip board) in the country is 62,000 tons. The actual production in 1977-78 was around 33,000 tons. In 1978-79 the demand for packing material is expected to increase in line with the increase in industrial production. So a production target of 40,000 tons has been fixed for 1978-79 which will be achieved through better capacity utilization.

16. *Fertilizer.*—Top priority is being given to the expansion of the fertilizer industry. Several projects to create the capacity to meet the growing demand for nitrogenous and phosphatic fertilizer are under implementation. The Pak Arab Fertilizer Factory is expected to be commissioned by end of 1978. The production targets for nitrogenous and phosphatic fertilizer for 1978-79 have been taken at 420,000 N. tons and 60,000 N. tons respectively against the actual production of 313,000 N. tons of nitrogenous fertilizer and 15,000 N. tons of phosphatic fertilizer in 1977-78.

17. *Engineering Goods.*—Pakistan possesses a significant nucleus of engineering goods industry both in the public and private sectors. The product range in this sector is considerable with emphasis on light and heavy engineering machine tools, telecommunication instruments, machinery, transformers, switch gears, surgical instruments, parts of textile, cement and sugar mill machinery, agricultural machinery and automotive parts etc. In view of the wide variety of goods produced by the engineering goods industry, it is difficult to specify the production targets separately for these products. The estimated production during 1977-78 was 280,000 tons. Against this, the target for 1978-79 is 300,000 tons.

Investment Programme

18. Total investment in industry in 1977-78 was Rs. 8,522 million. This investment is expected to decrease to Rs. 8389 million in 1978-79. Detailed break up of this investment is given in table 5. Investment in the public sector is programmed to decline from Rs. 6,691 million in 1977-78 to Rs. 6201 million in 1978-79. This decrease is primarily due to the expected completion of a number of projects in the public sector. In spite of the resource constraint the investment programme has been framed to fully provide for important on-going projects. Private investment in large scale manufacturing is projected to increase from Rs. 1,189 million in 1977-78 to Rs. 1485 million in 1978-79. Investment in small scale industry is projected to increase from Rs. 642 million in 1977-78 to Rs. 700 million in 1978-79.

TABLE 5

Investment Programme, 1978-79

(Rs. Million)

(a) Public Sector :							
(i) Federal ADP Programme..	..	..	..	..	..	..	4,489.880
(ii) Investment outside ADP (including Provinces)	..	..	..	..	..	..	1581.900
(iii) Baluchistan ADP	..	..	..	..	..	..	7.174
(iv) N.W.F.P. ADP	..	..	..	..	..	..	22.813
(v) Sind ADP	..	..	..	..	..	..	38.050
(vi) Punjab ADP	..	..	..	..	..	..	64.200
						Sub-Total (a)	6204.017
(b) Private Sector :							
(i) Large Scale	..	..	..	..	..	..	1485.000
(ii) Small Scale	..	..	..	..	..	..	700.000
						Sub-Total (b)	2185.000
						GRAND TOTAL	8389.017

Public Investment

19. *A.D.P. Investment.*—Most of the ADP investment in 1978-79 is meant for on-going projects. A major portion of this investment is meant for the Karachi Steel Mill (Rs. 3000 million), cement projects (Rs. 478 million) and fertilizer projects (Rs. 621 million). Details of the major projects included in the ADP are given subsequently.

20. *Outside ADP Investment.*—In 1977-78 the outside ADP investment of public sector corporations (Federal and Provincial) is expected to be Rs. 1,480 million. In 1978-79 the investment programme outside ADP is programmed at Rs. 1582 million. The details of this investment is presented in the following table :

TABLE 6

Investment outside ADP, 1978-79

S. No.	Name of the corporation	(Rs. Million)				
		Investment Outside ADP		Financed from Loans		Financed from Foreign Equity
		Total	FEG	Local	FEG	
Federal						
1.	Karachi Steel Mill	500.0	—	500.0	—	—
2.	State Cement Corporation ..	62.5	22.5	40.0	—	22.5
3.	State Petroleum Refining and Petrochemical Corporation	30.0	—	30.0	—	—
4.	Pakistan Industrial Development Corporation	70.0	—	70.0	—	—
5.	National Fertilizer Corporation of Pakistan	200.0	—	200.0	—	—
6.	State Heavy Engineering and Machine Tool Corporation	40.0	—	40.0	—	—
7.	State Electrical Corporation ..	2.2	—	2.2	—	—
8.	Textile Machinery Corporation ..	20.0	—	20.0	—	—
9.	Pakistan Tractors Corporation ..	16.0	16.0	—	—	16.0
10.	Federal Chemical and Ceramics Corporation	13.0	—	13.0	—	—
11.	Garment Corporation of Pakistan ..	6.5	—	6.5	—	—
12.	Ghee Corporation of Pakistan ..	4.0	—	4.0	—	—
13.	Pak. Libya Holding Company ..	200.0	200.0	—	—	200.0
14.	AKMIDC	23.6	—	23.6	—	—
	Sub-Total—(Federal) ..	1187.8	238.5	949.3	—	238.5
Provincial						
15.	B.D.A.	—	—	—	—	—
16.	S.D.A.	39.1	2.5	36.6	—	2.5
17.	Sind Sugar Mills Corporation ..	100.0	—	100.0	—	—
18.	P.I.D.B.	255.0	—	255.0	—	—
	Sub-Total—(Provincial) ..	394.1	2.5	391.6	—	2.5
	GRAND TOTAL ..	1581.9	241.0	1340.9	—	241.0

Private Sector

21. It is estimated that private investment in large scale manufacturing during 1977-78 was around Rs. 1189 million as against Rs. 1,162 million during 1976-77. The following table shows the level of private investment in large and medium scale industries during the last few years.

TABLE 7

*Private Industrial Investment
(Current Prices)*

								(Million Rs.)
Year								
1969-70	..	..	..	..	..	..	..	1,209
1970-71	..	..	..	..	..	..	..	1,224
1971-72	..	..	..	..	..	..	..	1,016
1972-73	..	..	..	..	..	..	..	763
1973-74	..	..	..	..	..	..	..	697
1974-75	..	..	..	..	..	..	..	990
1975-76	..	..	..	..	..	..	..	1,060
1976-77	..	..	..	..	..	..	..	1,162
1977-78 (Estimated)	..	..	..	..	..	..	..	1,189

22. The above table shows that private investment which amounted to Rs. 1,224 million in 1970-71 declined to Rs. 697 million in 1973-74. Since 1973-74 it has started picking up and has increased to Rs. 1,189 million in 1977-78. Due to price escalation during this period investment in real terms is still less than the level of 1970-71.

23. The position of PICIC and IDBP sanctions and disbursement is as follows :—

TABLE 8

PICIC AND IDBP Sanctions and Disbursements

							(Rs. Million)		
Year	Sanctions						Disbursements		
	PICIC	IDBP	Total	PICIC	IDBP	Total			
1972-73	64.1	155.0	219.1	277.0	48.5	325.5
1973-74	364.2	87.2	451.4	39.0	62.5	101.5
1974-75	366.4	230.6	497.0	165.0	141.2	306.2
1975-76	246.3	358.1	601.4	349.0	253.0	602.0
1976-77	378.3	139.7	518.0	168.0	85.0	253.0
1977-78 (Estimated)	176.8	200.7	377.6	119.2	77.9	197.1

24. It can be seen from the above table that sanctions and disbursements declined during 1977-78 as compared to 1976-77. This was mainly due to the disturbed economic conditions and the liquidity problems faced by the industries sector. Investment in large scale industry in 1978-79

is targetted at Rs. 1485 million. This would mean an increase of 26 per cent over the level of investment in 1977-78. A number of measures have been taken to encourage private investment in industry. These include the opening of the previously reserved fields of investment to the private sector, five year tax holiday and remission of import duty on machinery for industries set up in Baluchistan, D.I. Khan and Malakand Divisions of NWFP. Also the maximum rate of interest on loans for industrial investment has been reduced to 11 per cent.

Small Scale Industry

25. Small scale industry is continuing to experience a high growth rate. It has been estimated that investment in small scale industry increased from Rs. 256 million in 1972-73 to Rs. 642 million in 1977-78 with an average growth rate of 20 per cent per annum. A target of Rs. 700 million has been fixed for investment in small scale industry in 1978-79.

DETAILS OF MAJOR PROJECTS

Pakistan Industrial Development Corporation

26. *Dir Forest Industries Complex.*—PIDC is setting up an industries complex based on Dir Forest at an estimated cost of Rs. 244.691 million with a foreign exchange component of Rs. 178.407 million. The project envisages processing of 3.5 million CFT of round timber logs annually to produce sawn and seasoned timber, 5 mm thick plywood, and 19 mm thick chip board. The machinery for the project has arrived at site.

27. An expenditure of Rs. 141 million had been incurred on this project by June, 1978. Infrastructure facilities for this project are in an advanced stage of completion. Work on the housing colony at Ramoro and Sheringal is at a preliminary stage. Rs. 40 million with a foreign exchange component of Rs. 5.5 million has been allocated for this project in the ADP 1978-79. In 1978-79, infrastructure would be fully developed and work on the housing colony at Ramoro and Sheringal will be completed to the extent of 50% and 100% respectively. Factory building at Ramoro will be completed to the extent of 50% and erection of machinery will be started. The project is scheduled to go into production in 1979-80.

28. *Tarbela Cotton Textile Mill.*—PIDC is setting up a textile mill of 25,000 spindles at Khalabat with the assistance of the People's Republic of China. The capital cost of the project is Rs. 130 million with a foreign exchange component of Rs. 75 million.

29. The estimated expenditure upto June, 1978 was around Rs. 25.7 million. Land for the project has been acquired and boundary wall has been completed. Technicians hostel and warehouse for the machinery storage has been completed to the extent of 50 per cent and 100 per cent respectively. An allocation of Rs. 70 million with a foreign exchange component of Rs. 55 million has been made for the project in ADP for 1978-79. It is expected that technicians hostel, and the warehouse for the machinery storage will be completed and 31% of machinery will be received. The project is expected to start trial production in 1979-80.

State Cement Corporation of Pakistan

30. *Mustehkam Cement Project.*—The State Cement Corporation of Pakistan is establishing a new cement factory with a production capacity of 0.3 million tons per annum in the existing premises of Mustehkam Cement Project. The project would be using the dry process of manufacturing and will be based on imported machinery. The total cost of the project is estimated at Rs. 372.7 million with a foreign exchange component of Rs. 173.2 million.

31. An expenditure of Rs. 237.2 million had been incurred on this project up to June, 1978. Regarding physical progress till June 1978, 33% of the civil work relating to the main factory building had been completed and machinery to the extent of 80% had arrived at site.

32. An allocation of Rs. 70 million has been made for the project in the ADP 1978-79. The plant is expected to start trial production by the end of 1978-79.

33. *Javedan Cement Project.*—The State Cement Corporation is establishing a new cement factory with an annual capacity of 0.3 million tons at the existing premises of Javedan Cement Project, Karachi. The project would be using the dry process of manufacturing and will be based on imported machinery. The total cost of the project is estimated at Rs. 360 million with a foreign exchange component of Rs. 163.4 million.

34. An expenditure of Rs. 280 million had been incurred on the project upto June, 1978. As regards physical progress till June 1978, 70% of the civil works relating to the factory building had been completed. Machinery for the project had arrived at site. An amount of Rs. 32.70 million has been allocated for the project in the ADP 1978-79. The project is expected to start trial production by the end of 1978-79.

35. *Kohat Cement Project.*—State Cement Corporation is setting up a Portland Cement Factory at Babri Banda, Kohat District with an annual capacity of 0.3 million tons. The plant is proposed to be based on the dry process of manufacturing. The estimated cost of the project is Rs. 463.6 million with a foreign exchange component of Rs. 245.8 million.

36. An expenditure of Rs. 40 million had been incurred on this project upto June, 1978. Regarding physical implementation till June 1978, land had been acquired and site investigations had been completed. Orders for the import of plant and machinery had been placed

37. An amount of Rs. 190 million with a foreign exchange component of Rs. 100 million has been allocated for this project in ADP 1978-79. It is expected that in 1978-79 the housing colony will be completed, the civil works relating to the main plant building will be accelerated and a major part of the machinery will be delivered.

38. *Dandot Cement Project.*—The State Cement Corporation is setting up a new cement factory at an annual capacity of 0.3 million tons at Dandot. The project would be based on the dry process of manufacturing and imported machinery. The estimated cost of the project is Rs. 446.8 million with a foreign exchange component of Rs. 219.2 million.

39. An amount of Rs. 35 million had been spent on this project upto June, 1978. As regards physical progress till June 1978, land had been acquired and preliminary site investigations had been completed. Orders for the import of plant and machinery had been placed.

40. An amount of Rs. 80 million with a foreign exchange component of Rs. 50 million has been allocated for the Project in the ADP 1978-79. It is expected that soil investigations will be completed, civil works on housing colony and main plant building will commence, and the machinery for the project will start arriving during 1978-79.

41. *Thatta Cement Project.*—The State Cement Corporation is setting up a cement plant at Thatta. The plant is designed to produce 330,000 tons of cement per annum. The project is based on the dry process of manufacturing. The project is estimated to cost Rs. 490.9 million with a foreign exchange component of Rs. 225 million.

42. An expenditure of Rs. 36 million had been incurred on this project upto June 1978. Regarding physical progress till June 1978, land had been acquired and preliminary site investigation had been completed. Orders for the import of plant and machinery had been placed.

43. An amount of Rs. 80 million with a foreign exchange component of Rs. 50 million has been allocated for this project in the ADP 1978-79. It is expected that in 1978-79 soil investigations will be completed and civil works on housing colony and main plant building will commence. A part of the machinery is also expected to be received by the end of 1978-79.

Textile Machinery Corporation

44. *Spinning Machinery Project.*—The Textile Machinery Corporation of Pakistan is setting up a spinning machinery project. The plant will manufacture 300 ring spinning frames of 400 spindles (120,000 spindles) per annum under technical collaboration with M/s Schubert and Salzer "Ingolstadt" of West Germany. The capital cost of the project is Rs. 80 million with a foreign exchange component of Rs. 36 million. An expenditure of Rs. 52 million has been incurred on this project so far. Land for the project has been acquired and orders for the import of machinery have been placed. A part of the machinery has also been received.

45. An amount of Rs. 36.5 million has been allocated for this project in the ADP 1978-79. The project is expected to start trial production by June, 1979.

Federal Chemical and Ceramics Corporation

46. *Polyester Fibre Plant Karachi.*—The Federal Chemicals and Ceramics Corporation is setting up a polyester plant at Karachi. The project will have an annual manufacturing capacity of 10,000 tons of staple fibre and 2,000 tons of filament yarn. The total cost of the project is

Rs. 300 million with a foreign exchange component of Rs. 187 million. An amount of Rs. 280 million had been spent on this project upto 1977-78. The project is in an advanced stage of completion. A provision of Rs. 20 million has been made for completing the project in the ADP 1978-79. The project is expected to start trial production during 1978-79.

47. *Soda Ash Plant (Sind Alkalies Ltd.)*.—The Federal Chemical and Ceramics Corporation proposes to expand the Soda Ash Plant at Karachi. The plant has a manufacturing capacity of 35,500 tons of soda ash per annum which is proposed to be expanded to 66,000 tons per annum. The total cost of the project is Rs. 110.7 million with a foreign exchange component of Rs. 72.8 million. An expenditure of Rs. 5.6 million had been incurred on the project upto June, 1978. The project is in a preliminary stage of implementation. An allocation of Rs. 8 million has been made for the project in the ADP 1978-79. It is expected that civil works on the main factory building will be initiated and orders for import of machinery will be placed in 1978-79.

48. *D.S.A. Ittehad Chemical, Kala Shah Kaku*.—Federal Chemical and Ceramics Corporation are expanding the caustic soda plant at Kala Shah Kaku to increase production capacity of caustic soda from 90 M. tons per day to 120 M. tons per day. The capital cost of the project is Rs. 51.1 million with a foreign exchange component of Rs. 35.9 million.

49. Rs. 10 million has been allocated for this project in the ADP 1978-79. It is expected that about 15% of the work relating to civil and mechanical engineering will be completed during the year.

National Fertilizer Corporation of Pakistan

50. *Hazara Fertilizer Complex (Phase-I)*.—National Fertilizer Corporation of Pakistan is setting up a urea plant at Haripur. The plant is designed to produce 65,700 metric tons of urea containing about 44,000 metric tons of nitrogen. The estimated cost of the project is Rs. 419.9 million with a foreign exchange component of Rs. 175.2 million.

51. An expenditure of Rs. 111.8 million had been incurred on the project upto June, 1978. Regarding physical progress till June 1978, land had been acquired, soil survey completed and boundary wall constructed. Civil works on the housing colony are in progress.

52. An allocation of Rs. 131 million with a foreign exchange component of Rs. 81 million has been made for the project in the ADP for 1978-79. It is expected that civil works on the housing colony will be completed, work on the main plant building will be started and delivery of machinery will commence during 1978-79.

53. *Pak-Arab Fertilizer Limited*.—The National Fertilizer Corporation of Pakistan is expanding the fertilizer factory at Multan. The expansion scheme is designed to produce 168,000 nutrient tons of Nitrogenous fertilizer and 70,000 nutrient tons of Phosphatic fertilizer. The capital cost of the project is Rs. 1926.47 million with a F.E.C. of Rs. 1080.47 million. The project is in an advanced stage of completion and is expected to start trial production in October, 1978.

54. *Pak-Sadui Fertilizer Limited*.—The National Fertilizer Corporation is setting up a fertilizer plant at Mirpur Mathelo designed to produce 1760 metric tons of prilled urea a day or 577,000 metric tons of urea per annum. The total cost of the project is estimated at Rs. 1684.8 million with a foreign exchange component of Rs. 1143.7 million. An expenditure of Rs. 1244.4 million had been incurred on the project upto June, 1978. As regards physical progress till June 1978, civil works relating to housing colony and main plant building had been completed to the extent of 70% and 88% respectively, about 80% of the machinery had also been delivered and erection of machinery had been completed to the extent of 25%.

55. An allocation of Rs. 440 million with a foreign exchange component of Rs. 260 million has been made for this project in the ADP for 1978-79. It is expected that during 1978-79 100% of the machinery will be delivered and erection of machinery will be completed. The project is expected to go into production in 1979-80.

Karachi Steel Mills

56. The Pakistan Steel Mills Corporation is establishing the first integrated Steel mills project (Karachi Steel Mills) at Pipri with the financial/technical assistance of the USSR. The capital cost of the project is estimated at Rs. 19350 million inclusive of Rs. 7696 million in foreign exchange.

57. The project envisages the production of the following product-mix annually at full cycle of production in 1983-84.

						<i>Metric Tons</i>
Billets	..	..	..	..	..	260,000/400,000
Hot Rolled Sheets	..	..	..	..	..	445,000/305,000
Cold Rolled Sheets	..	..	..	..	..	90,000
Galvanised Sheets	..	..	..	..	..	100,000
Formed Sections	..	..	..	..	..	120,000
Pig Iron	..	..	..	..	..	350,000
Coke	..	..	..	..	..	215,000

58. The project is expected to go into partial production by 1980-81 and will attain the full cycle of product-mix by 1983-84.

59. The output of KSM will result in import substitution amounting to Rs. 2,225 million per annum. It will help satisfy the increasing demand for steel products, pig iron and coke by the construction industry, ship building industry the container industry and the fabrication and engineering industry.

60. A total number of 15,000 personnel will be required for the operation of KSM. Consequent upon the smooth functioning of the project, it is expected that job opportunities for about 200,000 artisans/craftsman alone will be created indirectly in subsidiary industries.

61. Rs. 6134 million had been spent on the project till June 1978. An allocation of Rs. 3500 million has been made for this project in the ADP for 1978-79, including Rs. 500 million to be raised from bank credit.

62. The details of the physical implementation so far and targets for 1978-79 are giving in Annexure VIII.

Provincial Programmes

63. The ADP of the four provincial governments for the manufacturing sector during 1978-79 amounts to Rs. 131.137 million. In addition the provincial governments plan to invest in industry Rs. 350 million from sources outside the ADP.

64. *Baluchistan*.—The provision made in the ADP 1978-79 for the development of the industrial sector in Baluchistan is Rs. 7.174 million (Annexure IV). Besides the allocation for promotional and training schemes, provision has been made for (i) Industrial Estate of Uthal (2) Automatic Brick making plant (3) Setting up of industrial estates at Hub and Sariab Road Quetta.

65. *N.W.F.P.*—The ADP provision for industries for 1978-79 made by the government of NWFP amounts to Rs. 22.813 million (Annexure V). In addition, Rs. 39.11 million is expected to be raised from the banking sector. Out of this allocation Rs. 4.6 million will be spent on the implementation of different promotional and training schemes sponsored by the Small Industries Corporation. The main feature of the ADP is a provision of Rs. 16.291 million for S.D.A. to complete the Corn Complex at Jhangaria and four cold storages at Peshawar, Mardan, Swat and Haripur. In addition, work will be initiated on an Industrial Estate in Peshawar and a cattle feed project.

66. *Sind*.—The ADP provision for industries for 1978-79 made by the government of Sind amounts to Rs. 38.050 million (Annexure VI). The allocation will be spent on the implementation of various projects of Sind Small Industries and Handicrafts Development Corporation and on two sugar mills, namely Dadu and Thatta Sugar Mill. Dadu Sugar Mill has already gone into trial production and it is expected that during 1978-79 the remaining part of the civil works will be completed. In the case of Thatta Sugar Mill, the estimated expenditure upto June, 1978 amounts to Rs. 150.00 million. The mill is expected to start trial production in the crushing season of 1978-79. Sind Sugar Mill Corporation is expected to raise Rs. 100 million from the banking system for the completion of these two sugar mills.

67. *Punjab*.—The Government of Punjab's ADP provision for the development of industries during 1978-79 is Rs. 64.2 million (Annexure VII). Out of this Rs. 20.9 million is proposed to be spent on various promotional training and research schemes sponsored by the Directorate of Industries and the Punjab Small Industries Development Corporation, Rs. 1.6 million will be spent by the printing and stationery department and Rs. 40.0 million have been allocated to the Punjab Industrial Development Board for the completion of the on-going Textile and Sugar Mills. The investment programme of PIDB outside of the ADP is Rs. 255 million. The major projects being implemented by the Punjab Industrial Development Board are as follows :

Pattoki and Pasrur Sugar Mills

68. Two sugar mills are being set up at Pattoki and Pasrur each with a cane crushing capacity of 1500 tons per day. The capital cost of each project is Rs. 147.8 million. Each project will provide employment to about 510 workers throughout the year in addition to 700 seasonal workers. Regarding physical progress, erection of machinery is in progress and both units are expected to start trial production during the crushing season of 1978-79.

Kamalia and Summandri Sugar Mills

69. Two sugar mills are being set-up at Kamalia and Summandri each with a cane crushing capacity of 2000 tons per day. The estimated expenditure upto June, 1978 on Kamalia and Summandri sugar mills is Rs. 163.86 million and Rs. 138.62 million respectively. Regarding physical progress of these projects civil works on main factory buildings are in an advanced stage of completion and machinery for the projects has started arriving. In 1978-79, it is expected that civil works will be completed and erection of machinery will be started.

Textiles

70. Three textile mills are being set up at Bahawalpur, D.G. Khan and Sahiwal. Each mill has a capacity of 25000 spindles and 355 looms. As regards physical progress of the mills, the spinning section of the People's Textile Mill, Bahawalpur has gone into trial production. In the case of Ghazi Textile Mill, civil works have been completed and erection of machinery has started. The spinning section of this mill is expected to start trial production in 1978-79. As regards Harappa textile mill, land has been acquired and civil works have been awarded to contractors, machinery has arrived at site and in 1978-79, it is expected that civil works on main factory building will be completed to the extent of 60%. The financing for the import of machinery of the weaving sections of the Peoples Textile Mill Bahawalpur and Ghazi Textile Mill D.G. Khan has not been arranged as yet. It is, however, expected that orders for the import of weaving sections of these mills will be placed in 1978-79.

INDUSTRIAL PRODUCTION

Item	Unit	1976-77 (Actual)	1977-78 (Revised Estimates)	1978-79 (Targets)
1. Sugar	000 M. tons	736	850	850
2. Vegetable Ghee	000 M. tons	324	376	400
3. Cigarettes	Billion Nos.	28	32	34
4. Cotton Yarn	Million Kg.	282	272	320
5. Cotton Cloth	Million Sq. meters	411	371	450
6. Paper	000 M. tons	27	27	30
7. Board	"	38	33	40
8. Soda Ash	"	55	76	80
9. Caustic soda	"	25	33	40
10. Nitrogenous Fertilizer	000 N. tons	314	313	420
11. Phosphatic fertilizer	"	14	15	60
12. M.S. Products	000 M. tons	264	280	300
13. Cement	"	3091	3224	3250
14. Wheat Milling	"	8.5	9.0	8.1
15. Cotton Ginning	Million bales	2.2	3.0	3.4
16. Rice Milling	000 M. tons	2.7	2.9	3.0

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1978-79

PAKISTAN			(Rs. Million)			
Sector/Sub-Sector	Allocation for 1977-78	Revised Estimates during 1977-78	Percentage Implementation	Allocation for 1978-79	% share	
1. Food Manufacture	269.827	240.763	89	152.015	2.3	
2. Beverages	—	—	—	—	—	
3. Tobacco Manufacture	2.435	—	—	—	—	
4. Manufacture of Textile	121.400	359.767	296	147.500	2.4	
5. Footwear and Apparels	4.245	4.625	109	5.225	0.1	
6. Wood and Cork	50.000	51.589	103	40.000	0.6	
7. Furniture and Fixture	—	—	—	—	—	
8. Paper and Paper Products	2.100	0.100	5	—	—	
9. Printing and Publishing	2.515	0.654	26	8.522	0.1	
10. Leather and Leather Products	—	—	—	—	—	
11. Rubber Products	—	—	—	—	—	
12. Chemical Industries	1268.000	1458.300	115	681.000	11.1	
13. Production of Petroleum Coal and Gas	—	—	—	—	—	
14. Petro-chemical Industries	68.000	139.700	205	57.000	0.9	
15. Non-metallic Mineral Product	338.000	494.230	146	479.000	7.8	
16. Basic Metal Industries	2500.000	2981.900	116	3500.000	56.8	
17. Metal Product Industries	95.500	77.650	81	60.000	1.0	
18. Machinery except Electrical Machinery	54.000	50.400	93	36.500	0.6	
19. Electrical Machinery Apparature and Appliances	4.000	0.550	14	5.350	0.1	
20. Transport Equipment	60.000	60.500	101	39.000	0.6	
21. Miscellaneous Industries	262.008	232.759	89	544.746	8.7	
22. Industrial Estate	10.341	9.047	88	15.731	0.3	
23. Training and Research	25.251	10.536	42	30.161	0.5	
24. Small Industries Promotional Programme	25.027	19.632	78	16.621	0.3	
25. Scientific and Industrial Research	19.570	24.800	127	35.140	0.5	
26. Survey and Investigations	—	—	—	—	—	
27. Pakistan Mint, Lahore	0.115	0.115	100	0.115	—	
28. Projects of Industrial Development Board	375.179	434.490	116	295.000	4.7	
29. S.D.A. Projects	52.100	39.195	75	55.391	0.8	
Total ..	6481.870	6691.302	103	6204.017	100	

Note The above figures are the total of ADP and outside ADP allocations and estimated expenditure during 1977-78.

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1977-79

Sector/Sub-Sector	FEDERAL					(Rs. Million)
	Allocation for 1977-78	Revised Estimates during 1977-78	% Implementation	allocation for 1978-79	% share	
1. Food Manufacture	69.200	47.318	68	23.002	0.3	
2. Beverages	—	—	—	—	—	
3. Tobacco Manufacture	2.435	—	—	—	—	
4. Manufacture of Textile	121.400	359.767	296	147.500	2.5	
5. Footwear and Apparels	4.245	4.625	109	5.225	0.1	
6. Wood and Cork	50.000	51.589	103	40.000	0.7	
7. Furniture and Fixture	—	—	—	—	—	
8. Paper and Paper Products	2.100	0.100	5	—	—	
9. Printing and Publishing	—	—	—	—	—	
10. Leather and Leather Products	—	—	—	—	—	
11. Rubber Products	—	—	—	—	—	
12. Chemical Industries	1268.000	1458.300	115	681.000	12.0	
13. Production of Petroleum, Coal and Gas	—	—	—	—	—	
14. Petro-chemical Industries	68.900	139.700	203	57.000	1.0	
15. Non-metallic Mineral Products	338.000	494.230	146	479.000	8.4	
16. Basic Metal Industries	2500.000	2981.900	119	3500.000	61.8	
17. Metal Product Industries	95.500	77.650	44	60.000	1.1	
18. Machinery, except Electrical Machinery	54.000	50.400	93	36.500	0.6	
19. Electrical Machinery Apparatus and Appliances	4.000	0.550	14	5.350	0.1	
20. Transport Equipment	60.000	60.500	101	39.000	0.7	
21. Miscellaneous Industries	255.832	225.000	100	538.408	9.4	
22. Industrial Estate	—	—	—	—	—	
23. Training and Research	23.000	8.00	35	28.000	0.5	
24. Small Industries Promotional Programme.. .. .	11.660	11.156	96	2.440	0.1	
25. Scientific and Industrial Research	19.570	24.800	27	35.140	0.6	
26. Survey and Investigations	—	—	—	—	—	
27. Pakistan Mint, Lahore	0.115	0.115	100	0.115	—	
28. Projects of Industrial Development Board	—	—	—	—	—	
29. S.D.A. Projects	—	—	—	—	—	
Total	4947.057	5995.700	121	5677.680	100	

The above figures are the total of ADP and outside ADP allocation and estimated expenditure during 1977-78.

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1978-79

BALUCHISTAN

(Rs. Million)

Sector/Sub-Sector	Allocation for 1977-78	Revised Estimates during 1977-78	% Implementation	allocation for 1978-79	% share
1. Food Manufacture	—	—	—	—	—
2. Beverages	—	—	—	—	—
3. Tobacco Manufacture	—	—	—	—	—
4. Manufacture of Textile	—	—	—	—	—
5. Footwear and Apparels	—	—	—	—	—
6. Wood and Cork	—	—	—	—	—
7. Furniture and Fixture	—	—	—	—	—
8. Paper and Paper Products	—	—	—	—	—
9. Printing and Publishing	0.956	—	—	—	—
10. Leather and Leather Products	—	—	—	—	—
11. Rubber Products	—	—	—	—	—
12. Chemical Industries	—	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—	—
14. Petro-chemical Industries	—	—	—	—	—
15. Non-metallic Mineral Products	—	—	—	—	—
16. Basic Metal Industries	—	—	—	—	—
17. Metal Product Industries	—	—	—	—	—
18. Machinery except Electrical Machinery	—	—	—	—	—
19. Electrical Machinery Apparatus and Appliances	—	—	—	—	—
20. Transport Equipment	—	—	—	—	—
21. Miscellaneous Industries	4.556	6.151	135	1.500	21
22. Industrial Estate	1.010	0.600	59	4.800	67
23. Training and Research	—	—	—	—	—
24. Small Industries Promotional Programme	0.450	0.250	56	0.874	12
25. Scientific and Industrial Research	—	—	—	—	—
26. Survey and Investigations	—	—	—	—	—
27. Pakistan Mint, Lahore	—	—	—	—	—
28. Projects of Industrial Development Board	—	—	—	—	—
29. S.D.A. Projects	—	—	—	—	—
Total	6.972	7.001	101	7.174	100

The above figures are the total of ADP and outside ADP allocation and estimated expenditure during 1977-78.

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1978-79

N.W.F.P.

(Rs. Million)

Sector/Sub-Sector	Allocation for 1977-78	Revised Estimates during 1977-78	% Implementation	allocation for 1978-79	% share
1. Food Manufacture	—	—	—	—	—
2. Beverages	—	—	—	—	—
3. Tobacco Manufacture	—	—	—	—	—
4. Manufacture of Textile	—	—	—	—	—
5. Footwear and Apparels	—	—	—	—	—
6. Wood and Cork	—	—	—	—	—
7. Furniture and Fixture	—	—	—	—	—
8. Paper and Paper Products	—	—	—	—	—
9. Printing and Publishing	0.759	0.654	86	1.922	4
10. Leather and Leather Products	—	—	—	—	—
11. Rubber Products	—	—	—	—	—
12. Chemical Industries	—	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—	—
14. Petro-chemical Industries	—	—	—	—	—
15. Non-metallic Mineral Products	—	—	—	—	—
16. Basic Metal Industries	—	—	—	—	—
17. Metal Product Industries	—	—	—	—	—
18. Machinery except Electrical Machinery	—	—	—	—	—
19. Electrical Machinery Apparatus and Appliances	—	—	—	—	—
20. Transport Equipment	—	—	—	—	—
21. Miscellaneous Industries	—	—	—	—	—
22. Industrial Estate	—	—	—	—	—
23. Training and Research	—	—	—	—	—
24. Small Industries Promotional Programme	6.000	2.990	50	4.600	7
25. Scientific and Industrial Research	—	—	—	—	—
26. Survey and Investigations	—	—	—	—	—
27. Pakistan Mint, Lahore	—	—	—	—	—
28. Projects of Industrial Development Board	—	—	—	—	—
29. S.D.A. Projects	52.100	39.195	75	55.391	89
Total	58.859	42.839	73	61.91	100

The above figures are the total of ADP and outside ADP allocation and estimated expenditure during 1977-78.

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1978-79.

SIND

(Rs. Million)

Sector/Sub-Sector	Allocation for 1977-78	Revised Estimates during 1977-78	% Implementation	allocation for 1978-79	% share
1. Food Manufacture	200.627	193.445	96	129.013	93
2. Beverages	—	—	—	—	—
3. Tobacco Manufacture	—	—	—	—	—
4. Manufacture of Textile	—	—	—	—	—
5. Footwear and Apparels	—	—	—	—	—
6. Wood and Cork	—	—	—	—	—
7. Furniture and Fixture	—	—	—	—	—
8. Paper and Paper Products	—	—	—	—	—
9. Printing and Publishing	—	—	—	5.000	4
10. Leather and Leather Products	—	—	—	—	—
11. Rubber Products	—	—	—	—	—
12. Chemical Industries	—	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—	—
14. Petro-chemical Industries	—	—	—	—	—
15. Non-metallic Mineral Products	—	—	—	—	—
16. Basic Metal Industries	—	—	—	—	—
17. Metal Product Industries	—	—	—	—	—
18. Machinery except Electrical Machinery	—	—	—	—	—
19. Electrical Machinery Apparatus and Appliances	—	—	—	—	—
20. Transport Equipment	—	—	—	—	—
21. Miscellaneous Industries	—	—	—	—	—
22. Industrial Estate	—	—	—	—	—
23. Training and Research	—	—	—	—	—
24. Small Industries Promotional Programme	4.000	4.000	100	4.037	3
25. Scientific and Industrial Research	—	—	—	—	—
26. Survey and Investigations	—	—	—	—	—
27. Pakistan Mint, Lahore	—	—	—	—	—
28. Projects of Industrial Development Board	—	—	—	—	—
29. S.D.A. Projects	—	—	—	—	—
Total	204.627	197.445	97	138.050	100

The above figures are the total of ADP and outside ADP allocation and estimated expenditure during 1977-78.

FINANCIAL EXPENDITURE AND A.D.P. ALLOCATION (MANUFACTURING INDUSTRY) 1978-79

PUNJAB

(Rs. Million)

Sector/Sub-Sector	Allocation for 1977-78	Revised Estimates during 1977-78	% Implementation	allocation for 1978-79	% share
1. Food Manufacture	—	—	—	—	—
2. Beverages	—	—	—	—	—
3. Tobacco Manufacture	—	—	—	—	—
4. Manufacture of Textile	—	—	—	—	—
5. Footwear and Apparels	—	—	—	—	—
6. Wood and Cork	—	—	—	—	—
7. Furniture and Fixture	—	—	—	—	—
8. Paper and Paper Products	—	—	—	—	—
9. Printing and Publishing	0.800	—	—	1.600	0.5
10. Leather and Leather Products	—	—	—	—	—
11. Rubber Products	—	—	—	—	—
12. Chemical Industries	—	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—	—
14. Petro-chemical Industries	—	—	—	—	—
15. Non-metallic Mineral Products	—	—	—	—	—
16. Basic Metal Industries	—	—	—	—	—
17. Metal Product Industries	—	—	—	—	—
18. Machinery except Electrical Machinery	—	—	—	—	—
19. Electrical Machinery Apparatus and App- hances	—	—	—	—	—
20. Transport Equipment	—	—	—	—	—
21. Miscellaneous Industries	1.620	1.608	99	4.838	1.5
22. Industrial Estate	9.331	8.447	91	10.931	3.4
23. Training and Research	2.251	2.536	13	2.161	0.6
24. Small Industries Promotional Programme	2.917	1.236	42	4.670	1.5
25. Scientific and Industrial Research	—	—	—	—	—
26. Survey and Investigations	—	—	—	—	—
27. Pakistan Mint, Lahore	—	—	—	—	—
28. Projects of Industrial Development Board	375.179	434.490	116	295.000	92.5
29. S.D.A. Projects	—	—	—	—	—
Total	392.098	448.517	114	319.200	100

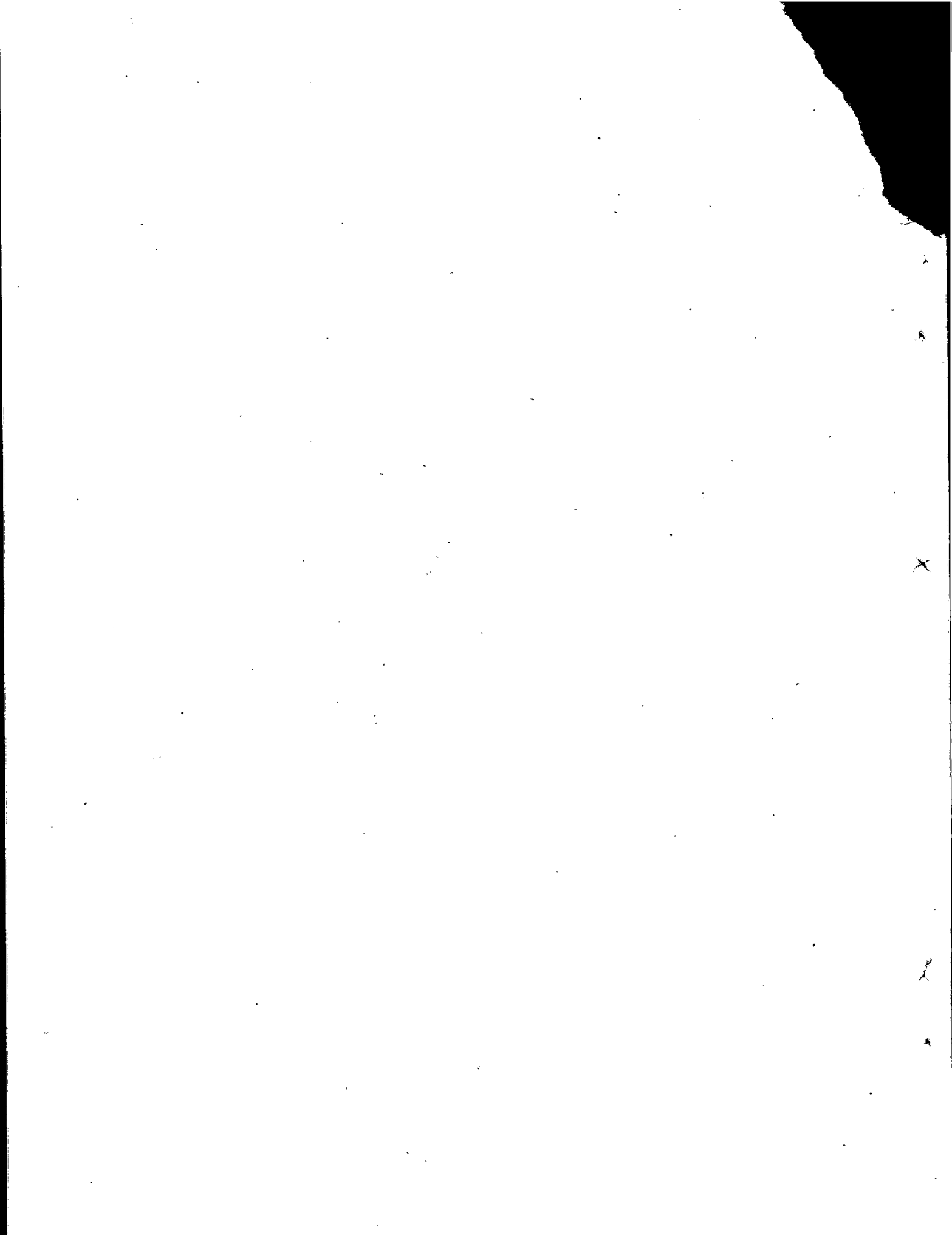
The above figures are the total of ADP and outside ADP allocation and estimated expenditure during 1977-78.

KARACHI STEEL MILL

Sl. No.	Items of Work	Estimated Achievements upto 1977-78	Target for 1978-79
1	2	3	4
I. Main Plant		%	%
1.	Soil testing, levelling and grading and Diversion Channels	92	100
2.	Repair Shops	70	100
3.	Storage Facilities	90	100
4.	Coke Oven and By-Product Plant	46	75
5.	Raw Material Preparation Plant	50	80
6.	Iron Making Plant..	50	75
7.	Steel Making Plant including Scrap Preparation Plant	30	55
8.	Thermal Power Plant	47	70
9.	Turbo Blower Station	47	65
10.	Power Supply including Main Step-down Sub-station	10	50
11.	Refractories and Lime Production	62	75
12.	800 mm Billet Mill (Hot Rolling Mill)	10	35
13.	Central Laboratory and Instrumentation Bldg. (Production Control)	50	85
14.	Administration and Welfare Bldg.	5	30
15.	Power Supply Intershop Pipeline	5	25
16.	Intershop Pipeline of Thermal Power Facilities and Power Utilities	5	25
17.	Tonnage Oxygen Plant	5	75
18.	Transport and Communication	20	45
19.	Structures, Water Supply, Sewerage Pipelines and Sludge Facilities	22	50
20.	Coolant Pipelines	—	40
21.	Refrigeration Plant	5	75
22.	1700 mm Strip Mill	—	25
23.	Cold Rolling Mills..	—	—
II. Infra-structure Facilities			
1.	Construction Water	100	* 100
2.	Potable Water Supply	75	100
3.	Industrial Water Supply	25	95
4.	Sea Water Intake and Outlet Channel	10	75
5.	Sewerage Treatment and Disposal	5	90
6.	Slag and Sludge Disposal	5	30

1	2	3	4
7.	Road Net-work	40	80
8.	Railway Sidings	62	100
9.	Unloader and Conveyor System/Cause-way	75	95
10.	Administrative Building	90	100
11.	Electric Power Supply	50	80
12.	Telephone	45	60
13.	Natural Gas	47	100
14.	Maintenance Workshop for Heavy Vehicles	—	25
III.	Metallurgical Training Centre	100	*
IV.	Construction Base		
1.	Engineering Production Base	100	100
2.	Construction Material Base	100	100
3.	General Facilities	99	100
4.	Steel Structure Yard	100	100
V.	Township		
1.	Accommodation for Soviet Specialists	90	100
2.	External Services for Soviet Specialists Colony	100	100
3.	Accommodation for Service Staff for Soviet Specialists Colony	90	100
4.	Accommodation for Pakistani Staff	35	75
5.	Trainee Hostel	70	100
6.	Bachelor Accommodation for Sweepers	80	100

*Already completed.



CHAPTER 14

ENERGY

REVIEW OF 1977-78

The total commercial energy supply in Pakistan during 1977-78 is estimated to be 430.72 million million BTU as against 379.41 million million BTU in 1976-77, showing a growth rate of 13.5%. Comparing with the target of 411.03 trillion BTU, set at the commencement of the Annual Plan 1977-78, the consumption was 4.3% higher than the target. The increases are mainly in the consumption of purified natural gas and hydro-electricity. A comparative statement of target set and estimated achievements during 1977-78 is given in table below :

TABLE I
Targets and Achievements during 1977-78

	1976-77 Actual			1977-78 Target			1977-78 Revised estimate		
	Quantity	Energy content %		Quantity	Energy content %		Quantity	Energy content %	
	Trillion BTU			Trillion BTU			Trillion BTU		
Natural purified Gas (Excluding Fertilizer Feed Stock) ..	131,084	127.81		131,009	127.73		139,342	135.86	
	MMCF			MMCF			MMCF		
Natural Gas from Mari ..	2,974	2.15		N.A.	N.A.		3,150	2.28	
	MMCF						MMCF		
Raw Natural Gas ..	11,174	10.43		12,000	11.70		13,356	12.46	
	MMCF			MMCF			MMCF		
Total ..	140.39	37.00		139.43	33.92		150.60	34.96	
Oil (net of export, Ocean Bunkers and non-energy use) ..	3,334	149.35	39.36	3,511	157.25	38.26	3,617	162.03	37.62
	million tons			million tons			million tons		
Coal ..	1.12	21.33	5.62	1.30	24.75	6.02	1.2	22.85	5.31
	million tons			million tons			million tons		
Hydro-electricity ..	5,183	62.20	16.39	6,969	83.63	20.35	7,466	89.60	20.80
	tons			tons			tons		
Nuclear ..	422	5.06	1.34	400	4.80	1.17	342	4.10	0.95
	GWL			GWL			GWL		
LPG ..	22,000	1.08	0.29	23,654	1.17	0.28	31,105	1.54	0.36
	tons			tons			tons		
Grand Total ..	379.41	100		411.03	100		430.72	100	

Foot notes :

- (a) Fertilizer consumption is estimated to be 15000 MMCF/annum.
- (b) Consumption of coal is also based on estimates.
- (c) Heat rates given in table E-2.

2. The overall energy supply and demand position has been satisfactory as no power, gas or oil shortages were experienced during 1977-78. This may be attributed to the slower growth of the economy as a result of which additional generation, electric transmission and Natural gas pipeline capacities, installed in the last 5 years proved adequate to meet the demand. Table above shows that during 1977-78 hydro-electric energy contribution increased from 16.4% in 1976-77 to 20.8% giving an additional 27.5 million million BTU, whereas the contribution of Natural gas decreased from 37.0% to 34.9% giving an additional 10.7 million BTU. Had this additional energy not been available either due to lack of generation capability or due to transmission bottlenecks then it would have increased the consumption of oil raising the foreign exchange bill and would also have resulted in load shedding.

3. An analysis of percentage share of various energy sources in commercial energy consumption and percentage increases in each type of fuel over past few years shows that there has been a continuous increase in the contribution of energy from hydro-electricity, whereas the shares of

energy from Natural gas and oil have been fluctuating marginally to match with the increased supply of hydro-electricity. The tables given below further elaborate these points :

TABLE 2

Yearly Percentage Increase in Energy Consumption

Source	1973-74 to 1974-75	1974-75 to 1975-76	1975-76 to 1976-77	1976-77 to 1977-78	1977-78 to 1978-79
Natural Gas	8.60	(-) 2.20	8.90	7.30	7.14
Oil (net of export Ocean, Bunkers and non-energy products)	13.45	(-) 10.30	3.50	8.50	3.70
Hydro	5.30	24.80	(-) 4.80	44.10	13.40
Coal	2.40	3.30	1.20	7.10	3.30
Nuclear	22.60	1.20	(-) 25.10	(-) 19.00	17.00
LPG	27.60	53.00	6.90	42.59	8.44
Total	10.10	(-) 7.92	3.40	13.40	7.32

TABLE 3

Percentage share of Various Energy Sources in Commercial Energy Consumption

Source	1973-74	1974-75	1975-76	1976-77	1977-78 Estimated	1978-79 Projected
Natural Gas	35.43	34.94	35.14	37.0	34.96	34.91
Oil	42.18	43.45	39.31	39.36	37.62	36.36
Hydro-electricity	14.79	14.14	17.72	16.39	20.80	21.98
Coal	5.89	5.48	5.71	5.62	5.31	5.35
Nuclear	1.62	1.81	1.84	1.34	0.95	1.04
LPG	0.09	0.18	0.28	0.29	0.36	0.36
Total	100.00	100.00	100.00	100.00	100.00	100.00

4. Despite increase in the supply of hydro electricity the consumption of natural gas has also increased by 7.3% over last year. The increase in natural gas consumption has been primarily in the southern part of the country where the KGC sale increased from 35622 MMCF to 46464 MMCF and IGC's sale increased from 20477 MMCF to 22319 MMCF over the last year. The sales of SNGPL have actually declined from 92234 MMCF to 85559 MMCF which is attributed to increase in the availability of hydro-electricity from Tarbela Power Station. Regarding the quantum of increase of hydro-electricity, it has been noted that the potential of Tarbela 1-4, Mangla 1-6 and Warsak 1-4 is 9829 million kWh. At an average utilization of about 85% of the total potential, the total generation should be about 8351 million kWh. However, the actual generation during 1977-78 was 7466 million kWh implying inadequate utilisation. The reason for not fully utilizing the potential of hydro electricity is partly attributed to the fact that the operation of power system is a complicated exercise which in certain cases necessitates operation of thermal station at the far end despite the availability of hydro potential in order to ensure voltage conditions and stable operation. As the demand of the system increased during the fiscal year 1978-79 it is hoped that the utilisation of the hydel energy would further increase despite the operational constraint.

ENERGY POLICY AND OVERALL TARGETS FOR 1978-79

5. The plans for 1978-79 are based upon an overall energy frame work set out for a medium term time horizon for five years in the Fifth Plan 1978-83 and are consistent with the directions set in the Annual Plans in past few years. The salient features of the overall policy are :

- (i) Maximum priority to hydel generation and commissioning of on-going hydro-electric projects.
- (ii) To economise fuel consumption by transmitting bulk power from Tarbela to the southern part of the country over extra high voltage transmission lines.
- (iii) Intensive exploration for indigenous resources of fossil fuel.
- (iv) Quick development of discovered and proven oil and gas fields.
- (v) Expansion of gas consumption for industrial use.
- (vi) Maximum use of coal resources.

6. During the Plan period 1978-79, in line with the above policy maximum priority will be given to increase utilisation of hydel energy. Exploration of oil and gas in different areas of the country will be carried out at a higher pace than in the past. Additional 3 wells will be drilled at the proven field of Toot besides the expansion programmes of Attock Oil Company for Meyal field, an additional well and Seismic study will be completed at Dhodak to ascertain the reserves at Dhodak and work will continue on many power and gas projects in order to meet the rising demand of electricity and to increase use of coal and further studies will be carried out regarding the exploitation of Lakhra Coal for Power Station Project. Further progress will be made for the Nuclear Power Station at Chashma.

7. In the light of the above mentioned policy and the major projects the targets for the commercial energy consumption during 1978-79 alongwith the revised estimates for 1977-78 are given below :

TABLE 4
Revised Estimates and Targets of Energy Consumption

		1977-78 Revised estimate			1978-79 Target		
		Quantity	Energy content Trillion BTU	%	Quantity	Energy content Trillion BTU	%
Natural Purified Gas (Excluding Fertilizer Feed Stock)*	975/Cft.	139,342 MMCF	135.86		150,372 MMCF	146.61	
Natural Gas from Mari ..	723/Cft.	3,150 MMCF	2.28		3,150 MMCF	2.28	
Raw Natural Gas	933/Cft.	13,356 MMCF	12.46		13,356 MMCF	12.46	
	Total ..		150.60	34.96		161.35	34.91
Oil (net of export, Ocean Bunkers and non-energy use) ..	20000/lb.	3.617 million tons	162.03	37.62	3.752 million tons	168.09	36.36
Coal ..	8500/lb.	1.2 million tons	22.85	5.31	1.3 million tons	24.75	5.35
Hydro-electricity	12000/KWh	7,466 GWh	89.60	20.80	8,465 GWh	101.58	29.98
Nuclear ..	12000/KWh	342 GWh	4.10	0.95	400 GWh	4.80	1.04
LPG ..	22000/lb.	31,105 tons	1.54	0.36	22,000 tons	1.67	0.36
	Grand Total ..		430.72	100.00		462.24	100.00

*Fertilizer Feed stock taken as 20749 MMCFT/annum. This assumes operation of Pak-Arab Fertilizer Factory at Multan at 70% of rated capacity from October, 1978.

The picture which emerges from the table is that the percentage share of natural gas will remain almost same and there will be a decline in the share of oil. The contribution of hydro-electricity will increase by 11.98 million million BTU due to increased utilisation of the hydro-electric potential. The total energy consumption would increase by 7.32% *per capita* consumption will be 5.93 million BTU as against 5.69 million BTU showing an increase of 4.2%.

8. The total allocation for energy sector for the year 1978-79 is Rs. 4,073 million as against Rs. 3,793 million during the last fiscal year showing an increase of 7.4%. Because of resource constraints the emphasis of this allocation is on the 'on-going projects' to expedite completion. A break-up of allocation for different agencies are given below. Besides, credit allocation will be made for KESC, Gas Companies, and refineries. The semi-public sector companies will also make investment from their self-generated funds.

TABLE 5
Agency-wise Financial Allocations for 1978-79

Power	(Rs. Million)	
	1977-78 (Revised Estimate)	1978-79 Allocation
WAPDA	2,647.990	2,915.000
KESC	—	30.000
PAEC	557.111	475.770
Under-developed areas ..	47.321	44.514
Small hydel projects in Azad Kashmir and NWFP ..	40.000	10.000
Energy Resources Cell ..	0.800	2.800
Total	<u>3,293.222</u>	<u>3,478.084</u>
OGDC	450.000	500.000
Refineries (Directorate of oil Operations)	0.500	1.900
Gas (Directorate of Gas Operations)	—	—
Foreign Exploration (Directorate of Petroleum Concessions)	48.916	93.403
Total ..	<u>499.416</u>	<u>595.303</u>
GRAND TOTAL ..	<u>3,792.638</u>	<u>4,073.387</u>

POWER SYSTEM

Review of 1977-78

GENERATION

9. The generation programme envisaged commissioning of Tarbela unit-4, 100 MW Gas Turbine Station at SITE (Karachi) and 125 MW Steam Station at Korangi (Karachi) to result a total capacity addition of 400 MW. Besides, it envisaged continuation of work on 50 MW gas turbine at Kotri, Guddu Thermal Power Station Stage-II, Tarbela Hydro Electric Power Station 5-8 and Warsak Hydro Electric Station units 5 & 6. As against these targets, the Tarbela unit 4 of 175 MW capacity was commissioned on 11th July, 1977 and 125 MW Steam Station at Korangi was commissioned in September, 1977. The commissioning of the 100 MW gas turbines at Karachi has, however, been delayed because its equipment was damaged during floods in Karachi due to heavy rains. The equipment had to be sent back to the supplier for repair/remanufacture of some

parts which consumed additional time. With regards to Guddu Stage-II where delay was due to problems of installation, a contract has now been finalized with the Russian. The cooling towers, off-take channel and other civil works are either complete or nearing completion. For Tarbela units 5-8 Asian Development Bank has extended a supplementary loan of \$38 million in addition to its earlier commitment of \$40.0 million. A loan of \$40.00 million was also signed with CIDA for this project during 1977-78. This leaves a shortfall of \$22 million in foreign exchange component of the project for which EAD is trying to arrange some loans. During 1977-78 notice of award was issued for contracts pertaining to penstocks, civil works, turbines in-let valves etc. Tenders for generators and exciters, Turbine governors and relief valves, 500 kV Switchgear, were floated and notices of awards are in various stages of finalization. Tenders for 500 kv transformers for units 7 & 8 have also been opened and evaluated. Regarding Mangla 7 and 8 the progress on civil works is summarised below :

Mobilization	93%
Construction of Coffor Dam	19%
Erection works on Zero Bay	100%
Civil works on Zero Bay	100%

10. The Turbine contract could not come into force because of shortfall of 1.4 million US dollar created due to devaluation of US dollar. This requirement is being met in the current fiscal year. The work on Mangla 7 and 8 is generally according to schedule. For Warsak 5 & 6 contracts for plant and machinery have been finalized with various suppliers and the manufacture of the equipment is proceeding satisfactorily at the suppliers premises. Power transformers have already arrived in Pakistan. The contract for erection of turbine and generators have been signed on 8th May, 1978 with M/s. Dominion Engineering Co. of Canada and the contract for Switchgear works has been awarded to M/s. Mc Graw of Canada. With regards to Kotri gas turbine units 3 & 4, almost all the equipment and plant (excluding two generators) have reached the site. The generators and other remaining equipment were shipped on 15th June, 1978 and is expected in the initial months of 1978-79. Civil works for foundations have been completed. There has been some problem due to insufficient supply of cement for this project.

11. The total installed capacity in the country has increased from 3210 MW to 3510 MW due to commissioning of Tarbela unit 4 and 125 MW Korangi Steam Station. A brief break-up of the total installed capacity is given below. Additional details are given in Annexure :

TABLE 6
Installed Capacity

	1970-71	1976-77	1977-78
WAPDA	1,317	2,460	2,635
KESC	382	520	645
Private	201	230	230
Total	1,900	3,210	3,510

12. The maximum demand during the fiscal year 1977-78 was 1836 MW in WAPDA integrated system and 432 MW in KESC system. The comparison of the system demand during the fiscal year 1976-77 and 1977-78 is given below :

TABLE 7
Comparison of System Demand

	1970-71	1976-77	1977-78
WAPDA	948	1,619	1,836
KESC	285	384	432
Aggregate	1,233	2,003	2,268

13. The total energy generation in the country during 1977-78 is estimated to be 12,549 million kWh as against 11,192 Million kWh during 1976-77 showing an increase of 1,357 million kWh. The break-up of energy generation on agency-wise basis as well as on source-wise basis (hydel and thermal) is given in the following tables :

TABLE 8

<i>Agency-wise Energy Generation</i>		(Million kWh)		
		1970-71	1976-77	1977-78
WAPDA.. .. .		5,740	8,736	10,085
KESC		1,463	2,006	2,014
Private		450	450	450
Total ..		7,653	11,192	12,549

TABLE 9

<i>Source-wise Energy Generation</i>									
		1964-65		1970-71		1976-77		1977-78	
		Million kWh	%	Million kWh	%	Million kWh	%	Million kWh	%
Thermal		2,935	82	4,204	55	5,587	50.0	4741	37.8
Hydel		645	18	3,449	45	5,183	46.3	7,466	59.5
Nuclear		—	—	—	—	422	3.7	342	2.7
		3,580	100	7,653	100	11,192	100	12,549	100.0

14. The estimate of consumption statistics of WAPDA shows that there has been an increase of 19.2% in the sale of electricity as against an increase of 15.4% in the generation of electricity during 1977-78. The higher growth rate in the sale of electricity against the generation is attributed to reduction in power system losses which are now estimated to be 35.5% of the total generation as against 37.6% in the year 1976-77. A brief comparison of the system energy generation sales and losses with past few years is given in the following table :

TABLE 10

WAPDA sale of electricity

Year		Gross Generation	Estimated Consumption	Sales
1964-65		2,463	2,017	1,822
1970-71		5,740	4,506	3,966
1976-77		8,736	6,454	5,454
1977-78 (Estimated)		10,085	7,598	6,500
GROWTH RATE				
		Generation	Consumption	Sales
1964-65—1970-71		15.2%	14.2%	13.8%
1970-71—1976-77		7.3%	6.2%	5.5%
1976-77—1977-78		15.4%	17.7%	19.2%
1964-65—1977-78		11.5%	10.7%	10.3%

The *per capita* generation in the country has increased from 152.42 kWh to 165.95 kWh resulting an increase of 8.88%.

TRANSMISSION

15. The main transmission schemes included in the Annual Plan 1977-78 were energization of 500 kV Tarbela-Faisalabad transmission line at 220 kV, continuation of work on 500 kV Faisalabad-Guddu-Karachi-Transmission line, extension of transmission line to Azad Kashmir, continuation of work on 220 kV Tarbela-Mardan Transmission line and construction of 132 kV Transmission line from Vinder to Uthal and Bela by KESC. A review of progress 1977-78 shows that Tarbela-Faisalabad line has been energized on 220 kV in 1977. This alongwith recently completed 220 kV Tarbela Wah line has enabled transmission of bulk of Power from Tarbela unit 1-4 to the load centres in the country. With regards to 500 kV transmission line from Faisalabad to Karachi the work has been separated in two sections namely Faisalabad-Guddu and Guddu-Karachi. For Faisalabad-Guddu Section a foreign exchange loan of \$ 50 million is available from World Bank and for Guddu-Karachi Section a loan of \$ 44.2 million is available from Kuwait fund. On Faisalabad-Guddu Section, design and engineering studies have been completed, orders for the equipment have been placed and work on towers foundation is in progress. Unlike Faisalabad-Guddu Section where the environmental conditions with regards to pollution are much better and permit engineering design by direct application of know-how, experience and data available from 500 kV line operating under similar conditions the pollution conditions on the Guddu-Karachi Section are exceptionally bad and not enough data is available world wide to permit direct conclusions about the design parameters. For this reason, a detailed study of characteristics of the pollution phenomenon on this section has become a pre-requisite to further engineering design. Pollution studies have been carried out by M/s CHECO's and WAPDA. M/s. CHECO's report is now under consideration of WAPDA, whereas laboratory test results with regards to WAPDA's examination study are awaited. After these studies enough data is expected to be available for designing the transmission line for Guddu-Karachi Section in the next fiscal year. On Tarbela-Mardan 220 kV transmission line, preliminary works have been completed and design data has been made available to Chinese.

16. With regards to the project of extension of 132 kV transmission lines to Azad Kashmir, the 132 kV line from Nilore to Azad Pattan is 48% complete. Foundation work of the Grid Station at Azad Pattan has also been completed. Route survey has been completed for Mansehra-Muzzafarabad section of 132 kV line and tenders have been floated for the Muzzafarabad Grid Station works. Erection of towers is in progress on Kharian Bhimber Section and soil testing is in progress for Ehimber Grid Station.

17. KESC has started work on the Vinder-Uthal-Bela transmission line. The Control rooms at each of these locations have been completed, contracts for erection and civil works have been awarded and buildings are constructed. Transmission line material and switchgear have been procured and the transformers have been shipped by the suppliers. The survey and marking of the transmission line route has already started.

18. *Secondary Transmission Line and Grid Stations.*—No specific targets were mentioned in the Annual Plan 1977-78 because the project was under preparation at the time of the preparation of the previous documents. The project has now been finalized after joint efforts by the Planning Division, Ministry of Water and Power and WAPDA. The estimated achievements during 1977-78 are given below :

TABLE 11
Achievement during 1977-78

	Target	Achievement
(a) Transmission Lines		
(i) 132 kV	589 Km.	274 Km.
(ii) 66 kV	438 Km.	232 Km.
Total	1,027 Km.	506 Km.
(b) Grid Stations		
(i) 132 kV	53 Nos.	32 Nos.
(ii) 66 kV	20 Nos.	28 Nos.
Total	73 Nos.	50 Nos.

DISTRIBUTION

19. The Plan set out the targets of 96,600 new connections and electrification of 867 villages by WAPDA. Besides it envisaged 37,700 connections to be provided by KESC. As against this WAPDA has provided 2,20,079 new connections and electrified 1,431 villages. KESC has also given 32,961 new connections. Details are given below.

TABLE 12
Achievement during 1977-78

	WAPDA 1977-78 Estimate	KESC 1977-78 Estimate
Domestic and Commercial	2,08,372	31,645
Industrial	6,527	1,300
Tubewells	5,180	16
Total ..	2,20,079	32,961

20. *Installation of Diesel Sets in Baluchistan*—In order to supply electricity to scattered townships in Baluchistan where extension of transmission lines at this stage is considered to be economically non-viable and operationally difficult a scheme of installation of diesel sets at 32 townships was started in May 1974. About 80% of the work on installation of diesel sets has been completed; In addition a new scheme for installation of diesel sets at 14 townships has been initiated, which will take three years to complete.

21. *Small Hydel Station*—The project for installation of 100 small Hydel Stations was started in 1974. The project has been making slow progress because of manifold problems indicating difficulties in selecting suitable sites. Arrangements for implementation of project are being lined up. Work on 10 Small Hydel Stations is expected to be completed during 1977-78.

Power Plans for 1978-79

22. Long lead times are the characteristics features of power sector projects. Therefore most of the power projects are conceived in a long term or medium perspective. The rationale for these projects therefore lies in overall plans whereas the annual plans are only links in the chain towards the achievements of the long term/medium term objectives. The Annual Plan 1978-79 has been cast in the perspective of the 5th Five-Year Plan 1978-83. The main features of the Plan are :

- (i) Increase in *per capita* generation of electricity by 3.83% from 165.95 kWh in 1977-78 to 172.30 kwh in 1978-79.
- (ii) Increase in the total installed capacity from 3510 MW to 3660 MW.
- (iii) Give maximum priority to the hydel generation.
- (iv) Give maximum priority to the on-going schemes.
- (v) Improve secondary transmission and distribution facilities.
- (vi) Accelerated village electrification.
- (vii) Place the power corporations on sound footing so that at least 30% of the expansion programme is financed through self generated resources.

GENERATION

23. For WAPDA Rs. 1111.00 million have been provided for generation projects which is 38.11% of the total ADP allocation for WAPDA. This amount is largely for the projects which have already been initiated. The only new projects are 50 MW Gas Turbine units 5 & 6 for Kotri and Tarbela Hydro Electric Power Station units 9—12 for which total of only 1.6 million rupees have been provided to meet the requirements of initial studies. During the year, the main addition in the installed capacity will be 100 MW gas turbine at Korangi (Karachi) and 50 MW Gas Turbine units 3 & 4 at Kotri. Besides 1565 MW of capacity will be under construction. A brief description of the likely achievements during the fiscal year 1978-79 on some major projects is given below :

TABLE 13
Targets for 1978-79 in Generation Projects

Name of the Project	Targets
Guddu Stage-II.	Continuation of electrical and mechanical works for plant erection.
50 MW Gas Turbine at Kotri Units 3 & 4.	Commissioning of the two units.
Tarbela Hydro Electric Station units 5—8.	Partial procurement of material and necessary Civil works.
Warsak Hydro Electric Station units 5 & 6.	75% completion of erection of plant and equipment and civil works.
Mangla units 7 & 8.	Procurement of material and civil works.
Lakhra Coal fired Station.	Feasibility study will be carried out.
Tarbela 9—12.	Feasibility study to determine the largest possible unit size will be carried out.
50 MW Gas Turbine at Kotri Units 5 & 6.	Commencement of work.
125 MW Gas Turbine at Karachi.	Procurement of material and erection works.
200 MW Steam Station at Pipri.	Preliminary works.
Chashma Nuclear Power Station.	Preliminary Works.

24. Besides a project has been approved by CDWP for the repair of Warsak Dam Stilling Basin which would be carried out in 1978-79. There is no provision in the Annual Development Programme but in view of the importance of the project it is proposed to consider the case for supplementary provision.

25. In overall terms the total addition in the capacity in Pakistan during 1978-79 will be 150 MW and the total installed capacity will become 3660 MW. The capacity under installation will be 1565 MW. A brief break-up of the total capacity alongwith target in the Fifth Five Year Plan is given below :

TABLE 14
Targets for Generation Capacity (MW)

Agency	1977-78	1978-79	1982-83
WAPDA	2,635	2,685	4,300
KESC	645	745	1,070
Private captive	230	230	395
Total	3,510	3,660	5,765

TRANSMISSION

26. *Primary Transmission.*—The Annual Plan makes a provision of Rs. 644 million for primary transmission which is 22.09% of the total ADP of WAPDA. As already stated for generation plans the allocation is primarily for continuation of work on those schemes which have already been initiated. The entire transmission line plan is in line with the strategy of overall Fifth Five Year Plan to synchronise commissioning of adequate transmission capacity with the commissioning of generating stations.

27. After the commissioning of Tarbela unit 1—4, 700 to 800 MW of power has become available from Tarbela. With the addition of another 4 units (Tarbela 5 to 8) about 1500 to 1600 MW power will be available in high water months which is proposed to be fed into the system through 500 kV Tarbela—Faisalabad line and 220 kV double circuit line from Tarbela to Wah. Both these lines have recently been completed and energised at 220 kV. During the period 1978-79 the Tarbela Faisalabad line will be energised at 500 kv level after the completion of grid station at Faisalabad. Through the 220 kV Tarbela-Wah Transmission Line has been completed a provision of Rs. 17.00 million is made in the Plan to meet the outstanding payments. Together these two Transmission line will have enough capacity (1500—1650 MW) to carrying the Tarbela Power to main system.

28. Another 4 units at Tarbela (Tarbela 9—12) are planned to be commissioned by November 1983 which would make available additional 700—800 MW of power for transmission towards the South of Tarbela for this purpose a second 500kV Transmission line from Tarbela is being planned to match with the time schedule for Tarbela units 9 to 12. The Annual Plan makes provision of Rs. 3.00 million in order to enable to carry out preliminary study.

29. In order to carry power from Tarbela to Mardan and to feed in 132 kV double circuit ring from Mardan to Charsada Shahi Bagh and Nowshera, which is presently being constructed under the secondary transmission and grid station project a 220 kV Transmission line is being constructed from Tarbela to Mardan. Chinese project aid has been made available for this project to finance its foreign exchange component for transmission line. Foreign exchange financing for the grid station has not yet been lined up. During 1978-79 design and engineering studies will be carried out and the overall progress on transmission line will be about 6%.

30. A provision of Rs. 17.00 million is made for Guddu-Sibbi-Quetta transmission line project for carrying out works for grid station at Mach, and energization of Guddu-Sibbi Section at 220 kV. The line was energised at 132 kV in 1976.

31. In order to fully exploit the benefits of hydro energy in respect of fuel economy and power system integration (reduced requirements of reserve and diversified the integrated system demand) a 500 kV Transmission line from Faisalabad to Karachi via Guddu has been started. As explained above, in the context a review plan of 1977-78, the work is split in two sections, namely Faisalabad-Guddu and Guddu-Karachi. The former is being financed from World Bank loan and the latter from Kuwati fund. For Multan-Guddu Section engineering design has already been completed and order for most of the equipment and material has already been placed. During 1978-79 all the material required for the transmission line will be procured and the construction of transmission line will be completed by 55%. The Multan sub-station will be completed to the extent of 64%. All other Miscellaneous work on this transmission line will also be completed. Regarding Guddu-Karachi Section as already stated environmental pollution study has been commissioned and its results have been almost due. It is hoped that after scrutiny of this study, WAPDA will be able to get the engineering design, completed from NESPAK and place order for transmission line and grid station material. Partial procurement of the material is also expected.

32. The expected schedule on completion of this transmission line is as follows :

(i) 500 kV Multan-Guddu Section to be operated 220 kV	..	..	..	1979-80
(ii) 500kV Multan-Faisalabad (to be operated on 220 kV)	..	..	..	1980-81
(iii) 500 kV Guddu-Hyderabad 220 kv line to be operated on 220 kV	..	..	..	1981-82
(iv) Completion of line to Karachi and conversion to 500 kV..	..	..	..	1982-83

33. Besides, the work on extension of transmission line to Azad Kashmir will remain in progress. Karachi Electricity Supply Company will continue work on Vinder-Uthal and Bela Transmission line.

34. The Plan also makes a provision of Rs. 40.00 million for the construction of prestressed concrete pole plant. These are being constructed at Chichoki Mallian (Sheikhupura); Lodhran (Multan) Bulland Hill (Sargodha) and Jahangira (Nowshera).

35. *Secondary Transmission Line and Grid Stations.*—An allocation of Rs. 550 million has been made for WAPDA for this project. It is 18.9% of the total ADP for WAPDA. The proposed targets are given below :

(i) <i>Transmission Line</i>						
(a) 132 KV	..	..	..	..	..	738 K.V.
(b) 66 KV	..	..	..	..	..	205 K.V.
					Total	943 K.V.
(ii) <i>Grid Stations</i>						
(a) 132 KV	..	..	..	..	..	38 Nos.
(b) 66 KV	..	..	..	..	..	9 Nos.
					Total	47 Nos.

36. The project of Secondary Transmission line and Grid Stations has been finalized after a joint effect of Planning Division, Water and Power Division and WAPDA. in order to improve the facilities to reduce power system losses and extend new transmission lines to various areas. The voltage level of the Secondary transmission lines are selected with greater consideration to the distances involved and future load requirements as compared to past practice. In past most of the secondary transmission system was based on 66 KV voltage level whereas in the proposed project the voltage has been chosen as 132KV except for those transmission lines which are of short distance and are suitable for 66 KV voltage level. At a few places, even 220 KV voltage level has already been introduced in view of the heavy load flows. Moreover the existing overloaded transmission lines have been identified and either their capacities have been augmented or these have been replaced altogether by higher voltage transmission lines. Similar procedure has also been adopted for each Grid Station after determining a detailed grid station forecast. In order to reduce the cost, maximum emphasis has been given on utilization of departmental construction force. A more detailed and analytic procedure has been adopted for the preparation of the projects in order to ensure better cost estimation and control. Unit costs of each and every item are thoroughly checked and are brought in line with the market trends. All these measures are expected to yield the desired effect of reduction in power system losses to meet the Fifth Plan target of 5% reduction in losses and supply of electricity to maximum number of consumer, within the boundaries of a prescribed operational criteria, at the minimum possible cost.

DISTRIBUTION OF POWER AND VILLAGE ELECTRIFICATION

37. An allocation of Rs. 600 million which is 20.6% of the total ADP of WAPDA has been made for distribution of power and village electrification. The targets as proposed by WAPDA for the year are given below :

TABLE 15
Targets of WAPDA

Type of consumer	1977-78 (Actuals)	Targets for 1978-79	Average yearly Target as proposed in Fifth Plan
General	2,08,372	80,000	1,40,000
Industrial	6,527	5,000	11,000
Agricultural	5,180	5,000	14,000
			90,000
Villages	1,431	1,200	1,000

38. Quite clearly WAPDA's proposed targets are much below the average annual target for Fifth Plan for each category of consumers. This is also visible from comparison with the achievements in 1977-78 as these are much higher than targets for 1978-79 despite the fact that the provision for the two years is the same. The reason for so low targets will be investigated and efforts will be made to increase the proposed targets.

39. Besides, KESC will extend new connections to 39,000 consumers. The category-wise break-up has not yet available by KESC. Regarding the village electrification, the strategy of the Fifth Plan from which the Annual Plan derive its direction is to transform the concept of village electrification from number of villages to number of consumers. In past trends have been that electricity was taken to the door steps of the villages but only about 10 to 15% of the rural population used to get electric connections. The proposed strategy for the Fifth Plan will reduce these uneconomic tendencies and under-utilisation of capital for village electrification. For this purpose a planned approach will be used and villages will not be selected just because of the overall distance of a village or a group of villages but also with particular reference to number of consumers who will get the benefit. For 1978-79, WAPDA proposes to electrify 800 villages. It is expected that WAPDA would try to maximise the number of consumers in each village. WAPDA has assumed a unit cost of Rs. 3 lakh per village. It is considered on the high side and it is hoped that after effecting necessary economics WAPDA will be able to reduce the unit cost to Rs. 2 lakh per village as proposed in the Fifth Plan and would be able to increase the total number of villages as well as the number of rural consumers.

DIESEL GENERATION FOR BALUCHISTAN

40. A provision of Rs. 10 million has been made for installation of Small Diesel Stations in various townships of Baluchistan. At present work is already in progress in connection with the above project for installation of diesel sets in 32 townships. A secondary project of similar nature for installation of small diesel sets at 14 other locations has also been initiated.

Investment

41. The total investment in Power Sector will be Rs. 3478.084 million as against the total investment of Rs. 3293.222 million showing an increase of 5.6%. As already stated most of the investment in power sector is for the on-going schemes. A brief summary of the total allocation is given below whereas additional details are given in the Annexure :

<u>Name of Agency</u>	<u>Provision for 1978-79</u>
	(Rs. in Million)
PAEC	475.770
WAPDA	2915.000
Small Hydel Project	10.000
Energy Resources Survey	2.800
K.A. Divisions	20.706
States and Frontier Regions	23.808
KESC	30.000
Total	3478.084

Break-up of WAPDA's Allocation

	Allocation (Rs. in million)	Percentage
Generation	1111.000	88.1
Primary Transmission	644.000	22.1
Secondary Transmission	550.000	18.9
Distribution	600.000	20.6
Diesel Sets in Baluchistan	10.000	0.3
Total	2915.000	100

42. From the allocations shown for WAPDA it would appear that the investment in generation facilities is higher than transmission and distribution. The imbalance in generation, transmission and distribution would become plusable in the light of the previous investment patterns which are summarised below :

TABLE 16

Past Investment pattern (percentages)

Item	1960—65	1970—75	1975-76	1976-77	1977-78
Generation	30.3	38.0	24.2	21.3	38.5
Transmission	36.4	36.4	53.8	50.0	38.3
Distribution	33.3	25.5	22.0	28.8	33.2

43. From the above table it is clear that the investment in the transmission sector in past few years has been much higher than generation and distribution. Viewed in a time frame of last four or five years the investment pattern become self explanatory. Another reason for the apparent imbalance is the price escalation of equipment and material for generation and transmission. Although a very comprehensive analysis has not been done, however from the data examined by the Planning Division it appears that the capital cost of hydel generation has increased at an average rate of 44% per annum whereas the cost of the distribution and transmission (as represented by conductors insulators etc.) has risen at a rate of only 11—20% per annum. Thus, part of the imbalance is due to the bias in favour of generation due to differential impact of inflation. The real imbalance in physical programme is, however, less.

PAKISTAN ATOMIC ENERGY COMMISSION

44. An allocation of Rs. 457.77 million has been made for Pakistan Atomic Energy Commission. The main programme are Chashma Nuclear Power Project and Fuel Reprocessing Plant, besides projects of uranium exploration, medical application and other scientific and technical research etc.

FUELS

45. The contribution in the energy sector from fossil fuels has been in the range of 78.25% to 84.05% in the past 5 years and is projected to be 76.98% in the year 1978-79 as is evident from the table given in the beginning of the chapter. Thus despite a considerable increase in the hydro output, fossil fuel will continue to supply a major portion of the commercial energy requirements of the country. As stated in the Plan for power development the rationale for Annual Plan 1978-79 lies in the Fifth Five Year Plan. The main features of the fuel policy in the Fifth Five Year Plan are to step up exploration and development of new oil and gas field, accelerated development of discovered and proven fields, expansion of gas supply, augment arrangements for transportation and storage of oil, increase refining capacity in the light of oil field development programmes and new discoveries, continue efforts for increased utilisation of coal and research and demonstration for unconventional sources of energy. With this background, the Annual Plan for various main sources of fossil fuel are discussed below :

NATURAL GAS

46. The consumption of natural gas increased from 171402 million CFT in 1976-77 to 178810 million CFT in 1977-78 showing a growth rate of 40.32%. This growth in the consumption of natural gas despite the fact that there has been a substantial increase in the availability of hydro-electricity. The table below summarizes the position regarding company-wise sales which shows that sales of KGC and IGC have been increased by 30% and 9%, respectively whereas sales of SNGPL have declined by 7.82% over 1976-77.

TABLE 17

Summary of Company-wise Gas Sales

							(MMCF)		
							1976-77	1977-78	%
SNGPL	..	..	..	..	..	..	92234	85545	7.25%
KGC	..	..	..	..	..	..	35622	46464	30%
IGC	..	..	..	..	..	..	20478	22272	8.76%
Sub-Total							148334	154280	4.00%
Guddu	..	..	..	..	..	..	11174	13356	
Mari	..	..	..	..	..	..	11894	11174	
Grand Total							171402	178810	

47. The category-wise analysis of the consumption of natural gas shows that in the case of SNGPL there has been decline of 11477 MMCF (11.19 million million BTU) in the power sector and there has been very little growth in the cement and fertilizer sector. The decline in the power sector is primarily because of availability of power from Tarbela Hydro Electric Station. It would be interesting to note that increase in the hydro-electricity as compared to last year is 27.4 million million BTU (228 Gwh) as against the reduction of 11.19 million million BTU in the use of natural gas in power sector. This implies that hydro-electricity has not only reduced the consumption of natural gas for power but also catered for the growth in energy demand. In the case of KGC major increase is attributed to power consumption. More details regarding which station consumed excessive natural gas are being obtained and analysed.

							(MMCF)					
							POWER		CEMENT		GEN. IND.	
							1976-77	1977-78	1976-77	1977-78	1976-77	1977-78
SNGPL	..	..	..	..	..	..	26620	15143	10433	10887	26637	31332
KGC	..	..	..	..	..	..	15248	23877	3004	3471	12829	13767
IGC	..	..	..	..	..	..	7851	N.A.	9098	N.A.	2200	N.A.

48. The main projects under execution were SNGPL's project-4, installation of two additional purification banks at Sui and normal distribution programme of various gas companies. Most of these targets have been met as the work on most of sections of project 4 of SNGPL has been completed except for a spur line for Haripur. The purification banks at Sui have been commissioned and the number of consumers company-wise given below :

No. of Gas consumers during the year 1977-78							
SNGPL	..	..	..	..	..	..	40447
KGC	..	..	..	..	..	..	32991
IGC	..	..	..	..	..	..	9703
Total ..							83141

49. *Reserves position.*—Of the total originally discovered reserves of 8.62 million million CFT at Sui 1.64 million million CFT of gas was consumed upto 30 June, 1978 leaving behind a balance of 6.98 million million E.F.T. Taking a recovery factor of 0.85 the total recoverable reserves at Sui are about 5.93 million million CFT, which will be consumed by the turn of the century assuming that optimum delivery level of 880 MMCFD will be achieved in 1990.

50. Regarding Sari and Hundi gas fields, the original reserves were about .08 MMCFD out of which .07 MMCFD are left. Assuming a daily off-take of 12 MMCFD and recovery factor of 0.8 the field will last upto 1990.

51. With regards to Dhodak the discovery of condensate and gas field was made in 1976-77 and in order to carry out further studies to determine various parameters of the field a seismic survey was started by OGDC but was interrupted because of very difficult terrain. OGDC is now arranging a helicopter to restart the survey. Besides, drilling of another well, Dhodak-II, was completed. OGDC made another discovery of Pirkoh field in Baluchistan on December, 1977. No firm estimate regarding of the reserves of gas are available at this stage.

Future Plans

52. The gas transmission capacity under-went substantial expansion during 1977-78 and therefore need for immediate investment with a view to increasing this capacity is not required. However, SNGPL will be undertaking transmission line construction programme to utilize the additional natural gas which will become available from Meyal and Toot as a result of programmes of accelerated development of these two fields. For this purpose, SNGPL will construct a 14 mile of 16" diameter pipeline from Meyal to Dhulian, 25 mile of 10" pipeline from Dhulian to Gali Jagir, 2 miles of 8" diameter from Toot to main network and installation of 100 MMCFD De-hydration plant at Meyal. This project will enable ultimate utilization of 95 MMCFD of natural gas most of which would have been otherwise, flared because the capacity of the existing Meyal-Dhulian pipeline is 32 MMCFD. This would also result in an increase in capacity of transmission line by 75 MMCFD because of two way supply of natural gas. Moreover SNGPL will construct a 16" diameter pipeline for a stretch of 12.7 mile in place of existing 10" diameter pipeline between Faisalabad and Shahdara in order to strengthen its existing system for meeting the increased requirements of Lalamusa, Sialkot, Gujranwala and Lahore etc. Besides, SNGPL will proceed for the installation of an in-house computer and continue its normal programme of new connections by installing about 35000 new connections during 1978-79. SNGPL is also the contractor for construction of PARCO oil pipeline.

53. The SGTC will carry out preliminary work with regards to the Sulphur Recovery Plant and proceed with the construction of PARCO pipeline for which it is the contractor alongwith SNGPL. Since no capacity shortage in transmission network are expected for the Southern Region therefore no other pipeline work will be taken up by SGTC.

54. Indus Gas Company and KGC will continue their programme of normal expansion of the number of consumers. Company-wise targets are given below :

Targets for number of gas consumers in 1978-79							
1. SNGPL	..	..	..	..	..	..	35000
2. IGC	..	..	..	..	..	..	9800
3. KGC	..	..	..	..	..	..	28000
Total ..							72,800

55. Regarding the construction of pipeline to Quetta and supply of natural gas to villages around Sui, Ministry of Petroleum and Natural Resources is actively engaged to examine the various proposals. Regarding the new fields it is proposed to complete the second well (Dhodak-II) which is being drilled at present and to drill an additional well (Dhodak-III) during the fiscal year 1978-79. Seismic survey will also be completed at Dhodak. Plans for Pirkoh are under consideration in the Ministry of Petroleum and Natural Resources.

56. The position regarding the total capacity of transmission is summarized below. The total gas consumption is forecast to increase from 177502 MMCF to 211245 MMCF including 15000 MMCF for non-energy fertilizer use.

57. The total investment in natural gas plant will be from sources other than ADP because the equity contribution required from the Government have already been made from past years ADP. The financing pattern for the pipeline for Quetta has not yet been decided.

OIL

58. The total domestic consumption of oil products during 1977-78, is estimated to be 3793 thousand tons as against 3506 thousand tons in 1976-77. The overall growth is 8.2% as against a target of 6% and an overall growth rate of 5.5% in the Fifth Five Year Plan. A brief summary of the oil consumption is given below whereas details are given in the Annexure.

TABLE 18

Domestic Oil Consumption

Products	(Thousand Tons)		
	1976-77	1977-78	Percentage change
Light Distillates	454	550	21.1
Middle Distillates	2230	2490	11.7
Furnace Oil	650	712	9.5
Total fuel products	3334	3617	8.5
Others	172	176	2.3
Total	3506	3793	8.2

Balance sheet of disposal of POL

	(Thousand Tons)	
	1976-77	1977-78
Local	3058	3806
Imports	989	1099
Total availability	4047	4905
Domestic consumption	3506	3793
Bunkers	236	228
Export	283	781
Total disposal	4025	4802
Change in stock	22	103

Exploration

59. OGDC carried of 2,200 Km of seismic survey, 761 Km. of geological survey and established 5134 stations for gravity survey. The most significant discovery was of Pirkoh field in Baluchistan. Seismic survey for Dhodak structure was also started but was interrupted because of very difficult terrain. The survey will now be started with the help of helicopters. Besides, OGDC drilled 4611 meters at the Kotrum structure, but the well turned out to be a dry hole.

60. The achievements of foreign oil exploration companies are summarized below and details are given in Annexure :

TABLE 19

Drilling

Name of Company	Meters	Remarks
Pakistan Texas gulf	4462	Well abandoned as dry hole.
Pakistan Petroleum Ltd. (AMOCO & PEL Joint Venture).	2812	Discovered Adhi oil & gas field.
Huskey Oil Co.	3356	Abandoned as dry hole.
ESSO Eastern Inc.	---	Oil well reworked to achieve production.
Total	10,630	

TABLE 20

Survey

Name of Company	Number of parties
Marathon Petroleum Ltd.	1
Marathon Petroleum Ltd. (deep concession)	1
PPL	1
Pakistan Texas gulf.	2
Huskey Oil	1
Union texas	2
AMOCO	2

Development of Oil Fields

61. In line with the Governments' policy to give highest priority to the development of proven and newly discovered field, OGDC continued drilling on 4 wells namely Toot 7, 8 and 9 besides drilling for a second well at Dhodak. The drilling progress is summarized below :

	Metres
Toot 7	1459
Toot 8	973
Toot 9	3830
Dhodak	2643
	<u>8905</u>

Refining

62. Not much progress has been made with respect to the proposed physical works for extension in Attock Oil Refinery and PARACO at Multan. The former is in stage of negotiations between Government and AOC and the latter is being reviewed in the light of the latest development in the fuel sector specifically the discovery of Dhodak Condensate and Gas field and Adhi oil and gas field.

Plan for 1978-79

63. The total domestic consumption of petroleum products is expected to increase from 3793 thousand tons to 4029 thousand tons showing an increase of 6.2%. A brief summary of the consumption targets is given below and the product-wise details are given in the Annexure:

TABLE 21

Targets of Domestic consumption of POL

Products	(Thousand tons)		
	1977-78	1978-79	Percentage
Light distillates	550	529	(-)-3.8
Middle distillates	2490	2615	5
Furnace oil	577	608	5.4
Total fuel products	3617	3752	3.7
Others	176	277	5.7
Grand Total	3793	4029	6.2

TABLE 22

Balance sheet of disposal of POL

Items	(Thousand tons)	
	1978-79	
Local production	3686	
Import	1232	
Total availability	4918	
Domestic consumption	4029	
Bunders	247	
Export	642	
Total disposal	4918	
Change in stock	Nil	

64.—Exploration; OGDC's targets for exploration are given below:

Type of survey	Number of parties	Targets
Seismic	5	300 Km.
Gravity	1	4200 stations
Geological	2	700 Km.

65. Besides, OGDC will drill 3 exploratory wells and the target depth is estimated to be 9400 meters. In addition to OGDC the foreign oil companies have set the following target.

TABLE 23

Target of Survey

Name of Company	Number of parties
PPL	1
Union Texas	2
AMOCO	1

TABLE 24

Target of Drilling

Name of Company	Target
Marathon Petroleum	1
Marathon Petroleum (deep Concession)	1
Huskey Oil	1
Union Texas	1
AMOCO	1 (Adhi 6)
Pakistan Texas gulf	1
AMOCO	1

66. *Development.*—OGDC is expected to complete well Nos. 8,9,10 and 11 and Toct and besides, completion of well No. 2 at Dhodak, it will drill another well, Dhodak 3. The total target depth to be drilled during the year 1978-79 is 15,000 metre. Besides, PPL will drill its 24th well at Sui and POL will drill two wells at Meyal field, namely Meyal 8 and 9.

67. *Refining.*—As stated in the review of the last year's Annual Plan, the negotiations for expansion of AOC from 0.5 million tons to 1.5 million tons are in progress. It is hoped that during 1977-78 necessary design and engineering work will be completed and expansion of facilities will be partially completed. Regarding PARCO refinery at Multan, it is difficult to lay down specific target at this stage because at present the matter is being reviewed in the light of the recent developments in the fuel sector in Pakistan specially with regards to the discovery of Dhodak and Adhi fields.

68. *Movements.*—The oil pipeline from Karachi to Multan was planned as a part of the PARCO project. While the matters regarding the refinery are under review it has been decided to continue work on the pipeline portion of the project which would strengthen the existing transportation facilities. Contract for main construction works of pipeline have been awarded to SNGPL & SGTC. The material for the pipeline have already been imported. The pipeline will be commission in February 1980 and will function as a product pipeline to start with.

73. At present, only 3 companies are marketing LPG. The total upliftment of LPG during 1977-78 was also 31,105 tons. For 1978-79 it is hoped that the total consumption of LPG will be 34,000 tons.

74. The main bottleneck in the rapid development of LPG utilization so far has been the fact that the LPG extraction facilities and distribution arrangements are capital intensive. The use of bottled LPG is popular though costlier than firewood and kerosene because it is a clean and efficient fuel. Other possible uses of LPG are for tobacco curing, public transport and for peak shaving of natural gas demand. However none of these has been commercially exploited so far. Ministry of Petroleum and Natural Resources is expected to chalk out some plans for increased uses of LPG in future.

Non-conventional energy resources

75. Energy Resources Cell under the Ministry of Petroleum and Natural Resources is engaged in the small pilot and research project for non-conventional energy. The main purpose is to keep abreast with development in this sector and to utilize the new techniques wherever these are economically viable. The main projects are biogas plants, rural energy research and rural electrification project etc. A provision of Rs. 2.8 million has been made for this project.

Plans for under-developed areas

76. The development of backward areas is receiving special attention of the Government. In this connection during the Plan period 1978-79 work will continue on on-going projects of installation of diesel generation sets in 32 townships, a new project of installing diesel sets at 14 more locations in Baluchistan will be started; the work on Chitral Hydro Electric Station extension will continue besides continuation work on the 100 Small Hydel Stations Project for Northern Areas, NWFP and Azad Kashmir. The project of extending transmission lines from Abbottabad via Mansehra, Gahi Habibullah to Muzaffarabad and 132 kV transmission line from Islamabad to Azad Pattan, Palandry, Rawalakot has already been started and its progress has been reported above in the transmission programme in Power Sector. During 1978-79, work will be in progress for energization of the Guddu-Sibbi Section of the Guddu-Quetta transmission line at 220 kV and substantial progress will be made on the Mach Grid Station. The Karachi Electricity Supply has already started physical work on Vinder-Uthal-Bela transmission line and the physical targets are given in the paragraphs for transmission programme above. In the Fuel Sector construction of a gas pipeline to Quetta and supply of gas to townships in one mile radius of the Sui has been proposed and substantial work will be carried out during 1978-79.

POWER

(Million Rupees)

Sl. No.	Sub-Sector	Provision for 1978-79	Foreign Exchange Component	
			Total	Own Resources Foreign Aid
1.	Pakistan Atomic Energy Commission	475.77	226.45	25.850 200.600
2.	WAPDA	2915.00	1043.927	28.100 1015.827
3.	Small Hydel Projects in Azad Kashmir, N.A. and NWFP	10.00	—	—
4.	Energy Resources Survey	2.80	0.650	0.650 —
5.	K. A. Division	20.706	—	—
6.	States and F. R. Division	23.808	—	—
7.	KESC	30.00	—	—
Total (Power)		3478.084	1271.027	54.600 1216.427

FUELS

Sl. No.	Sub-Sector	Provision for 1978-79	Foreign Exchange Component	
			Total	Own Resources Foreign Aid
1.	Petroleum Concessions	93.403	—	—
2.	Oil and Gas Development Corporation	500.000	330.000	180.000 150.000
3.	Oil Operations	1.900	—	—
Total (Fuel)		595.303	330.000	180.000 150.000
Total (Fuel & Power)		4073.387	1601.027	234.600 1366.427

Sl. No.	Name of the Scheme	ADP Allocations for 1978-79
1	2	3
WAPDA		
<i>(On-going)</i>		
1.	Guddu Thermal Power Station Stage II	236.00
2.	Mangla Units 7 & 8	185.00
3.	Tarbela Units 5—8	569.00
4.	Warsak Hydro Electric Power Station Units 5+6	30.00
5.	2×25 MW Gas Turbine at Kotri (3—4)	85.00
6.	Ranking Study (PC-I approved) and Planning and Investigation of Major Hydro Electric Power Station (Un-approved)	1.00
New Schemes		
7.	Lakhrā Coal Fired Power Station Hyderabad	3.40
8.	50 MW Gas Turbine at Kotri (Units 5+6)	0.10
9.	Tarbela Unit 9—12 (Un-approved)	1.50
Total Generation		1111.00

1	2	3
Transmission		
<i>(On-going)</i>		
10.	500 kV Tarbela-Faisalabad Transmission Line	27.00
11.	500 kV Faisalabad-Multan-Guddu-Karachi Transmission Line	500.00
12.	220 kV Double Circuit Wah (Burhan)	17.00
13.	Guddu-Sibbi-Quetta Transmission Line	17.00
14.	220 kV Tarbela-Mardan Transmission Line	10.00
15.	Power Development in Azad Kashmir	30.00
<i>New Schemes</i>		
16.	2nd 500 kV Tarbela-Faisalabad Transmission Line (PC-I) will be Prepared on Finalization of	3.00
17.	Construction of Prestressed Concrete Pole Plant	40.00
18.	Secondary Transmission Line and Grid Station	550.00
Total (Transmission)		1194.00
Distribution		
	Distribution of Power in Pakistan	600.00
	Installation of Diesel Sets and L.D. System in Baluchistan Town Ships	10.00
Total (Distribution)		610.00
Grand Total (WAPDA)		2915.00
OGDC		
	Toot Field	145.00
	Dhodak Field	45.00
	Surveys	110.00
	Exploratory Wells	160.00
	Joint Venture with AMOCO	40.00
Total (OGDC)		500.00

WAPDA'S EXISTING GENERATION CAPACITY

								(MW)
Category	Name of Station						Capacity June, 1978	
Hydel	1. Tarbela 1-4						700	
	2. Mangla 1-6						600	
	3. Warsak 1-4						160	
	4. Small Hydel						107	
	Sub-Total (Hydel)						1,567	
Steam	5. Multan Steam						260	
	6. Faisalabad Steam						132	
	7. Guddu Steam						220	
	8. Quetta Steam						12	
	9. Sukkur Steam						50	
	10. Hyderabad Steam						41	
Sub-Total (Steam)						715		
Gas Turbines	11. Faisalabad G.T.						200	
	12. Shahdera G.T.						85	
	13. Kotri G.T.						30	
	14. Quetta G.T.						33	
	15. Multan G.T.						5	
	Sub-Total (Gas Turbines)						353	
Grand Total						2,635		

KESC'S EXISTING GENERATION CAPACITY

								Capacity June, 1978
Category	Name of Station							
Steam	1. West Wharf 1-3 (Station A)						15	
	2. West Wharf Extension 1-2 (Station B)						30	
	3. West Wharf Extension B X 1-2						66	
	4. Dual Fuel Station 1-11						15	
	5. Korangi Units 1-2						132	
	6. Korangi Unit 3						125	
	7. Korangi Unit 4						125	
Sub-Total (Steam)						508		
Nuclear	8. KANUPP						137	
	Grand Total						645	

PRIVATE EXISTING GENERATION CAPACITY

Private	230
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ENERGY GENERATION

Name of Agency	64-65	65-66	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	1982-83
WAPDA ..	2,463	2,909	3,016	3,648	4,371	5,074	5,740	6,029	6,836	7,179	8,041	8,276	8,763	10,085	16,524
KESC ..	667	731	873	947	1,066	1,295	1,463	1,532	1,635	1,876	1,962	1,922	2,006	2,014	3,595
Private ..	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450
Total ..	3,580	4,090	4,339	5,045	5,887	6,819	7,653	8,011	8,921	9,505	10,453	10,648	11,219	12,549	20,569
Population (Million) ..	51.76	53.26	54.79	56.37	58.00	59.70	61.49	63.34	65.24	67.20	69.21	71.29	73.43	75.62	86.90
Per Capita (Generation) kwh ..	69.17	76.79	79.19	89.50	101.50	114.22	124.46	126.48	136.74	141.44	151.03	149.36	152.78	165.96	236.70

HISTORICAL CONSUMPTION OF NATURAL GAS

Year	(MMCF)						Total
	SNGPL	KGC	IGC	MARI	GUDDU		
1955-56	—	2,402	1,054	—	—	3,456	
1956-57	—	5,437	3,135	—	—	8,572	
1957-58	—	7,436	4,294	—	—	11,630	
1958-59	—	9,153	4,368	—	—	13,521	
1959-60	—	10,459	5,149	—	—	15,608	
1960-61	—	11,018	6,001	—	—	17,019	
1961-62	—	12,922	6,523	—	—	19,445	
1962-63	—	13,780	7,282	—	—	21,062	
1963-64	—	17,062	9,187	—	—	26,249	
1964-65	—	19,910	9,645	—	—	29,555	
1965-66	27,332	20,112	10,102	—	—	57,546	
1966-67	28,406	23,921	11,171	—	—	63,498	
1967-68	30,143	25,369	11,734	20	—	67,266	
1968-69	37,578	28,225	13,292	5,734	—	84,829	
1969-70	43,946	31,803	14,566	9,945	—	100,260	
1970-71	45,760	31,106	18,056	11,330	—	106,252	
1971-72	54,999	29,621	17,183	9,710	—	111,513	
1972-73	67,471	29,036	20,166	10,738	—	127,411	
1973-74	82,109	30,615	20,813	10,962	—	144,499	
1974-75	92,659	29,955	21,885	11,352	1,526	157,377	
1975-76	84,759	33,857	21,017	11,564	6,214	157,411	
1976-77	92,234	35,622	20,477	11,894	11,174	171,401	
1977-78	85,545	46,464	22,319	11,174	12,000	177,502	
1978-79	94,000	52,793	24,328	27,299	12,825	211,245	

ANALYSIS OF COMPONENTS OF GAS DEMAND OF KGC

(MMCF)

Year	Power	Cement	Gen. Ind.	Commercial	Domestic	Total
1955-56	1,617	523	262	—	—	2,402
1956-57	2,922	1,180	1,335	—	—	5,437
1957-58	3,623	1,406	2,381	23	3	7,436
1958-59	4,224	1,846	2,932	133	18	9,153
1959-60	4,754	1,781	3,638	247	39	10,459
1960-61	5,353	1,110	4,153	324	79	11,018
1961-62	5,799	1,618	5,000	369	136	12,922
1962-63	5,793	1,678	5,657	443	209	13,780
1963-64	7,554	1,823	6,878	509	298	17,062
1964-65	8,804	2,365	7,779	570	392	19,910
1965-66	9,088	2,005	7,900	627	492	20,112
1966-67	10,198	3,042	9,373	720	588	23,921
1967-68	10,889	3,198	9,906	751	625	25,369
1968-69	12,621	3,534	10,538	837	695	28,225
1969-70	15,673	3,174	11,178	929	849	31,803
1970-71	14,645	2,986	11,460	976	1,039	31,106
1971-72	14,283	2,310	10,756	1,041	1,231	29,621
1972-73	11,906	3,205	11,353	1,082	1,490	29,036
1973-74	11,382	3,517	12,713	1,217	1,786	30,615
1974-75	9,904	3,484	13,164	1,251	2,152	29,955
1975-76	12,904	3,549	13,412	1,445	2,547	33,857
1976-77	15,248	3,004	12,829	1,521	3,020	35,622
1977-78	23,877	3,471	13,767	1,586	3,763	46,464

ANALYSIS OF COMPONENTS OF GAS DEMAND OF IGC

(MMCF)

Year				Power	Cement	Gen. Ind.	Commercial	Domestic	Total
1965-66	..	..	..	5,177	3,345	1,458	19	8	10,007
1966-67	..	..	..	5,270	4,145	1,707	38	13	11,173
1967-68	..	..	..	5,337	4,693	1,621	64	20	11,735
1968-69	..	..	..	6,217	5,226	1,742	81	29	13,295
1969-70	..	..	..	7,302	5,275	1,849	104	41	14,571
1970-71	..	..	..	6,739	9,335	1,758	159	69	18,060
1971-72	..	..	..	6,718	8,455	1,643	222	151	17,189
1972-73	..	..	..	8,566	9,258	1,790	290	268	20,172
1973-74	..	..	..	8,313	10,396	2,131	383	394	21,617
1974-75	..	..	..	8,105	10,573	2,298	422	489	21,887
1975-76	..	..	..	7,704	9,652	2,229	514	621	20,720
1976-77	..	..	..	7,851	9,098	2,200	503	826	20,478
1977-78	..	..	..		20,657		543	1,119	22,319

SURVEYS CARRIED OUT BY PETROLEUM EXPLORATION COMPANIES IN THE PRIVATE SECTOR DURING 1977-78

S. No.	Name of the Operator	Area leased out (In sq. miles)	Province	Number of survey parties deployed	Type of survey carried out	Remarks
1.	Marathon Petroleum Pakistan Ltd. (1973 Concession Agreement).	9,840	Baluchistan and offshore	1	Offshore seismic	—
2.	Marathon Petroleum Pakistan Ltd. (Deep Sea Concessions)	6,011.30	Deep Sea	1	Offshore seismic.	—
3.	Pakistan Petroleum Limited (AMOCO and PPL Joint Venture).	496	Punjab.	1	Land seismic.	—
4.	Pakistani Texas gulf (AOC, POL and Texas gulf Joint Venture)	499.12	Punjab and NWFP.	1	Geological Onshore seismic.	—
5.	Husky Oil Company	6,800	Sind (onshore and offshore area).	1	Offshore seismic.	—
6.	Union Texas	6,900	Sind.	2	Onshore seismic.	—
7.	AMOCO Pakistan Exploration Company (AMOCO and OGDC Joint Venture)	3,465	Punjab and NWFP.	2	Onshore seismic.	—

SURVEY PLANNED BY PETROLEUM EXPLORATION COMPANIES DURING 1978-79

Name of the Operator	Area leased out (in sq. miles)	Province	No. of survey parties to be deployed	Type of survey to be carried out	Remarks
1. Pakistan Petroleum Limited (AMOCO and PPL Joint Venture)	496	Punjab.	1	Seismic.	—
2. Union Texas	6900	Sind.	2	Seismic.	—
3. AMOCO Pakistan Exploration Company (AMOCO and OGDC Joint Venture)	3965	Punjab and NWFP.	1	Seismic.	—
4. Pakistani Texas gulf Inc. (AOC, POL and Texas gulf Joint Venture)	499.12	Punjab and NWFP.	—	—	—

DRILLING PROGRAMME IN THE PRIVATE SECTOR FOR 1978-79

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Company (Operator)	Area leased out (in sq. miles)	Province	No. of wells	Remarks
Exploration				
1. Marathon Petroleum Pakistan Ltd. (1973 Concession Agreement)	9840	Offshore.	1 (offshore).	Data being evaluated to delineate structure for drilling.
2. Marathon Petroleum Pakistan Ltd. (Deep Sea Concessions)	6011.30	Deep Sea.	1 (Deep sea).	"
3. Husky Oil Company	6300	Sind and Offshore.	1 (offshore).	"
4. Union Texas	6900	Sind.	1 (on land).	"
5. AMOCO Pakistan Exploration Company (AMOCO and PPL Joint Venture)	496	Punjab.	1 (Adhi-6).	This is a confirmatory well of Adhi-5.
6. Pakistani Texas gulf (AOC, POL and Texas gulf Joint Venture)	499.12	Punjab and NWFP.	1	Data being evaluated to decide drilling of Dakhni well-I.
7. AMOCO and Pakistan Exploration Company (AMOCO and OGDC Joint Venture).	3465	Punjab and NWFP.	1	
Development Wells				
1. Pakistan Petroleum Limited	289	Baluchistan.	1 (Sui No. 24).	—
2. Pakistan Oilfields Limited	153	Punjab.	2 (Meyal well 8 and 9).	—

DRILLING ACTIVITIES IN PRIVATE SECTOR DURING 1977-78

Annexure XI

Name of the Company	Area leased out (in sq. miles)	Province	Name of the well	Projected depth (in ft.)	Depth penetrated (in ft.)	Remarks
Exploration Drilling						
1. Pakistani Texas gulf (AOC, POL and Texas gulf Joint Venture).	499.12	Punjab and NWFP	Karak No. 1 (NWFP).	10,000	14,628	Well abandoned as dry hole.
2. Pakistan Petroleum Limited (AMOCO and PPL Joint Venture).	496	Punjab	Adhi-5 (Punjab)	10,000	9,219	Discovered Oil and Gas.
3. Husky Oil Company	--	Offshore	Karachi South A-1	10,000	11,002	Abandoned as dry hole.
Development Drilling						
ESSO Eastern Inc.	339	Sind	Mari X-10	2,533	2,533	Gas Producer.
			Mari X-11	2,620	2,620	"
			Mari X-12	2,417	2,417	"
			Mari X-13	2,443	2,443	"
			Mari X-14	2,451	2,451	"
			Mari X-15	2,416	2,416	"
			Mari X-16	2,400	2,400	"
			Mari X-3 (Sind)	--	--	Old well re-worked to achieve gas production.

PRODUCTION, IMPORTS AND DISPOSAL OF OIL PRODUCTS (1977-78 REVISED ESTIMATES)

(All Figures in 000 Tons)

Products	Availability of P. O. L.			Disposal			Change in Stock
	Local Production	Import	Total Availability	Export	Bunker	Total External Consumption		Total Disposal
100/130	—	6	6	—	—	5	+1
73 ON	—	2	2	—	—	1	+1
JP-4	96	—	96	—	—	97	-1
MS	331	—	331	—	—	345	-14
HOBC	71	34	105	—	—	102	+3
Naphtha	187	—	187	149	—	149	+38
Total (Light Distillates)	685	42	727	149	—	530	+28
JP-1	364	—	364	—	129	212	+23
SK	254	441	695	—	—	665	+30
HSD	851	528	1,379	—	14	1,334	+31
LDO	223	88	311	—	3	279	+29
Total (Middle Distillates)	1,692	1,057	2,749	—	146	2,490	+113
FO	1,224	—	1,224	630	82	712	-65
Total of Fuel Products	3,601	1,099	4,700	779	228	3,617	+76
Asphalt	100	—	100	2	—	84	+14
Others	105	—	105	—	—	92	+13
GRAND TOTAL	3,806	1,099	4,905	781	228	3,793	+103

PRODUCTION, IMPORTS AND DISPOSAL OF OIL PRODUCTS (1978-79 PROJECTED)

(All Figures in 000 Tons)

Products	Availability of P. O. L.				Disposal			Total Change in Stock
	Local Production	Import	Total Availability	Export	Bunker	Total External	Domestic Consumption	
100/130 On	—	6	6	—	—	—	6	6
73 ON	—	2	2	—	—	—	2	2
JP-4	91	—	91	—	—	—	91	91
MS	330	—	330	—	—	—	330	330
HOBC	91	9	100	—	—	—	100	100
Naphtha	131	—	131	131	—	131	—	131
Total (Light Distillates)	643	17	660	131	—	131	529	660
JP-1	334	—	334	—	132	132	202	334
SK	249	417	666	—	—	—	666	666
HSD	737	713	1,450	—	14	14	1,436	1,450
LDO	249	65	314	—	3	3	311	314
Total (Middle Distillates)	1,569	1,195	2,764	—	149	149	2,615	2,764
FO	1,217	—	1,217	511	98	609	608	1,217
Total of Fuel Products	3,429	1,212	4,641	642	247	889	3,752	4,641
Asphalt	122	—	122	—	—	—	122	122
Others	135	20	155	—	—	—	155	155
GRAND TOTAL	3,686	1,232	4,918	642	247	889	4,029	4,918

CHAPTER 15

TRANSPORT AND COMMUNICATIONS

REVIEW OF 1977-78

The performance of transportation system during 1977-78 showed a little improvement as compared to 1976-77. The Railway freight increased by 8.33% from 4800 million tons miles to 5200 million tons miles against the estimated traffic of 5,800 million ton miles. The shortfall compared to the target has been attributed to frequent locomotive failures, non-completion of the essential components of the Crash Plan, particularly the doubling of track between Kotri-Hyderabad and the second bridge. The passenger traffic, however, registered an increase of 2.43% from 8173 million passenger miles in 1976-77 to 8,372 M.P.M. in 1977-78. This increase has been attributed to shortage of buses on intercity routes diverting the passengers to rail travel, and also due to greater leads.

2. Port situation, however, improved towards the end of 1977-78 when the waiting period for the ships outside port came down from 15 days to less than 5 days, as a result of better management measures taken at the Port. The total traffic handled at the Port increased from 8.75 million tons in 1976-77 to about 11.0 million tons in 1977-78.

3. The availability of wagons at the Port site had been at the average of 740 wagons per day though the turn around time decreased from 17.36 in 1976-77 to 15.7 days in 1977-78.

4. In case of Road Transport, the goods transportation continued to suffer as the sale of trucks during 1977-78 stood at 3260, the lowest ever in the last 4 years. Similarly, in case of passenger buses in the private sector also the sale stood at 805 which was again the lowest ever. The private investment, however, increased in light commercial vehicles. The problem of urban passenger transport continued as before. This was mainly due to the fact that whatever the induction of new fleet was affected, it was offset by the rapid depreciation of the existing fleet, due to inadequate maintenance facilities.

5. The actual traffic handled in 1976-77, the actual traffic for 1977-78 and the forecast for 1978-79 are given below :

TABLE 1
Forecast of Rail/Road Traffic during 1978-79

	1976-77 (Actual)	1977-78 Actual	1978-79 (Estimated)	% change 1977-78/ 1978-79
Rail				
Goods (MTM)	4,800	5,200	6,536	+ 25.6
Passenger (MPM)	8,173	8,372	8,597	+ 2.68
Road				
Goods (MTM)	8,700	8,300	9,064	+ 9.20
Passenger (MPM)	36,827	40,628	44,403	+ 10.83

6. The railways goods traffic is projected to show a growth rate of 5% per annum over the actual capacity of 5,991 million available during 1976-77. The performance of railways is expected to improve further by completion of the Crash Plan components as far as the line capacity works are concerned and due to introduction of new passenger coaches. In the case of road transport, the growth rate for goods and passenger traffic has been estimated at 9.20% and 10.83%, respectively.

7. As regards the road development programme, about 1268 miles of federal and provincial roads were constructed/improved during 1977-78.

8. The performance of PIAC has been lower than estimated as against the anticipated increase of 26.1% and 35.2%, respectively, for passenger and cargo traffic, the actual increase stood at 10.34% and 15.53%, respectively.

9. During 1977-78, Rs. 3,433.178 million was allocated for the Transport and Communications programme in the public sector. This allocation was about 15.4% higher than the 1976-77 allocation.

10. The actual public sector utilization for the Federal Programme was Rs. 2,481.13 million against an allocation of Rs. 2,688.058 million. For the Provincial Programmes, the utilization was Rs. 676.86 million against an allocation of Rs. 745.12 million. The estimated expenditure for the sector as a whole was Rs. 3,157.992 million, giving a percentage utilization of about 92%.

11. In the semi-public sector, the federal expenditure stood at Rs. 335.8 million against the provision of Rs. 392.80 million, while the provincial expenditure was nil due to non-release of funds against the provision of Rs. 30.00 million. The overall utilization thus showed a shortfall of about 20.58%.

12. The sub-sector-wise details of 1977-78 programme are as follows :

FEDERAL PROGRAMME

Railways

13. Against an allocation of Rs. 935.7 million for 1977-78, actual expenditure stands at Rs. 660.0 million. The reduction was caused by delay in ratification of agreement for the Kuwait Fund Project Assistance and non-disbursement of commitments made under the World Bank Project loan. The main objectives of 1977-78 programme were to improve utilization of existing assets, modernization and replacement of rolling stock improvement of tele-communication system and increase in signalling efficiency.

14. The performance of Railways during 1977-78 was slightly better as compared to the previous year. As regards the availability of Wagons, the Wagons turn around time improved from 16.36 in 1976-77 to 15.7 days. The daily mileage per locomotive for goods traffic increased from 139 miles in 1976-77 to 140 miles. However, the daily mileage per locomotive for passenger traffic increased from 287 miles to 298.

Traffic

15. There was an increase of 8.33% in case of goods traffic (from 4,800 MTM in 1976-77 to 5,200 MTM in 1977-78) and an increase of 2.43% in case of passenger traffic from 8,173 MPM in 1976-77 to 8,372 MPM in 1977-78.

The increase in passenger miles is attributed to the following :

	1976-77	1977-78
Coach mile per day	197	203
Engine miles per day for passenger trains	287	298
No. of passenger trains	132,000	156,000
No. of Rail Cars services	27,000	28,500
No. of passengers	142 million	149 million

16. Details of 1977-78 programme are as follows :

17. *Rolling Stock*.—The entire allocation of Rs. 271.37 million was utilized for manufacturing 102 passenger coaches, 86 bogies, 101 special wagons, 60 B.T.J's and 40 tank wagons orders for 30 new B.G. Diesel electric locomotives were also placed.

18. *Rehabilitation of Tracks*.—Against an allocation of Rs. 285 million (FEC of Rs. 201 million) an expenditure of Rs. 272.0 million was incurred. The programme envisaged complete track renewal of 90 miles with 100 Lbs. rails on Karachi-Lahore Section and 35 miles of rail renewal and 110 miles of sleeper renewal on other sections. Besides Rs. 32 million were earmarked for construction of new sleeper factories. Against these targets, 86 miles of complete track renewal 25 miles of rail renewal and 28 miles of sleeper renewal were carried out. There has been a serious shortfall in case of sleeper renewal, due to non-availability of sleepers.

19. *New Construction.*—Against an allocation of Rs. 15.6 million, an expenditure of Rs. 21.4 million was incurred, and 85% of the work on Islamabad Spur was completed upto Margalla Station. Work relating to conversion of Mari-Indus-Bannu Section from narrow gauge to broad gauge progressed to the extent of 23%.

20. *Marshalling Yard.*—The entire allocation of Rs. 96 million for 1977-78 was utilized. About 85% of the work relating to the yard was completed.

21. *Doubling of Track between Kotri and Giddu including Bridge over river Indus.*—Against an allocation of Rs. 1.0 million, Rs. 17.5 million were spent. The main work of the bridge remained suspended during this year also as fresh geotechnical investigation for water piers had to be carried out. The design has now been finalized. Work however, progressed on the approaches and minor bridges and culverts.

Roads

22. *Federal Roads.*—Against an allocation of Rs. 604.928 million for 1977-78 for the Federal Road Development Programme an expenditure of Rs. 588.903 million was incurred, giving a utilization of 97%. Details of the programme are as follows :

23. *Azad Kashmir.*—An allocation of Rs. 35.128 million was made during 1977-78 for metalling of 27 miles of roads and completion of work relating to Malwani Nullah, Chella Bandi, Raj Dhani and Chulpum bridges. In addition, work relating to 8 suspension bridges was also to be undertaken. An expenditure of Rs. 40.789 million was incurred. In physical terms work on the bridges in hand was completed except for Chulpum bridge which is nearing completion. Work relating to the suspension bridge also progressed. In addition, 54 miles of existing roads were improved.

24. *Northern Areas.*—Against an allocation of Rs. 10.10 million an expenditure of Rs. 13.389 million was incurred on construction of 4 miles of black top, 10 miles of 3-tonner and 50½ miles of jeepable roads. In addition 25 miles of pony tracks were constructed while 20 miles of existing roads and 12 suspension bridges were improved.

25. *F.A.T.A.*—An allocation of Rs. 50 million was made for 1977-78. The programme envisaged construction of 17 miles of black topped roads, 51 miles of shingle roads and improvement of 68 miles of existing road. An expenditure of Rs. 66.728 million was incurred on construction of 52.45 miles of shingle roads and 21 miles of black topped roads and improvement of 83 miles of the existing roads.

26. *Roads and Bridges under Ministry of Communications.*—Against an allocation of Rs. 509.7 million for 1977-78 programme, an expenditure of Rs. 468.0 million was incurred. Details of various programmes are as under :

27. *Third Highway Project.*—Against an allocation of Rs. 20.0 million an expenditure of Rs. 14.648 million was incurred on completion of phase-I, covering the preliminary study. Phase-II covering the detailed designing was also carried out to the extent of about 45%.

28. *Major Bridges.*—Against an allocation of Rs. 130 million for 1977-78 an expenditure of Rs. 89.689 million was incurred which gives a utilization of about 69%. The right abutment and all but four of the piers of Attock Bridge were completed. Four of the five piers, and the abutments were completed and girders were hoisted for two spans at the Nowshehra Bridge. In case of the Ghazi-Ghat bridge, preliminary work relating to the mobilization of machinery, land acquisition and construction of colony were substantially undertaken. In addition, excavation of five well curbs up to 10 ft. was also carried out. The contract of the D.I. Khan-Darya Khan Bridge was awarded while in case of Dadu-Moro Bridge, mobilization was completed. Portion of the left guide bank about 3,000 feet in length out of a total length of 5,600 feet of the left marginal Bund was also completed.

29. *Rapid Transit System.*—Against an allocation of Rs. 0.7 million, Rs. 0.314 million were spent. Pre-qualification and appointment of consultants were carried out. Negotiations were also carried out with the British Government for a grant to cover consultancy services.

30. *Traffic Count Programme.*—The entire amount of allocation of Rs. 1 million for 1977-78 was utilized on the programme.

31. *Master Plan and Miscellaneous Studies.*—Against an allocation of 2.3 million rupees an expenditure of Rs. 1.25 million was incurred on the completion of the short term report.

32. *Other Roads.*—Against an allocation of Rs. 310 million an expenditure of Rs. 360.7 million were incurred. During the period under review, construction of roads in Mari Bugti area and Kakar-Kharasan areas and portion of KaraKaram Highway (KKH) between Thakot and Hallegush was completed. In addition, improvement of culverts/cause-ways on the KKH-Skardu (170 Kms.) and roads in Azad Kashmir were carried out. Some work on the Daur Bridge on the Hewalian-Thakot stretch of the KKH was also done.

33. Under FATA roads, work relating to construction of class 70, Bannu-Zarwan-Shawa carried out. The work of widening Nowshetra-Chakdara-Chitral road also progressed to the extent of 100% Metalling and surfacing progressed upto 14%.

Road Transport in Public Sector

34. *Northern Area Transport Corporation.*—An allocation of Rs. 8 million was made during 1977-78 for the construction of main workshop and head office at Gilgit. Progress achieved has not been reported though full expenditure has been incurred.

35. *Karachi Transport Corporation.*—An allocation of Rs. 25 million was originally made in 1977-78 which was revised to Rs. 18.85 million for import of 200 bus chassis, spare parts, purchase of workshop machinery and major over-hauling of 98 buses. The entire revised amount was incurred on payment for balance of body fabrication of 100 Bedford chassis, 10% down payment in respect of 200 new Fiat bus chassis to be imported, spare parts, workshop machinery and major over-hauling of 72 buses out of 98 during 1977-78. 100 Bedford buses were brought on road.

36. *Punjab Urban Transport Corporation.*—An allocation of Rs. 25 million was made during 1977-78 for purchase of 100 Bedford chassis with bodies, 152 Fiat Chassis with bodies, sparepart, machinery/equipment and necessary civil works for Central Workshop. Against this an expenditure of Rs. 7.424 million was incurred on purchase of 100 Bedford buses with bodies, 10% payment for 152 Fiat chassis with bodies and purchase of machinery/equipment for Central Workshop and the existing depots. 100 Bedford buses were brought on road.

Road Transport in Private Sector

37. During the past, road transport in the private sector had shown fluctuating trends. Sale of buses was very low due to apprehension of the private transporters about nationalization of the industry. The situation is still unsatisfactory as the sale of buses has further decreased during 1976-77 and 1977-78. However, it was partly offset by manifold increase in the sales of large number of light commercial vehicles. The sale of trucks, also decreased compared to that in 1974-75 during the last three years. This is partly due to too high prices of truck chassis, and popularity of small pickup vans. The position regarding import and sale of roads transport vehicles during the past few years may be seen in Annexure-II.

Ports and Shipping

38. Against a total allocation of Rs. 775.05 million during 1977-78 both for the public and semi-public sectors, an expenditure of Rs. 791.50 million was incurred giving a utilization of about 102%. The increase in expenditure was mainly due to higher allocation for Port Qasim.

39. An amount of Rs. 730 million was envisaged for the Port Development Programme during 1977-78, out of which Rs. 530 million were earmarked for the Port Qasim Project which was utilized to the extent of 110% by incurring an expenditure of Rs. 590 million. Work progressed satisfactorily on the physical construction of the port. The remaining amount of Rs. 200 million was allocated to Karachi Port against which an expenditure of Rs. 156 million was incurred giving a utilization of about 78%. Details of the programme are as follows :

40. *Karachi Port.*—During 1977-78, against traffic estimates of 7.806 million tons of dry cargo and 4.5 million tons of oil, 5.8 million tons of dry cargo and 5.2 million tons of oil were handled at the Karachi Port.

41. An allocation of Rs. 200 million was made for 1977-78. The 1977-78 programme aimed at the augmentation of capacity through separate package projects. It was planned to continue work on schemes already underway under the Third Project of 4-Berths at Juna Bunder in addition to normal civil and mechanical works. Work on the 5th project viz the IV oil piers was almost completed.

42. An expenditure of Rs. 156 million was incurred during 1977-78. Ten shipping berths under the 2nd Port Project with all related ancillary facilities were finally completed and have been put up into full operation.

43. *Port Qasim*.—An allocation of Rs. 530 million was originally made for 1977-78 which was enhanced to Rs. 590 million.

44. During 1977-78, the entire revised allocation of Rs. 590 million was utilized on continuation of construction work mainly relating to the Marginal Wharf and Iron Ore and Coal Berths. Work on services also continued. Most of the equipment and port vessels have been acquired or ordered.

45. *Navier Mole Bridge*.—The entire allocation of Rs. 22 million for 1977-78 was utilized on work mainly relating to the completion of piling work.

46. *Pakistan Marine Academy*.—An allocation of Rs. 20.0 million was made during 1977-78. The full amount was utilized on completion of administrative, residential and instruction block.

47. *Seamen's Training Centre*.—An allocation of Rs. 3.00 million was made during 1977-78. The full amount was utilized.

48. *Gawadar Harbour*.—An allocation of Rs. 5 million was made during 1977-78 for survey work and investigations to identify the type and size of the facilities to be provided at Gawadar Harbour. The entire amount was utilized.

49. *Shipping*.—The main effort in the shipping sector have been in the direction of consolidation of the holdings and major decision in this respect has been the merger of the two Corporations, namely NSC and PSC as one enterprises. Lot of work was done in planning. The augmentation in the past deteriorating fleet which has resulted not handling any drop in the share of cargo handling by Pakistan National Fleet and it has also effected D.W.T.

50. No physical addition was made to the National Fleet during the year.

Civil Aviation

51. An allocation of Rs. 92.43 million was originally made during 1977-78 which was enhanced to Rs. 121.807 million. The 1977-78 programme provided for the on-going works on new airports viz Saidu Sharif and Ormara, and improvement/expansion of existing infrastructure at various airports to meet PIA's operating plans. The programme included expansion of facilities at Multan and Faisalabad to cater for Boeing operations and interim expansion of terminal facilities at Islamabad, Karachi and Lahore international airports. The actual expenditure incurred amounted to Rs. 116.566 million. Work progressed satisfactorily on all the projects in hand and out of 27 on-going and 4 new schemes, 15 and 2 respectively were completed. Besides, 25 other schemes of urgent operational requirements were completed by accommodating within the allocation during 1977-78. Turbat airport was opened to traffic.

52. *P.I.A.*—Against the traffic estimates for 1977-78, at 5,147 million passenger kilometers and 219 million tonne kilometer of freight traffic, the actual traffic handling amounted to 4,505 million passenger kilometer and 185 million freight ton kilometer. This indicates an increase of 10.34% in case of passenger, and 14.2% in case of freight traffic over the year 1976-77. This is much lower than the estimated growth of 35.2% and 26.1%, respectively, during 1976-77.

53. During 1977-78, work continued on construction of the wide bodied air craft hanger, supporting workshop facilities though with a slow tempo. The work was also initiated on air cargo terminal at Karachi and computerised system passenger reservation and check-in. The induction of short haul narrow-bodied aircraft, however, remained in the planning stage. However, as an interim arrangement, PIA acquired 4-707 Boeing on lease.

54. Against an allocation of Rs. 192.8 million, an expenditure of Rs. 179.8 million was incurred from P.I.A. budget.

Telecommunications

55. An allocation of Rs. 430.00 million was made for the expansion and improvement of telecommunication system during the year 1977-78. Out of this, Rs. 415.0 million were earmarked for Telegraph and Telephone Department and Rs. 15.0 million were earmarked for Special Communication Organization for development of telecommunications in Northern Area and Azad Kashmir. The allocation was fully utilized.

56. *T&T Department.*—The major targets envisaged during 1977-78 were installation of 15,000 telephones, 15 N.W.D. stations, 20 exchanges, 50 long distance PCO's, 15 Telegraph Offices ; installation of 31, PCM systems, 100 single channel V.H.F. and 8 multi-channel U.H.F. systems, 7 open wire carrier systems, 4 cable carrier systems, and erection of 5,000 miles of open wire lines and also construction of Telecommunication Research Centre at Islamabad.

57. Actual achievement has been installation of 17,500 telephones and commissioning of 23 N.W.D. stations and 33 exchanges (New expansion). On long distance network Karachi-Sukkur-Rawalpindi-Peshawar microwave link was completed. There was further progress on Hyderabad-Badin, Shikarpur-Larkana-Dadu-Moro, Sahiwal-Arifwala-Burewala-Chishtian, Karachi-Manora, Sukkur-Quetta, Sahiwal-Okara, Multan-Khanewal, Mardan-Chitral and Mardan-Saidu Sharif microwave systems. Besides 15 PCM system, 20 single channel V.H.F. and 14 multi-channel U.H.F. systems were installed. Coaxial cable system between Qila Sheikhpura-Kharian was completed and existing Kharian-Rawalpindi coaxial cable system almost upgraded from 960 channels to 2,700 channels working. The work was also in progress on Rawalpindi-Kasur carrier cable system. An international electronic telex exchange of 2,000 lines at Karachi was brought in service for the improvement of telex service and direct dialling of international telex calls ; local telex and gentex system was completed at Sukkur ; 100 long distance PCOs were opened and 2,240 Kms of overhead lines erected and replacement of 9,600 Kms of copper wire by copper weld wire was also completed. Work was in progress on the construction of Telecommunication Research Centre at Islamabad.

58. *Special Communication Organization.*—The targets fixed for 1977-78 for Northern Areas were installation of 11 new exchanges, 7 long distance PCO's and overhead lines between Gilgit-Gupis, Astore-Ratu and Skardu-Olding. The targets for Azad Kashmir were installation of 5 small exchanges and 7 long distance PCO's, replacement of 3 exchanges by C.B. exchanges, increasing capacity of 3 manual exchanges and commissioning of 3 auto exchanges.

59. In Northern Areas, 220 telephones and 5 exchanges were installed ; one carrier system and 5 wireless stations were established, and also 201 Kms of overhead lines erected. In Azad Kashmir, 320 telephones and 5 exchanges were installed ; 3 carrier systems were established and 183 Kms of overhead lines were erected.

60. *Pakistan Post Offices.*—During 1977-78, Rs. 15.00 million were allocated to Pakistan Post Offices. The main expenditure envisaged was on the construction of Director General Office building and residential quarters for its staff at Islamabad. Opening of 600 Post Offices (525 in rural areas and 75 in urban area) was also envisaged. The actual expenditure incurred was of Rs. 10.00 million on D.G. Office building and staff quarters at Islamabad. The progress achieved was up to 80%. The remaining amount of Rs. 5.00 million was utilized for construction of 17 postal operational buildings and 25 staff quarters, the achievement was in the range of 50—80 per cent. During 1977-78, 300 Post offices were opened.

61. *N.T.R.C.*— During 1977-78, Rs. 1.30 million were allocated to National Transport Research Centre for carrying out research studies in the field of transportation. An expenditure of Rs. 0.827 million was incurred.

PROVINCIAL PROGRAMME

62. The original allocation for the Provincial Programme during 1977-78 amounted to Rs. 741.62 million and Rs. 30.00 million in the public and semi-public sectors, respectively. Salient features of province-wise development programme are given below :

BALUCHISTAN

63. *Roads.*—An allocation of Rs. 74.316 million was made during 1977-78 for continuation of ongoing works namely RCD Highway, Loralai—D.G. Khan road and other works in addition to a small modest programme of new roads in the province. The programme aimed at construction of 55 miles of black top roads, 34 miles of shingle roads and improvement of 10 miles

of existing roads. An expenditure of Rs. 74.244 million was incurred. Work progressed satisfactorily and in physical terms 19 miles of black top roads—miles of shingle road and improvement of 54 miles of existing roads were achieved in different parts of the province.

N.W.F.P.

64. *Roads*.—Against an allocation of Rs. 105.304 million for 1977-78 an expenditure of Rs. 110.565 million was incurred. The 1977-78 programme envisaged construction of 38 miles of black top roads, 63 miles of shingle roads and 131 miles of improvement of existing roads in addition to completion of work of 13 bridges. Against this construction of 34 miles of black top roads, 61 miles of shingle roads and 128 miles of improvement of existing roads was carried out. Also work on 13 bridges was completed.

65. *Road Transport*.—An amount of Rs. 4 million was provided in the provincial ADP (in addition to Rs. 17 million in the semi-public sector) for purchase of 60 buses as replacement, improvement of workshop facilities and procurement of spare parts. However, these targets could not be met due to non-release of funds.

SIND

66. *Roads*.—An allocation of Rs. 238.9 million was made during 1977-78 for construction of 200 miles of new roads and improvement of 280 miles of existing roads. The programme also envisaged procurement of road making machinery and restoration of flood damages in the province. An expenditure of Rs. 188.502 million was incurred on construction of 125.5 miles of new roads and improvement of 277 miles of existing roads.

PUNJAB

67. *Punjab Roads*.—An allocation of Rs. 320 million was originally made during 1977-78 for construction of 200 miles of new roads in addition to restoration of flood damages. However, due to resource constraint, a cut was imposed and the revised allocation was of the order of Rs. 302.558 million. Against this, Rs. 302.323 million was spent on 100 miles of new construction and 150 miles of improvement. Out of 104 schemes relating to the restoration of flood damages only 40 schemes could be completed during 1977-78. Work was completed on Chablat, Sanghar Nullah and Kanshi Nullah Bridges.

68. *Road Transport*.—An allocation of Rs. 13 million was made during 1977-78 in the semi-public sector for continuation of work on-going on the schemes namely construction of depots at Sahiwal and Bahawalpur etc. An expenditure of Rs. ———million was incurred during 1977-78. The work on these schemes could not be completed due to shortage of cement in the country and delay in release of funds. However, Civil works at these depots are in advanced stage of completion. Out of Rs. 2.65 million earmarked for civil works, an amount of Rs. 2.26 million has been utilized. Against the allocation of Rs. 1.13 million for machinery, order for the import of machinery for Rs. 0.098 million has been placed. Action with regard to procurement of indigenous machinery is in hand. It is expected that the new depots at Sargodha, Sahiwal and Bahawalpur could start functioning at full-fledged and independent unit in the mid of 1978-79.

PROGRAMME FOR 1978-79

69. The overall financial allocation for 1978-79 in the Transport and Communications Sector is Rs. 4,280.261 million. This envisages an acceleration of 13.60 percent over the 1977-78 provision of Rs. 3,356 million and acceleration of 25.37 per cent over the actual utilization of Rs. 3,494 million during 1977-78. The public sector allocation provides for an acceleration of 13.18 percent while in semi-public sector the acceleration over 1977-78 allocation is 5.13 per cent. The allocation for shipping is notional and depends upon availability of foreign loans/credits.

70. The 1978-79 public sector programme envisages an allocation of Rs. 3,935.78 million, of which Rs. 3,322.638 million have been provided for the Federal Programme which is about 89.85% of the total outlay. The remaining amount of Rs. 613.143 million, constituting about 14% of the total public sector programme, has been allocated for the provincial programme. Reduction in the allocation for the Provincial Programmes during 1978-79, as compared to the 1977-78 allocation of Rs. 745.12 million, is because of four major highways which have been nationalized and their improvement/development programme reflected in the Federal allocations.

71. The financial allocation for 1978-79 as well as the financial allocation and utilization for 1977-78, are given in Annexure I.

Strategy

72. The following strategy which has been indicated for Transport and Communication Sector for the Fifth Plan would be pursued during 1978-79 :

- (i) Major share of long haul bulk freight traffic will be handled by the Railway.
- (ii) Integrated development of different modes of transport will be pursued.
- (iii) To avoid dilution of resources, the number of schemes will be kept at the minimum possible level.
- (iv) Highest/priority/adequate financial coverage will be given to on-going schemes nearing completion for early realization of benefits from investments made.
- (v) Communication facilities will be improved in backward areas to open up these areas and facilitate development.
- (vi) The improvement and construction of roads will conform to standard designs and specifications.
- (vii) Port capacity will be augmented in a manner as to achieve progress at a maximum feasible rate. The future plans of the Karachi Port and Port Qasim will be coordinated to avoid duplication.
- (viii) Capacity of railway will be increased by removing operational bottlenecks and rehabilitation and replacement of work-out assets.
- (ix) For better planning, comprehensive transport studies continue.
- (x) The telecommunications system will be improved by providing additional capacity, installation of microwave and carrier system and opening up of new public call offices.

73. Keeping in view the above strategy ; an allocation of Rs. 1,000 million has been made for the Pakistan Railways which is the highest ever, and is about 65% over the actual expenditure during 1977-78. This allocation is in line with the agreement reached between the World Bank and the Railways on three years development programme (1978—81), which will enable it to carry out the track rehabilitation work, ensure completion of Pipri Marshalling Yard by December, 1979 in addition to the completion of re-engining of 10 locomotives, 30 new D. E. Locomotives and manufacture of 188 passenger coaches.

74. Adequate funds have also been provided for the development of ports, especially for the Port Qasim Project. An amount of Rs. 670 million has been allocated during the 1978-79 so as to develop the appropriate port facilities to cater for ships of 25,000 DWT by end of 1978 and 50,000 DWT by mid 1979 and to meet the requirement of Pakistan Steel Mills Corporation in accordance with their time schedule for operation of the Karachi Steel Mills. The programme also provides for substantial completion of the work of the Pakistan Marine Academy and Napier Mole Bridge.

75. A provision of Rs. 485 million has been made for the T & T Department and the ISCO for the expansion and improvement of the telecommunication system. The main strategy to be followed during the year 1978-79 is to slow down the installation of new telephone lines and divert the resources on improvement of the system

76. The year 1978-79 is going to be a year of crises as far as transport of imported commodities like wheat, fertilizer, rock phosphate and cement are concerned. As in the case of wheat, the quantities during the year 1978-79 would be about 2 million tons which is double the quantity imported during 1977-78. Similarly, in the case of import of fertilizer, about 30% increase is expected over 1977-78, and the quantities to be imported amount to 1 million tonne. Similarly, there is another new item namely rock phosphate which to be imported in quantity of about 0.6 million tons. The increase in quantities of these items would cause severe strain, particularly on the Karachi Port handling capacity as well as inland transport system. The railways are not expected to provide more than 740 wagons a day at the port site as in the year 1977-78, implying transport of about 50% of wheat and fertilizer by road to upcountry which will require at least 30% increase in the import of trucks over 1977-78.

FEDERAL PROGRAMME

Railways

77. The main problem of the Railways is the big gap between the requirement based on replacement and traffic growth and actual investment. This gap is expected to remain fairly wide during next five years. However, it has been planned to check the rate of deterioration in the major assets of the Railways. The main strategy of the 1978-79 programme is to improve the utilization of motive power, initiate work on telecommunications/signalling and operations and the modernization/replacement of rolling stock, increase in marshalling capacity and removal of bottlenecks on the main line and Bolan Pass.

78. The programme for 1978-79 envisages improvement in wagon utilization by reducing wagon turn around time from 15.7 days in 1977-78 to 13.5 days in 1978-79. The daily mileage per locomotive for goods traffic is expected to be increased by about 21.42% from 140 miles during 1977-78 to 170 miles in 1978-79, while the corresponding figures for passenger traffic is expected to improve by about 17.44% from 298 miles to 350 miles.

79. An allocation of Rs. 1,000 million has been made for 1978-79, which mean an increase of 65% over the 1977-78 expenditure. Details of the 1978-79 programme are as follows :

80. *Motive power and Rolling Stock.*—An allocation of Rs. 431 million with (FEC of Rs. 234.2 million) has been made for 1978-79. The 1978-79 programme provides for the procurement of four special shunters, 30 broad gauge D. E. locomotives and 40 re-engining kits. Work on re-engining of 10 locomotives is expected to be completed. The programme also envisages manufacture of 188 passenger coaches of various types including 45 coaches for Bangladesh Railway.

81. *Construction of new lines.*—An allocation of Rs. 17.66 million has been made for 1978-79. The work of new construction will be restricted to Islamabad Spur and conversion of Mari-Indus-Bannu section from narrow gauge to broad gauge during 1978-79. Survey work and feasibility studies will also be continued on a number of proposed new lines.

82. *Pipri Marshalling Yard.*—An allocation of Rs. 30 million has been made for 1978-79. The progress of work relating to laying of track has been adversely effected for want of sleepers. However it is expected that the project would be completed during the next financial year.

83. *Rehabilitation of Track.*—An allocation of Rs. 300 million has been made for 1978-79. This includes Rs. 70 million for construction of new concrete sleeper factories. The programme envisages 96.3 miles of complete track renewal, 34.8 miles of rail renewal and 99.4 miles of sleeper renewal.

84. *Doubling of track between Kotri and Giddu including bridge over River Indus.*—An allocation of Rs. 34.8 million (FEC of Rs. 18 million) has been made for 1978-79 for completion of work relating to piers, and approaches.

85. *Telecommunications and Related signalling work.*—An allocation of Rs. 32 million (FEC of Rs. 15.17 million) has been made for the 1978-79 programme which envisages installation of telecommunication network based on a microwave back-bone from Karachi to Rawalpindi. Work of improvement of signalling has also been programmed.

Highways

86. Apart from the normal programme of development of highways under the Ministry of communications, new responsibilities have been assumed by the Federal Government by nationalization of the following highways :

- (i) Karachi—Lahore—Peshawar—Turkham.
- (ii) Karachi—Kalat—Quetta—Chaman.
- (iii) Rohri—Sukkur—Jacobabad—Sibbi—Quetta.
- (iv) D. I. Khan—Fort Sandeman—Quetta.

87. A National Highways Board has been established which would be responsible for the development and maintenance programmes of the nationalized highways.

88. An allocation of Rs. 899.43 million has been made for the Federal Highways Programme, including Ministry of Communications, Azad Kashmir, Northern Areas, FATA and other Roads. The strategy proposed during 1977-78 will continue to be followed.

89. Work on Indus Highway will be limited to the improvement of the existing right bank highway. Details of the programme are given below :

90. *Azad Kashmir*.—An allocation of Rs. 50.314 million has been made for 1978-79 for continuation of work on suspension bridges and improvement of 45 miles of the existing roads.

91. *Northern Areas*.—An allocation of Rs. 14.93 million has been made during 1978-79 for completion of construction work on road from Hunza Hotel Chowk to residency via Hospital road and metalling of road from Skardu. Two schemes for 3 tonner roads and 6 schemes for construction of jeepable roads and one bridge will also be completed. Fleet of NATCO (Northern Areas Transport Corporation) will also be augmented.

92. *FATA*.—An allocation of Rs. 3.174 million has been made for 1978-79 for construction of 40 miles of black top roads, 65 miles of shingle roads and improvement of 45 miles of existing roads.

93. *Roads/Bridges under Ministry of Communications* :—An allocation of Rs. 389.0 million has been made for 1978-79 for continuation of work on major bridges and National Highways. Details have been given below :

94. *National Highways*.—An allocation of Rs. 212.0 million has been made for 1978-79. The major works envisaged under the 1978-79 programme include completion of construction work on the Gujranwala bye-pass, the new carriageway from Shahdara to Muridke, the overhead bridge on Gujrat bye-pass, and carpetted dual carriageway mile 169/4 to 201/0 of G. T. Road, and improvement of other nationalized highway.

95. *Third Highway project*.—An allocation of Rs. 7.8 million has been made for completion of phase-II study by October/November, 1978.

96. *Major Bridges*.—An allocation of Rs. 58.15 million has been made for major Federal bridges during 1978-79. The programme envisages completion of Attock and Nowshera Bridge. In case of the D. I. Khan—Darya Khan bridge it is proposed to complete guide banks and left spurs and part of the approach road embankment. Works would gain momentum on Dadu-Moro and Ghazi Ghat bridges.

97. *Rapid Transport System*.—An allocation of Rs. 18 million has been made for finalization of Interim detailed report, final study and review by foreign experts, study tour and finalization of PC. I.

98. *Traffic Count programme*.—An allocation of Rs. 1 million has been made for 1978-79 for continuation of the traffic count programme.

99. *Other Roads—FWO*.—An allocation of Rs. 383.91 million has been made for the 1978-79 programme which envisages work relating to construction of new bridges on K. K. H. Havilian-Thakot road, widening of road and construction of bridges and culverts on K. K. H. Skardu road and roads in Azad Kashmir. In addition 6 miles of protective works for Bannu—Zewam—Shawa road will be carried out under the FATA roads. Another road viz Banu—Mianje Khel via Darub Darghy, has also been entrusted to F.W.O.

Urban Road Transport

100. *Karachi Transport Corporation*.—The programme for 1978-79 provides for import of 200 new Fiat Chassis (100 Seaters), assembly and body fabrication, purchase of spare parts for new Fiat Buses, machinery, tools and plants. However, the work in respect of on going construction of Workshop, construction of additional depots, workshop units and re-construction of depot;

workshop unit damaged during heavy rains will also be undertaken. Besides, purchase of 100 new engines, import of 100 bus chasses including their assembly, body fabrication and spare parts have been planned. The case for replacement of 74 un-serviceable vehicles will also be initiated. It has also been proposed to establish a Central Training School for better driving education and maintenance techniques.

101. A provision of Rs. 25 million has been made for the 1978-79 ADP as Federal Government equity for the Corporation. An amount of Rs. 25 million has been kept out-side the ADP as a token provision for fleet augmentation and maintenance facilities development programme. By 30th June, 1979 out of total fleet of 650, the buses on road will be 450—500. Majority of 150 off road buses will be brought under operation.

102. *Punjab Urban Transport Corporation.*—The salient features of the 1978-79 programme include procurement of 152 Fiat Buses, development of Garden Town sub-depot as operation depot, construction of a new depot at Lahore and an additional depot in Islamabad. A Central Transport Training Institute will also be established. As such the programme mainly aims at better maintenance and repair facilities. The programme also includes replacement of 150 depreciated buses. A provision of Rs. 25 million has been made as Federal Government equity to the Corporation in the ADP.

Ports and Shipping

103. The allocation for development of ports during 1978-79 is of the order of Rs. 925.4 million. Principal features of the development programme are detailed below :—

104. *Port Qasim.*—As in the last financial year, the main thrust of the Port Qasim Authority would be directed towards the construction of Marginal Wharf (4 berths), iron ore and coal berths, acquisition of craft and equipment, aids to navigation and related works/essential infrastructure and preliminaries for dredging of navigation channel. The completion of the port facilities are also scheduled as to cater for ships of 25,000 dwt during 1977-78 and 50,000 dwt by mid-1979. This would be in accordance with the time schedule of operations of the Karachi Steel Mill, as well as to relieve acute congestion at Karachi Port.

105. An allocation of Rs. 670 million has been made for 1978-79 which exceeds the 1977-78 allocation and expenditure by 126% and 114% respectively. The port is expected to start functioning partly in January, 1979. The 1978-79 programme envisages continuation of work relating to construction of Marginal Wharf (4 berths) and Iron Ore and Coal berth, channel dredging and navigational aids.

106. *Karachi Port.*—An allocation of Rs. 205.30 million has been made for 1978-79 for ongoing works under the Third, and Fourth Projects of Karachi Port, in addition to normal civil and mechanical works. Under the Third Port Project major works envisaged for completion are the quay structure and apron works and transit sheds at Juna Bunder, addition to the new Napier Mcle Bridge over Chinna Creek and the container storage park. Completion of Third Project of Karachi Port will increase the handling capacity of the port facilities by about one million tons of equivalent dry general cargo per annum. The new port railway yard will have handling capacity of 1000 wagons per day. Under the IVth project, the new oil berth with 5.0 million tons capacity is expected to be commissioned while channel dredging and construction of trailing suction hopper dredger would continue.

107. *Napier Mole Bridge.*—An allocation of Rs. 31 million has been made for 1978-79, for the project expected to be completed during the year.

108. *Pakistan Marine Academy.*—An allocation of Rs. 15 million has been made for completion of the building and provision of training aids during 1978-79.

109. *Seamen's Training Centre.*—An allocation of Rs. 1.00 million has been made for 1978-79 for completion of the Centre.

110. *Gawadar Harbour.*—An allocation of Rs. 1.00 million has been made for 1978-79 for completion of survey work and investigations.

111. *Navigational Aids.*—An allocation of Rs. 1.00 million has been made for 1978-79 for installation of radio telephone communication between Cape Monze lighthouse and other lighthouses on Mekran coast.

112. *Shipping.*—The foremost emphasis during 1978-79 in the Shipping Sector is to complete the merger of the two Shipping Corporations, initiate joint operations and evolving a system of accounting and re-organization.

113. Detailed studies of the new acquisition programme of 16 to 21 liner facilities during 5th Plan period will be made in 1978-79. It is expected that orders for about 10 ships will be placed with a foreign shipyard, and order for six ships with the Karachi Shipyard.

114. This acquisition programme will be based on country/supplier's credit under a bilateral arrangement.

Civil Aviation

115. The PIA fleet is expected to expand 2.5 times between 1978—81. This expansion is over and above the three hundred per cent increase which has already been achieved by PIA during the period 1973—77. The department of Civil Aviation have not been able to catch up with P.I.A's earlier expansion and it is imperative that infrastructure facilities are extended and strengthened to meet the requirement associated with the planned increase. Keeping in view these facts the following strategy will be followed for the development of Civil Aviation during 1978-79.

- (a) The existing infrastructure will be consolidated with capacity of expansion wherever absolutely necessary.
- (b) Top priority will be given to passenger safety and operation by providing telecommunication and navigational aids.
- (c) Ground safety measures covering fire fighting and rescue service will be provided.
- (d) Interim expansion of terminal facilities at Karachi and Lahore will be corrected out where congestion has already reached a critical stage.
- (e) Training and engineering facilities will be expanded and research in the field of Civil Aviation will be initiated in the country.

116. An allocation of Rs. 139 30 million has been made for 1978-79 to carry out urgent works according to the above strategy. Work on establishment of new airports at Saïdu Sharif and Ormara will be accelerated. Work on Panjgur airport will also be taken in hand. Efforts will be required for planning of projects for the 5th Plan period. The UNDP assistance for establishment of Civil Aviation Training Institute at Hyderabad is expected to become available during 1978-79.

117. *P.I.A.*—During the year 1978-79, it is proposed to augment cargo capacity of the air-line from 384 million available tonne kilometers in 1977-78 to 562 million available tonne Kilometers. Passenger capacity is expected to increase from 7268 million available seat Kilometers to 8,572 million available seat Kilometers, which means an increase of about 46.3% and 17.9% respectively.

118. The traffic forecast for 1978-79 anticipated passenger traffic at 5,483 million passenger Kilometers and freight traffic at 236 million freight tonne Kilometers indicates an increase of 21.7% and 27.6% over the year 1977-78. (Annexure-III)

119. The 1978-79 programme mainly constitutes continuation of work on the on-going projects, namely wide bodied air-craft hanger, PIA Air Cargo terminal at Karachi, computerised reservation and passenger check-in-system at Karachi and other ancillary works.

120. For the augmentation of capacity orders will be placed for wide bodied air-crafts.

Telecommunications

121. An allocation of Rs. 485.00 million has been made for the expansion and improvement of telecommunications system in 1978-79. Of this, Rs. 460.00 million have been earmarked for T & T Department and Rs. 25.00 million for Special Communication Organization for development of telecommunication in Azad Kashmir and Northern Areas.

TELEPHONE AND TELEGRAPH DEPARTMENT

122. *Traffic*—The trunk traffic has grown at the rate of 11 per cent from 18 million 1964-65 to 50.70 million in 1974-75 and at the rate of 14% the trunk traffic is expected to reach a level of 145 million calls in 1983.

123. Being the first year of the Fifth Plan, the programme for 1978-79 has been prepared within the framework of the Fifth Plan strategy outlined below :

- (a) To augment long distance and subsidiary trunk routes capacity to cope with 14% annual growth in traffic, to connect new places and remote areas and increase national/international traffic handling capacity of the links and to establish reliable links in NWFP and Baluchistan including Mekran coast.
- (b) To accelerate the expansion of telephone facilities to rural and under developed areas by establishing on a rational basis, long distance public call offices either in telegraph or sub-post offices.
- (c) To raise the telephone density from 3.86 to 5.45 per 1000 persons by installing 200,000 new telephone lines, there by utilizing the manufacturing capacity to full extent.
- (d) To complete National Wide Dialling (NWD) facilities for 61 towns/cities.
- (e) To continue modernization and improvement of Telegraph and Telephone Services.
- (f) To develop local manufacturing of sophisticated telecommunication equipment, spares and primary and secondary cables.
- (g) To augment international telecommunication channels *via* satellite.
- (h) To increase telephone exchanges to a total of 1075, 875 in rural areas and 200 in urban areas.

124. *Accordingly main targets for 1978-79 programme are as follows.*—(The physical targets achieved during 1977-78 and physical targets for 1978-79 are given in Annexure-IV.)

- (i) Installation of 25,000 telephones.
- (ii) Installation of 14 N.W.D. stations 57 exchanges and 24 trunk positions.
- (iii) On long distance network work will progress on Mardan—Chitral, Mardan—Saidu Sharif, Quetta—Warrechah, Sahiwal—Arifwala—Burewala—Chishtian, Okara—Sahiwal, Multan—Khenawal microwave links and Chishtian—Bhawalnagar coaxial cable system.
- (iv) Telex and gentex exchange at Quetta will be commissioned and 19 telegraph more offices will be converted into teleprinter offices for rapid handling of telegrams.
- (v) 55 long distance Public Call Offices will be installed and 1600 Kms of land line will be erected in the different parts of the country.

125. *Special Communication Organization.*—In the Northern Areas, 530 telephones and 5 exchanges will be installed and existing 2 exchanges will be expanded. Two carrier systems of 8 channels and 3 H.F. stations will be established, one long distance Public Call Office will be opened and 548 Kms of overhead lines will be erected. In Azad Kashmir, 665 telephones and 4 exchanges will be installed and existing 6 exchanges will be expanded, 3 carrier systems of six channels and four U.H.F. links will be established, 6 long distance Public Call Offices will be opened and 500 Kms of open wire lines will be erected.

POST OFFICES

126. An allocation of Rs. 26.00 million has been made for Pakistan Post Office Department for 1978-79 fiscal year. Out of this Rs. 11.00 million will be spent on the Post Office Directorate General building and residential quarters at Islamabad. This project is now in its final stages and will be completed by the end of the current financial year. An amount of Rs. 13.00 million will be spent on the other on-going works relating to construction of 81 operational buildings and 327 residential quarters. During the year 1978-79, 600 post offices will be opened, 525 in rural areas and 75 in urban areas.

N.T.R.C

127. An allocation of Rs. 0.80 million has been made during 1978-79 for National Transport Research centre for research studies in the field of Transportation.

PROVINCIAL PROGRAMMES

128. The allocation for provincial programme during 1978-79 amounts to Rs. 613.143 million in the public sector.

129. The problem adversely affecting the road development programme in the past was due to ever increasing number of road projects which resulted in thinning out of resources, lengthening of the gestation period and consequential escalation in their cost. Inclusion of new schemes aggravated the situation further and economic returns anticipated from these projects could not therefore, be realised.

130. The strategy adopted previously has been continued for 1978-79 as well i.e. over-riding objective to complete the on-going projects by allocating major provisions to those schemes which are in final stages of completion and addition of only a few number of new schemes to ensure realization of promised benefits in a short period. This reallocation of priorities is therefore strongly indicated and projects of higher priorities have been retained in the programme.

131. The situation has not improved in case of province of Sind, where the number of schemes is rather large.

132. Province-wise details of development programme are given below. It may be pointed out that projects of national importance have already been brought under the control of the Federal Government.

BALUCHISTAN

133. *Roads.*—An allocation of Rs. 54.75 million has been made for 1978-79 out of which Rs. 37.05 million have been earmarked for 8 on-going projects and Rs. 17.7 million for 12 new schemes. The allocation for individual schemes deteriorated from Rs. 4.371 million in 1977-78 to Rs. 3.737 million in 1978-79. This is due to inclusion of new projects. The programme envisages construction ofmiles of blacktop roads.....miles of shingle roads and improvement of.....miles of existing roads.

134. The total number of schemes for ADP is 20 out of which 8 are on-going carry/over and 12 are new schemes.

N.W.F.P.

135. An allocation of Rs. 123.193 million has been made for construction of 69 miles of blacktop and 61 miles of shingle roads in addition to 147 miles of improvement and completion of work on 11 bridges. In order to achieve maximum benefits from investment in this sector the average allocation per scheme has been increased from 1.032 million in 1977-78 to 1.935 million in 1978-79. Total number of schemes is 73 out of which 66 are on-going and 7 are new schemes.

136. *Road Transport.*—An allocation of Rs. 20.00 million has been made in semi-public sector for import of 60 buses, spare parts etc. In addition Rs. 9.00 million will be raised through debentures.

SIND

137. *Roads.*—An allocation of Rs. 191.05 million has been made for 1978-79 for construction of 126 miles of new roads and improvement of 112 miles of existing roads in addition to import of machinery which will be imported on receipt of foreign loans. However, as regards the average allocation per scheme in the province, the position has deteriorated as the average allocation per scheme cannot exceed Rs. 0.772 million during 1978-79 as compared to Rs. 0.853 million during 1977-78. Total number of schemes included in the ADP stands at 238 with 221 on-going and 17 new schemes.

138. *Sind Road Transport Corporation.*—The SRTC has 624 buses on its strength of which 215 are road worthy while 174 are held up for major repairs. The remaining 235 buses have either been fully depreciated or going to be depreciated during 1978-79, and will have to be disposed off being beyond the economical repairs. SRTC has programmed to repair 174 buses upto November, 1978. Thus the road worthy fleet will be raised to 389. However, during the year 1978-79, another 69 buses will outlive their economic lives and the net road worthy fleet will reduce to 320 buses by end of 1978-79. The programme being credit-oriented has been kept out side the ADP with an allocation of Rs. 36 million during 1978-79.

PUNJAB

139. *Roads*.—An allocation of Rs. 240.2 million has been made for 1978-79. The 1978-79 programme provides for construction of 75 miles of new roads and widening/improvement of 100 miles of existing roads. Priority has been given for widening/improvement of Lahore-Gujranwala road, Gujrat-Sargodha road, Mianwali-Muzafargarh road and D. G. Khan-Fort Munro road. The programme also caters for the 2nd carriageway between Lahore and Shekhpura and overhead bridges at Okara, Rahimyar Khan and Sadiqabad. It may be pointed out that Rs. 90 million have been provided for restoration of flood damages. This leaves only Rs. 150 million for 206 schemes out of which 196 schemes are on-going. It is felt that this amount is inadequate for such a large number of schemes giving only Rs. 0.728 million for the individual schemes. Even the overall average allocation per scheme is less i.e. Rs. 1.47 million during 1978-79 as compared to Rs. 1.26 million during 1977-78. To remedy the situation the provincial government have avoided inclusion of new schemes in their programme. Total number of schemes for 1978-79 is 205 of which 195 are on-going and 10 new schemes. Out of 195 ongoing schemes, 76 pertain to restoration of flood damages with an allocation of Rs. 10.00 million during 1978-79.

140. *Road Transport*.—An allocation of Rs. 3.50 million has been made for 1978-79 for completion of depot at Sialkot, import/local purchase of machinery, purchase of training aids such as simulators/dual control vehicles etc. in addition to establishment of a cell for research study in the Transport Department of Provincial Government. The programme being credit-oriented will be executed as and when credit becomes available during 1978-79.

FINANCIAL ALLOCATION DURING 1977-78 & 1978-79

(Rs. in Million)

Sector/Sub-Sector	1977-78			1978-79		
	Original Allocation	Utilization	Performance %	Allocation	Percent of Total T&C Sector	Acceleration Deceleration 1977-78/1978-79%
1	2	3	4	5	6	7
Public Sector :						
<i>A—Federal :</i>						
1. Pakistan Railway	935.70	660.00	70.54	1,000.00	22.82	+6.87
2. Ports and Shipping :						
(i) D. G. P & S	23.50	23.50	100	19.10	0.43	-18.42
(ii) Port Qasim	530.00	590.00	111.32	670.00	15.29	+26.42
(iii) Napier Mole Bridge	22.00	22.00	100	31.00	0.70	+40.91
Sub-total P & S	<u>575.50</u>	<u>635.50</u>	<u>110.43</u>	<u>720.10</u>	<u>16.44</u>	<u>+25.13</u>
3. Civil Aviation	92.43	116.566	126.11	139.30	3.10	+50.71
4. Roads :						
(a) Azad Kashmir	35.128	40.789	116.12	50.314	1.14	+43.23
(b) Northern Area	10.10	13.384	132.52	12.930	0.29	+28.02
(c) FATA	50.00	66.728	133.46	63.174	1.44	+26.35
(d) Other Roads	310.00	360.762	116.37	383.910	8.76	+23.84
(e) National Highway	—	—	—	75.00	1.71	—
(f) M/o Communications :						
(i) Roads & Bridges	199.70	107.240	53.70	176.81	4.02	-11.47
(ii) Additional Provision	—	—	—	137.30	3.13	—
Sub-total Roads	<u>604.928</u>	<u>588.903</u>	<u>97.35</u>	<u>899.438</u>	<u>20.54</u>	<u>+48.68</u>
5. Road Transport :						
(a) N.A.T.Co.	8.000	8.000	100	2.000	0.04	+75.00
(b) F.U.T.C.	25.000	26.244	105.10	50.000	1.14	+100.00
6. N.T.R.C.	1.30	0.827	63.62	0.800	0.02	-38.46
7. Telegraph & Telephone	415.00	415.00	100	460.000	10.50	+10.84
8. Special Communication organization	15.00	15.000	100	25.00	0.57	+66.66
9. Post Offices	15.00	15.000	100	26.00	0.59	+73.33
10. Science & Technology Division	0.200	—	—	—	—	—
Sub-Total—(Federal)	<u>2,688.058</u>	<u>2,481.130</u>	<u>92.30</u>	<u>3,322.638</u>	<u>75.85</u>	<u>+23.60</u>

	1	2	3	4	5	6	7
<i>B.—Provincial :</i>							
1. Roads in Punjab	320.00	302.323	94.48	240.20*	5.48	—24.94	
2. Punjab Road Transport Board	2.60	1.228	47.23	3.50	0.08	+34.62	
3. Roads in Sind	238.90	188.502	78.90	191.50	4.37	—19.84	
4. Roads in NWFP	105.304	110.565	104.99	123.193	2.81	+16.99	
5. NWFP Road Transport Corporation	4.000	—	—	—	—	—	
6. Roads in Baluchistan	74.316	74.244	99.90	54.75	1.24	—26.33	
Sub-Total—(Provincial)	745.12	676.862	90.84	613.143	13.65	—17.71	
Total—Public Sector	3,433.178	3,157.992	91.98	3,935.781	89.85	+13.18	
<i>A.—Semi Public Sector :</i>							
1. Karachi Port	200.00	156.00	78.00	205.30	4.57	+2.65	
2. Shipping	—	—	—	—	—	—	
3. P.I.A.C.	192.80	179.80	93.26	200.40	4.46	+3.9	
4. F.U.T.C.	—	—	—	25.00	0.57	—	
Sub-Total—(Federal)	392.80	335.80	85.40	430.70	0.84	+9.64	
<i>B.—Provincial</i>							
1. P.R.T.B.	13.00	—	—	—	—	—	
2. S.R.T.C.	—	—	—	—	—	—	
3. N.W.F.P. (RTC)	17.00	—	—	13.78	0.31	—18.94	
Sub-Total—Provincial	30.00	—	—	13.78	0.31	—54.06	
Total—Semi Public Sector	422.80	335.80	79.42	444.48	10.15	+5.13	
GRAND TOTAL—T & C	3,855.978	3,493.792	90.60	4,380.261	100.00	+13.60	

* This is exclusive of Rs. 7.30 million provided for Muree—Kahuta Development Authority.

IMPORT AND SALE OF ROAD TRANSPORT VEHICLES

Year	Imports			Sale		
	Trucks	Buses	L.C.V.	Trucks	Buses	L.C.V.
PRIVATE SECTOR						
1972-73	4,518	888	—	3,586	795	—
1973-74	8,310	2,932	2,610	3,909	2,443	2,317
1974-75	4,968	3,316	4,875	5,848	1,901	5,141
1975-76	6,700	2,430	11,338	3,305	2,438	5,686
1976-77	598	1,512	—	3,347	952	14,162
1977-78	1,788	120	7,498	3,267	805	9,397
PUBLIC SECTOR BUSES SALES						
Year						No.
1972-73	..	..	..	..	..	482
1973-74	..	..	..	..	..	1,520
1974-75	..	..	..	..	..	1,288
1975-76	..	..	..	..	..	1,544
1976-77	..	..	..	..	..	—
1977-78	..	..	..	..	..	—

*Provisional.

P.I.A.C.

The detailed comparison of estimated figures for 1977-78 and 1978-79 are given below :

(Figures in Million)

	1977-78	1978-79	Increase %
RPK's	4505	5483	21.7
ASK's	7268	8572	17.9
RFTK's	185	236	27.6
AFTK's	384	562	46.7

The projected increase during 1978-79 in RPK's is 21.7% and increase in RFTK's is 27.6% over that of 1977-78. Corresponding increase in capacity is projected to be 17.9% in ASK's and 46.3% in AFTK's.

TELECOMMUNICATIONS

Achievement during 1977-78 and physical targets for 1978-79.

Sl. No.	Items	Position on 30-6-77	Achievement 1977-78	Position on 30-6-78	Target 1978-79	Position on 30-6-79
1.	Telephones	269,000	18,040	286,540	26,095	312,635
2.	Density per 1000 Population	3.57	—	3.80	—	4.0
3.	Places provided with :					
	(a) Telephone exchanges	643	18	661	57	718
	(b) Public Call offices	606	50	656	62	718
	(c) All places with telephone facilities ..	1249	68	1317	119	1436
4.	Trunk positions	568	16	584	24	608
5.	N.W.D. Stations	13	23	36	14	50

CHAPTER 16

MASS MEDIA

The development programme included in the Fifth Plan envisages growth of mass media coverage both in terms of area and population alongwith emphasis on adult functional literacy and non-formal instructional programmes. Specifically the objectives are :

- (i) To extend the coverage of radio and T.V. signals to less developed regions.
- (ii) To strengthen the role of media in instructional and educational fields especially for the less privileged sections of the society.
- (iii) To create awareness of the problems and prospects of rural development through the media in order to win support, co-operation and participation of the people.
- (iv) To improve the operational efficiency and strengthen the performance of radio and T.V.

2. An allocation of Rs. 749.43 million has been made in the Fifth Plan for mass media. Of this, Rs. 137.57 million have been earmarked for the first year of the Plan, 1978-79.

REVIEW OF A.D.P, 1977-78

3. Rupees 180.400 million were allocated to the Mass Media Sector in the A.D.P, 1977-78, against which an expenditure of Rs. 121.420 million was incurred by June, 1978, showing a 67.8 per cent utilization. The following table shows the financial allocations and utilization :

TABLE 1.
Financial Allocation and Utilization, 1977-78

Agency	Allocation	Revised Estimates	Percentage
1. Pakistan Broadcasting Corporation	56.40	46.12	82
2. Pakistan Television Corporation	98.60	73.60	75
3. Associated Press of Pakistan (APP)	3.60	1.70	47
4. State Film Authority	1.00	—	—
5. National Academy for Films, Radio and Television.	18.80	—	—
6. Development Support Communication Centre ..	2.00	—	—
Total ..	180.40	121.420	

4. The allocations of Rs. 21.00 million for the defunct S.F.A, the National Academy for Films, Radio and Television, and Development Support Communication Centre could not be utilised as the schemes did not receive approval during the year.

5. The agency-wise physical implementation of the Pakistan Broadcasting Corporation, Pakistan Television Corporation and Associated Press of Pakistan is given in the following paragraphs.

Pakistan Broadcasting Corporation

6. *Financial Allocation and Utilization.*—The Pakistan Broadcasting Corporation was allocated Rs. 56.40 million for 1977-78 against which the expenditure by end of June, 1978 stood at Rs. 46.12 million, showing a 82 per cent utilization. The area and population coverage of radio was 62 and 88 per cent, respectively, by the end of the year. The physical progress in major projects is given below :

- (i) 1000 KW MW Transmitter, Islamabad.—The transmitter is operational. Power supply generator has been received and the installation of air-conditioning equipment completed. Work on the directional antenna has started. The project was completed to the extent of 85 per cent as against 75 per cent achieved upto 1976-77.
- (ii) Broadcasting House, Islamabad. —Ninety per cent of works, including installation of equipment, the acoustic treatment of the studios and the work on air-conditioning plant was completed.
- (iii) 300 KW M.W Transmitter, Peshawar. —The transmitter is operational. The remaining civil works have been completed. Tenders for the installation of emergency power supply generator and air-conditioning equipment were received and finalised. The project was implemented upto 85 per cent.
- (iv) Broadcasting House, Peshawar —The equipment has been received and work on foundations of the building has been completed. Estimates for the rest of civil works are expected to be received. About 30 per cent work was completed.
- (v) 100 KW MW Transmitter, Muzaffarabad. —The work on access road remained in progress. Orders for certain equipment required for the fabrication of transmitter have been placed. About 15 per cent progress on the project was reported.
- (vi) 100 KW MW Transmitter, Karachi. —The transmitter is operational. The outstanding work of the generator and air-conditioning equipment was completed. The projects has been completed to the extent of 96 per cent.
- (vii) 100 KW MW Transmitter and Broadcasting House, Khairpur. —The work on construction of the transmitter building was progressing satisfactorily. The fabrication of major transmitter was completed. Sixty-five per cent progress has so far been registered.
- (viii) 10 KW MW Transmitter, D.I. Khan. —Most of the equipment has been procured and some civil works started at site.

PROGRAMME PERFORMANCE

7. The output of broadcasting in terms of transmitting hours during 1977-78 was 1,32,495 hours. The average duration of transmission time from all stations stood at 190 hours a day, including 160 hours for home and external services and 30 hours of programmes on second channel facilities created at Karachi, Hyderabad, Quetta and Lahore. The average duration of various categories of programmes broadcast daily for all audiences works out to 56.50 hours of general purpose programmes, including religious, educative, literary/cultural items ; 106.50 hours of music/entertainment ; 11.50 hours for special audiences (farmers, women, children, etc.) ; 11.01 hours for news and current affairs, and 4.5 hours of commercial advertising. Substantial time in regional languages was devoted to programmes especially addressed to rural audiences.

8. *Education Programmes.*—The radio broadcast 4,000 hours of programmes meant for rural audiences during the year. Besides, the following programmes, sponsored by Allama Iqbal Open University were put on the air during 1977-78 :

	Average time daily all stations
1. Kitchen gardening	5 hours
2. Primary Teachers orientation course	5 hours
3. Arabic Lessons	2 hours

TRANSMISSION COST

9. The cost of radio programmes transmitted was estimated at Rs. 19.70 per minute during 1977-78, compared to Rs. 14.73 per minute in 1976-77 and Rs. 12.74 in 1975-76. An increase of 17 per cent was recorded in the per minute cost in 1977-78 as compared to 15.6 per cent during 1976-77. The increase was due to higher costs of programme management and programme transmission. The following table shows the details :

TABLE 2
P.B.C. Programme Cost and Unit Cost

Year	Recurring Expenditure* (Rs. Million)	Total Transmission hours (Thousand)	Unit Cost per minute (Rs.)	Percentage increase in unit cost over previous year
1972-73	41.50	99.80	6.93	—
1973-74	68.80	116.60	9.88	42.6
1974-75	85.70	127.30	11.22	13.6
1975-76	99.58	130.20	12.74	13.5
1976-77	116.70	132.50	14.73	15.6
1977-78	157.00	132.50	19.70	17.0

*Includes depreciation cost of equipment.

Pakistan Television Corporation

10. A sum of Rs. 98.600 million was allocated to the Pakistan Television Corporation in 1977-78, against which the expenditure by June, 1978 was, Rs. 73.60 million, showing a 75 per cent utilization. The physical progress on various PTV schemes by 30th June, 1978 is as follows :

- (i) *Islamabad T.V. Complex.*—Against the total cost of Rs. 214.65 million, Rs. 89.94 million were spent on the project by June, 1978. The administrative block of the complex has been completed and work on the construction of studio and technical area is in progress. The procurement of remaining equipment has already started.
- (ii) *Television Centres, Lahore and Karachi.*—The civil works on extension of building at both stations were progressing satisfactorily. The installation of colour equipment earlier received has since been completed.
- (iii) *Television Centres, Peshawar and Quetta.*—The civil works of Peshawar T.V. Centre awarded in 1976-77 were proceeding according to the schedule. Sixty per cent work on the project was completed by end of June, 1978. The contract for civil works, at Television Centre, Quetta could not be finalised as the response to the Corporation's invitation for tenders was poor and the rates quoted by some of them were exorbitant. It has been decided to re-invite tenders.
- (iv) *Re-broadcast Centre, Rojhan.*—The major part of civil works and the installation of equipment at the re-broadcast centre, Rojhan has been carried out. The re-broadcast centre is expected to go on air in August, 1978.

PROGRAMME PERFORMANCE

11. The Pakistan Television Corporation telecast general purpose and public service programmes for 13,200 hours during 1977-78 from all stations or 254 hours weekly. The average weekly duration of various categories of programmes is : news and current affairs 30 hours ; education, motivation and information 104 hours ; music/entertainment 110 hours ; commercial spot advertising 9 hours ; miscellaneous programme 1 hour. The ratio of imported programme to locally produced programmes is 1 : 5.

12. *Instructional Programmes.*—The PTV has set up 200 Community Viewing Centres under its Adult Functional Literacy Programmes for imparting basic education to 48,000 persons per annum. The programmes had to be suspended during the year on account of re-organization of IRDP/PWP programmes and difficulties in the apportionment of financial responsibility. However, a weekly 1/2 hour programme was telecast for rural audiences and 1/2 hour weekly for Arabic lessons during 1977-78.

PROGRAMME COST

13. The Pakistan Television Corporation operated 3 main T.V. stations, Rawalpindi-Islamabad, Lahore and Karachi and two pilot T.V. Centres at Quetta and Peshawar. Other Boosters/Rebroadcast Centres were at Murree, Cherat, Sakesar, Thana Bulla Khan, Shikarpur, Shujabad, Sahiwal and T.V. links at Murree-Thandiani and Lak-pass. The transmission cost of 13,200 hours of programmes was Rs. 213.200 million. The programme cost was Rs. 269.19 per minute in 1977-78, against Rs 228.82 per minute in 1976-77. This was mainly due to increase in production and management expenses related to generally inflationary trend. The following table shows the details :

TABLE 3
PTV Programme Cost and Unit Cost

Year	Recurring Expenditure (Rs.Million)	Total yearly programme hrs. transmitted (thousand)	Unit cost per minute (Rs.)	Percentage increase over previous year
1972-73	31.10	5.56	93.22	—
1973-74	49.90	7.17	116.00	24.4
1974-75	81.43	9.54	142.26	22.6
1975-76	136.20	12.92	175.96	23.7
1976-77	181.23	13.20	228.82	30.0
1977-78	213.20	13.20	269.19	17.6

*Including depreciation cost of equipment.

14. The pace of expansion in the television services over the last few years was very rapid. The cost of running T.V. services, therefore, increased from Rs 31.10 million in 1972-73 to Rs. 181.23 million in 1976-77 and is estimated at Rs. 213.20 million in 1977-78. An increase of 17.6 per cent was registered in the unit cost of per minute transmission during 1977-78, as compared to 30 per cent during 1976-77.

POPULATION AND AREA COVERAGE

15. During 1977-78, the Pakistan Television Corporation signal coverage stood at 50 per cent of the population and 60 per cent of the total area of the country. The total number of TV sets stood at about 5.0 lakh.

Associated Press of Pakistan

16. Rupees 3.600 million were allocated to Associated Press of Pakistan (APP) in 1977-78 for the establishment of R.T.T. system. An expenditure of Rs. 1.70 million was incurred against the allocation or 47.2 per cent. The equipment was received and the project was completed to the extent of 40 per cent by the end of June, 1978.

Culture Division (Films)

17. A sum of Rs. 1.00 million was allocated to the disbanded State Film Authority in the A.D.P., 1977-78 for two schemes namely ; (i) The National Motion Picture Library and Archives and (ii) The National Motion Picture Dubbing and Sub-Titling Unit. The agency was wound up and the projects were taken over by the Culture Division. No physical progress was achieved due to non-release of funds.

PROGRAMME FOR 1978-79**Financial Allocation**

18. The A.D.P. for the Mass Media agencies for 1978-79 is Rs. 137.57 million (F.E.C. Rs. 37.300 million) as against the expenditure of Rs. 121.42 million in 1977-78. The A.D.P. allocations are mainly for the on-going projects. The agency-wise break-up is given below.

TABLE 4
A.D.P. 1978-79 for Mass Media Sector

		(Rs. Million)	
S.No.	Name of Agency	Total	F.E.C.
I. Ministry of Information and Broadcasting :			
1.	Pakistan Broadcasting Corporation	43.07	7.00
2.	Pakistan Television Corporation	92.70	29.50
3.	Associated Press of Pakistan	0.50	—
	Sub-Total I ..	136.27	36.50
II. Culture Division :			
4.	Film, Archives and Dubbing Schemes	1.30	0.80
	Sub-Total II ..	1.30	0.80
	GRAND TOTAL (I—II) ..	137.57*	37.30

*Excluding 0.61 million provided in the Punjab Budget.

Pakistan Broadcasting Corporation

19. A sum of Rs. 43.070 million has been provided for the Pakistan Broadcasting Corporation (Details in Annexure-I) compared to an expenditure of Rs. 46.120 million during 1977-78. The major physical and financial targets of the Corporation projects for 1978-79 are :

(i) 1000 KW MW Transmitter, Islamabad.—Against the total cost of Rs. 54.204 million, Rs. 44.642 million, were spent by the end of June, 1977-78. During 1978-79, Rs. 1.00

million will be spent on the installation of air-conditioning plant and the construction of power house building. Major portion of the work pertaining to additional directional antenna is also expected to be completed. The project will be completed 100 per cent by the end of the year.

- (ii) *Broadcasting House, Islamabad.*—The project will be completed 100 per cent during the year and will become operational. Against the total cost of Rs 86.675 million, Rs. 76.322 million were spent by 1977-78, and Rs. 5.00 million have been provided for the project during 1978-79.
- (iii) *300 KW MW Transmitter, Peshawar.*—The total cost of the project is Rs. 38.752 million of which, Rs. 30.497 million were spent by the end of June. During 1978-79, Rs. 3.00 million will be spent on the air-conditioning work and installation of the generator.
- (iv) *Broadcasting House, Peshawar.*—Against the total cost of Rs. 20.023 million, Rs. 10.542 million were spent upto 1977-78. Rs. 3.00 million have been provided in the A.D.P. 1978-79 to start the construction work on the main building. The project is expected to be completed by 60 per cent by the end of June, 1978-79.
- (v) *100 KW MW Transmitter, Karachi.*—Against the total cost of Rs. 14.642 million, Rs. 13.156 million were spent by the end of 1977-78. During 1978-79, Rs. 0.7 million will be spent. The project is expected to be completed by 100 per cent during the year.
- (vi) *100 KW MW Transmitter and Broadcasting House, Khairpur*—The total cost of the scheme is Rs. 17.846 million, of which Rs. 16.249 million were spent by June, 1978. Rs. 1.60 million have been provided in the A.D.P. 1978-79 to complete the project by 80 per cent. The construction of transmitter building and fabrication of the transmitter will be completed while installation of transmitter will be taken in hand.
- (vii) *300 KW MW Transmitter and Broadcasting House, Khuzdar.*—Against the total cost of Rs. 52.253 million, a token provision of Rs. 0.10 million has been made during 1978-79.
- (viii) *10 KW MW Transmitter, D.I. Khan.*—Rs. 5.004 million have been spent on the project against the total cost of Rs. 13.330 million up to June, 1978. During 1978-79, Rs. 3.00 million will be spent on the implementation of project to the extent of 40 per cent.
- (ix) *100 KW MW Transmitter, Muzaffarabad.*—The total cost of the scheme is Rs. 18.093 million against which Rs. 8.055 million were spent by 1977-78. Rs. 5.00 million have been provided during 1978-79. About 25 per cent physical progress is expected to be achieved during the year. The construction of the building will be started. The components of transmitter ordered earlier will be received and the work on the fabrication of the transmitter will be undertaken. Some more equipment will be ordered as per foreign exchange allocation made.
- (x) *Village Broadcasters.*—Rs. 3.71 million were spent on the project against the total cost of Rs. 14.967 million by the end of June, 1978. Rs. 3.00 million have been earmarked for the project in the current A.D.P. to complete the project to the extent of 40 per cent by June, 1979. Work will be started on at least two village broadcasters in the revised shape and form.

AREA AND POPULATION COVERAGE AND SPECIAL PROGRAMMES

20. The area and population coverage during 1978-79 will remain at 62 per cent and 88 per cent, respectively. In line with the Fifth Plan emphasis on formal/non-formal education programmes, the radio would put on air special educational programmes of 4,000 hours for the rural population per annum. In addition, it will carry the Allama Iqbal Open University programmes from all its stations. The average programme duration for Open University will increase from 5 hours daily in 1977-78 to 7 hours daily in 1978-79.

Pakistan Television Corporation

21. The total size of A.D.P. for Pakistan Television Corporation is Rs. 92.700 million (Details in Annexure-II) which is 26 per cent higher than the revised estimates of Rs. 73.600 million for 1977-78.

- (i) *Islamabad T.V. Complex.*—During 1978-79, Rs. 26.00 million have been provided for completion of the project by 54 per cent. The construction work will reach an advanced stage. Studio equipment will be received and air-conditioning plant procured during the year.
- (ii) *Lahore and Karachi T.V. Stations.*—Against the total cost of Rs. 122.270 million for Lahore T.V. Centre and Rs. 1131.120 million for Karachi T.V. Centre, Rs. 65.150 million and Rs. 63.319 million, respectively, had been spent on the two projects by June, 1978. During 1978-79, Rs. 20.00 million each have been provided for both the projects. Under the programme, the phase II of civil works will be started at Karachi. The equipment earmarked for the two stations will be received. About 73 and 70 per cent physical progress respectively will be achieved on these projects during the year.
- (iii) *Quetta and Peshawar T.V. Centres.*—The total cost of Quetta and Peshawar T.V. Centres was Rs. 113.020 million and Rs. 108.320 million, respectively. Of this, Rs. 59.159 million were spent on Quetta T.V. Centre and Rs. 68.204 million on Peshawar Centre by June, 1978. During 1978-79, Rs. 7.00 million will be spent on Quetta, and Rs. 18.00 million on Peshawar T.V. Centres. The civil works at Peshawar T.V. Centre will be largely completed and equipment received. About 72 per cent of the project will be completed by June, 1979. In case of Quetta T.V. Centre, the civil works will continue. About 59 per cent physical progress is expected to be achieved during the year.

EDUCATION PROGRAMMES

22. During 1978-79, the PTV will re-start its Adult Functional Literacy Programme and will establish another 222 Community Viewing Centres (CVCs) bringing the total number of CVCs to 422. The PTV will provide Adult Functional Education to 50,000 persons within the target areas and an equal number of persons in non-target areas. It will launch 1-hour weekly programmes, each on vegetable gardening, "Kaam ki Baat", and basic agriculture practices for increasing agricultural productivity during 1978-79. It will also telecast the programmes sponsored by the Allama Iqbal Open University during the year in the field of formal and nonformal education.

23. *Population and Area Coverage.*—During the year, the Rojhan Rebroadcast Centre will be commissioned which will cover 2.40 million population in an area of 8,000 square miles. The cities to get T.V. signal are Khanpur, Rahim Yar Khan, Sadiqabad, Kashmore, Mithan Kot, Kand Kot, Mirpur Mathelo and Sui. In terms of additional population and area coverage it comes to 3.28 per cent and 2.66 per cent respectively.

Associated Press of Pakistan (APP)

24. A sum of Rs. 0.500 million has been allocated to the Ministry of Information and Broadcasting for the development programme of Associated Press of Pakistan. The amount will be utilised for the establishment of Radio Teleprinter Transmitter (R.T.T.).

Culture Division (Films)

25. A sum of Rs. 1.300 million (F.E.C. Rs. 0.800 million) was allocated in the A.D.P. 1978-79 for the establishment of the motion picture library and archives and a motion picture dubbing and subtitling unit in films development programme of the Culture Division.

SCHEME-WISE ADP OF PAKISTAN BROADCASTING CORPORATION, 1978-79

(Million Rs.)

S.No.	Name and Status of the Scheme	Estimated Cost		Estimated Exp. upto 1976-77	Revised Estimates for 1977-78	Estimated Physical implementation upto June, 1978 in quantitative/percentage terms	Provision for 1978-79	Foreign Exchange		Physical targets envisaged up to 1979 in quantitative/percentage terms
		Total	F.B.C.					Total	—	
1	2	3	4	5	6	7	8	9	10	
A. (On-going Schemes)										
1.	2X250 KW SW Transmitters, Islamabad, (Approved) ..	29.248	15.785	21.187	0.450	99.5	0.050	—	100	
2.	2x100 KW SW Transmitters, Islamabad (Approved) ..	20.078	11.210	12.627	0.200	99	0.310	—	100	
3.	100 KW MW Transmitter, Muzaffarabad (Approved)	18.093	7.100	2.655	5.400	15	5.000	0.200	25	
4.	Village Broadcasters (4 Nos) (Approved) ..	15.155	0.020	0.710	3.000	30	3.000	—	40	
5.	10 KW MW Transmitter, D.I. Khan (Approved) ..	13.330	2.101	3.314	1.700	10	3.000	—	40	
6.	100 KW MW Transmitter, Karachi (Approved) ..	14.642	4.731	12.723	2.130	96	0.700	—	100	
7.	Security Works (Approved) ..	5.113	—	5.013	0.100	100	—	—	—	
8.	100 KW MW Transmitter and B.H. Khairpur (Approved) ..	17.846	4.153	7.149	9.100	65	1.600	—	80	
9.	1000 KW MW Transmitter, Islamabad (Approved)	54.204	19.812	40.951	5.655	85	1.000	—	100	
10.	Broadcasting House, Islamabad (Approved) ..	75.675	14.076	58.905	11.600	90	5.000	0.170	100	
11.	300 KW MW Transmitter, Peshawar (Approved) ..	38.752	11.045	31.055	2.332	75	3.000	—	100	
12.	Broadcasting House, Peshawar (Approved) ..	20.023	4.200	5.576	0.500	30	3.000	—	60	
13.	Security Works at R/Centre, Peshawar (Approved) ..	0.570	—	0.188	—	—	—	—	—	
14.	STLs (3 Nos) (Approved) ..	2.030	0.300	0.038	0.300	10	0.500	—	25	
15.	Standby Generators (Approved) ..	5.070	2.570	2.657	0.800	40	1.000	1.000	60	

1	2	3	4	5	6	7	8	9	10
16.	300 KW MW Transmitter and Broadcasting House Khatir (PC-I Submitted)	53,975	15,881	0,100	—	2	0,100	—	25
17.	Extension Trading Facilities (Approved)	4,200	1,612	—	0,781	15	2,000	1,600	50
18.	Modernization of Equipment (Phase-II) (Approved)	15,370	6,742	0,150	0,351	2	3,000	2,000	30
19.	Extension of Broadcasting House Quetta (Approved)	5,916	1,400	—	1,721	25	3,640	1,400	70
	Total—A (On-going Schemes)				46,120		35,900	6,370	
	B. (New Schemes)								
20.	10 KW MW Transmitter, Skardu. (Approved)	13,042	2,291	1,345	—	—	3,000	—	40
21.	Furnishing of Office Block at Broadcasting House Islamabad. (Approved)	1,637	—	—	—	—	1,600	—	100
22.	Monitoring Equipment (Approved)	0,970	0,462	—	—	—	0,970	0,460	100
23.	Housing Scheme for PBC Employees (Approved)	30,000	—	1,718	—	—	0,100	—	30
24.	Extension of Broadcasting House Bahawalpur. (Approved)	1,785	0,175	—	—	—	1,500	0,170	60
	Total B (New Schemes)						7,170	0,630	
	Total (PBC)				46,120		43,070	7000	

SCHEME-WISE DETAILS OF ADP OF PAKISTAN TELEVISION CORPORATION FOR 1978-79

(Million Rs)

S.No.	Name and Status of the Scheme	Estimated Cost		Estimated Exp. upto 1976-77	Revised Estimates for 1977-78	Estimated Physical Implementation upto June, 1978 in quantitative/percentage terms	Foreign Exchange		Provision for 1978-79	Physical targets Estimated upto June 1979 in quantitative/percentage terms
		Total	F.E.C.				Total	Total		
1	2	3	4	5	6	7	8	9	10	
A. (On-going Schemes)										
1.	Islamabad T.V. Station (Approved)	214.650	67.632	63.943	25.500	42	26.000	10.000	54	
2.	Karachi T.V. Station (Approved)	113.120	46.871	52.810	10.500	56	20.000	8.000	73	
3.	Lahore T.V. Station (Approved)	122.270	49.013	54.300	10.350	53	20.000	8.000	70	
4.	Multan/Shujabad T.V. Station (Approved)	17.815	3.786	16.815	—	94	1.000	—	100	
5.	Quetta T.V. Station (Approved)	113.020	40.307	53.759	5.400	52	7.000	—	59	
6.	Peshawar T.V. Station (Approved)	108.320	40.468	54.854	13.350	60	18.000	3.500	72	
7.	Shikarpur Rebroadcast Station (Approved)	14.651	4.086	13.951	—	98	0.700	—	100	
8.	Rojhan R.B. Centre (Approved)	16.870	4.973	12.442	4.200	100	—	—	100	
9.	Thandiani-Narran Link. (Approved)	34.327	11.376	0.250	—	—	—	—	—	
10.	Chishtian/Faisalabad Translator	6.667	1.500	2.000	3.300	90	—	—	—	
Total-A. (On-going Schemes)					73.600		92.700	29.500		
B. (New Schemes)										
1.	Translator 2 Nos. (Approved)	13.000	4.500	4.164	—	22	—	—	—	
2.	Karachi-Gwadar Link (Approved)	73.410	19.200	0.250	—	—	—	—	—	
Total (FTV)					73.600		92.700	29.500		

CHAPTER 17

PHYSICAL PLANNING AND HOUSING

REVIEW OF ADP, 1977-78

The Annual Plan for 1977-78 marked a significant step forward in allocating larger resources for development of social services. The provision for Physical Planning and Housing was increased by 27 per cent from Rs. 1268 million in 1976-77 to Rs. 1626 million in 1977-78. This increase was accommodated within a static ADP of Rs. 17000 million. Accordingly, the share of the sector in the ADP increased from 7.8% in 1976-77 to 9.5% in 1977-78.

2. During the year, stress was laid on the programme of development of plots for low income population and water supply and sanitation facilities in the urban and rural areas, in a phased manner so as to narrow down the gap between demand and supply. The allocation for low income housing and Katchi Abadies was 24.5 per cent. Provision of water supply, sewerage and drainage facilities received 31.7 per cent of the total allocation. The balance of 44% was meant for various other programmes.

3. Against the original allocation of Rs. 1625.775 million, the expenditure incurred was Rs. 1272.513 million showing an overall utilization of 78.27 per cent. Agency-wise figures are given in Annexure I.

4. The major targets and achievements for the year are given in the table below :

TABLE I

Major Targets and Achievements, 1977-78

Sub-Sector	Units	Targets	Achievement	%Achievement
(i) Development of plots in the urban areas	Nos.	100,000	54,149	54.1
(ii) Urban Water Supply	Addl. pop. to be served (Million)	2.576	1.340	52.0
(iii) Urban Sewerage & Drainage	Do.	1.947	1.122	57.6
(iv) Rural Water Supply	Do.	2.350	1.922	81.8
(v) Rural Sanitation	Do.	0.440	0.264	60.0
(vi) Housing for Govt. Servants	Nos.	2,805	1,600	57.0
(vii) Office space	Million sq. ft.	1.178	0.710	60.3

5. The achievements made during the year are considerably less than envisaged targets. This is mainly due to the fact that the provincial government changed the sectoral priorities as a result of which the sectoral allocations were revised downward consequently reducing the physical targets.

6. Private investment in housing during 1977-78 is estimated at Rs. 2055 million. The number of houses constructed during the year is approximately 45,000.

7. Physical accomplishments made in various sub-sectors by different executing agencies are described in the subsequent paragraphs.

Low Income Housing

8. Against the target of development of 100,000 plots in urban areas, the actual physical achievement is expected to be 54,149 plots, as follows :

NWFP ..	.. Industrial Workers	..	..	..	1,000
Baluchistan	Public Sector				1,149
Sind ..	(i) KDA ..	..	..	..	14,500
	(ii) Rest of Sind	..	..	..	200
	(iii) Industrial workers	..	..	..	2,300
	(iv) Private Sector	..	..	..	3,000
Punjab	(i) Development Authorities :				
	(a) LDA ..	..	..	..	13,000
	(b) FDA ..	..	..	..	2,000
	(c) MDA ..	..	..	..	1,000
	(ii) Housing Deptt.	..	..	..	10,000
	(iii) Private Sector	..	..	..	2,000
C.D.A. ..	.. ..	..	..	..	4,000

In the case of NWFP only some plots for industrial workers were developed. Preliminary work was undertaken on the Hyatabad Township scheme but no plots could be developed during 1977-78. It is expected that with the new organizational arrangements, the progress in the next few years will show a marked improvement.

9. In addition, about 1,006 lakh 5-marla plots were also developed in the rural areas of Punjab.

Urban Water Supply, Sewerage and Drainage

10. For Baluchistan, information is available for two schemes only. Works on water supply at Ormara was completed to the extent of 75%. The water supply in the Irrigation Colony at Quetta was renovated.

11. In NWFP, work on 2 schemes was taken up and an-additional population of about 20,000 was served.

12. In Sind, outside Karachi, 2 schemes of water supply at Larkana and Sukkur and 2 schemes of sewerage and drainage at Thatta and Dadu were completed. As a result, an additional population of 2.60 lakh was served with water supply and 2.02 lakh with sewerage facilities in areas excluding Karachi.

13. In Karachi, the 3rd Phase of Greater Karachi Bulk Water Supply Project (cost Rs. 750 million) is nearing completion. On the completion of this Phase, 70 MGD of water will be added to the existing availability of about 148 MGD. The project will supply 26 MGD for the Steel Mill and 4 MGD for Qasim Port. During 1977-78, work progressed on the 70 MGD pumping station at Dhabeji, filter plants at Pipri and North-East Karachi, and 10 MGD reservoirs at three locations.

14. Work was also continued on the Karachi Water Supply and Sewerage renovation scheme by KMC on which about 94% progress was achieved. Similarly Lyari water supply and sewerage scheme also remained under execution. It is estimated that in Karachi, about 4.90 lakh additional population was served with water supply.

15. In Punjab, work continued on 30 water supply and 26 sewerage and drainage schemes, outside Lahore, Faisalabad and Multan, out of which 2 water supply schemes were completed to serve an additional population of 2.00 lakh. In addition two schemes of sewerage and drainage were also completed to serve an additional population of 5.0 lakh.

16. In the case of Greater Lahore Water Supply, Sewerage and Drainage Project, Phase-II, work on the installation of 5 tubewells, laying of distribution lines, trunk sewers and drains was continued. In addition, work on the comprehensive water supply and sewerage scheme, Multan and short-term plan for Greater Faisalabad Water Supply Project was also continued. It is estimated

that an additional population of about 3.50 lakh was served with water supply and 3.00 lakh with sewerage facilities in the cities of Lahore, Faisalabad and Multan during 1977-78.

Rural Areas

17. The achievement in this sub-sector in various provinces were as under :
- (i) In Baluchistan, 5 rural water supply schemes were completed during 1977-78 by the Irrigation Department, serving an additional population of 86,000.
 - (ii) In NWFP, about 160 schemes were under implementation with the Public Health Engineering Department against which 60 schemes were completed by the end of 1977-78 resulting in water supply facilities to about 2.49 lakh additional population.
 - (iii) In Sind, 64 schemes of water supply and sanitation were taken up by the Public Health Engineering Department and it is expected that about 19 schemes will be completed, which will provide water supply facilities to an additional population of about 0.68 lakh and drainage to 0.64 lakh persons. The achievements in water supply fell far below the targets because the programme of installation of handpumps could not be undertaken due to delay in finalization of agreement with USAID and other procedural difficulties.
 - (iv) In Punjab, a total number of 94 schemes of water supply and sewerage were included for implementation during 1977-78 by the Public Health Engineering Department. It is expected that by the end of 1977-78, 55 schemes (including 13 schemes of drainage) would be completed to serve an additional population of about 5.40 lakh with water supply and 2.00 lakh with sanitation facilities. Due to various factors, the handpumps programmes proceeded at a slow pace and only about 1000 handpumps were installed during the financial year.

Other Programmes

URBAN AND REGIONAL PLANNING

18. In Punjab, during 1977-78, preparation of outline development plans of Mianwali and D. G. Khan have been completed. Work on detailed planning of Pattoki and Pir Mahal towns has been finalized. In addition, 30% work on the preparation of Regional Development Plan for Rawalpindi region has also been completed. In Sind, the work on Regional Plan for Sind continued and various pre-planning studies were finalised. Under the Federal programme, the Environment and Urban Affairs Division have completed a number of feasibility studies of proposed agro-villes and some sites have been finally selected for detailed planning and consultants appointed. These sites include Mirokhan and Garhi Kairo in Sind; Dhudial and Baffa in NWFP, Kohlu, Maiwand and Temple Dera in Baluchistan and Athmuqam and Rawalakot in Azad Kashmir. In the case of JRP-IV project for slum improvement and urban development, the first phase has been completed and the scope of activities of the project has been extended to all the provinces.

GOVERNMENT SERVANTS HOUSING, OFFICES AND BUILDINGS

19. In the ADP 1977-78, within the modest allocations provided, about 2800 houses were proposed to be constructed at various places in the country. The physical achievement is expected to be about 1600 units, including the barrack type accommodation. However, against the target of construction of 11.78 lakh sq. ft. office area, it is estimated that only about 7.10 lakh sft office space was constructed. The shortfall in the target was mainly due to some reduction in the allocation and increase in the cost of construction materials.

ISLAMABAD

20. Work on various Schemes in Islamabad progressed satisfactorily except for two projects namely, construction of Simly Dam and Parliament Building. In the case of Simly Dam, the work continued to suffer delays due to difficulties of the contractor over rates of payment and non-availability of machinery. Similarly, the work on the Parliament Building could not proceed as envisaged originally because of the modification in the design of the building. Substantial progress was, however, made on the Presidential Estate Complex and construction of 1024 A and B type quarters for the low income employees which are nearing completion.

TOURISM

21. An allocation of Rs. 65.00 million was made in ADP 1977-78 for implementing the on-going schemes of tourism as well as for the development of tourist infrastructure in the Northern Areas and other schemes of touristic importance. The physical progress of the work on these schemes was not entirely satisfactory because of delay in the preparation of detailed projects. The renovation of existing buildings at Keenjhar lake was completed and opened to tourists. Work on the new buildings was accelerated. Similarly substantial progress was made on the tourist resort at Kaghan. An extensive programme of publicity and promotion was also undertaken. The design work of Keenjhar lake complex, hotels and chalets in Northern Areas, Tourist Resort at Kalam and some of the Tourist villages has been completed.

22. The designing of Gadani Beach Resort and the 4 AHP hotels at Lahore, Rawalpindi, Peshawar and Mirpur was also taken in hand. Work on the tourist complex at Koh-e-Taftan and Chaman was also continued. However, Malam Jabba Skiing resort project was in the initial stages of implementation and construction of roads and other infrastructural services was in hand. A scheme has also been prepared for the expansion of Tourism and Hotel Training Institute at Karachi.

NORTHERN AREAS, AZAD KASHMIR AND TRIBAL AREAS

23. It is expected that by the end of 1977-78, 120 residential units and 30 water supply schemes would be completed.

CIVIL ARMED FORCES AND CONSTABULARIES

24. Modest allocations were provided for the construction of office and residential accommodation for Civil Armed Forces and Constabularies which were mostly utilized for acquisition of land, preparation of plans, development of land and construction of barracks, kotes, and magazines.

ANNUAL PLAN, 1978-79

25. The provision for Physical Planning and Housing is being increased from an expenditure of Rs. 1272.513 million in 1977-78 to Rs. 1661.927 million in 1978-79 or an increase of about 30.6%. Out of the above allocation the share of priority programme of water supply/sewerage and urban housing and slum improvement are 32.1 and 19.3 per cent respectively. The slum improvement programme accounts for Rs. 100.00 million or 6% of sectoral allocation in 1978-79. The balance 48.6% of the allocation is for development of the Capital at Islamabad, Tourism, Government Servants Housing and Offices etc.

26. It might be useful to recapitulate briefly the strategy which is being followed in respect of housing and environment.

Firstly, in view of shortage of resources, effort is being concentrated on a few key objectives. The highest priority is being given to water supply (particularly in rural areas) and extension of sewerage. The water supply programme is conceived as part of the integrated effort to improve health and living conditions in rural areas.

Secondly, in the field of urban housing, public sector resources will be utilized almost exclusively for development of serviced plots. The construction of houses will be left to private initiative assisted by some financing from banks and specialized credit agencies.

Thirdly, the conditions in slums will be ameliorated through improvement. Expensive slum clearance and redevelopment projects will be avoided.

Fourthly, self financing would be encouraged in all sub-sectors. Plot development will be financed to a great extent from recoveries. The charges for water and sewerage would be re-adjusted to make the utilities more self-supporting.

Fifthly, Urban and Regional Planning would be encouraged but on a scale commensurate with resources available in the near future.

Sixthly, a beginning would be made with essential urban development schemes not included in above programme.

Seventhly, in respect of government offices and housing, the emphasis would be on economy and functional utility.

27. The physical targets for 1978-79 alongwith a comparison with targets of Fifth Plan is given below :

TABLE 2
Physical Target for 1978-79 and Fifth Plan 1978-83

Item	Unit	1978-79	1978-83	% of 4 to 5
1	2	3	4	5
1. Urban Residential Plots	No.	70,000	425,000	16.4
2. Environmental Improvement	(Pop. to be served in thousand).	250	1,333	18.8
3. Urban Water Supply	(Pop. to be served in million).	2.248	8.250	27.2
4. Urban Sewerage and Drainage	Do.	1.502	5.860	25.6
5. Rural Water Supply	Do.	1.827	14.250	12.8
6. Rural Sanitation	Do.	0.353	2.000	17.6
7. Govt. Servants Housing	No. of residences.	2,346	15,000	15.6
8. Govt. Offices	(Million sq. ft.)	1.086	9.000	12.1

Executing agency-wise physical targets for 1978-79 for various sub-sectors are given in Annexure III.

28. The allocation of funds by various programmes is given below :

TABLE 3
Sub-Sector-wise allocations during 1977-78 and 1978-79

S.No.	Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
		Amount	%	Amount	%
1	2	3	4	5	6
1.	Water Supply and Sewerage.. ..	518.016	31.9	533.709	32.11
	(a) Urban	339.439	20.9	374.687	22.53
	(b) Rural	178.557	19.0	159.022	9.57
2.	Low Income Housing	397.700	24.5	320.832	19.30
	(a) Plot development	141.600	8.7	110.832	6.67
	(b) House Construction	95.000	5.8	110.000	6.62
	(c) Katchi Abadis	161.100	10.0	100.000	6.01
3.	Govt. Servants Housing	108.194	6.6	119.503	7.19
4.	Govt. Offices and Buildings.. ..	112.493	6.9	135.262	8.14
5.	Other Urban Development Projects	164.463	10.1	159.826	8.41
6.	Tourism	66.000	4.1	66.490	4.00
7.	Capital at Islamabad	146.500	9.0	218.500	13.15
8.	Others	112.439	6.9	127.805	7.70
	Total	1,625.775	100.0	1651.927	100.00

29. The allocation by administrative agencies will be as follows :

TABLE 4
Agency-wise allocation, 1978-79

Executing Agency	(Million Rs.)			
	Allocation 1977-78	Utilization 1977-78	Allocation 1978-79	Percentage increase over 1977-78 allocation
Baluchistan	35.675	30.963	66.960	87.70
N.W.F.P.	155.882	123.846	147.145	(—)5.60
Sind	166.644	120.249	182.600	13.18
Punjab	794.800	528.427	680.602	(—)13.24
Federal Govt.	472.774	469.028	575.620	21.75
Total	1,625.775	1,272.513	1,661.927	2.22

Financial allocations by executing agencies and by sub-sectors are given in Annexure IV, while the details of major sub-sectoral allocations by various provinces and Federal Government agencies are given in Annexures V to IX.

30. In addition, Rs. 192.7 million is being provided through the credit budget. Also expenditure from own resources of the development authorities and local bodies will amount to about Rs. 700 million.

31. The allocation of funds for important programmes, province-wise is given below :

TABLE 5
Percentage of total allocation

Sub-Sector	Punjab	Sind	NWFP	Baluchis- tan	Federal
(i) Water Supply and Sewerage ..	52	51	48	21	—
(a) Urban	41	35	13	12	—
(b) Rural	11	16	35	9	—
(ii) Low Income Housing	27	2	13	3	19
(iii) Government Housing	5	7	12	16	8
(iv) Govt. Office and Buildings ..	6	8	21	39	5
(v) Other Urban Development ..	11	25	6	21	—

The expenditure on urban housing in Sind is understood as the bulk of the work is undertaken by K.D.A. outside the ADP. In case of Federal Government, the analysis of expenditure exclude Islamabad and the allocation for tourism.

32. The provision for private sector investment in housing, compared to Fifth Plan is given below :

	1978-79	1978-83	% of 1 to 2
Investment (Rs. Million)	2,310	13,200	17.4
No. of Houses (Thousands)	50,000	350,000	14.3

33. The details of various programmes and physical targets for 1978-79 in respect of various Federal Divisions and Provincial Governments under various sub-sectors are described in the subsequent paragraphs.

Federal Programmes

34. In the Physical Planning and Housing Sector, the Federal programmes consist mainly of the development of the Capital at Islamabad, programme of provision of housing and offices for Federal Government employees and Civil Armed Forces, development programme of tourism, housing and water supplies programme in Azad Kashmir, Northern and Federally Administered Tribal Areas and provision of credit facilities for construction of houses. Although the demands of the Federal Divisions were very large but due to resource constraints modest allocations have been made and major on-going priority projects have been protected to a great extent.

HOUSING FINANCE

35. The Annual Plan target for private investment for house building is Rs. 2,310 million (against Rs. 2,055 million during 1977-78), a major portion of which would be financed through credit facilities. The total requirements for institutional credit for house building during 1978-79 work out to Rs. 770 million. It is anticipated that the House Building Finance Corporation would disburse about Rs. 550 million during 1978-79. An allocation of Rs. 80 million has been made for House Building Finance Corporation in the ADP 1978-79, for reloaning in the housing sector. About Rs. 50 million have also been allocated in the Federal and Provincial Programmes for advancing loans to Government Servants. The balance of credit requirement would be met by commercial banks, State Bank Loan to the House Building Finance Corporation and their own recoveries, and private savings of the house builders to the extent of about 66%. It is anticipated that about 50,000 houses would be constructed during 1978-79 against about 45,000 constructed during 1977-78.

REGIONAL AND URBAN PLANNING

36. In the Annual Plan 1978-79, it is proposed to complete the on-going regional studies for Bahawalpur-Multan and Lesbela-Mekran regions. Rupees. 0.50 million have been earmarked for feasibility studies for new agrovilles sites to be indicated by the Provincial Governments. In the case of Joint Research Project No. IV at Karachi for 'Slum Improvement and Urban Development', the research programme includes finalization of report on Gujarpur (Lahore), and socio-economic surveys in walled city of Lahore, and selected areas of Gujranwala, Peshawar and Quetta.

ISLAMABAD

37. The total allocation for CDA in ADP 1978-79 is Rs. 218.5 million. The major emphasis is being placed on the provision of housing for which an allocation of about Rs. 50.00 million has been made. Out of the above allocation, a major allocation of Rs. 40 million has been made for the construction of housing for the low paid staff. Construction of 1,024 'A' and 'B' type houses which is already in progress will be fully completed during 1978-79. Work will also be undertaken on the remaining 1840 'A' to 'D' type houses (out of the ongoing scheme of 3008 houses) and substantial progress will be made. Other housing programmes include staff quarters for the President's staff, AGPR, and construction of bachelor's hostel. CDA will also develop about 1000 plots in Islamabad through their own resources.

38. Under the programme of buildings of national importance, an allocation of Rs. 100 million has been made. Work on the Presidential Estate Complex will be completed to make the building functional while work on the National Assembly Building would continue.

39. As regards office accommodation, work will be continued on the construction of office building for AGPR, Police Posts/Stations etc. with an allocation of about Rs. 4 million.

40. In the case of water supply, sewerage and drainage, an allocation of Rs. 20.3 million has been made. The major allocation of Rs. 11.3 million has been made for continuation of work on the construction of Simly Dam, which on completion will supply 24 MGD of water to Islamabad. Work on the feasibility study of supplying water to Islamabad from Khanpur Dam will also be undertaken in addition to regular programmes of laying of water supply, drainage and sewerage distribution system.

41. For the construction of roads, an allocation of Rs. 5.5 million has been made. Work on the construction of 2nd carriageway of Shahrah-e-Islamabad from Faizabad Chowk to Airport link road which started during 1976-77, would be continued during 1978-79 with an allocation of Rs. 3.5 million.

42. Under their self-financing programme, CDA will undertake development of infrastructure in the Blue Area of Islamabad and development of various residential sectors.

TOURISM

43. A long term Master Plan for development of tourism in Pakistan prepared by UN Consultants is under implementation in phases. The schemes to be undertaken in 1978-79 are based on recommendations contained in the Master Plan.

44. During 1978-79, it is expected that tourists arrivals will increase by at least 12% over the 220,448 foreign tourists that arrived during 1977. Similarly the earnings from foreign tourists are expected to increase by about 34% over the earning of US\$ 60.41 million during 1977. To achieve these targets, tourism promotion and publicity, at home and abroad, will be accelerated. The PTDC will initiate work of construction of accommodation units in Swat and Northern Areas. Work on the establishment of a skiing resort at Malam Jabba will continue for which an allocation of Rs. 10 million including Austrian Aid of Rs. 9.0 million has been made. Kaghan Summer Resort and Keenjhar Lake Complex will be completed while work on Gadani Beach Resort and renovation and expansion of 4 AHP hotels will be taken in hand. Besides, a number of small scale schemes for tourism development will be completed.

GOVERNMENT OFFICE BUILDINGS AND GOVERNMENT SERVANT HOUSING

45. The Works Division has initiated a number of schemes for the construction of residential accommodation for Government Servants at Karachi, Quetta, Rawalpindi and Peshawar. The schemes are in various stages of implementation and it is expected that during 1978-79, 700 houses will be completed. Provision has also been made for completing the work on the rest houses for government servants at Karachi, Lahore, Peshawar and Rawalpindi. In the case of office buildings, besides initiating work on the construction of new Customs House at Karachi and office accommodation at Quetta, the Works Division will also complete a number of small schemes for construction of office buildings and provision of additional facilities in the existing office buildings. It is expected that about one lakh sq. ft. of office space would be added during 1978-79.

CIVIL ARMED FORCES

46. A number of schemes have been initiated for the construction of residential and office accommodation for Frontier Corps, Frontier Constabulary, Baluchistan Constabulary in Marri, Bugti and Mengal Area of Baluchistan, Tribal Areas of NWFP and Baluchistan and Indus-Kohistan and Allai Areas. Provision has also been made for the construction of most essential office and residential accommodation for Rangers and F.I.A. at various locations.

SPECIAL AREAS

47. The Special Areas which comprise Azad Kashmir, Northern Regions, and Federally Administered Tribal Areas, have a range of acute problems including poor housing conditions, shortages of drinking water and lack of office and residential accommodation for employees of various government departments. The population in these regions is very sparse and the settlements are scattered, making the provision of essential facilities like water supply difficult.

48. In order to improve the environmental conditions of these areas, major emphases during 1978-79 will be on the provision of water supply and sanitation facilities in these areas followed by construction of residential and non-residential accommodation for government employees and development of tourism. For the purpose of provision of water supply and construction of residential and non-residential accommodation, allocations of Rs. 16.000 million for Azad Kashmir, Rs. 23.61 million for Northern Regions and Rs. 25.26 million for FATA have been provided in the ADP 1978-79. With these allocations it would be possible to meet the following targets in each region.

TABLE 6
Programmes in Special Areas

Sub-Sector	Unit	Targets		
		Azad Kashmir	Northern Areas	FATA
1	2	3	4	5
Water Supply :				
(a) Rural	Addl. Pop. to be served—D.—	70,000	40,000	120,000
(b) Urban.. .. .		15,000	—	2,000
Government Servants Housing ..	Nos.	40	70	45
Government Offices and Buildings ..	Area to be constructed (sft.)	35,000	50,000	35,000

49. The Northern Regions and Azad Kashmir also have great potential for tourism development. Appropriate measures are being taken by the Federal Tourism Division to develop Tourism facilities in these areas. In Northern Areas, work will be initiated on construction of hotel at Hunza and Chalets at two other places, and development of Kunjerab Park.

Provincial Programmes

BALUCHISTAN

50. The total allocation for Baluchistan during 1978-79 is Rs. 66.96 million. Out of this allocation, Rs. 13.960 million is meant for water supply and sewerage, Rs. 11.00 million for government servants housing, Rs. 26.00 million for government offices and Rs. 16.00 million for Urban Development. The physical targets in various sub-sectors are as follows :

51. *Water Supply and Sanitation.*—In the case of water supply and sanitation facilities, an additional population of 0.35 lakh will be served with completion of 4 on-going schemes.

52. *Government Servants Housing, Offices and Buildings.*—Three schemes of Govt. Servants housing will be undertaken during 1978-79 and about 60 houses will be completed. Similarly, a large number of schemes of Government Offices and Buildings would be implemented during 1978-79, resulting in addition of about 0.80 lakh square feet of office space. This includes construction of Provincial Assembly Building and High Court Building at Quetta and Baluchistan House at Islamabad.

53. *Urban Development.*—Work on the construction of Quetta Development Authority Office and Staff Colony and development of Race Course area for recreational purposes will be continued.

N.W.F.P.

54. The total allocation for N.W.F.P. during 1978-79 is Rs. 147.145 million. Out of this allocation, Rs. 18.862 million are meant for low income housing, Rs. 70.399 million for water supply and sewerage, Rs. 16.883 million for Government Servants Housing, Rs. 31.390 million for Govt. Offices and Buildings, Rs. 8.826 million for Urban Development and Rs. 0.785 million for Regional Planning.

55. The major targets include the provision of 3500 residential plots for low income urban families, 500 plots for industrial workers, water supply and sanitation facilities for 3.06 lakh rural and 0.61 lakh urban population, 74 housing units for Government Servants and construction of 1.14 lakh sq. ft. of office space in Government Offices in various areas of the province. Various programmes proposed in the N.W.F.P. ADP in 1978-79 to achieve the above targets are as follows :

56. *Basic Development and Urban and Regional Planning.*—The on-going project of Regional Development Plan for N.W.F.P. will continue. Provincial Urban Development Board, Peshawar Development Authority and Mardan Development Authority will be provided with essential staff. Provision has also been made for construction of office and residential accommodation for Public Health Engineering Divisions at Abbottabad and Malakand.

57. *Low Income Housing.*—The work on first phase of Hyatabad Town in Peshawar will be stepped up where, besides acquisition of land, 2500 plots will be developed during 1978-79. In addition other small scale schemes for development of plots in other urban areas of the province will yield about 1500 plots including 500 plots for industrial workers.

58. *Urban Water Supply and Sewerage.*—Ten on-going schemes and 3 new schemes would be undertaken, out of which 4 schemes will be completed during 1978-79, providing safe water supply and sanitation facilities to 0.61 lakh urban population. The scheme proposed to be completed during 1978-79 include Water Supply Schemes at Mardan, Phase I and II and Tank.

59. *Rural Water Supply and Sanitation.*—A total of 135 schemes for rural water supply and sanitation will be undertaken during 1978-79. Out of these, 75 schemes are expected to be completed providing water supply and sanitation facilities to 3.06 lakh rural population.

60. *Government Servants Housing and Government Offices.*—The on-going scheme for the construction of residential accommodation for Government Servants at Jamrud Road, Peshawar will be continued and 40 residential units will be completed during 1978-79. About 34 units will also be completed in other small schemes in various areas of the province. Besides, design and feasibility studies of new Secretariat Complex and residential flats for officers at Peshawar will be taken in hand.

61. It is proposed to construct 1.14 lakh sq. ft. of office space in the province during 1978-79. This includes space for police headquarters at Peshawar and at a number of other places in the province. The work on the construction of Frontier House at Islamabad will be completed. Similarly, work on the High Court Building at Peshawar and extension of Assembly Building at Peshawar, which has already been initiated, will be stepped up.

62. *Urban Development.*—Under the programme of Urban Development, allocations have been made for the construction of a bus stand and shops at Peshawar and improvement of small cities and towns.

SIND

63. The total allocation of Sind during 1978-79 is Rs. 182.60 million. Out of this allocation, Rs. 3.300 million meant for urban and regional planning, Rs. 4.170 million for low income housing, Rs. 93.550 million for water supply and sanitation, Rs. 13.033 million for Govt. Servant's Housing, Rs. 14.547 million for Govt. Offices and Buildings, Rs. 45.00 million for Urban Development and Rs. 9.00 million for special projects.

64. The major targets for 1978-79 include the development of 25,000 plots for low income families and industrial workers, provision of water supply and sewerage facilities to an additional

urban population of 12.22 lakh and rural population of 2.55 lakh. Construction of 167 housing units and 1.60 lakh sq. ft. of office space will also be completed. The programmes to achieve these targets are as follows.

65. *Basic Development and Regional Planning*—Under the programme of preparation of outline development plans, work on 6 towns would be continued. The Sind Regional Plan Organization will collect and analyse data on regional resource endowment in the various sectors of the Provincial economy.

66. *Low Income Housing*.—The work on the low income housing schemes at Nawabshah and Tando Adam will be completed which would provide 1000 plots in these towns. Work on a new housing scheme at Jacobabad will also be initiated. Outside the ADP, an additional 13000 plots for industrial will be developed in Karachi by KDA, 6000 plots for Industrial workers in various industrial centres and 5000 plots in the private sector.

67. *Urban Water Supply, Sewerage and Drainage*.—The 3rd Phase of Greater Karachi Bulk Water scheme would also be fully completed and finances (Rs. 160.000 million) would be provided through the National Credit Budget. With the completion of this scheme, an additional supply of 70 MGD would be added to make available an overall supply of 230 MGD to the city of Karachi. This will still be short of the total demand for the city and therefore during 1978-79, a feasibility study for obtaining water from Hub Dam, would be carried out.

68. Karachi Water Supply and Sewerage Renovation Scheme has been completed to the extent of 95%. During 1978-79, work on the scheme would be continued and it is hoped that the scheme would be fully completed. Under Lyari Water Supply and Sewerage scheme, the water supply component would be completed covering 2.0 lakh persons while under the drainage component, 0.5 lakh persons would receive drainage facilities.

69. As regards Hyderabad Water Supply Sewerage and Drainage scheme, work on underground reservoirs and 48" mains will be completed. Pumping machinery and the existing filter plants would also be improved. It is expected that about 2.0 lakh additional persons would receive piped water supply besides mitigating shortage of drinking water during peak summer months.

70. Outside Karachi and Hyderabad, work would be continued on 15 on-going schemes (6 water supply and 9 drainage) at Mirpurkhas, Sukkur, Jacobabad, Nawabshah, Thatta, Khairpur, Rohri, Dadu, Tando Adam, Larkana, and Sindharpur, out of which the schemes at Nawabshah, Mirpurkhas, Sindharpur, Larkana and Dadu will be completed. With the completion of these schemes, it is expected that 2.0 lac additional persons would receive drinking water facilities in 1978-79. Similarly in the case of drainage, 1.22 lakh additional persons would be covered.

71. *Rural Water Supply and Sanitation*.—Work would continue on 36 on-going and 7 new schemes during 1978-79. It is proposed to cover an additional population of 1.50 lakh persons with water supply and 1.05 lakh with sanitation facilities. Seventeen schemes of water supply and 5 schemes of sanitation will be completed.

72. *Govt. Servants Housing and Govt. Offices and Buildings*.—Work on 30 schemes of Government Servants Housing and 34 schemes of Government Offices and buildings would be continued during the year. It is estimated that 167 housing units would be constructed for Govt. Servants and 1.60 lakh sq. ft. of space in respect of Government Offices and Buildings.

73. *Special projects*.—During 1978-79, special projects in the Physical Planning and Housing Sector such as Development Complex, Sehwan, Development Complex, Bhit Shah and Shah Jahan Mosque, Thatta, will be completed in addition to Sind House at Islamabad.

74. *Urban Development*.—Under the programme of urban development, lumpsum allocation of Rs. 40 million has been made for the development needs of various towns. In addition, Rs. 5.0 million have been earmarked for the on-going scheme of construction of Lyari General Hospital being executed by K.M.C. Similarly, an allocation of Rs. 2.5 million has been made for improvement of Katchi Abadis which will benefit about 0.50 lakh persons.

PUNJAB

75. The total allocation for Punjab during 1978-79 is Rs. 689.602 million. This allocation includes an amount of Rs. 1.700 million for town planning and research, Rs. 85.600 million for low income housing, Rs. 355.800 million for water supply and sewerage, Rs. 31.701 million for Government Servants Housing, Rs. 41.211 million for Govt. Offices and Buildings, Rs. 100.00 million for development of Katchi Abadis, Rs. 72.00 million for urban development and Rs. 1.39 million for Tourism.

76. The physical targets for 1978-79 include development of 39,500 plots for low income families in urban areas and 1.46 lakh plots in the rural areas. A population of about 2.0 lakh will benefit from the programme of improvement of slums and Katchi Abadis. In the case of water supply and sanitation facilities, an additional population of 24.30 lakh will be served in urban areas and 13.74 lakh in the rural areas with potable water and sanitation. Various programmes to be undertaken in the Annual Plan 1978-79 to achieve these targets are as follows :

77. *Town Planning and Research.*—The on-going projects relating to preparation of outline plans for Leiah and Khushab will be completed, whereas 75% work on the regional plan for Rawalpindi will be completed. In addition, work on Agrovilles development programme for Nankana Sahib, and Bhalwal would also be undertaken.

78. *Low Income Housing.*—Out of the 50 on-going schemes of Housing and Physical Planning Deptt., about 30 schemes are expected to be completed with the development of 10,000 residential plots. In addition it is expected that about 22,500 plots will be developed by the Development Authorities, including 17,000 at Lahore, 4,300 at Faisalabad and 1,200 at Multan. Moreover, 5,000 plots will be developed for the Industrial Workers through the Workers Welfare Fund and 2,000 plots by the Private sector.

79. *Urban Water Supply, Sewerage and Drainage Schemes.*—For all urban areas other than Lahore, Faisalabad and Multan, the Public Health Engineering Department would execute 54 on-going schemes (30 water supply and 24 sewerage/drainage) during 1978-79. With the completion of 17 urban water supply schemes during 1978-79, about 21 mgd. of water shall be added which will serve a population of 7 lakh. In addition 7 schemes of sewerage and drainage shall be completed during 1978-79 which will serve an additional population of 10.0 lakh.

80. In the case of Lahore, an amount of Rs. 140.0 million will be utilized by WASA of Lahore for the II Phase of Greater Lahore Water Supply, Sewerage and Drainage project. The agency will complete installation of 30 tubewells and laying of 60 miles of water supply distribution lines, 15 miles of water supply main grid, 15 miles of trunk sewers and 65 miles of lateral sewers. An additional population of one lakh will be served with water supply.

81. A major allocation of Rs. 70.0 million has been made for the Faisalabad Water Supply, Sewerage and Drainage project. This includes an amount of Rs. 30.0 million for the short term plan under which work on installation of tubewells, underground reservoir and storm channels will be completed. The remaining allocation of Rs. 40 million has been made for initiating work on the comprehensive water supply, sewerage and drainage project which is being partly aided by the Asian Development Bank. An additional population of 3 lakh will be served with water supply through installation of 17 tubewells and one lakh with sewerage and drainage facilities through installation of 17,000 house connections.

82. In the case of Multan, allocations of Rs. 17.00 million and Rs. 3.00 million have been made for sewerage and drainage and water supply projects, respectively for continuing work on the on-going schemes.

83. *Rural Water Supply and Sanitation Schemes.*—This sector has been allocated Rs. 72.20 million. Out of the 95 on-going and new schemes to be undertaken during 1978-79, it is expected that 39 rural water supply schemes shall be completed, which will provide an additional 4.00 mgd. of water serving an additional population of 3.89 lakh persons. Similarly about 18 sewerage/drainage schemes shall be completed during 1978-79 which will benefit an additional population of 2.45 lakh persons. About Rs. 22.20 million have been provided for installation of 14,800 hand pumps in rural areas during 1978-79. This programme shall be executed through PWP and would provide potable water to about 7.40 lakh additional population.

84. *Government Servants Housing, Offices and Buildings.*—During 1978-79, it is planned to construct about 790 houses and 4.12 lakh sq. ft. of office space. Major schemes include construction of residential and office accommodation for the officers at newly created districts of Vehari and Kasur.

85. *Urban Development.*—An amount of Rs. 100.0 million has been provided in the Punjab ADP for the development of Katchi Abadies and confirmment of proprietary rights of land on the residents of Katchi Abadies in different cities and towns of the province. It is anticipated that a population of 2.00 lakh will benefit from the programme of environmental improvement of various Katchi Abadies.

86. A major programme of construction and improvement of roads and bridges within the urban areas will be undertaken with an allocation of Rs. 65.00 million. This includes twenty-one schemes in Lahore (allocation of Rs. 45.0 million), 5 schemes in Faisalabad (allocation of Rs. 7.5 million) and six in Multan (allocation Rs. 12.5 million).

87. An allocation of Rs. 5.0 million has also been made for carrying out Lahore Urban Development and Traffic Study.

RELATIONSHIP OF ANNUAL PROGRAMME 1978-79 TO FIFTH PLAN

88. The sectoral programmes included in the Annual Plan 1978-79 are in line with the policies and strategies adopted in the Fifth Plan which aim at reducing the gap between the demand and supply in the field of housing and water supply and sewerage. With the achievement of physical targets envisaged in the Annual Plan 1978-79, the position of availability of water supply and sewerage in the urban and rural areas would be as follows by the end of 1978-79.

Water Supply

- (i) Urban Areas .. Population served would increase from 61% to 68% as against the target of 81.5% by 1982-83.
- (ii) Rural Areas .. Population served would increase from 14% to 17% as against the target of 35.8% by 1982-83.

Sewerage and Drainage

- (i) Urban Areas .. Population served would increase from 34.8% to 40% as against the target of 50.9% by 1982-83.
- (ii) Rural Areas .. Population served would increase from 0.25% to 0.88% against the target of 3.5% by 1982-83.

Housing

89. The Fifth Plan target is to develop additional 425,000 plots in the public and semi-public sectors, i.e. an average of 85,000 plots annually. During 1978-79, the first year of the Fifth Plan, it is proposed to start with a lower target of 70,000 which will gradually be increased in the subsequent years.

ADP 1978-79 ALLOCATION AND UTILIZATION

(Million Rs.)

Executing Agency	Original Allocation 1977-78	Revised Allocation 1977-78	Estimated expenditure 1977-78	% Utilization	
				of original allocation	of revised allocation
Baluchistan	35.675	31.011	30.963	86.79	99.85
N. W. F. P.	155.882	123.846	123.846	79.45	100.00
Sind	166.644	130.713	120.249	72.16	91.99
Punjab	794.800	645.000	528.427	66.49	81.93
Federal Government	472.774	472.774	469.028	99.21	99.21
Total	1625.775	1403.344	1272.513	78.27	90.86

PROVINCE-WISE TARGETS AND ACHIEVEMENTS

Sub-Sector	Unit	Punjab		Sind		N.W.F.P.		Baluchistan		Federal		Total
		Targets	Achievements	Targets	Achievements	Targets	Achievements	Targets	Achievements	Targets	Achievements	
PILOTS												
(i) Urban Residential plots	.. Nos.	57,000	30,000	25,000	20,000	5,000	1,000	1,149	13,000	4,000	100,000	54,149
Water Supply/Sanitation												
(ii) Urban Water Supply..	.. Add. Pop. served (lakhs)	10.00	5.50	14.20	7.50	1.00	0.20	0.30	10.26	10.20	25.76	13.40
(iii) Urban Sewerage and Drainage	.. Do.	12.00	8.00	6.72	3.02	0.75	—	—	0.30	0.20	19.77	11.22
(iv) Rural Water Supply	.. Do.	7.60	5.50	7.60	8.68	5.00	2.49	0.20	3.10	2.23	23.50	19.22
(v) Rural Sanitation	.. Do.	1.05	2.00	2.35	0.64	1.00	—	—	—	—	4.40	2.64

MAJOR PHYSICAL TARGETS FOR 1978-79

(Million Rs.)

S. No.	Item	Unit	Punjab	Sind	NWFP	Baluchistan	Federal Government	Total
1.	Urban Residential plots	Nos.	39,500	25,000	4000	500	1000	70,000
2.	Urban Water Supply	Additional Population (in lakh)	11.00	10.50	0.61	0.20	0.17	22.48
3.	Urban Sewerage and Drainage	Do.	13.30	1.72	—	—	—	15.02
4.	Rural Water Supply	Do.	11.29	1.50	3.03	0.15	2.30	18.27
5.	Rural Sanitation	Do.	2.45	1.05	0.03	—	—	3.53
6.	Government Servants Housing Nos. (including Islamabad).		790	167	74	60	1255	2346
7.	Government Offices and Buildings	Lakh sq. ft.	4.12	1.60	1.14	0.80	3.20	10.86
8.	Environmental Improvements of slums dwellers.	Pop. to be benefitted (lakh persons)	2.00	0.500	—	—	—	2.50

FINANCIAL ALLOCATION BY EXECUTING AGENCIES AND SUB-SECTORS 1978-79

(Million Rs.)

S. No.	Sub-Sector	Federal Government	Punjab	Sind	NWFP	Baluchistan	Total
1.	Basic Dev. Regional and Town Planning	0.400	1.033	3.300	0.783	—	5.518
2.	Agrovilles	0.500	0.667	—	—	—	1.167
3.	Low Income Housing	—	75.200	4.170	—	—	79.370
4.	H.B.F.C.	80.000	—	—	—	—	80.000
5.	Advances to Government Servants for House Buildings	30.000	—	—	—	—	30.000
6.	Urban Water Supply/Sewerage	—	53.600	13.530	19.530	8.007	94.687
7.	Rural Water Supply & Sanitation	—	72.200	30.000	50.869	5.953	159.022
8.	Government Servants Housing	46.886	31.701	13.033	16.883	11.000	119.503
9.	Government Offices and Building	22.114	41.211	14.547	31.390	26.000	135.262
10.	Urban Development (Aid to Local Bodies for Water Supply, Housing and other Schemes)	—	412.600	95.000	27.688	16.000	551.288
	Water Supply and Sewerage	—	230.000	50.000	—	—	280.000
	Low Income Housing	—	10.600	—	18.862	2.000	31.462
	Katchi Abadies	—	100.000	—	—	—	100.000
	Roads & Bridges	—	65.000	—	—	—	65.000
	Others	—	7.000	45.000	8.826	14.000	74.826
11.	Special Projects	—	—	9.000	—	—	9.000
12.	Capital at Islamabad	218.500	—	—	—	—	218.500
13.	Tourism	65.100	1.390	—	—	—	66.490
14.	Interior Division	35.100	—	—	—	—	35.100
15.	Frontier Constabulary	9.000	—	—	—	—	9.000
16.	F.A.T.A.	25.260	—	—	—	—	25.260
17.	F.A.T.A. DC	1.650	—	—	—	—	1.650
18.	Northern Areas	23.610	—	—	—	—	23.610
19.	Azad Kashmir	16.000	—	—	—	—	16.000
20.	Science and Technology	1.500	—	—	—	—	1.500
GRAND TOTAL		575.620	689.602	182.600	147.145	66.960	1661.927

SUB-SECTOR-WISE ALLOCATION DURING 1977-78 AND 1978-79

PUNJAB

(Rs. Million)

S. No.	Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
		Amount	%	Amount	%
1.	Water Supply and Sewerage	357.400	44.97	355.800	51.60
	(a) Urban	271.400	(34.15)	283.600	41.12
	(b) Rural.. .. .	86.000	(10.82)	72.200	10.48
2.	Low Income Housing	276.200	34.75	185.800	26.94
	(a) Plot Development	115.100	(14.48)	85.800	12.44
	(b) House Construction	—	—	—	—
	(c) Katchi Abadies	161.100	(20.27)	100.00	14.50
3.	Government Servants Housing	24.200	3.04	31.701	4.59
4.	Government Offices and Buildings	45.500	5.72	41.211	5.98
5.	Other Urban Development Project	91.500	11.52	72.000	10.44
6.	Others	—	—	3.090	0.45
	Total (Punjab) ..	794.800	100.00	689.602	100.00

SUB-SECTOR-WISE ALLOCATION DURING 1977-78 AND 1978-79

SIND

(Rs. Million)

S. No.	Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
		Amount	%	Amount	%
1.	Water Supply and Sewerage	80.652	48.39	93.550	51.23
	(a) Urban	45.652	27.39	63.550	34.80
	(b) Rural	35.000	21.00	30.000	16.43
2.	Low Income Housing	5.500	3.30	4.170	2.28
	(a) Plot Development	5.500	3.30	4.170	2.28
	(b) House Construction	—	—	—	—
	(c) Katchi Abadies	—	—	—	—
3.	Government Servants Housing	10.750	6.45	13.033	7.14
4.	Government Offices and Buildings	15.985	9.59	14.547	7.97
5.	Other Urban Development Projects	46.035	27.62	45.000	24.65
6.	Others	7.722	4.65	12.300	6.73
	Total (Sind)	166.644	100.00	182.600	100.00

SUB-SECTOR-WISE ALLOCATION DURING 1977-78 AND 1978-79

N.W.F.P.

(Rs. Million)

S. No.	Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
		Amount	%	Amount	%
1.	Water Supply and Sewerage	69.629	44.66	70.399	47.84
	(a) Urban	17.818	11.43	19.530	13.27
	(b) Rural.. .. .	51.811	33.23	50.869	34.57
2.	Low Income Housing	21.000	13.47	18.862	12.82
	(a) Plot Development	21.000	13.47	18.862	12.82
	(b) House Construction	—	—	—	—
	(c) Katchi Abadies	—	—	—	—
3.	Government Servants Housing	21.587	13.85	16.883	11.47
4.	Government Offices and Buildings	21.662	13.91	31.390	21.33
5.	Other Urban Development Projects	20.478	13.13	8.826	6.00
6.	Tourism	1.000	0.64	—	—
7.	Others	0.526	0.34	0.785	0.54
Total (N.W.F.P.)		155.882	100.00	147.145	100.00

SUB-SECTOR-WISE ALLOCATION DURING 1977-78 AND 1978-79

BALUCHISTAN

(Rs. Million)

S. No.	Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
		Amount	%	Amount	%
1.	Water Supply and Sewerage	10.335	28.97	13.960	20.85
	(a) Urban	4.569	12.81	8.007	11.96
	(b) Rural	5.766	16.16	5.953	8.89
2.	Low Income Housing	—	—	2.000	2.98
	(a) Plot Development	—	—	2.000	2.98
	(b) House Construction	—	—	—	—
	(c) Katchi Abadies	—	—	—	—
3.	Government Servants Housing	7.657	21.46	11.000	16.43
4.	Government Offices and Buildings	12.853	36.03	26.000	38.83
5.	Other Urban Development Projects	4.830	13.54	14.000	20.91
	Total (Baluchistan)	35.675	100.00	66.960	100.00

SUB-SECTOR-WISE ALLOCATION DURING 1977-78 AND 1978-79

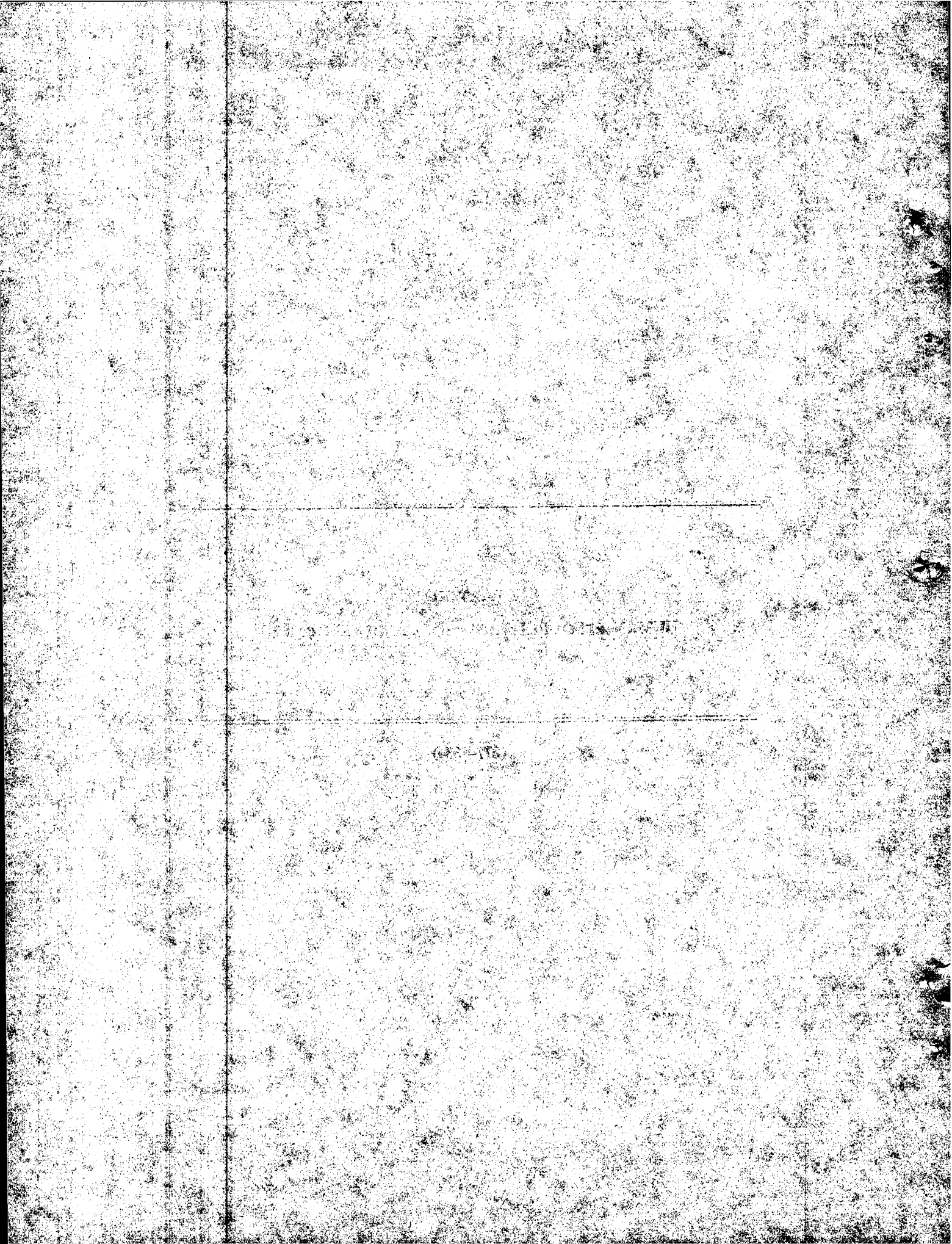
FEDERAL GOVERNMENT

(Rs. Million)

Sub-Sector	Allocation in ADP 1977-78		Allocation in ADP 1978-79	
	Amount	%	Amount	%
1. Water Supply and Sewerage ..	—	—	—	—
(a) Urban ..	—	—	—	—
(b) Rural ..	—	—	—	—
2. Low Income Housing ..	95.000	20.09	110.00	19.11
(a) Plot Development ..	—	—	—	—
(b) Housing Construction ..	95.000	20.09	110.00	19.11
(c) Katchi Abadies ..	—	—	—	—
3. Government Servants Housing ..	44.00	9.31	46.886	8.14
4. Government Offices and Buildings ..	16,493	3.47	22.114	3.84
5. Other Urban Development Projects ..	1.600	0.38	—	—
6. Tourism ..	65.000	13.74	65.100	11.31
7. Capital at Islamabad ..	146.500	30.98	218.500	37.96
8. Others ..	104.181	22.03	113.020	19.64
Total (Federal Government) ..	472.774	100.00	575.620	100.00

PART III
HUMAN RESOURCES AND SOCIAL DEVELOPMENT

(277-354)



CHAPTER 18
EDUCATION AND TRAINING

REVIEW OF 1977-78

A sum of Rs. 647.3 million has been utilized for development against the ADP allocation of Rs. 767.6 million. In overall terms this gives an utilization percentage of 84 but there are wide variations in the percentage utilization of ADP allocation by various executing agencies and on various sub-sectors of education as can be seen by the table given below :

TABLE 1
*Sub-sector-wise percentage utilization of ADP allocation by
executing agencies*

S. No.	Baluchis- tan	N.W.F.P.	Sind	Punjab	Federal Govt.	Total
1. Primary Education ..	156	98	60	29	24	50
2. Secondary Education ..	96	76	86	73	93	85
3. Teacher education ..	116	100	70	57	94	79
4. Technical education ..	—	105	97	100	80	96
5. College education ..	132	108	109	132	138	125
6. University education ..	790	110	125	83	95	120
7. Scholarship	—	84	100	100	100	97
8. Miscellaneous programme*	20	36	57	137	78	86
9. National Institute of Cul- ture, Islamabad ..	—	—	—	—	88	88
Total ..	187	95	85	82	75	84

(Annexure I gives details)

2. The smaller Provinces have attained higher percentage of utilization and have adhered to the ADP priorities better. In the case of Baluchistan, higher expenditure on colleges and University is the result of additional allocations which have been specially provided for them. In NWFP, the ADP priorities have been largely maintained except a shortfall of 26% in secondary education and 16% in scholarship. Expenditure on technical education, colleges and universities has exceeded ADP allocation by a margin of 5, 8 and 10 percent respectively. In Sind, the lowest percentage of utilization (excluding miscellaneous programmes) is on primary education 60%, followed by teacher education 70% and secondary education 86%. On technical education, college education and university education the rates of utilization are 97%, 109% and 125% respectively. In Punjab, lowest utilization is in the sub-sector of primary education (29%) followed by teacher education (57%) and secondary education (73%). Highest rate of utilization is for miscellaneous programmes (137%) followed by colleges (132%), technical education (100%) and universities (83%). Expenditure under Federal Government also shows lowest rate of utilization for primary education but this is due to non-availability of anticipated assistance of Rs. 69.3 million from US AID.

* Include expenditure on curriculum development, books, adult and special education, archaeology, museums, archives, sports, cultural activities and research statistics and planning.

3. It is also important to consider the share of total expenditure received by each sub-sector during the year 1977-78.

TABLE 2
Percentage share of sub-sectors of education

	Baluchis- tan	NWFP	Sind	Punjab	Federal Govt.	Total
Primary education ..	9	46	21	7	8	16
Secondary education ..	16	13	13	10	11	12
Teacher education ..	12	3	4	7	3	5
Technical education ..	—	6	33	17	2	9
College education ..	14	14	11	10	16	11
University education ..	48	12	10	16	13	15
Scholarship ..	—	5	5	15	10	9
Miscellaneous ..	1	1	3	18	43*	23
Total ..	100	100	100	100	100	100

(Annexure II compares these percentages with percentage allocation in ADP of 1977-78 and 1978-79).

4. The percentage shares of different sub-sectors indicate that the highest percentage spent on primary education was by NWFP (46%) followed by Sind (21%). The lowest percentage spent on primary education was by the Punjab (7%). The highest and lowest percentages spent on secondary education were by Baluchistan (16%) and Punjab (10%). Similarly, the highest percentage of ADP utilization on college education was by Baluchistan and NWFP (14%) each as against 11% by Sind and 10% by the Punjab and Federal Government each. The highest percentage spent on university education was by Baluchistan (48%) followed by the Punjab 16% and Federal Government 13%. The highest percentage of expenditure on scholarships and loans was by Punjab (15%) followed by Federal Government (10%) and Sind and NWFP (5%) each.

5. *An over-view of Physical developments during 1977-78.*—During the year under review, 1,209 primary schools were opened, 732 new primary school buildings were constructed and 370 old primary school buildings were either reconstructed or improved. In order to make qualitative improvement in teaching at the primary level 2,977 primary schools were supplied with equipments/books and 15,000 schools were provided with teaching kits consisting of audio-visual aids.

6. At the secondary level 37 primary schools were upgraded to middle level and 6 middle schools were upgraded to high level; 54 middle school buildings and 125 high school buildings were constructed whereas 20 middle school buildings and 24 high school buildings were repaired and improved. In addition, 9 science laboratories, 15 teacher residences and 7 student hostels were constructed; equipment was supplied to 284 middle schools and 59 high schools. In connection with the introduction of agro-technical courses necessary equipment was supplied to 184 middle and high schools.

7. Various programmes of in-service training of teachers were continued at all provincial teacher training institutions. At the Federal level, 694 teachers were trained at the Federal College of Education and National Institute of Teacher Education. In addition 15,000 primary school teachers attended re-orientation course offered by the Allama Iqbal Open University through radio and television. Under the Third Education Project, work of construction of TTIs was started at Pishin, Karachi, Lalamusa, Gakkhar, Multan, Rawalpindi, Kamalia Shahpur Saddar and Jamrud while preliminary work in respect of other TTIs was completed and construction was to begin during the next year.

* Includes expenditure on curriculum development, books, adult and special education, archaeology, museums and archives, cultural activities, sports, and research, statistics and planning.

8. The on-going work of construction at the Mehran University of Engineering and Technology, Nawabshah, was continued while development of first phase of the NED Engineering College Campus reached completion stage. At the University of Engineering and Technology the buildings of electrical and mechanical engineering departments, workshop student hostels and 48 teacher residences were completed and necessary equipment and furniture were supplied. At the second campus of the University of Engineering and Technology, Lahore at Taxila a lecture theatre, a laboratory and a student hostel were completed and equipment and furniture were supplied. Preliminary work in connection with the establishment of engineering College, Khuzdar was completed. In connection with the upgradation of polytechnics to colleges of technology additional buildings for two colleges were provided and on-going work at 7 colleges completed. Construction of additional facilities at 3 nationalized polytechnic institutes was completed. The buildings of one vocational training institute, two commercial training institutes and two vocational institutes for girls were completed while work continued on the construction of buildings of four vocational institutes.

9. For the development of college education the buildings of 16 intermediate colleges were completed and buildings of 48 intermediate colleges and 9 degree colleges remained under construction. In addition, the buildings of 5 nationalized degree colleges were improved. In connection with the consolidation of the facilities at intermediate level, three library buildings and four science laboratories were constructed and science equipment were supplied to two colleges.

10. The on-going work of construction at the campuses of the universities of Baluchistan; Peshawar, Karachi, Sind, Multan and Punjab and Gomal, Quaid-i-Azam and Allama Iqbal Open universities continued to make progress. Laboratory equipment, library books, furniture and transport vehicles were supplied to the Islamia University, Bahawalpur, Quaid-i-Azam University, Islamabad and Allama Iqbal Open University, Islamabad. The Allama Iqbal Open University offered an orientation course to 15,000 serving primary school teachers; two teaching gardening courses and a masters' level course in educational planning and management. It also launched a pilot cycle of foundation level courses in English, Urdu, Mathematics, Social and Basic sciences.

11. Under the local scholarship programmes Rs. 54.165 million were spent to provide scholarships to students studying in educational institutions in the country. In addition, 4,000 students received scholarship under President's 1,000 scholarship scheme. Sixty four scholars proceeded abroad for advance studies while 257 scholars sent in earlier year continued their studies.

12. The construction of the Sports Complex of the National Institute of Sports and Culture at Islamabad continued to make progress.

Primary Education

13. A total of 1,209 primary schools were opened during 1977-78 as against the target of 1,218. Major programmes implemented are given in the table below :

TABLE 3
Major Programmes under Primary Education, 1977-78

	Federal Govt.	Baluchistan	NWFP	Sind	Punjab	Total
No. of new schools opened ..	90 (FATA)	80	389	150	500	1,209
No. of new buildings completed.	268	28	301	104*	—	701
No. of schools buildings in progress/nearing completion..	5	30	85	—	—	120
No. of school buildings replaced/improved. . .	40	100	126	65	39	370
No. of schools provided with equipment/books ..	252	80	—	—	2645	2,977
No. of schools provided with teaching kits. . .	15,000	—	—	—	—	15,000

*In addition, 31 school buildings were reconstructed in Sind.

14. Details of physical targets attained in the primary education by various executing agencies are given below :

PROVINCIAL PROGRAMMES

15. *Baluchistan*.—Eighty new primary schools were opened and provided with necessary equipment. Twenty-eight primary school buildings were constructed and on-going work of construction of 30 primary school buildings was completed. In addition, 100 primary school buildings were repaired.

16. *N.W.F.P.*—Primary school buildings of 301 schools have been completed whereas those of 28 are nearing completion and 58 are in progress. Out of the target of 380 primary school buildings, work could not be started only on 3 school buildings. Similarly, out of the target set for replacement of 47 primary school buildings, 27 have been completed, 7 are nearing completion, 8 are in progress whereas work could not be started on 2 school buildings. In addition to the above the work of improvement of 126 primary school buildings has also made good progress, in so far as 99 primary school buildings have been improved, whereas work is in advance stage at 27 school buildings.

17. *Sind*.—A total of 104 primary school buildings were constructed. Under the scheme for the improvement of primary school buildings 65 Government primary schools and 2 nationalized primary schools have been improved. In addition 31 school buildings have been reconstructed under the scheme of the special repairs of school buildings.

18. *Punjab*.—During 1977-78, 500 new schools were opened and consolidation of 1,500 primary schools was completed. Moreover, school buildings of 39 primary schools damaged during 1971 war were constructed and equipment was provided to 1,145 flood damaged schools.

FEDERAL PROGRAMMES

19. *Education Division*.—Four primary school buildings in Islamabad were completed whereas work on 5 primary school buildings in Federal areas was started. In addition library books were supplied to 117 primary schools in the Federal Capital Area. In view of pressure of demand for admission the facilities at the Islamabad Junior Model School were further expanded.

20. *Northern Areas*.—Construction of 40 primary school buildings were started in the Northern Areas and renovation/repair of primary school buildings was undertaken at a cost of Rs. 0.175 million. The buildings of 40 existing primary schools were reconstructed and equipment was supplied to primary schools at a cost of Rs. 0.500 million.

21. *F.A.T.A.*—Ninety new primary schools have been opened and the construction of 264 primary school buildings including those opened, during the year have been completed. Equipment was supplied to 90 new and 45 existing primary schools.

Secondary Education

PROVINCIAL PROGRAMMES

22. *Baluchistan*.—Six primary schools were upgraded to middle standard and necessary equipment was supplied to these upgraded schools. The buildings of six existing middle schools were constructed and the buildings of 40 were repaired. Six middle schools were upgraded to high standard and necessary equipment was supplied. The buildings of six existing high schools were constructed during the year and those of 20 were repaired. The on-going work of construction of 15 high school buildings was completed. For the introduction of agro-technical courses equipment worth Rs. 50,000 were supplied to three high schools. In view of the difficulty experienced by teachers in un-attractive areas, teacher residences were constructed at 15 high schools. Student hostels were constructed at seven high schools to enable students from far-flung areas to continue their education.

23. *N.W.F.P.*—Twenty-one primary schools were upgraded to middle standard. The buildings of 11 of these 21 upgraded schools were constructed while 6 are nearing completion and 4 are in progress. Two buildings for high schools were constructed against the target of 4. Facilities for the introduction of agro-technical courses have been provided in 28 schools while the work is in progress at 6 schools. Thus the target of introducing agro-technical subjects in 34 schools has almost been attained. To improve facilities for the teaching of science laboratories have been provided at 9 high schools while work is in progress at the remaining 3. Equipment has been supplied to all the 141 high schools as per ADP target. The buildings of comprehensive high schools at Peshawar, Mardan and Bannu have been completed. Of the two high school hostels planned to be constructed during the year, one has been completed while work is in progress at the second.

24. *Sind*.—Eight primary schools were upgraded to the middle level. The buildings of 12 upgraded middle schools have been completed. Five existing middle schools have been raised to the high school standard and buildings have been provided. In addition the, buildings of 4 nationalized high schools were improved during the year.

25. *Punjab*.—The buildings of 21 upgraded middle schools were completed while work on the buildings of other 39 middle schools continued to make progress. In addition, the buildings of 29 upgraded high schools were nearing completion while the buildings of single and double sections high schools at Khairpur, Mianwali, Rahwali, Dina, Hujra and the building of girls high school at Khanka Dogran were completed. Agro-technical equipment was supplied to 139 units of middle and high schools.

FEDERAL PROGRAMMES

26. *Education Division*.—The buildings of 4 middle schools in the Federal Capital Area were completed. To bring about qualitative improvement in school education, 18 middle schools and 9 high schools in Islamabad Federal Area were provided Library books at a cost of Rs. 0.63 million and equipment at a cost of Rs. 1.038 million was supplied to high schools in Islamabad and Federal Capital Area. During 1977-78, equipment was supplied to 2000 high schools and 1000 middle schools in the country at a cost of Rs. 10 million in connection with the introduction of Agro-technical subjects in high schools. Trade schools at Pipri, near Karachi and Islamabad were started with enrolment of 120 and 140, respectively.

27. *Northern Area*.—Two middle schools were upgraded to high school standard.

28. *F.A.T.A.*—Buildings of 74 upgraded middle schools were completed and equipments were supplied to 30 existing high schools. Work on the construction of 29 existing and newly upgraded high schools was completed. Equipment were supplied to 17 existing high schools.

29. *Azad Kashmir*.—During the year under review, library books and equipment were supplied to 125 middle schools. In addition, books were supplied to 7 high schools, drawing material to 5 high schools and furniture to 8 high schools. Of the projected 4 industrial arts and 10 home-economic workshops, work was completed on 3 industrial and 9 home economics units. Agro-technical equipment was supplied to 4 industrial arts and 10 home-economics units. For the improvement of teaching science, equipment for biology and chemistry was supplied to 119 and 48 high schools respectively. Fifty-five class rooms, 20 other rooms and 15 halls were constructed in the existing high schools and furniture was provided for 11 halls. The on-going work of construction of 5 hostel units continued to make progress.

Teacher Education

PROVINCIAL PROGRAMMES

30. *Baluchistan*.—The first floor of the hostel of the Teacher Training School for Men at Quetta was completed. The on-going works of construction of the Teacher Training School at Uthal and Panjgur was completed. Under the Third Education Project work was continued on the Teacher Training Institute for Girls at Pishin. It is expected that the work shall be completed during 1978-79. Work was initiated on the Teacher Training Institute at Mastung.

31. *N.W.F.P.*—Various programmes of in-service training of teachers were continued. Preliminary work in connection with the implementation of the Third Education Project has been completed and work of construction is to start shortly.

32. *Sind*.—Work has started on the construction of the Teacher Training Institute for girls at Karachi under the Third Education Project. Preliminary work in connection with the work of T.T.Is at Mithiani and Moro was completed and construction is to start shortly.

33. *Punjab*.—In-service training programmes were continued at all level and 12,844 teachers of primary, middle and high schools were trained in the teaching of revised curricula. Construction of the buildings of elementary teacher training colleges at Kot Adu, Kot Lakhpat and Mianwali reached an advanced stage. Audio-visual equipment was provided to elementary teacher training colleges. Under the Third Education Project, work has started on consolidation and development of 6 teacher training institutes at Lalamusa, Gekhar, Multan, Rawalpindi, Kamalia and Shahpur Saddar.

FEDERAL PROGRAMMES

34. *Education Division*.—The building of the Federal College of Education, Islamabad was completed. During 1977-78, 694 teachers were trained at Federal College of Education and National Institute of Teacher Education. In addition, 15,000 teachers were trained by Allama Iqbal Open University through correspondence and radio.

35. *F.A.T.A.*—Hostel being constructed at the Teacher Training Institute, Jamrud under the Third Education Project reached nearing completion stage.

36. *Azad Kashmir*.—The construction of facilities at Teacher Training Institute, Afzalpur, in connection with its upgradation to college level have been completed. Two hostel units have been constructed at existing high school for the use of primary school teachers who shall be assembled there for in-service training.

Technical Education

PROVINCIAL PROGRAMMES

37. *N.W.F.P.*—Equipment was supplied to Polytechnic, Peshawar. One of the vocational training institutes was provided with building and equipment. However, work could not be taken in hand at the remaining three of four institutes that were to be provided with building and equipment. The buildings of two of the three commercial institutes provided in the ADP are under construction.

38. *Sind*.—At the proposed Campus of Mehran University of Engineering and Technology at Nawabshah, student hostel blocks A, B and C were completed while work continued at blocks D and E and various categories of residential quarters. The First Phase of the development of the new campus of NED Government Engineering College, Karachi has almost been completed. Construction of additional buildings for College of Technology at Karachi was completed while at Khairpur construction was continued. The consolidation work continued at three of the nationalized polytechnic institute. The buildings of vocational institutes for girls at Shikarpur and Sujawal were completed whereas work continued at three other units. Work was also started at the proposed building for the Vocational Institute at Jamshoro. The work of consolidation continued at two nationalized vocational schools.

39. *Punjab*.—At the University of Engineering and Technology, Lahore, the buildings of Electrical and Mechanical Engineering departments, workshops, boys hostel, girls hostel and 48 teacher residences were completed. In addition works on the swimming pool and squash courts were also completed. Furniture and equipment were also supplied to newly completed department buildings and one of the two hostels. At the second campus of the University at Taxila, one lecture theatre, one laboratory block and one student hostel were completed and equipment/furniture were supplied.

40. All on-going projects relating to the expansion of polytechnic institutes at Rawalpindi and Lahore, establishment of polytechnic institute at Faisalabad, up-gradation of polytechnic institutes at Multan, Rasul, Rawalpindi and Bahawalpur to technical college level and construction of buildings of selected existing vocational and commercial institutes were completed.

FEDERAL PROGRAMMES

41. *Education Division*.—Preliminary work was started on the scheme costing Rs. 126.9 million for the establishment of an Engineering College at Khuzdar recently approved by ECNEC. For the consolidation of the facilities at the National College of Engineering and Technology at Karachi the Principal has been appointed as Project Director and an amount of Rs. 4.80 million was spent on the development programme of the college during 1977-78. At the National College of Arts, Lahore the work of construction of hostel was continued and additional equipment were also supplied.

College Education

PROVINCIAL PROGRAMMES

42. *Baluchistan*.—The buildings of eight intermediate colleges were constructed. Science equipment was supplied to Intermediate College at Pishin and Girls College at Quetta. Work was initiated on the library buildings of three degree colleges and science laboratories for four degree colleges and these are likely to be completed during 1978-79.

43. *N.W.F.P.*—Of the five buildings for intermediate colleges planned to be constructed during 1977-78, two have been completed and three are nearing completion. Necessary equipment was supplied to 39 colleges.

44. *Sind*.—The on-going work of construction of 13 intermediate college buildings was continued while work was started on the building for intermediate science college for girls at Lyari in Karachi. In connection with the upgradation of intermediate college to degree level the on-going work of construction of additional buildings at 8 colleges continued to make progress. In addition the work of improvement of building facilities of five nationalized degree colleges was continued while work was initiated at Khurshid Degree Girls College, Karachi.

45. *Punjab*.—In connection with the consolidation of existing facilities buildings of two intermediate colleges were completed while work reached an advanced stage of completion at 11 intermediate colleges. During the year 1977-78 work was initiated on the improvement of physical facilities of Lahore College for Women, Lahore, Queens Marry College, Lahore, Science College, Lahore and Government Colleges at Okara, Gujranwala, Sahiwal, Baghbanpura and Jhelum and Home-economics College at Lahore. In addition the facilities at Government Colleges at Pattoki and Daska were improved by provision of additional space and equipment. Work was also started on the construction of buildings for Government Intermediate Colleges for Girls at Model Town, Lahore and Narowal.

FEDERAL PROGRAMMES

46. *Education Division*.—The on-going work of construction of the building for Federal Government College for men at Islamabad was continued. The Federal Government Commerce College was established at Islamabad and Rs. 0.10 million were provided for the purchase of equipment for this college.

47. *Northern Areas*.—The on-going work of construction of the buildings for Degree College at Skardu continued to make progress.

48. *F.A.T.A.*—Of the six college buildings currently under construction one was completed while the remaining five are in progress. The work for renovation of buildings provided to Cadet College, Razmak, was also continued and the college was supplied some equipment.

49. *Azad Kashmir*.—The work was initiated in connection with the upgradation of high schools at Bhimber and Garhi Dopata to the level of intermediate colleges. The first phase of the construction of the three girls college buildings reached completion stage. Of the staff quarters to be constructed at Government College, Authmaqam one was completed and at two places continued to make progress.

University Education

PROVINCIAL PROGRAMMES

50. *Baluchistan*.—At the University of Baluchistan development programmes included construction of Science Laboratories Block and completion of 42 residences. Library books and science equipment was purchased and construction programme of the mosque was finalized.

51. *N.W.F.P.*—The on-going work of construction of Pushtu Academy, Campus Model School and Staff quarters on the Campus of University of Peshawar reached an advanced stage of completion. At the Gomal University Campus the approved Phase I programme was completed and preliminary work in connection with the Phase II programme was initiated.

52. *Sind*.—At the University of Karachi Campus work continued on six on-going schemes. Under P.L. 480 programme a research project entitled "Water Reclamation and Useful Utilization of Sewage Solid Waste" was started. At the Sind University Campus the on-going programme of construction on academic buildings, a student hostel, residences for staff were continued. At the Shah Abdul Latif Bhitai Campus of the University of Sind at Khairpur, one hostel block was completed, while work continued on additions and alterations of the main academic building (Mumtaz College Building) and construction of residential quarters for faculty and staff. Work on provision Chancellor's office and Micro-Biology Laboratory was completed.

53. *Punjab*.—At the Punjab University Campus work was continued on the construction of the buildings of the Institute of Chemical Engineering and Technology, Law College and residences for the staff. For the development of the Multan University Campus 600 acres of land were purchased and one Bus was acquired for the use of students. Architectural work on the Master Plan was completed while preparation of detailed plans for the Language Institute and the departments of business administration, Economics and Education were taken in hand. Laboratory equipment, Library books, furniture and a vehicle were supplied to the Islamia University, Bahawalpur.

FEDERAL PROGRAMMES

54. At the Quaid-e-Azam University Campus the on-going work on Phase I for the scheme was continued. The University Mosque, the Cafeteria, 18 B-type and 10 C-type staff residential quarters were completed while 50 per cent work on the Central Library buildings was completed. Books, equipment and furniture worth Rs. 1 161 million were supplied. The preparation of the Master Plan for Allama Iqbal Open University was completed and detailed designing for construction is expected to be taken up during 1978-79. Library books, furniture, equipment and vehicles were purchased. Work was initiated on the establishment of an Iqbal Cell in the University. Correspondence Text Books, Study material were printed for the use of 48,000 students. The enrolment at the primary teachers orientation courses was limited to 15,000 due to resource limitation. Two courses on Kitchen gardening, one for winter vegetables and one for summer vegetables were offered and 1,000 students were enrolled. The workshop for the second cycle of Master Level course in educational planning and management was held in January 1978. A pilot cycle of foundation level courses in English, Urdu, Mathematics, Social Science and Basic Sciences was relaunched with about 1,000 enrolment. Part-time courses in typing and shorthand, each of six months' duration, were organized at the Campus as well as at regional offices located at Multan and Peshawar for 300 students. Arabic Language evening classes were started at the University Campus and in Rawalpindi with an enrolment of 350. A multi-media course in elementary Arabic is in the final stages of preparation and is likely to be offered during the coming year.

Scholarships

PROVINCIAL PROGRAMMES

55. *N.W.F.P.*.—Rupees 6.265 million were spent on awarding scholarships and loans to students at various levels.

56. *Sind*.—Rs. 3.500 million were spent on scholarships and loans and about 9,000 students at various levels.

57. *Punjab*.—A sum of Rs. 20 million was spent on scholarships and loans to 27,546 students at various levels.

FEDERAL PROGRAMME

58. *Education Division*.—Sixty-four scholars proceeded abroad for advance studies, 54 under the Central Overseas Training Scheme, 9 under Merit Scholarship scheme and one under Quaid-i-Azam Scholarship scheme. Of the scholars who were sent abroad in earlier year 257 continued their studies during the year under review; 195 under Central Overseas Training scheme, 32 under Merit Scholarship scheme and 20 under the Quaid-i-Azam Scholarship scheme. Under the Presidents's One Thousand Scholarship scheme, 1,000 scholars were awarded scholarships during the year under review while 3,000 scholarship holders of previous years continued to receive scholarships. Two hundred and sixty six foreign students shall be provided scholarship to enable them to continue their studies in Pakistani institutions of higher learning. Of these 220 shall be scholarship holders of previous years and 46 new scholarships shall be awarded.

59. *F.A.T.A.*.—During 1977-78 scholarships and loans were awarded to 3,800 students studying at various levels.

Miscellaneous Programmes

PROVINCIAL PROGRAMMES

60. *Baluchistan*.—In order to improve supervisory functions of the Directorate of Education, three jeeps were purchased for supervisory staff of primary schools and residential accommodation was constructed for the Inspectress of Schools. Grant-in-Aid was also provided for the development of sports to Dini Madrassahs and private schools.

61. *Federal Programmes*.—Teacher Education Curricula for PTC, CT and B. Ed. were finalized and revised curricula were introduced. 15,000 teaching kits were distributed to primary schools throughout the country. Revised curricula were introduced in all subjects in classes VII to X,

Curricula of general and technical subject to be taught in classes IX and X in trade schools established at Karachi and Islamabad were developed. The revision of curricula at intermediate level was initiated and draft reports were prepared in 35 subjects. National seminars were organized for the training of master trainers in Science, Mathematics, English, Industrial Arts and Audio-Visual techniques. A national workshop on evaluation of curricula was organized.

62. The National Book Foundation arranged import of 7,754 copies of 21 titles of foreign textbooks prescribed in colleges and universities. It printed locally 30,000 copies of 25 titles of foreign textbooks for the use of students of colleges and universities. It published 20,000 books of 20 titles for general readers under its own publication programme. In addition it published 34 titles of various school textbook boards for the benefit of students of primary, secondary and higher secondary classes.

63. The on-going work of construction of the sports complex of National Institute of Sports and Culture at Islamabad continued to make progress. The work on sportsmen hostel reached completion stage and is likely to be ready for occupation by October 1978. Fifty per cent of the foundation work of the stadium was completed. The turfing of the Athletic field has been completed. At the National Sports Training and Coaching Centre, Lahore, fifty per cent work has been completed.

64. The first floor of the building of the National Folklore Archives has been completed. Field work in connection with ethnological collection was continued. Cassettes were purchased for the Cassete Dubbing Plant.

65. Microfilming and photostating equipment and mobile microfilming unit was purchased and material for preservation in the National Archives was acquired.

66. The on-going works of conservation at Shalimar Gardens and Lahore Fort was continued. Work was also continued on the conservation of structural remains, removal of debris and construction of officers' quarters and garrages at Moenjodaro.

ANNUAL DEVELOPMENT PROGRAMME 1978-79

67. The year 1978-79 marks the launching of the Fifth Five Year Plan. The ADP for the year 1978-79, accordingly, reflects the plan priorities and programmes which lay special emphasis on the qualitative improvement and qualitative expansion of primary education, and consolidation of educational facilities at all other levels of education by improving their physical facilities and teaching programmes.

68. The ADP of 1978-79 provides Rs. 878.214 million for development in the Sector of Education & Training and Sports & Cultural activities. The amount is 14% higher than the ADP allocation of Rs. 767.647 million for 1977-78 and it is 36% higher than the estimated expenditure of Rs. 647.301 million. Annexures III and IV give details. However in terms of the proportion of the overall size of ADP, of Rs. 22,500 million, allocation for education and training sector constitutes 3.9% only, whereas the total plan allocation for education and training of Rs. 10.28 billion constitutes 6.9% of the total public sector plan programme of Rs. 148.17 billion. It is obvious that in the first year of the Fifth Plan funds allocated to the Sector Education and Training are substantially lower than its due share based on plan size, priorities and programme. This would mean a set-back in the achievement of plan targets specially in such sub-sectors as primary education where the fulfilment of the plan target depends on the cumulative result of the performance of all the five years of the plan period. In all sub-sectors the proposed development programmes are much smaller compared to these envisaged under plan phasing. However, the ADP which has been drawn up represents, to the extent it is possible, an earnest effort to reflect the plan priorities to provide adequate allocations for programmes which have been emphasized in the plan. The ADP assigns highest priority to the development of primary education and earmarks 28% of total allocation for it against a share of 15 per cent which primary education actually received in 1977-78 (Annexure II). Simultaneously, the ADP ensures higher rate of growth in the less developed provinces/areas. This is indicated by the fact that against the total increase of only 14% over ADP of 1977-78 the increase for Baluchistan is 65 per cent, for NWFP it is 29 per cent, Sind 23 per cent and Punjab 17 per cent. Under Federal Programmes, despite a limited total increase of 4 per cent, the size of development programme of FATA, increased by 54 per cent, and of Northern Areas by 96 per cent. The ADP allocation for Azad Kashmir is however Rs. 10.656 million against the revised estimate of expenditure of Rs. 13.946 million giving a decrease of about 31 per cent. The allocation for 1978-79 does not include any funds for the development of primary education.

69. ADP 1978-79 accords higher priority to the completion of on-going programmes in so far as 66 per cent of the ADP have been allocated to on-going schemes as against 34 per cent to new schemes (Annexure V). Among on-going and new schemes high priority has been assigned to the field relating to primary education. Twenty per cent of the funds ear-marked for the completion of on-going schemes and 43 per cent of the funds which have been allocated for new schemes are earmarked for the development of primary education. Other major on-going schemes are Islamabad Sports Complex, development of Universities, establishment and expansion of Engineering Colleges and development of Secondary Education. Comparative allocations according to sub-sectors of education and executing agencies which have been earmarked for 1977-78 and 1978-79 are given in Annexure III.

Targets for 1978-79

70. *A Preview of Physical Targets for 1978-79.*—During 1978-79, 1,608 primary schools be opened, 446 primary schools shall be provided with buildings equipment shall be supplied to 268 schools and improvements/additions shall be made in the buildings of 822 schools. Teaching kits shall be supplied to 20,000 schools.

71. At the secondary education level, 140 primary schools shall be upgraded to middle school level and 61 middle schools to high standard. It is proposed to consolidate 250 secondary schools and provide additional accommodation to 127 schools, and books and equipment to 285 schools. For the introduction of agro-technical courses 16 workshops shall be constructed and equipment shall be supplied. The on-going work of construction of school buildings shall be completed.

72. Apart from provincial programmes of in-service teacher training, 30,000 serving primary school teachers shall be given an orientation course by Allama Iqbal Open University and 2,000 teachers shall be given pre-service training in the teaching of agro-technical subjects. An agro-technical teacher training school shall be established in Baluchistan. Under the Third Education Project, the on-going work shall be continued and work on remaining Teacher Training Institutions shall commence.

73. For the development of technical education work shall be continued on the campuses at Nawabshah and Karachi. At the campuses at Lahore basic and applied science block, an auditorium, multi-purpose hall, a student hostel and some expansion of civil engineering department shall begin. The work of expansion and consolidation of existing polytechnics/college of technology, vocational training institutes, commercial institutes and vocational institutes for women shall continue.

74. In the field of college education the emphasis shall be on consolidation of existing facilities and improvement in the teaching of science. Construction of buildings of 10 intermediate colleges shall be initiated while the on-going work on 48 college buildings shall be continued. Improvement in the physical facilities of 22 existing colleges shall be made by the construction of additional classrooms and laboratories. Equipment shall be supplied to 48 colleges.

75. The on-going work of construction of various campuses shall be continued and furniture and equipment shall be supplied. Rs. 30.5 million has been provided for the award of scholarship for study within the country. In addition, 1,000 first class matriculates shall be awarded scholarships under the President's Thousand Scholarship scheme. Ninety-nine scholars shall be sent abroad for higher studies and 52 foreign students shall awarded scholarship for studies in Pakistan.

76. Work shall be continued on the Sports Complex of the National Institute of Sports and Culture at Islamabad.

Primary Education

PROVINCIAL PROGRAMMES

77. *Baluchistan.*—ADP provides for the supply of equipment for the opening of 250 primary schools to be housed in places donated by the public Fifteen boys and 5 girls existing primary schools shall be provided with buildings whereas the buildings of 100 existing primary schools shall be improved. The on-going work of construction of primary schools buildings shall be completed. Additional rooms shall be constructed at 88 existing primary schools of Quetta town.

78. *N.W.F.P.*—It is proposed to open 358 primary schools and to provide these schools with buildings. For the improvement of existing primary schools the ADP provides for the replacement of the buildings of 40 existing schools and for the construction of 236 additional rooms at existing primary schools. The ADP also provides for the supply of equipment to 918 primary schools.

79. *Sind.*—ADP provides for the opening of 150 new primary schools. Of these 108 schools shall be provided with buildings during the current year. The buildings of 60 existing schools shall be improved and 25 classrooms shall be constructed at existing primary schools. For the consolidation and improvement of existing primary schools special repairs shall be undertaken at 30 schools and furniture shall be provided. Boundary walls of 9 existing primary schools shall be constructed during the current year. In view of the difficulties experienced in recruiting female primary school teachers it is proposed to construct teacher residences at 6 girls primary schools.

80. *Punjab.*—During 1978-79 1,000 new primary schools shall be opened at places where no primary school exists within easy excess of children. Of these 547 shall be boys and 453 for girls. The ADP also provides for the consolidation of 1,000 existing primary schools by providing additional furniture and equipment. In addition buildings shall be constructed for 203 existing primary schools which do not have any building of their own. Boundary walls of 400 girls primary schools shall be constructed. Repairs/additions of rooms and facilities for drinking water shall be provided at 200 existing primary schools. In un-attractive areas where it is difficult to recruit female primary school teachers it is proposed to construct 75 residential quarters. With the World Bank assistance 300 centre schools shall be developed. At these centre schools 300 additional classrooms, boundary walls of 500 schools, 50 residential quarters for female teachers and furniture and equipment shall be supplied.

FEDERAL PROGRAMMES

18. *Education Division.*—The ADP provides for the construction of 4 primary school buildings in Islamabad and 11 in Federal Capital Area. The buildings of 7 primary schools located in Federal Capital Area shall be reconstructed. In addition 56 classrooms shall be added to 16 primary schools located in Federal Capital Areas.

82. *F.A.T.A.*—The ADP provides for the opening of and construction of buildings for 100 new primary schools. The on-going work of construction of 50 primary schools shall be completed. For the consolidation and improvement of existing primary schools 60 classrooms shall be constructed at 20 primary schools.

Secondary Education

PROVINCIAL PROGRAMMES

83. *Baluchistan.*—Twentytwo primary schools will be upgraded to the middle standard and six middle schools to high standard. Additional accommodation shall be constructed at five middle schools upgraded in 1977-78 and books and equipment will be provided to 40 existing middle schools. The on-going work of construction of five middle school buildings shall be completed. The on-going construction of science rooms at pilot secondary school, Mastuhg, drawing room and boundary wall of high school Gwadur and additional room and laboratory of Pasni shall be provided. Provision of drinking water will be made at high school, Kanmehtarzai. Construction of four agro-technical workshops at Hub, Quetta, Sibi and Killa Saifullah shall be completed and agro-technical subjects shall be introduced at 8 schools : industrial arts in 4, agriculture in 2, and Home-economics in 2. Work will be started on the construction of additional buildings of 25 middle schools raised to high standard, on the construction of buildings of 5 girls schools at Quetta and on the improvement of 20 existing high schools. On-going construction of residential accommodation for teachers and headmasters will be completed and construction of 12 residences for female high school teachers and headmistress will be started. The students hostel currently under construction at Sehri shall be completed and 2 additional hostels shall be constructed during 1978-79. Grants-in-aid shall be provided to non-government institutions.

84. *N.W.F.P.*—The ADP provides for the upgradation of 30 boys and 10 girls primary schools to middle standard. Provision has also been made for the upgradation of 25 boys and 5 girls middle schools to high standard. Classroom equipment shall be supplied to 154 existing secondary schools. Furniture and library books shall also be supplied to 91 secondary schools. Ten agro-technical workshops shall be constructed and equipment shall be supplied to 387 middle and high schools. Provision has also been made for replenishment of equipment to schools where agro-technical courses were started in previous years.

85. *Sind.*—It is proposed to upgrade 13 existing primary schools to middle standard and upgrade 12 existing middle schools to high standard. In addition the work of consolidation of 10 middle schools and 5 high schools shall be completed.

86. *Punjab*.—The ADP provides for the upgradation of 42 existing primary schools to middle standard and 5 middle schools to high standard. To bring about qualitative improvement it is proposed to consolidate and improve 250 existing middle and high schools. Biology equipment shall be provided to 150 existing high schools. Agro-technical courses shall be introduced at 384 middle and high schools. The on-going work of construction of 180 agro-technical workshops shall be completed and necessary equipment shall be provided to 63 secondary schools. The on-going work of construction of additional class rooms for 131 middle and high schools shall be completed.

FEDERAL PROGRAMMES

87. *Education Division*.—It is proposed to construct buildings for 3 middle schools in Federal schools in Federal Capital Areas. The building of the secondary school, Kurree shall be constructed. Scientific equipment and furniture shall be provided to institutions in Federal Area and Islamabad. Agro-technical workshops shall be constructed at Nilore and Sihala. Equipment shall also be provided for the establishment of an experimental school for psychological study at Islamabad. Quarters for Chowkidars shall be constructed at 2 primary and 2 secondary schools in Islamabad.

88. *F.A.T.A.*—Forty three primary schools shall be upgraded to middle standard and 8 middle schools will be upgraded to high standard. Necessary buildings shall be constructed for all these schools.

89. *Azad Kashmir*.—During 1978-79 halls shall be constructed at 50 existing high schools. Of these, 15 halls shall be furnished. Provision shall be made for purchase of play fields for 10 high schools. Two new student hostels and 3 laboratories will be added to existing high schools. For the introduction of agro-technical courses required equipment shall be supplied. to four institutions for their industrial arts workshops, to 5 institutions for home-economics workshops, and to 10 institution for agriculture workshops. In addition the on-going work of construction of teachers' hostels at high schools for use during in-service training of primary school teachers shall be completed.

Teacher Education

PROVINCIAL PROGRAMMES

90. *Baluchistan*.—An agro-technical teacher training school for teachers shall be established. Under the Third Education Project construction of Teacher Training Institute at Pishin and Mastung shall be continued. In addition the ADP provides for construction of first floor of the hostel for the Education Extension Centre, Quetta. Provision has also been made for meeting the liabilities of the completion work of Teacher Training Institute at Uthal.

91. *N.W.F.P.*—Preliminaries in connection with the implementation of the Third Education Project having been completed, work of construction shall begin.

92. *Sind*.—Under the Third Education Project work of construction of TTI for girls at Karachi shall be continued while work of construction of TTIs at Moro and Mithiani shall commence.

93. *Punjab*.—It is proposed to train 25,400 primary, middle and high school teachers in the teaching of revised curricula. The on-going work of construction of buildings of elementary teacher training colleges at Kot Adu, Kot Lakhpat and Mianwali, building of science teacher training college at Lahore and the hostel of Education Extension Centre at Lahore shall be completed. Under the Third Education Project work shall be continued on the development of six TTIs at Lalamusa, Ghakhar, Kamalia, Rawalpindi, Multan and Shahpur Saddar.

FEDERAL PROGRAMMES

94. *Education Division*.—It is proposed to provide in-service training to 30,000 primary school teachers and pre-service training to 2,000 teachers of Agro-technical subjects through the programme of Allama Iqbal Open University and Federal College of Education and Agro-technical Teacher Training Centres, respectively.

Technical Education

PROVINCIAL PROGRAMMES

95. *Baluchistan*.—The facilities at the Polytechnic at Quetta shall be further consolidated through the provision of additional building facilities and supply of books.

96. *N.W.F.P.*—The on-going work of construction of vocational institute at Abbottabad shall be completed. Equipment shall be supplied to vocational institutes at Abbottabad, D. I. Khan and Mardan. The construction of staff residences at women vocational institute. Abbottabad and the building of commercial institute D. I. Khan shall be completed.

97. *Sind.*—The on-going work of construction at the campuses of NED Government Engineering College and Mehran University of Engg. and Technology, Nawabshah shall be continued. However, in compliance with the decision of CDWP no new construction shall be started at the Nawabshah Campus till the scheme is approved. The on-going work at the college of technology, Karachi shall be completed. Work shall also be continued on the construction and improvement of three nationalized polytechnics institutes 4 commercial institutes and 4 vocational institutes. In addition, work of construction of 5 new vocational institutes for girls shall be taken up.

98. *Punjab.*—At the University of Engineering and Technology, Lahore, a basic and applied sciences blocks, an auditorium, a multi-purpose hall, a student hostel and expansion of civil engineering department hall be taken up. At the second campus at Taxila the civil engineering department, a student hostel, some teacher residences and extension of laboratory and classroom blocks shall be taken up. Initial work on the establishment of 7 new commercial institutes for boys and 5 new vocational institutes for girls will be taken in hand. The work of consolidation and improvement of existing colleges of technologies, polytechnics and vocational and commercial institutes shall be continued and equipment shall be supplied.

FEDERAL PROGRAMMES

99. *Education Division.*—The work of construction of the hostel of the National College of Engineering and Technology, Karachi shall be completed and further equipment shall be provided. The architectural drawings of Baluchistan Engineering College, Khuzdar shall be completed and civil work shall be started.

College Education

PROVINCIAL PROGRAMMES

100. *Baluchistan.*—The on-going work of construction in connection with the upgradation of intermediate college, Loralai to degree level and establishment of intermediate college at Zhob shall be completed. The construction of boundary walls of Government College, Khuzdar shall also be completed. For the improvement of facilities for the teaching of science, laboratories shall be constructed at two existing colleges and science equipment shall be supplied. The girls hostel of Pilot School, Sibi shall be renovated to accommodate girls students. Provision for the supply of drinking water shall be made at intermediate college, for boys at Kallat. Provision has also been made for completion of degree college, Turbat.

101. *N.W.F.P.*—The ADP provides for the construction of buildings for 7 intermediate colleges. In addition, equipment shall be supplied to 28 intermediate and degree colleges for the improvement of teaching of science.

102. *Sind.*—Work shall be continued on the buildings of 13 colleges of which three shall be completed. The on-going work of construction of buildings of 8 government degree colleges and 6 nationalized degree colleges shall be continued. In addition work shall be initiated on the improvement of Government Girls College, Singhar, Government College, Ratodero, College of Home-Economics, Hyderabad and Ziauddin Memorial Nabi Bagh College, Karachi.

103. *Punjab.*—The on-going work of construction of 13 intermediate college buildings shall be completed and equipment will be provided to 15 intermediate and degree colleges. Work shall be started on the construction of buildings of intermediate colleges at Shahpur, Isakhel and Pakpattan and necessary equipment shall be provided. In addition the buildings of Islamia College, Railway Road, Lahore and Government College, Lahore shall be improved. Provision has also been made for providing additional building facilities and science equipment for 15 existing intermediate and degree colleges.

FEDERAL PROGRAMMES

104. *Education Division.*—The on-going work of construction of the building of Federal Government College for men, Islamabad will reach completion stage.

105. *F.A.T.A.*—The on-going work of construction of 5 colleges shall be completed, and work on the construction of and alterations of the building of cadet college, Razmak shall be accelerated.

106. *Azad Kashmir*.—For the improvement and expansion of facilities for the teaching of science, laboratories shall be provided at 3 girls colleges.

University Education

PROVINCIAL PROGRAMMES

107. *Baluchistan*.—The on-going work of construction of science faculty block and 42 residences for 42 staff residences at Baluchistan University Campus shall be continued.

108. *N.W.F.P.*—The on-going work of construction of Pashto Academy Campus Model School and Staff quarters on the campus of the University of Peshawar shall be completed. Work shall be started on Phase-II of the development of Gomal University, D.I. Khan.

109. *Sind*.—The on-going work of construction at the campuses of Karachi University, Sind University, Jamshoro and Shah Abdul Latif Bhatai campus shall be continued.

110. *Punjab*.—Provision has been made for the completion of the buildings of the Institute of Chemical Engineering, Law College, and 40 teacher residences of the University of the Punjab. Necessary furniture will be supplied to the completed blocks. At the Multan University campus, site development work and the construction of language institute shall be started. At the Islamia University Bahawalpur, the ground floor of a student hostel shall be completed.

FEDERAL PROGRAMMES

111. *Education Division*.—At the Quaid-i-Azam University, Islamabad, a student hostel block and 8 'D' type and 24 'B' type quarters shall be completed while work shall be continued on the construction of the university library building. Provision has also been made for initiating work on social science block. At the Allama Iqbal Open University campus, work of architectural plan shall be continued while work shall be started on the pilot studio block (Institute of educational technology), and printing shop (services and operation block). Provision has also been made for procurement of furniture, books, audio-visual aids and other equipment and for the printing production of correspondence texts for the use of students. The development of Iqbal Cell in the University library shall be continued.

Scholarships

112. The ADPs of various executing agencies provide the following amounts for scholarships and Loans :

Baluchistan :	Provision made in the Non-development budget.
Sind :	Rs. 6.5 million
NWFP :	Rs. 4.0 million
Punjab :	Rs. 20.0 million
Federal Government :	
(a) Education Division.	Rs. 22.1 million
(b) F.A.T.A.	Rs. 6.5 million
(c) Establishment Division.	Rs. 1.9 million

113. Details about the number and type of scholarships loans to be awarded are not available.

114. *Federal Programme*.—Nintynine scholars shall be sent abroad for advance studies in foreign universities. 60 under the Central Overseas Training scheme, 25 under the Merit Scholarships scheme and 14 under the Quaid-i-Azam Scholarship scheme. In addition 1,000 fresh first class Matriculates shall be awarded scholarships for study within the country under the Presidents, Thousand Scholarship scheme. Fiftytwo foreign students shall be awarded scholarships for study in Pakistani colleges and universities and 220 scholarship holders from previous years shall continue to receive scholarships.

Miscellaneous Programmes

115. *Curriculum Development.*—The curricula for intermediate level will be finalized for all major subjects. Work on preparation of integrated science curricula for secondary level students will be taken up. New curricula for teachers of general and technical education will also be finalized. Textbooks prepared under the revised curricula for various levels of education will be continued to be reviewed in the Ministry of Education. Compilation of a students' dictionary will be taken up and teachers' guides will be prepared for science subjects. Evaluation of the revised curricula introduced recently in elementary and secondary schools will also be taken up.

116. *Book Production.*—Under the programme of the National Book Foundation, 20 titles with about 20,000 copies will be published. About 40 titles of the school textbooks shall be printed by the National Book Foundation for the Text Book Boards. Fifty titles of foreign textbooks will be locally produced and 300 titles of foreign textbooks will be imported in order to make these books available at cheaper costs to the students.

117. *Adult Education.*—The Annual Development Programmes of Federal Government and NWFP provide Rs. 0.7 million and Rs. 0.5 million for adult education programmes. The programme under Federal Government will include continuation of the adult education programme in Federal area and of the pilot experimental project for integrating education with rural development. The programme in NWFP will comprise of establishment of adult education centres in various parts of the province.

118. *Special Education.*—ADPs of Federal Government and Punjab provides Rs. 0.51 million and Rs. 0.7 million for special education. The programme under Federal Government will include establishment of a pilot project for the education of blind, deaf and dumb and strengthening of existing institutions for the blind. The programme in Punjab provides for the development of nationalized institutions for the education of the handicapped.

119. *Archaeology and Museums.*—Repairs and maintenance of various sections of Shalimar Gardens and Lahore Fort will be continued. Work will also be continued in respect of on-going programmes at archaeological sites at Bhambere (Karachi) Harrappa, Moenjodaro and Farud-ghae-Shahane Mughlia at Wah Gardens. Antiques will be acquired for the National Museum of Pakistan.

120. *Arts and Culture.*—At the National College of Arts Lahore a 4-storey boys' hostel will be completed and preliminaries will be taken up for the construction of a 5-storey Audio Block with photography Laboratory, class rooms, Staff rooms etc. Programme of the National Commission on Historical and Cultural Research will be continued. On-going programmes of the National Council of the Arts and Institute of Folk Heritage will also be continued.

121. *National Archives of Pakistan.*—The work of procurement of archival material from private sources will continue and a similar programme will be under taken *vis-a-vis* Federal Ministries.

122. *Sports.*—Under the programme of National Institute of Sports Islamabad, Sportsmen Hostel will be completed. Work of foundation of stadium and super structure of two sections will be completed. In addition work will also be taken up of super structure of two more sections of the stadium, completion of main foundation of Gymnasium, super structure of the Main Practising Hall, Earth work of outdoor fields for various games, land scaping of the area around sportsmen hostel, and development of parking area. Under the scheme of 'Participation in 8th Asian Games' training will be provided for 400 sportsmen and 50 local coaches in 13 games and sports under the supervision of 22 foreign coaches.

123. *Research and Statistics.*—The programme of Planning Division will include economic research studies and agriculture policy studies. In Punjab, the programme includes addition of Photographic and re-production units and sample survey unit in Bureau of Statistics and establishment of project preparation and evaluation training centre. In Sind, the programme includes Statistical and Economic Research and re-organization and expansion of Bureau of Statistics and strengthening of library of Planning Deptt. In NWFP, the programme includes strengthening of Bureau of Statistics and development of library of Planning Department. and carrying out feasibility studies. In Baluchistan the programme will include feasibility studies and researches.

SUB-SECTOR-WISE ALLOCATION AND REVISED BUDGET ESTIMATES FOR 1977-78

(Million Rs.)

	Executing Agencies																		Total												
	Baluchistan						N.W.F.P.						Sind							Punjab						Federal Government					
	ADP	RBE*	3 as %2	ADP	RBE	6 as %5	ADP	RBE	9 as %8	ADP	RBE	12 as %11	ADP	RBE	15 as %14	ADP	RBE	18 as %19													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19													
Primary Education.	2.7	4.2	156	52.0	51.1	98	23.2	14.0	60	32.0	9.3	29	95.7	23.3	24	205.6	101.9	50													
Secondary Education.	8.3	8.0	96	18.6	14.1	76	10.0	8.6	86	17.2	12.6	73	34.6	32.2	93	88.7	75.5	85													
Teacher Education.	5.2	6.0	116	3.0	3.0	100	4.3	3.0	70	17.3	9.8	57	10.3	9.7	94	40.1	31.6	79													
Technical Education.	—	0.1	—	6.3	6.6	105	23.3	22.6	97	22.7	22.4	100	8.4	6.7	80	60.7	58.4	96													
College Education.	5.0	6.6	132	14.2	15.3	108	6.9	7.4	109	9.8	12.9	132	21.0	28.9	138	56.9	71.1	125													
University Education.	3.0	23.7	790	11.9	13.1	110	5.7	7.1	125	25.4	21.1	83	38.0	36.2	95	84.0	101.2	120													
Scholarship & Loans.	—	—	—	7.5	6.3	84	3.5	3.5	100	20.0	20.0	100	27.7	27.4	100	58.7	57.2	97													
Miscellaneous	2.0	0.4	20	2.2	0.8	36	3.7	2.1	57	17.8	24.4	137	72.2	56.7	98	97.9	84.4	86													
Total	26.2	49.0	187	115.7	110.3	95	80.6	68.3	85	162.2	132.5	82	307.9	221.2	72	692.6	581.3	72													
Islamabad Sports Complex	—	—	—	—	—	—	—	—	—	—	—	—	75.0	66.0	88	75.0	66.0	88													
Grand Total	26.2	49.0	187	115.7	110.3	95	80.5	68.3	85	162.2	132.5	82	382.8	287.2	75	767.6	647.3	84													

*RBE=Revised Budget Estimates.

PERCENTAGE OF SUB-SECTORAL ADP ALLOCATION (1977-78) UTILIZATION (1977-78) AND ADP ALLOCATION (1978-79) FOR VARIOUS EXECUTIVE AGENCIES

Executing Agencies

Sub-Sectors	Baluchistan		N.W.F.P.		Sind		Punjab		Federal Government		Total							
	1977-78	78-79	1977-78	78-79	1977-78	78-79	1977-78	78-79	1977-78	78-79	1977-78	78-79						
	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Primary..	10	9	21	45	46	42	29	21	26	20	7	22	25	8	26	27	16	28
Secondary	32	16	30	16	13	28	12	13	19	10	10	17	9	11	9	12	12	16
Teacher	20	12	18	3	3	3	5	4	5	11	7	8	3	3	4	5	5	5
Technical	—	—	3	5	6	5	29	33	20	14	17	16	2	2	3	8	9	8
College	19	14	10	12	14	10	9	11	11	6	10	12	6	10	8	7	11	9
University	12	48	13	10	12	5	7	10	8	16	16	9	10	13	9	11	15	8
Scholarships and Loans	—	—	—	7	5	4	4	5	4	12	15	10	7	10	7	8	9	7
Miscellaneous	7	1	5	2	1	3	5	3	7	11	18	6	38	43	34	22	23	19
Total ..	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SUB-SECTOR-WISE ALLOCATION: ANNUAL DEVELOPMENT PROGRAMMES 1977-78 AND 1978-79

Sub-Sectors	Baluchistan		N.W.F.P.		Sind		Punjab		Federal Govt.		Total		Allo- cation as % of Total	
	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Primary ..	2.704	8.900	52.042	62.013	23.150	26.000	32.025	41.280	95.649	104.301	205.570	26.7	242.494	27.6
Secondary ..	8.323	13.081	18.577	42.441	10.018	19.232	17.225	31.684	34.596	36.264	88.739	11.6	142.702	16.3
Teacher ..	5.146	7.974	3.000	4.500	4.310	4.500	17.330	14.381	10.319	14.934	40.105	5.2	46.289	5.3
Technical ..	—	1.300	6.295	7.026	23.345	20.100	22.683	31.020	8.400	13.200	60.723	7.9	72.646	8.4
College ..	5.037	4.382	14.174	15.028	6.835	11.145	9.797	22.138	21.012	29.115	56.855	7.4	81.808	9.3
University ..	3.000	5.500	11.920	7.358	5.700	7.500	25.400	16.800	37.987	37.150	84.007	10.9	74.308	8.5
Scholarship ..	—	—	7.500	6.500	3.500	4.000	20.000	20.000	27.660	28.600	58.660	7.6	59.100	6.7
Curriculum, Books, Examination, Library, Guidance and Counselling ..	—	0.800	—	1.180	0.675	2.800	1.677	4.100	9.000	16.140	11.352	1.5	25.020	2.8
Miscellaneous ..	1.495	0.890	1.360	1.094	0.329	1.600	10.354	5.115	27.555	9.888	41.093	5.4	18.497	2.1
Sports, Archaeology and Culture ..	0.200	—	1.500	—	0.600	—	4.700	—	28.300	24.440	34.300	4.5	24.400	2.8
Islamabad Sports Complex ..	—	—	—	—	—	—	—	—	75.000	75.000	75.000	9.8	75.000	8.5
Planning Research and Statistics ..	0.300	0.500	0.379	2.627	2.100	2.600	1.109	2.582	4.365	4.451	8.253	1.1	12.760	1.5
Establishment Division ..	—	—	—	—	—	—	—	—	2.990	2.150	2.990	0.4	2.150	0.2
Religious Affairs Division ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scientific and Technology Research Division ..	—	—	—	—	—	—	—	—	—	—	—	—	1.000	—
Total ..	26.205	43.237	115.747	149.767	80.562	99.477	162.300	189.100	382.833	396.633	767.647	100	878.214	100

REVISED BUDGET ESTIMATE FOR 1977-78 AND ALLOCATION 1978-79 BY VARIOUS EXECUTING AGENCIES

(Million Rupees)

Sub-Sectors	Executing Agencies													Total		
	Baluchistan			N.W.F.P.			Sind			Punjab			Federal Government			
	RBE	Allocation	RBE	Allocation	RBE	Allocation	RBE	Allocation	RBE	Allocation	RBE	Allocation	RBE		Allocation	RBE	Allocation
1	2	3	4	5	6	7	8	9	10	11	12	13				
Primary Education ..	4,199	8,900	51,139	62,013	14,006	26,000	9,250	41,280	23,300	104,301	101,984	242,494				
Secondary Education ..	8,002	13,081	14,168	42,441	8,622	19,232	12,580	31,684	32,157	36,264	75,529	142,702				
Teacher Education ..	5,954	7,974	3,000	4,500	2,977	4,500	9,860	14,381	9,769	14,934	31,560	46,289				
Technical Education ..	0,050	1,300	6,606	7,026	22,628	20,100	22,430	31,020	6,700	13,200	58,414	72,646				
College Education ..	6,591	4,382	15,257	15,028	7,428	11,145	12,890	12,138	28,913	29,115	71,079	81,808				
University Education ..	23,700	5,500	13,096	7,358	7,104	7,500	21,100	16,800	36,237	37,150	101,237	74,308				
Scholarships and Loans ..	—	—	—	6,265	3,500	4,000	20,000	20,000	27,400	28,600	57,165	59,100				
Miscellaneous ..	0,462	2,100	0,847	4,901	2,074	7,000	24,390	11,797	56,650	58,069	84,423	83,867				
Total—(Education) ..	48,958	43,237	110,378	149,767	68,339	99,477	132,500	189,100	221,126	321,633	581,301	803,214				
Islamabad Sports Complex ..	—	—	—	—	—	—	—	—	66,000	75,000	66,000	75,000				
GRAND TOTAL ..	48,958	43,237	110,378	149,767	68,339	99,477	132,500	189,100	287,126	396,633	647,301	878,214				
Utilization of original allocation.	187%			95%	85%	46%	82%	75%	84%							
Increase/decrease over Revised Budget Estimate ..		(-)	12%	36%	46%	38%	43%	36%	38%							

Notes :—Under miscellaneous are included programmes relating to curriculum development programmes of reprint and import of foreign textbooks, adult and special education, archaeology, museums and archives, sports and cultural activities, and research, statistics and planning.

2. Funds for all other programmes have been apportioned to related sub-sectors.

*Including allocation for Madrassah Education.

GLOSSARY

RBE—Revised Budget Estimates.

Allo—ADP Allocation.

SUB-SECTORAL BREAKDOWN INTO ON-GOING AND NEW SCHEMES

(Million Rupees)

Sub-Sectors	Executing Agencies																	
	Baluchistan			N.W.F.P.			Sind			Punjab			Federal Govt.			Total		
	on-going	New	%	on-going	New	%	on-going	New	%	on-going	New	%	on-going	New	%	on-going	New	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
Primary Education ..	3.500	5.400	2.146	59.867	19.670	6.330	7.800	33.480	81.944	22.357	115.060	20	127.434	43.0				
Secondary Education ..	0.507	12.574	1.404	41.037	18.232	1.000	11.974	19.710	23.602	12.662	55.719	10	86.983	29.4				
Teacher Education ..	6.474	1.500	2.000	2.500	4.500	—	14.281	0.100	12.393	2.541	39.648	7	6.641	2.2				
Technical Education ..	—	1.300	5.269	1.757	19.700	0.400	21.877	9.143	13.200	—	60.046	10	12.600	4.3				
College Education ..	0.550	3.832	10.020	5.008	9.945	1.200	9.924	12.214	21.199	7.916	51.638	9	30.170	10.2				
University Education ..	5.500	—	6.158	1.200	7.500	—	16.800	—	37.150	—	73.108	13	1.200	0.4				
Scholarships and Loans ..	—	—	—	6.500	4.000	—	20.000	—	28.600	—	52.600	9	6.500	2.2				
Miscellaneous ..	—	2.100	0.799	4.102	5.600	1.400	4.997	6.800	47.763	10.306	59.159	10	24.708	8.2				
Islamabad Sports Complex ..	—	—	—	—	—	—	—	—	75.000	—	75.000	12	—	—				
Total ..	16.531	26.706	27.796	121.971	89.147	10.330	107.653	81.447	265.851	55.782	581.978	100	296.236	100				
Percentage ..	38	62	19	81	90	10	57	43	83	17	66	34						

*Including Madrassah Education.

Notes : 1. Under miscellaneous are included programmes relating to curriculum development, programmes of reprint and import of foreign textbooks, adult and special education, archaeology, museums and archives, sports and cultural activities, and research, statistics and planning.

2. Funds for all inter-sectoral programmes have been apportioned to related sub-sectors.

CHAPTER 19

HEALTH

The Annual Plan 1978-79 is a step towards accelerating the improvement of facilities in rural areas. Out of the total capital outlay for the current year, 31.7 per cent is for the rural health programme. This will increase the coverage of health facilities from 50 per cent in 1977-78 to 58 per cent in 1978-79. Coverage means that a health facility will be available within 3.2—6.4 km distance of 58 per cent of the population. Gradually, during the Fifth Plan, facilities will be increased and 100 per cent of the population will be within 3.2 to 6.4 km distance of health establishments by 1982-83. The second major step is to initiate poly-immunization programme to protect children from debilitating diseases of childhood. The Annual Plan will continue programme for strengthening medical education and facilities in urban areas.

Review of ADP, 1977-78

2. The allocation for development of health sector during 1977-78 was Rs. 684 million. The revised estimates are Rs. 512 million, representing utilisation of 75 per cent of budget allocation. The revised estimates show a decline of 5 per cent compared to corresponding figure of 1976-77 (Annexure I). However, the recurring expenditure on health went up by 20.7 per cent during 1977-78, as compared to 1976-77.

3. A major achievement during the year was integration of malaria control programme with general health services which has been completed in all the four provinces. A decision has also been taken to integrate family welfare clinics of population planning programme with the health system. This is a significant step towards an integrated health delivery system.

4. Significant progress was made with training of mid level health workers. The designing of curriculum for mid level health workers (MLHWs) was completed. Substantial progress was made in production of reading material for MLHWs. The first batch of tutors from all the four provinces completed their training. The sites for schools for mid level health workers have been selected and schools would be made operative by September, 1978.

5. The training of community health workers is in progress in Northern Areas and Baluchistan. Training of community workers in other provinces did not progress as a number of questions like selection, supervision, training and mode of remuneration remained unresolved.

6. The estimated output of medical graduates during 1977-78 was 1300 against a target of 2656. The achievement was low because the final examination of last two sessions could not be held in Sind province, before the end of the financial year. In the rural health programme, 167 BHUs/dispensaries and 13 RHCs were constructed against the targets of 529 and 33, respectively. The works on rural health programme was quite slow in Punjab, Sind and Baluchistan Provinces. The main causes of delay were firstly the inability to select the sites for construction of these units and secondly the reluctance of the contractors to work in remote areas. In Baluchistan province, the funds were released late in December 1977 and even then the work could not be started due to winter season. Training of 1520 CHWs could not be undertaken because the training of mid level health workers could not be initiated as scheduled. The physical targets for the year under review and their achievements are given at Annexure II.

7. The progress of some of the major Federal programmes is given below :

- (i) *Malaria Control programme.*—The original allocations for this programme was Rs. 213.0 million. The revised estimates are Rs. 90.87 million showing a saving of Rs. 122.13 million. This saving is mainly due to the availability of sufficient insecticides from the stock of previous year. Physical achievements include spray coverage of 78.8 per cent of targetted houses. A total of 1.653 million blood smears have been collected giving 32,607 malaria cases. The programme distributed 6.884 million anti-malaria tablets for treatment of malaria cases. However, no progress has been made in extending the programme to northern areas and urban areas of the country.
- (ii) *Bolan Medical College, Quetta.*—This is an on-going project. Against an allocation of Rs. 40.0 million during the year, revised estimates are Rs. 45.0 million. The work on hostel block-A, structure of hostel-B, the piling and roofing of hospital building and piling of the college building has been completed.

- (iii) *Islamabad Hospital*.—The project is divided into two phases. The first phase saenviges construction of 296 bedded hospital. Estimated expenditure during the year was Rs. 14.11 million against original allocation of Rs. 10.00 million. Work is in an advanced stage on the indoor portion of the hospital.
- (iv) *Extension of College of Physicians & Surgeons, Karachi*.—The Scheme involves further improvement in the college by adding 1st, 2nd and 3rd floors in the main college building and 2nd floor over the residential hostel. The first floor of the college building is complete. The allocation of Rs. 1.5 million has been utilized.
- (v) *Improvement and extension of J.P.M.C., Karachi*.—The allocation for three on-going schemes was Rs. 4.0 million, out of which Rs. 3.2 million have been spent. The department and school of paediatrics has been completed. The work on construction of half first floor, second and third floors over combined blood bank is in an advanced stage. Wood work and installation of fixtures is in progress. Work has not yet started on construction of hostel for 200 student nurses.

Provincial Programmes

8. The progress in respect of provincial programmes is as under :

9. *Baluchistan*.—The revised allocation is Rs. 22.000 million against original allocation of Rs. 16.617 million. However, actual e penditures are estimated at Rs. 16.0 million; 66% of revised allocations. Work was delayed due to late release of funds. The work on construction of 30 BHUs and 6 rural health centres could not be completed and would extend to the next financial year. However, 3 rural health centres and 8 basic health units, from among the on-going schemes, have been completed.

10. *N.W.F.P.*—During the year, the financial utilization was Rs. 100.190 million against the allocation of Rs. 102.239 million. All the 18 dispensaries proposed have been completed during the year. Out of 140 basic health units, 104 have been completed whereas work on the remaining units is in different stages of construction. Six rural health centres were completed during the year.

11. *Sind*.—The revised estimates are Rs. 35.600 million against original allocation of Rs. 69.180 million. Three taluka headquarters hospitals (Khipro, Rato Dero and new Hala) and one rural health centre have been completed. The work on taluka headquarters hospital Matli, Tando Alla-Yar, Services Hospital, Karachi, rural health centres and basic health units are in various stage of implementation. The work on construction of four new tehsil headquarters hospitals is in initial stages. The work on construction of Chandka Medical College, Sind Medical College, People's Medical College, Nawabshah and hostel for Liaquat Medical College, Hyderabad is going on at accelerated pace.

12. *Punjab*.—The revised ADP allocation is Rs. 138.300 million against original allocation of Rs. 163.669 million. In physical terms 3 rural health centres and 37 basic health units of the previous years have been completed. The work on 100 basic health units, initiated in 1976-77, is in various stages of implementation. There was little progress on 175 new basic health units, which were provided for in the Annual Plan of 1977-78. Work on construction of teaching hospitals, district headquarters hospitals and tehsil headquarters hospitals was completed and 100 per cent funds have been utilized.

PROGRAMME FOR 1978-79

13. The Annual Development Programme for health sector for the year 1978-79 amounts to Rs. 761.297 million. The funds allocated from the non-developmental budget amount to Rs. 647.437 million. The policy objectives for the Annual Plan 1977-78 are briefly as follows :

- (i) The shift in emphasis from curative to preventive measures will be continued.
- (ii) A beter balance will be achieved between facilities available for the urban areas and the facilities provided for rural areas though a three-tier health system consisting of doctors, para-medicals and community health workers.

- (iii) Special programmes will be integrated with the health services without jeopardizing the fulfilment of objectives.
- (iv) Linkages with the health and other programmes will be strengthened.
- (v) Expansion undertaken in higher medical education will be consolidated.

Targets

14. The targets to be achieved by various administrative agencies during the year 1978-79 are given in Table 1.

TABLE 1
Targets 1978-79

	Health Divn.	N.A.	A.K.	FATA	Baluchistan	NWFP	Sind	Punjab	Total
Doctors ..	—	16	60	85	86	200	790	880	2117
Nurses & Auxiliaries	100	33	124	168	200	700	810	2200	4335
CHW ..	—	40	100	200	200	1400	500	750	3190
RHC ..	—	—	3	2	6	15	21	21	68
BHUs ..	—	15	30	45	70	140	46	120	466
Hospital Beds	—	20	150	96	120	625	510	971	2492

Allocations

15. The allocations for the health sector programme by administrative agency and by regions are given in Table 2.

TABLE 2
Allocations A.D.P. 1978-79

									(Rs. in million)
Health Division ..	..	..	..	..	..	..	..	..	262.950
Azad Kashmir ..	..	..	..	..	..	..	..	..	15.094
Northern Areas ..	..	..	..	..	..	..	..	..	8.000
F.A.T.A. ..	..	..	..	..	..	..	..	..	25.739
Science & Technology ..	..	..	..	..	..	..	..	..	5.000
Planning Division ..	..	..	..	..	..	..	..	..	2.125
Interior Division ..	..	..	..	..	..	..	..	..	3.000
Baluchistan ..	..	..	..	..	..	..	..	..	27.719
N.W.F.P... ..	..	..	..	..	..	..	..	..	121.200
Sind ..	..	..	..	..	..	..	..	..	76.770
Punjab ..	..	..	..	..	..	..	..	..	213.700
								Total ..	761.297

16. Programme-wise allocation by executing agency is at Annexure III. The agency-wise allocation of health sector programme expressed as percentage of development outlay is at Annexure IV. The recurring expenditure by executing agency alongwith revised estimates for the previous year are at Annexure V.

17. The allocation for health programme for 1978-79 is broadly in line with Fifth Five Year Plan. Some re-adjustments in physical targets had been made but these would not conflict with Fifth Plan priorities. Highest priority has been given to the development of health facilities in the rural areas for which an allocation of Rs. 240.707 million has been made. This is 31.7% of the total provision for the health sector during the current year. This may be compared with the allocation of 1977-78 when Rs. 190.853 million were allowed for rural health programme or 27.9% of the allocation for that year.

Federal Programme

18. *Malaria Control Programme.*—An amount of Rs. 80.00 million has been provided for control of malaria in the country. The reduced allocation compared to last year, is in accordance with the phasing of the programme. The allocation for 1978-79 will be utilized for purchase of insecticides and equipment, spare parts and vehicles.

19. *Bolan Medical College.*—Rs. 90.00 million including Rs. 20.00 million foreign exchange has been allocated for the project. The allocation has been enhanced considerably so as to complete the construction work of hostel-A and hostel-B. The work on 1st and 2nd floor of college will also be completed. Construction of residential colony will be started. The overall progress at the end of year will be 75%.

20. *Islamabad Hospital.*—An amount of Rs. 30.00 million including foreign exchange component of Rs. 10 million has been allocated with a view to making the 296 beds operational as early as possible.

21. *Improvement & Expansion of J.P.M.C., Karachi.*—An amount of Rs. 12.231 million has been allocated for different schemes to be implemented for improvement and expansion of Jinnah Postgraduate Medical Centre, Karachi, including hostel for nurses.

22. *Hazara Medical Complex.*—An amount of Rs. 20.00 million has been allocated for purchase of land and feasibility study for Hazara Medical Complex Phase I. The Phase I consists of an under-graduate medical college with 200 seats for NWFP, Azad Kashmir, Northern Areas and Federally Administered Tribal Areas.

23. *Nuclear Medical Centre, Islamabad.*—Work could not be done last year on this project. An amount of Rs. 5.00 million has been allocated to start the work this year. This will form part of Islamabad Hospital Complex.

24. *Improvement of National Health Laboratories.*—An amount of Rs. 10.64 million has been provided during the year for improvement and expansion of National Health Laboratories. This includes the construction of Health Centre, installation of incinerator, boiler, improvement of residential areas and laboratories for measles, poliomyelitis and anaerobic vaccines. The work on 50 bedded clinical wing of National Health Laboratories will also be started.

25. *Azad Kashmir.*—An allocation of Rs. 15.094 million have been allocated for Azad Kashmir showing an increase of 70 per cent over the allocation of last year. This amount is 9.0 per cent of total ADP of Azad Kashmir as compared to 7 per cent of the last year. In physical term 3 RHC, 30 BHUs and 150 Hospital Beds will be added. Work will continue on the Para-Medical School, Mirpur. The work on establishment of District Headquarter Hospital at Kotli will be started.

26. *Northern Areas.*—An amount of Rs. 8.00 million has been allocated for Health programme during the year. This is 10 per cent of total allocation for the area. This amount includes Rs. 2.5 million for Rural Health Project which would basically concentrate on retraining of Health Guards.

27. *Federally Administered Tribal Areas.*—The allocation for health sector of FATA amounts to Rs. 25.739 million against an allocation of Rs. 15.00 million of the last year. The health share is 11.7 per cent of total ADP of FATA. The physical targets include construction of 2 Rural Health Centres and 45 Basic Health Units. Besides, 120 beds will be added in different institutions.

28. *Interior Division.*—An amount of Rs. 3.000 million has been provided for treatment and rehabilitation of drug addicts.

29. *Planning and Development Division.*—An amount of Rs. 2.125 million has been provided for nutrition planning project and generation of data for health planning.

30. *Science and Technology Division.*—Pakistan Medical Research Council will continue research work pertaining to national health problems with an allocation of Rs. 5.00 million. A new medical research cell will be established at Quetta.

Provincial Programme

31. *Baluchistan*.—An amount of Rs. 27.719 million has been provided for health sector during the current year with an increase of Rs. 5.719 million over revised allocation of the last year. The current allocation forms 7.34 per cent of total ADP of Province. The increase in allocation will enable the completion of 6 Rural Health Centres, addition of 120 beds of infectious diseases hospital and 60 Basic Health Units. Ten ambulances at various health units will be provided during the year for referral care. Provision for expansion of Nursing School and training of mid level health workers has also been made.
32. *N.W.F.P.*—An allocation of Rs. 121.2 million has been provided for 1978-79 in this sector. A sum of Rs. 35.7 million or about 30% of the allocation has been set aside for consolidation and improvement of the existing facilities.
33. It is planned to establish 90 new Basic Health Units in addition to the 50 on-going ones. It is also hoped to improve 13 hospitals during the year. Rural health has been allocated Rs. 53.68 million, which is 52.6% of the sectoral allocation. In all about 0.8 million persons in the rural areas would benefit from the programme. To man the new facilities it is also planned to train 700 health auxiliaries and 1400 community health workers.
34. Besides the emphasis on primary health which is aimed at increasing the coverage in the rural areas, a sum of Rs. 24 million has been allocated to increase the effectiveness of general hospitals in the province. Some other projects in this sector are as follows :
- (i) Construction of Casualty Block, Lady Reading Hospital, for which a sum of Rs. 1.6 million have been allocated during the year.
 - (ii) Continuance of work on Phase II of Khyber Teaching Hospital for which Rs. 12 million have been allocated during the year.
35. *Sind*.—The allocation for Health Sector is Rs. 76.77 million which is 9.2 per cent of the total development outlay of the province. Rural Health Services receive high priority for which Rs. 37.725 million have been provided *i.e.* 49 per cent of the total health programme.
36. About 510 additional beds would be added in the province out of which 220 beds would be through the completion of 21 Rural Health Centres. The total number of Rural Health Centres in the province by June, 1979 would be 75. 100 beds would be provided in the Services Hospital, Karachi which has been set up for Provincial Government employees while 90 additional beds would be added in District Headquarter Hospitals and L.M.C., Jamshoro. During the year, 2 Tehsil Headquarter Hospitals (Tando Allahyar and Khipro) would be completed. Besides, work on 5 on-going taluka hospitals would continue. Thirty-nine new Basic Health Units/Dispensaries would be completed out of which 2 would be linked with two Integrated Rural Health Centres. In addition, 6 dispensaries in Sukkur and one in Golarchi (Badin) would be added.
37. The on-going works in the People's Medical College, Nawabshah, Chandka Medical College, Larkana and Sind Medical College, Karachi would continue for which a total provision of Rs. 13.70 million has been made.
38. *Punjab*.—A provision of Rs. 213.7 million has been made for health sector during the year. This is 9.2% of total development outlay.
39. The major emphasis during the year will be the expansion of the rural health programme for which Rs. 92.3 million have been allocated which is 43 per cent of total provision for health sector of the province. As a part of rural health programme work on construction of 21 new Rural Health Centres and 120 new Basic Health Units will be undertaken. Work will also be continued on the on-going schemes. The main schemes are construction of 200 bedded eye ward and a new casualty block in Mayo Hospital, improvement and expansion in General Hospital, Lahore, Nishtar Hospital Multan and Faisalabad Hospital, improvement in DHQ Rawalpindi, Holy Family Hospital, Rawalpindi, and Services Hospital, Lahore, to bring them to standard of teaching hospitals, will be undertaken during the year. Upgradation of different District Headquarter Hospitals and Tehsil Headquarter Hospitals will also be carried out during the year. A 89-girl students hostel and 3rd phase of boy hostel of King Edward Medical College will be completed. In all, 571 beds will be added.

ALLOCATION IN 1977-78 ADP AND REVISED ESTIMATES BY EXECUTING AGENCIES
(Health Sector)

(Million Rs.)

S. No.	Executing Agencies	ADP Allocation	Revised Estimates	Percentage utilization
1.	Health Division	293.480	173.950	59.3
2.	Azad Kashmir	8.855	8.665	97.9
3.	Northern Areas	8.500	8.194	96.4
4.	Federally Administered Tribal Areas (FATA)	15.000	19.840	132.3
5.	Interior Division	1.200	1.200	100.0
6.	Planning and Development Division	2.600	1.340	51.5
7.	Science and Technology Division	3.000	3.000	100.0
8.	Baluchistan	16.617	22.000	132.4
9.	N.W.F.P.	102.239	100.190	98.0
10.	Sind	69.180	35.600	51.5
11.	Punjab	163.669	138.300	84.5
	Total	684.340	512.279	74.9

PHYSICAL TARGETS AND ACHIEVEMENTS 1977-78**(Health Sector)**

S. No.	Category	Targets	Achievements	Percentage achievement
1.	Doctors	2,659	1,300	49.0
2.	Nurses	596	537	90.0
3.	Health Auxiliaries	2,362	1,500	63.5
4.	Community Health Workers	1,520	30	2.0
5.	Hospital Beds	2,618	1,968	75.0
6.	Rural Health Centres	33	13	39.4
7.	Basic Health Units/Dispensaries/Maternity and Child Health Centres	529	167	31.6

ALLOCATION 1978-79 BY SUB-SECTORS AND EXECUTING AGENCIES

Sub-Sector	(Million Rs.)										Percentage		
	Health Division	Science & Tech. Division	Planning Division	Interior Division	FATA	North-eastern Areas	Azad Kashmir	Baluchistan	NWFP	Sind		Punjab	Total
Rural Health Programme	.. 0.500	—	—	—	16.089	5.080	5.520	21.537	61.956	37.725	92.300	240.707	31.6
Preventive Programme	.. 92.400	—	—	3.000	—	0.250	2.860	0.662	5.545	0.700	13.206	118.623	15.6
Hospital facilities including teaching hospitals	.. 42.540	—	—	—	7.650	2.620	3.264	3.920	38.870	17.600	58.128	174.592	22.9
Health Manpower Development	.. 117.380	—	—	—	2.000	0.050	2.450	1.600	13.150	20.645	46.674	203.949	26.8
Medical and Nutrition Research	.. 10.130	5.000	2.125	—	—	—	—	—	0.979	0.100	2.000	20.334	2.7
Miscellaneous	.. ..	—	—	—	—	—	1.000	—	0.700	—	1.392	3.092	0.4
Total	.. 262.950	5.000	2.125	3.000	25.739	8.000	15.094	27.719	121.200	76.770	213.700	761.297	100.0

PERCENTAGE ALLOCATION OF REGIONAL ADP 1978-79 FOR HEALTH SECTOR

(Million Rs.)

Agency	Total ADP	Health ADP	Percentage of total
Federally Administered Tribal Areas (FATA)	220.000	25.739	11.70
Azad Kashmir	170.000	15.049	8.85
Northern Areas	80.000	8.000	10.00
Baluchistan	377.257	27.719	7.00
N.W.F.P.	790.000	121.200	15.34
Sind	833.700	76.770	9.21
Punjab	2,324.012	213.700	9.20

RECURRING EXPENDITURE BY EXECUTING AGENCY

(Million Rs.)

Executing Agency	Revised Estimates 1977-78	Budget Estimates 1978-79
Health Division	89.336	115.808
Azad Kashmir	0.506	0.533
Northern Areas	6.640	6.764
Federally Administered Tribal Areas (FATA) ...	11.479	14.038
Baluchistan	38.345	44.840
N.W.F.P.	70.000	93.200
Sind	111.130	122.300
Punjab	202.488	249.954
Total ...	529.924	647.437

POPULATION PLANNING

Pakistan was among the first few developing countries to initiate efforts at Governmental level for controlling population growth. In the First Five Year Plan (1955—60) a significant step was taken by clearly spelling out a Family Planning Programme. The limited success in reducing the fertility was, however, accompanied by sharp reduction in mortality rates, resulting in an acceleration in population growth rate. Currently, the growth rate is estimated to be in the neighbourhood of 3 per cent and ranks amongst the highest in the world. The population even if it reaches replacement levels immediately, will still continue to grow for about three quarters of a century before stabilising. The Government, therefore, is launching a major offensive through the Fifth Plan by strengthening the process of socio-economic change with the overall objective of raising the consciousness of the people to the benefits of planning families and providing facilities to couples desiring such services. The Fifth Plan target of reducing the population growth rate to 2.5 per cent is a key element in strengthening the national economy, improving the welfare of the families and laying the foundation for sustained advances during the rest of the century.

Demographic Trends

2. The third census in 1972 revealed that the population had almost doubled since 1951. The principal cause was an imbalance between the birth and death rates. There are indications that birth rates have declined by 5 to 10 points. The total fertility rate has come down to around 7 for an average female completing her reproductive period. The Pakistan Fertility Survey 1975 (PFS 1975) established Crude Birth Rate (CBR) to be around 40 per thousand.* The distribution of death rates indicates a high level of infant mortality but fortunately overall mortality has recorded a pronounced decline over the last three decades. The decline in the mortality rate has been significant. It is at present estimated at around 14 per thousand compared to 1960 estimates of 30 per thousand. The life expectancy at birth has risen to a level of 50—55 years as compared to 47 according to 1962—65 estimates.

3. Recently out-migration of technically skilled persons has become significant. It is estimated at 140 thousand in 1977, and would have some depressing effect on fertility.

REVIEW OF 1977-78

4. The programme during the reference period maintained low key operations. In fact, field activities were disturbed in early 1977 due to uncertain conditions. A high powered committee was appointed in August, 1977 to review the administrative structure. The Government also took cognisance of the fact that many health related programmes were running parallel to each other and thus resulted in duplication of services. In view of the need to consolidate the various services, the Government took a major decision to integrate population programme with the general health network.

5. The programme was allocated Rs. 243 million including a foreign exchange component of Rs. 99.6 million in the ADP 1977-78. Initial estimates of expenditure show a utilization of Rs. 105.27 million which is 43 per cent of the total allocation. The figure is likely to change as more firm expenditure estimates became available.

6. The physical targets envisaged and expected realization are detailed below :

TABLE I
Physical Targets and Achievement, 1977-78

S. No.	Item	Targets	Percentage ** expected to be realized
(i)	Conventional Contraceptives	0.803 million Gross	50
(ii)	Oral Pills	5.2 million cycle	28
(iii)	IUD's	300,000	24
(iv)	Sterilization	45,000	15

*Pending further substantiation of this evidence for decline in crude birth rate, the population growth estimates used by the Planning Division are based on a CBR of 44 per thousand.

** Based on July, 1977—May, 1978 and Projected to June, 1978.

7. The low level of achievement is stated to be due to the fact that field activities remained suspended for a substantial part of the year. Performance figures are mainly based on clinic reports whereas information from far flung distribution points was not collected. Moreover, the supply of services would have met the requirements of firm clients so that the contraceptive use is likely to have been more effective. It can, however, be concluded that the programme did not make much progress during the year and that the impact on fertility level may not be significant.

Fifth Plan 1978—83

8. The Government through its Fifth Plan (1978—83) is launching a major Population Planning Programme with a direct investment of Rs. 18.00 million. The programme which is being revised in the light of recent reviews has a rather ambitious objective of reducing the overall population growth rate to 2.5 per cent with a corresponding reduction in crude birth rate (CBR) to 35.5 per thousand and crude death rate (CDR) decline to 10.2 per thousand. The total fertility rate (TFR) is projected to drop from 7 to 5 live births. The intermediate stage of demographic transition through which the population of Pakistan is passing, provides an opportunity to register appreciable decline in growth rate. With the death rate approaching its lower limits the future fertility declines have greater likelihood of being reflected in a parallel movement of population growth. Furthermore, it was revealed by PFS 1975 that while only 6% of eligible couples were regularly practising contraception, as many as 70 per cent of the exposed couples had either practised or intended to practise population planning. An effective programme out-reach is needed to narrow the gap between intention and practice.

9. A restructured Population Planning Programme would continue to retain the main responsibility of reducing the population growth rate. However, various programmes of the Fifth Plan which are likely to influence fertility both during the Plan as well as in the post-plan period are briefly discussed here. Firstly, the Fifth Plan seeks to bring about socio-economic change, which in addition to having priority in their own right would also generate a demographic transition and induce greater desire to limit family size. Under the growth strategy, emphasis would be placed on less fortunate sections of the society with special attention to the uplift of rural and backward regions. With the rise in incomes there is a likelihood of preference for smaller family size. This is being assumed on the basis of experience of other developing countries. The expansion in female education coupled with employment opportunities especially away from home would accelerate the process of fertility decline. As a consequence, the age at marriage is likely to increase. Secondly, improvement in public health services would appreciably reduce the incidence of infant and child mortality which has strong linkages with fertility. Even though the above stated factors are important, the success of population programme depends on how quickly the desire to limit family size is generated and how effectively this is transformed into practice.

10. The Government has been making constant efforts in the past to improve the programme performance. The programme which conceptually forms a part of the health network could not be integrated with other related programmes in the absence of an extensive health infrastructure. With the actual and planned expansion in health facilities in rural areas, such an integration has now become a practical possibility. Furthermore, in view of the socio-cultural set up there was a growing feeling that a programme like population planning would be difficult to sell in the absence of complimentary and immediate tangible benefits. The Government, therefore, has recently decided to integrate all health related programmes running parallel to each other. Consequently, a task force in currently laying down the foundations for a revised set-up. The finding of this task force is expected to be finalized by the end of September, 1978 for the consideration of the Government. It may be mentioned that as a result of integration, the total service out-lets would increase manifold and with a wider coverage those remote areas hitherto without these facilities would come under the programme orbit.

PROGRAMME FOR 1978-79

11. The programme during 1978-79 cannot switch over to the new strategy. In the meanwhile, it would continue to offer services through its outlets under the existing setup and the field activities would be reactivated. A training and retraining programme of the medical and para-medical personnel will be taken up on a large scale in phased manner. In order to prepare the field workers for their expanded role as multi-purpose workers, joint syllabi would be developed. As

a first step in this direction a conference was held in July, 1978. Some other changes in the population strategy are briefly listed below :

- (i) The field activities of the Population Planning Programme would be merged into the total health system by the end of current financial year ;
- (ii) A more effective system of implementation and coordination will be established involving Federal, Provincial and District level Organizations ;
- (iii) Linkages with other programmes would be improved with establishment of Councils of Population, Health and Social Welfare at all the three levels of operation ;
- (iv) Efforts would be made to change the contraceptive mix in favour of more effective and safer methods of contraception ;
- (v) The programme approach would be made flexible to suit regional conditions ;
- (vi) The involvement of public and volunteer groups would be enhanced ;
- (vii) Indigenous practitioners (Hakeem, Homoeopaths etc.) would be involved in the Programme activities.
- (viii) Greater emphasis would be placed on Information, Education and Communications (IEC) to enhance the programme effectiveness.
- (ix) Clinical and Non-clinical research activities would be stepped up.

Organization

12. With the abolishing of Population Planning Council, a Population Division within the Ministry of Health, Population and Social Welfare has been established, with an overall responsibility of policy, coordination, planning and logistics. The Division would be headed by an Additional Secretary to assist the Secretary, Health, Population and Social Welfare.

13. At the Provincial level, the Health Department would be renamed as Department of Health and Population and with two Directorates, one each for Health and Population. The latter would be established by converting the existing Director General's offices in the Provinces. The District level set-up would consist of 4 to 6 officers catering to various aspects of the integrated programme under the charge of a District Health and Population Officer. Beyond the district level the programme would operate through Basic Health units, Rural Health Clinics, MCH centres and Family Welfare clinics. The overlapping, if any and gaps in the services would be properly phased out with the ultimate objective of providing a service to most of the population within 2-mile radius. Besides, community workers would be trained to operate at village level.

Financial

14. An allocation of Rs. 210 million including a foreign exchange component of Rs. 72.3 million has been made in the ADP 1978-79. Though this amount shows a decline compared with ADP 1977-78 which was Rs. 243.00 million, yet it is sufficient to meet the current year's requirement of the programme. In short the reduced allocation reflects the consolidated aspects of the programme.

Physical

15. Following targets are being proposed but a strict adherence to these would not be possible in view of flexible approach of the programme.

TABLE 2
Physical Targets for 1978-79

S. No.	Item	Targets 1978-79
(i)	Conventional Contraceptives	831,000 gross
(ii)	Oral Pills	6.4 million cycles
(iii)	Sterilization	40,000
(iv)	Injectables	94,000
(v)	Liquid Foam	63,000 Bottles.

ALLOCATION/EXPENDITURE 1970-78

(Rs. Million)

Year	Allocation	Expenditure
1970-71	48.1	42.5
1971-72	27.9	25.7
1972-73	24.1	41.9
1973-74	102.0	103.3
1974-75	145.0	104.5
1975-76	189.5	187.8
1976-77	243.0	193.0
1977-78	243.0	105.3*
1978-79	210.0	—

*Rough estimates of expenditure.

CONTRACEPTIVES SALES

Year						(Million)			
						Sterilization	IUD's	Oral Pills (Cycles)	Conventional Contraceptives
1970-71	..	..	..	..	..	0.005	0.238	0.005	68.4
1971-72	..	..	..	..	..	0.003	0.124	0.006	25.2
1972-73	..	..	..	..	..	0.003	0.107	0.163	28.8
1973-74	..	..	..	..	..	0.004	0.092	1.265	48.0
1974-75	..	..	..	..	..	0.008	0.137	2.540	82.2
1975-76	..	..	..	..	..	0.014	0.224	5.510	148.0
1976-77	..	..	..	..	..	0.015	0.176	4.100	98.45
1977-78	..	..	..	..	..	0.007	0.072	1.456	57.8

**ASSUMED RELATIVE EFFECTIVENESS OF CONTRACEPTIVES METHODS FOR CONTINUOUS USERS
(BASED ON ONE YEAR REGULAR USE)**

Methods	At the onset of Fifth Plan (1978-79)
Sterilization .. .. .	.65
IUD .. .. .	.66
Injectables .. .. .	.50
Oral Pills .. .. .	.40
Condom .. .. .	.40
Foaming Liquid .. .. .	.30

**PHYSICAL CONTRACEPTIVES TARGETS HAVE BEEN WORKED OUT ON THE BASIS OF THE
FOLLOWING CRITERIA**

Methods	Users	Contra- ceptives Unit Need- ed
Sterilization	1	1 Operation
IUD	1	1 Insertion
Injection	1	5 Injections
Oral Pills	1	13 Cycles
Condom	1	100 Units
Liquid Foam	1	100 Applica- tions.

RUPEE COSTS AND FOREIGN EXCHANGE COMPONENT OF POPULATION PLANNING PROGRAMME *

(Rs. Million)

Year								Rupee Costs	Foreign Exchange	Total
1978-79	..	..	..	..	..	..	..	137.7	72.3	210
1979-80	..	..	..	..	..	..	..	200.0	70.0	270
1980-81	..	..	..	..	..	..	..	285.0	68.0	353
1981-82	..	..	..	..	..	..	..	380.0	60.0	440
1982-83	..	..	..	..	..	..	..	470.0	50.0	530
							Total	1472.7	330.3	1803

* The breakdown is purely tentative except for 1978-79.

POPULATION PROJECTIONS

(Rs. Million)

	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Rural	54.92	56.17	57.48	58.81	60.09	61.24
Urban	20.70 (27.4%)	21.69	22.68	23.68	24.67	25.66 (29.5%)
Total ..	75.62	77.86	80.16	82.49	84.76	86.90
CBR (per 000)	43.6	42.6	61.6	40.1	38.0	35.5
CDR (per 000)	13.8	13.0	12.0	11.0	10.5	10.2
Growth Rate %	2.98	2.96	2.96	2.91	2.75	2.53
Rural (1978-83)	2.2%					
Urban (1978-83)	4.4%					

CHAPTER 21
SOCIAL WELFARE
REVIEW OF 1977-78

A total allocation of Rs. 16.90 million was made for Social Welfare in the Annual Plan for 1977-78. This allocation was fully expended on a national basis but there was 50% shortfall in Sind and about 81% excess in Baluchistan as indicated in the statement given below:

TABLE 1
Allocation and Expenditures (1977-78) by Executing Agencies

Executing Agency	Allocation	Expenditure
1. Federal Govt.	5.00	5.00
2. Punjab Govt.	9.50	9.50
3. Sind Govt.	1.00	0.50
4. N.W.F.P. Govt.	0.78	0.78
5. Baluchistan Govt.	0.62	1.12
Total	16.90	16.90

2. Significant physical achievements made in the Social Welfare Sector pertained to the field of child and women welfare services. These achievements included establishment of 150 social service units : Punjab 126, Sind 3, NWFP 8, Baluchistan 6 and Federal Agencies 4 as indicated in Table 3 by projects.

PROGRAMME FOR 1978-79

3. The development programme of 1978-79 for social welfare sector envisages continuation and expansion of 139 on-going projects as indicated in para 2 above. However, only 35 new units (Punjab 15, Sind 5, NWFP 3, Baluchistan 4 and Federal Agencies 8) will be added due to financial constraints. Child and Women Welfare programmes will again be accorded priority over other programmes. As such, needy children and women will form the two main target groups of beneficiaries under various programmes. The programme content of various projects going to be pursued by all the executing agencies is almost similar.

Federal Programmes

4. *Health and Social Welfare Division.*—The Social Welfare Wing of the Ministry of Health, Population and Social Welfare will undertake different tasks for expansion of on-going projects as follows :

- (i) Grants-in-Aid/Financial and Professional assistance to 600 voluntary social service agencies (Punjab 300 agencies, Sind 150 agencies, NWFP 100 agencies and Baluchistan 50 agencies) ;
- (ii) Grants-in-aid to 6 University Departments of Social Work at Karachi, Hyderabad, Lahore, Peshawar, Quetta and Bahawalpur and 29 colleges throughout the country ;
- (iii) Organisation of four training courses for social welfare personnel in Public and Private Sectors.
- (iv) Establishment and expansion of 2 comprehensive community development centres in Northern Areas at Gilgit and Skardu ;
- (v) Establishment and expansion of a pilot comprehensive community development project at Alipur in the Federal Capital area of Islamabad ;
- (vi) Establishment of a Social Service Unit for the rehabilitation of the disabled in Islamabad.

5. *Establishment Division.*—The Staff Welfare programmes for 1978-79 envisage initiation and completion of construction works relating to (i) 3 buildings to house an equal number of multi-purpose community centres—one each at Lahore, Islamabad and Peshawar, and building for a Holiday Home at Murree to provide rest and recreation, and leisure time activities to Federal Government employees, besides strengthening and improving upon existing programmes.

Provincial Programmes

6. *Punjab.*—The Government of the Punjab will initiate work on the establishment of 4 new Day-Care Centres, 2 at Lahore and 1 each at Faisalabad and Rawalpindi to look after the children of working mothers and thereby enhance participation of women in employment. One of these day-care centres will be completed during 1978-79. Preliminary work will be started on another new project entitled 'hostel for working women' at Gujranwala to provide secure living accommodation to working women of lower income groups and thereby encourage female employment. Besides, out of 50 new rural Community Development projects at IRDP Markez level, 10 new projects will be established to mobilize local resources, initiatives and leadership in an effort to improve upon living conditions at Community level.

7. The other programmes consist of on-going projects carried over from previous Annual Plan 1977-78 for continuation and expansion. These on-going projects include (i) disbursement of financial and technical assistance to 300 voluntary social welfare agencies for enhancement and standardisation of social welfare activities in the private sector ; (ii) 2 Destitute Homes—one each at Lahore and Rawalpindi to provide vocational training and rehabilitation services for women without support ; (iii) 4 Darul Aman/Rescue Homes—one each at Faisalabad, Gujranwala, Multan and Rawalpindi to provide protection and care for insecure women and prevent their abuse or exploitation ; (iv) one ILO financed pilot project for upliftment of rural women ; (v) 5 socio-economic centres for women—one each at Lahore, Multan, Rawalpindi, Sargodha, and Bahawalpur and 19 Lady Industrial Centres, equipped with an equal number of display and production, units at each District headquarters of the Province to achieve and maintain economic self-sufficiency of the poor families through skill training-cum-income earning facilities in the field of cottage industries and women crafts ; (vi) 6 Mothers and children homes—one each at Sialkot, Lahore, Multan, Bahawalpur, Rawalpindi and Sargodha to provide community-based skill training-cum-earning facilities to poor mothers, and education facilities to their children at one and the same place ; (vii) the Child Welfare and Inservice Training Institute at Lahore to train child care workers and provide inservice training, refresher's courses to other categories ; 5 Day-care Centres for the Children of Working Mothers—one each at Sialkot, Faisalabad, Rawalpindi, Multan and Bahawalpur ; (viii) 1 Abandoned Baby Home at Rawalpindi to provide institutional care and placement services for new-born babies found unclaimed and un-cared for ; (ix) 5 Child Welfare Centres—one each at Lahore, Multan, Bahawalpur, Rawalpindi and Sargodha for recovery, institutional care and reclamation of kidnapped and lost children ; (x) 5 Hostels for Working Women—one each at Faisalabad, Multan, Bahawalpur, Lahore, Gujranwala and Rawalpindi, (xi) 1 Treatment and Vocational Rehabilitation Centre for the Mentally Retarded Children at Lahore ; (xii) 2 Homes—one each at Lahore and Rawalpindi to provide institutional care to old and infirm persons without family support ; (xiii) 50 Community Development Projects covering all the districts/sub-divisions in the province ; and (xiv) 15 Medical Social Work projects in district hospitals for after care and convalescence services to the needy and poor patients.

8. *Sind.*—The Government of Sind will initiate construction works for a building to house the Darul Aman at Karachi. Another unit of Darul Aman at Sukkar will be established. The other programmes include establishment of (i) 3 socio-economic centres—one each at Moro (Nawabshah), Sujawal (Thatta) and Jacobabad ; (ii) establishment of 1 Model Orphanage at Karachi in order to improve the child welfare facilities of a private orphanage ; (iii) initiation of 1 PL-480 SRS Action Research project at Sakro (Thatta) ; (iv) establishment of 1 vocational Training and Rehabilitation Centre for the Physically Handicapped in Sehwan Sharif (Dadu) ; and disbursement of grants-in-aid to 150 voluntary social welfare agencies.

9. *N.W.F.P.*—The Government of NWFP will initiate construction of 2 buildings to house a Darul Aman at Peshawar and a welfare home for vocational training, placement and employment of Beggars at Peshawar. Preliminary work will be undertaken to establish a Social Welfare Centre for Rehabilitation of the Physically Handicapped initially to provide artificial limbs to the disabled persons. The rest of the programmes consist of on-going projects carried over

from the previous Annual Plan for 1978-79 which includes 4 urban community development projects—one each at Charsadda, Sawabi, Haripur and Shah Baz Khel and 4 rural community development projects—one each at Dir, Chitral, Mansehra and Latamber (Kohat), and disbursement of grants-in-aid to 100 voluntary social welfare agencies.

10. *Baluchistan*.—The Government of Baluchistan will construct 2 community Centres—one each at Mach and Uthal. It will also construct 2 buildings—one each to (i) house a Centre for the Rehabilitation of the disabled, and (ii) Social Welfare Directorate at Quetta. The on-going programmes carried over from previous Annual Plan consist of (i) a Research Evaluation and Planning Cell in the Provincial Social Welfare Directorate, and (ii) Disbursement of grants-in-aid to 50 voluntary social welfare agencies.

TABLE 2
Revised Estimate (1977-78) and Allocation (1978-79) By Executing Agencies

S. No.	Name of Executing Agency	Revised Estimates 1977-78	Allocation for 1978-79		
			On-going	New	Total
1	2	3	4	5	6
1. Federal Agencies :					
	(a) Health and Social Welfare Division.	3.00	3.24	0.60	3.84
	(b) Establishment Division ..	2.00	2.00	—	2.00
	Total—Federal Agencies ..	5.00	5.24	0.60	5.84
2.	Punjab	9.50	13.12	1.88	15.00
3.	Sind	0.50	1.00	0.35	1.35
4.	N. W. F. P.	0.78	1.01	2.18	3.19
5.	Baluchistan	1.12	0.19	1.51	1.70
	Total—Province ..	11.90	15.32	5.92	21.24
	Total—Social Welfare ..	16.90	20.56	6.52	27.08

TABLE 3
Physical Achievements (1977-78) and Physical Targets (1978-79) Social Welfare

S. No.	Name of Project	Punjab		Sing		N.W.F.P.		Baluchistan		Federal Agencies	
		Achievements 1977-78	Targets/ Throw forward 1978-79	Achievements 1977-78	Targets/ Throw forward 1978-79	Achievements 1977-78	Targets/ Throw forward 1978-79	Achievements 1977-78	Targets/ Throw forward 1978-79	Achievements 1977-78	Targets/ Throw forward 1978-79
1	2	3	4	5	6	7	8	9	10	11	12
I. Service Units											
1.	Mother and Children Homes	6 Estt.	6 cont.	—	—	—	—	—	—	—	—
2.	Child Welfare and In-service Training Institute	1 Estt.	1 cont.	—	—	—	—	—	—	—	—
3.	Model-Orphanage	1 Estt.	—	—	1 new	—	—	—	—	—	—
4.	Day Care Centres for Children	5 Estt.	5 cont. & 5 new.	—	—	—	—	—	—	—	—
5.	Abandoned babies and Destitute Children Home	1 Estt.	1 cont.	—	—	—	—	—	—	—	—
6.	Social Services Centres for lost and kidnapped children	5 Estt.	5 cont.	—	—	—	—	—	—	—	—
7.	Treatment and Rehabilitation Centres for mentally retarded children	1 Estt.	1 cont.	—	—	—	—	—	—	—	—
8.	Darul Aman/Rescue Homes	6 Estt.	4 cont.	—	2 new	—	1 New	1 Estt.	—	—	—
9.	Destitute Home for Poor Women	2 Estt.	2 Cont.	—	—	—	—	—	—	—	—
10.	Socio-economic Centres for women	5 Estt.	5 Cont.	3 Estt.	3 Cont.	—	—	—	—	—	—
11.	Construction of Building for Ladies Industrial Home	—	—	—	—	—	—	—	—	1 Estt.	—
12.	Ladies Industrial Homes with Display Centres	19 Estt.	19 Cont.	—	—	—	—	—	—	—	—
13.	ILO Pilot Craft Training Projects for rural women	2 Estt.	1 Cont.	—	—	—	—	—	—	—	—
14.	Hostels for Working women	5 Estt.	5 Cont.	—	—	—	—	—	—	—	—
15.	PL-480 SRS Action Research project for upliftment of rural women	—	—	—	1 New	—	—	—	—	—	—

	1	2	3	4	5	6	7	8	9	10	11	12
16. Social Service Unit for the rehabilitation of the Disabled						1 New		1 New		1 New		1 New
17. Welfare Homes for Beggars								1 New				
18. Comprehensive Community Development Centres											2 Estt.	2 Cont. + 1 New
19. Construction of Community Centres									4 Estt.	2 New	2 Estt.	2 Cont. + 1 New
20. Community Development Project in Urban and Rural areas			50 Estt.	50 cont. + 10 New			8 Estt.	8 Cont.				
21. Medical Social Projects			15 Estt.	15 Cont.								
22. Construction of Holiday Homes for low-paid Government Employees											1 Estt.	1 New
23. Homes for Old and Infirm persons			2 Estt.	2 Cont.								
24. Training Courses in Public and Private sectors											1 Estt.	4 New
25. Research, Evaluation and Planning Cell									1 Estt.	1 Cont.		
26. Construction of Building for Social Welfare Dts.										1 New		
Total—Service Units	126	138	3	3	3	8	8	11	6	5	7	12
II. Aided Agencies												
27. Financial Assistance to Voluntary Welfare agencies	290	400	200	200	150	60	100	50	50	600	600	600
28. Grants-in-Aid to Universities for field work training in social work	2	2	2	2	2	2	2	1	1	1	1	1
29. Grants-in-Aid to Colleges for field work training in Social work	19	19	8	8	8	8	8	1	1	1	1	1
Total—Aided Agencies	311	421	210	210	160	61	102	51	52	600	600	600

Note : 1. Targets include continuation (cont.) of on-going units and addition of new units.
 2. Achievements included establishment (Estt.) of units including construction of buildings.

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MANPOWER AND EMPLOYMENT

Pakistan shares with other developing countries, the problem of a labour force which is large in relation to physical capital stock and underemployed in the sense that income and productivity are low in relation to the potential and efforts of the labour force and the needs of their families. The problem is less amenable to solution or relief in Pakistan which has experienced, and continues to do so, one of the highest population growth rates in the world. A sharp reduction in the population growth rate is a key element in the long term remedy.

2. The short and medium term solution must rest with programmes and policies which enable sufficient expansion in output, income and employment to lead to a reasonable minimum full employment income and to improvements in standards of living and the economic prospects of most sections of the population. The search for such an employment oriented growth policy must form a central concern of planning. In the medium term, however, a fall in population growth would not help as much for the evident reason that our labour force up to ten to fifteen years from now has already been born.

3. In recent years, large numbers have emigrated to the middle east. At the same time, there had been a major increase in public sector investment and employment. As a consequence, severe repercussions of the poor output levels on the unemployment situation have been avoided. However, the threat of a serious unemployment problem remains because these recent trends cannot be sustained. It is fully and highly inflationary to push up government outlays beyond revenues particularly when output is stagnant. In Pakistan, the government's aggregate calims on national resources are already at the limit of prudent economic management. Similarly, to put faith on a continuance of existing emigration flows would be wrong and risky. It is, therefore, necessary to increase gainful, output-generating employment opportunities.

4. Sizeable emigration has not only muted the basic labour surplus problem but has led to labour shortages in certain areas and skills. Replacement of the traditional time consuming, informal apprenticeship training by short and professional courses has become an urgent need to prevent delays in and protect quality of projects and output.

Labour Force and Employment

5. This chapter, therefore, deals with two separate aspects; the first a general review and forecast of the employment situation and the second, skill development programmes. It is necessary to preface estimates of the Labour Force and Employment provided in this chapter with a work of caution. Estimates of labour force and employment, especially year to year variations, suffer from lack of reasonably reliable data. Labour force surveys are conducted periodically and their results become available usually after a time lag. The estimates used in this chapter have been prepared with the help of latest information from the labour force survey 1974-75.

6. Another aspect which makes both monitoring and influencing employment trends difficult is the nature of employment. First, most of the employment is in the private sector which makes the task of monitoring difficult. Secondly, almost 80 per cent of the employed fall in the category of self employed and family helpers. This aspect makes it all the more difficult for the government to control the conditions of employment or to be aware of recent developments. It is, therefore, often necessary to approach the employment aspect indirectly through providing for increases in output and through pursuit of general policies which have a favourable bearing on employment. An implication of this approach, however, is that estimates and forecasts cannot be made with much certainty.

7. Pakistan's population has increased by 136 per cent in thirty years. The estimated size in 1977-78 was 75.6 million of which 54.9 million or 72 per cent resided in rural areas. The population has been growing at a rate of approximately 3 per cent per annum for some time resulting in a high proportion of dependents. Besides, the propensity for women to seek employment outside their homes is very low. These factors have resulted in low measures of labour force participation rates. The recent, heavy emigration of workers who have left their families behind has reinforced this tendency. Thus, the estimated labour force of 22.2 million in 1977-78 forms less than 30 per cent of the population. Participation rates are higher in rural areas owing to lesser schooling and greater female participation. In urban areas, only a quarter or so of the population constitutes

the labour force, the estimated labour force in 1977-78 by sex and urban-rural residence is presented in Table 1.

TABLE 1
Sex and Area Breakup of Labour Force 1977-78

							(Million)		
							Rural	Urban	Pakistan
Male	..	..	..	..	..	..	15.42	5.09	20.51
Females	..	..	..	..	..	..	1.44	0.27	1.71
Both Sexes	..	..	..	..	..	..	16.86	5.36	22.22

8. The last Labour Force Survey was conducted in 1974-75 and it reported a labour force participation rate of 29.5 per cent. Since then, substantial emigration of working age males has taken place. Complete and reliable figures on net emigration are not available, especially before 1977. Official records put gross emigration at 140 thousand persons in 1977. In previous years the emigration was probably lower. The loss of labour force due to emigration would have been made up to some extent by the entry of family members who were previously not included in the labour force. Taking these factors into account, it has been estimated that the labour force participation rate came down to 29.4 per cent in 1977-78 and the projection for 1978-79 include a provision of 80,000 as net emigration; once again, it is assumed that participation rates of those remaining within the country will increase.

9. The basis for estimates and projections of sectoral employment are described subsequently. Since the assumptions behind these estimates have an element of arbitrariness, the aggregate employment needs to be reviewed on more general considerations. The labour force survey for 1974-75 and previous surveys have consistently shown very low rates for open unemployment, the substantial increase in investment expenses, service sector income and the large emigration after 1974-75. It seems to indicate that unemployment should not have risen over this period. The increase in public sector investments was constrained in 1977-78 but this was substituted by a gross increase in the output. Therefore, it is postulated that unemployment would not have risen during 1977-78. At the same time, the reported rates of open unemployment in the labour force surveys are so low that a further reduction in them does not appear feasible given the incidence of frictional unemployment and the time lags between search for and replacement of first job. The estimates and projections for population, labour force and employment are shown in Table 2.

TABLE 2
Population, Labour Force and Employment Estimates 1974-75—1978-79 (Million)

							1974-75	1977-78	1978-79
Population	..	..	..	..	..	..	69.210	75.62	77.86
Labour Force	..	..	..	..	..	..	20.42	22.22	22.86
Labour Force Increase	..	..	..	..	..	..	—	0.62	0.64
Growth Rate %..	..	..	..	..	..	..	2.9	2.9	2.9
Employment	..	..	..	..	..	..	20.07	21.84	22.47
Productivity*	..	..	..	..	..	..	430	442	456

* GDP per employee per month at 1974-75 prices.

10. While open unemployment is likely to have been stemmed throughout this period, underemployment in its broader definition continued to be severe. The sharp increase in output in 1977-78

has provided some relief. Besides, 1977-78 was a year of industrial peace with sharp decrease in strikes, number of workers involved and the man-days lost. These details on annual basis are given in Table 3.

TABLE 3
Number of Strik Workering Involved and Man-days lost 1972—78

Year	No. of Strikes	No. of workers per strike (000)	Man-days Lost (000)	Average duration of Strikes (days)
1972	779	361	2,018	5.58
1973	536	234	804	3.44
1974	370	302	1,434	4.75
1975	260	129	798	6.19
1976	171	77	515	6.68
1977	81	49	200	4.08
Upto June, 1978 ..	35	11	20	1.82

11. The sectoral distribution of employment is based upon the Labour Force Survey 1974-75. It may be noted that over the years the productivity rates have behaved erratically in most sectors and past productivity rates are meaningful only over a period sufficiently long to cover years of both high and low economic activity, good and bad harvest and variety of political situation. Based on Labour Force Surveys 1966-67-1974-75 which meet these conditions, the average productivity rates by sector have been accepted as actual or minimum which have been applied, except electricity, gas and water sector which experienced a phenomenal rate of increase in production from low base. In view of the infrastructural development in agriculture and heavy investment in manufacturing, the productivity rates in these two sectors were targeted higher than those experienced historically in 1966-67-1974-75; for other sector the historical rates have been applied.

12. The application of targetted productivity rates to GDP targets resulted in estimation of annual sectoral employment growth rate. The bulk of internal job creation (58%) will be in the agriculture sector reflecting the predominantly rural nature of the population. Out side the agriculture, the major sectors of job creation are manufacturing (13.73%), wholesale and retail trade (10.54%) and services (11%).

13. On the basis of the data provided by the Bureau of Emigration 80,270 people migrated from Pakistan during 1977-78 for employment reasons. During the calendar years 1978 and 1979 a total number of 1,60,000 people are estimated to migrate. The total labour force during the year 1978-79 at a growth rate of 3.2 percent is estimated as 22.92 million. Considering that unemployment will be maintained at 1.7 percent (0.39 million) a total number of 22.55 million people will require employment opportunities. However, after accounting for 80,000 persons, out migration the total jobs required within the country are estimated as 22.47 million. It can thus be concluded that the total increase in the labour force estimated for 1978-79 will be absorbed by the job opportunities both at home and abroad. If, however, the total number of migrants increase over the estimated number then an equal amount of backlog would be absorbed. The sector-wise composition of internal employment is estimated as follows at a GDP growth rate of 7 per cent.

TABLE 4
Sector-wise Employment-1974-75 to 1978-79

Sector	1974-75	1977-78	1978-79
Agriculture	11.00	12.36	12.72
Mining	0.03	0.03	0.03
Manufacturing	2.74	2.90	2.98
Electricity	0.10	0.11	0.11
Construction	0.84	0.90	0.93
Trade	2.23	2.30	2.37
Transport	0.98	1.02	1.49
Banking	0.13	0.14	0.15
Services	1.96	2.01	2.07
Others	0.06	0.07	0.07
Total	20.07	21.84	22.92

REVIEW OF PROGRAMME 1977-78

14. A total allocation of Rs. 19.80 million was provided out of which Rs. 8.70 million was earmarked for federal programmes while Rs. 11.09 million was provided for various provinces. Against the allocated amount, the utilization for federal programmes was Rs. 8.48 million (98%) while that of provincial programmes was Rs. 9.378 million (85%). The under-utilization ranges from 2 percent in case of federal agencies 20% in case of Punjab. Procedural bottlenecks and late commencement of various programmes have been reported as the main reasons for underutilization of financial allocation. In case of Punjab, however, there has been an over utilization in respect to skill development training and mines safety and security training. Agency wise details of allocations and utilization are given in Table 5.

TABLE 5

Agency-wise Allocation/Utilization of ADPs 1977-78 by Sub-sectors

Agency	(Million Rs.)										
	Skill Development & Training		Employment Services		Safety & Security		Industrial Relation		Total		
	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization	Allocation	Utilization Millions%	
1	2	3	4	5	6	7	8	9	10	11	12
Federal	2.500	2.450	6.200	6.031	—	—	—	—	8.7	8.481	98
Punjab	3.050	3.242	1.227	1.067	1.102	1.671	2.565	0.350	7.944	6.330	80
Sind	0.400	0.350	—	—	—	—	—	—	0.400	0.350	88
N.W.F.P.	1.462	1.454	0.107	0.107	0.105	0.105	—	—	1.674	1.666	100
Baluchistan	1.072	1.032	—	—	—	—	—	—	1.072	1.032	98
Total	8.484	8.528	7.534	7.205	1.207	1.776	2.565	0.350	19.790	17.859	90

15. Statement in the table 5 provides a review of both Federal and Provincial programmes during the year 1978-79. Sub-sector-wise utilization show that highest priority was given to skill development and training closely followed by employment services, industrial relation and for mines safety and security measures.

16. As far as physical programmes are concerned a major policy decision of the Government is that highest priority will be given to development of skills in adequate quantity and of acceptable quality. This issue has acquired importance because of the need to provide replacement of migrated skilled and semi-skilled manpower to meet the complex demands of the growing national economy to improve productivity of labour and to increase the incomes of urban and rural poor. The year under reference is expected to mark the beginning to evolve a comprehensive programme for skill development and has provided approximately Rs. 36 million for it over and above the investment that will be made on training by Pakistan Railway, PIA, BIM T&T Department and other public sector enterprises.

17. The Federal Government is considering to launch a programme of Vocational Training with IDA assistance. It will consist of two components; viz institutional infrastructure required for developing employable skills on systematic basis and specific programmes to meet the urgent need of training of skilled workers. After completion the programme will achieve a fourfold increase in the present output (4,245) from Government Vocational Institutes and Technical Training Centres.

PROGRAMME FOR 1978-79

18. In view of above policy total allocation has been increased to Rs. 56 million during 1978-79 from Rs. 19.78 million in 1977-78. In percentage terms the increase is 183 over the revised estimates for 1977-78.

The allocation includes Rs. 8.225 million in foreign exchange of this Rs. 8.200 million will be provided by the UNDP for skill development training and development of workers' education.

19. Out of the total allocation of Rs. 56 million proposed for the year 1978-79, a sum of Rs. 24 million will be provided for the Federal Programmes while Rs. 32 million will be made available to the various provincial governments. Details of allocations for various Sub-sectors appear in the following table :

TABLE 6
Agency-wise A.D.P. Allocation by Sub-sectors

(Rs. Million)

Agency	Skill Development	Employment Services	Safety and Security	Industrial Relations	Others	Total
Federal	15.900	6.700	—	1.100	1.000	24.700
Punjab	10.100	1.700	4.223	1.477	—	17.500
Sind	0.400	0.500	0.300	—	—	1.200
N.W.F.P.	6.936	0.286	0.710	—	—	7.932
Baluchistan	2.500	0.150	—	—	2.000	4.650
Total	35.836	9.336	5.233	2.577	3.000	55.982

20. Although the provision for federal programmes during 1978-79 indicate an increase of 184% this is Rs. 7.3 million short of the allocation indicated in the Fifth Plan. However, it would be sufficient to cover the requirements of the following three major programmes :

(i) *Skill Development*.—Under this programme 3 projects are envisaged to be funded at a total cost of Rs. 16 million :

- (a) Crash Training Programme for Skilled and Semi-skilled Workers for Overseas Employment will provide facilities for short term condensed training programme for skilled workers and is designed to provide training in various employable skills at technical level. This programme is expected to produce 18,036 workers during 1978-79 as against 6,276 in 1977-78;
- (b) Federal Programme for Skill Development envisages development of manpower training schemes on a scientific basis and provides for strengthening of the activities of the Federal Training Board through necessary legislation and regulations. It proposes to revise and expand the existing national classification for approximately 40 occupations. Besides, the programme proposes to formulate and establish trade standards for 11 occupational areas, determine the content of training programme and develop relevant curricula utilizing wherever possible the concept of Modules of Employable Skills (MES).
- (c) Orientation and Briefing Centres will maintain two on-going units and brief an estimated number of 6,000 persons during 1978-79 as against the achievement of 4,000 during the last year.

(ii) *Employment Promotion*.—The main objective of the programme is to help improve the employment situation in this country, particularly with reference to educated manpower. The four on-going schemes which will be provided an amount of Rs. 6.7 million are as under :

- (a) Overseas Employment Corporation will enable the export of 3,000 workers in 1978-79 as against 217 persons during the last year;
- (b) National Development Volunteer Programme will register a total of 1400 people and place 1200 out of these with the various industrial units for on-the-job training. The remaining 200 will be provided stipends till they are absorbed or accepted as apprentices. The programme will be implemented by the Industries Division ;
- (c) National Talent Pool will launch the first phase of activity whereby doctors, engineers, agricultural specialists and scientists will be registered ; and
- (d) Pilot Survey on the Measurement of Productivity under the auspices of the Labour Division will study productivity behaviour of 14 industrial units.

- (iii) *Industrial Relations*.—The industrial workers' education will be undertaken with a view to encouraging healthy and effective trade union activities in the country. The project will be launched with the UNDP assistance of Rs. 1 million and implemented by the Labour Division.

Provincial Programmes

21. The Provincial programmes are proposed to be provided a sum of Rs. 32 million during 1978-79 thus showing an increase of 182 percent over the previous year's revised estimates. The various Provincial programmes reflect the national priorities as well as regional needs. These programmes are briefly stated below :

22. *N.W.F.P.*—A sum of Rs. 7.93 million has been provided for 4 on-going and 4 new schemes. These are occupational and rehabilitation centres at Khalabut (Rs. 1.52 million); Technical Training Centres one each at D.I. Khan (Rs. 2 million) and Peshawar (Rs. 0.9 million). One new TTC at Mangora (Rs. 2 million); Vocational Guidance Centre, Peshawar (Rs. 0.14 million); strengthening of Factory Inspection Services (Rs. 0.15 million); and a new Mobile Training Project for Mines Workers (Rs. 0.7 million) are proposed to be established.

23. *Punjab*.—The Punjab has provided of Rs. 17.5 million for 1978-79. This amount will just be sufficient to meet the needs of 17 on-going (Rs. 12 million) and 8 new projects (Rs. 5.50 million). The area of Skill Development and Training receives the highest priority with Rs. 10.10 million allocation. Six on-going projects will be provided Rs. 5.85 million, while Rs. 4.25 million have been allocated for four new projects. Among the on-going projects are 3 Technical Training Centres at Gujar Khan (Rs. 3 million), Lahore (Rs. 0.2 million) and Rahim Yar Khan (Rs. 0.3 million) and three Apprenticeship Training Centres at Gujranwala (Rs. 2 million), Faisalabad (Rs. 0.35 million) and Ferozwala (Rs. 1 million). Among the new projects Staff Training Facilities are proposed to be added to the existing TTCs at Lahore (Rs. 1.2 million), besides establishing two new TTCs at Rawalpindi (Rs. 1.2 million) and Sargohha (Rs. 0.85 million). In addition, under the programme for Upgrading Technical Skills in Barani Tracks, it is proposed to establish three new sub-training centres (Rs. 1 million), the probable sites being Daultala, Attock and Jhand.

24. In view of the importance of Mines Safety and Security, a provision of Rs. 4.12 million has been made for two on-going (Rs. 2.37 million) and three new (Rs. 6.85 million) projects. Among the on-going ones are Mines Rescue and Safety Station, Khushab (Rs. 2.87 million) and Mobile Training Unit at Rawalpindi (Rs. 0.5 million). The Training Centre for Mines Supervisor and Mining Technicians at Khushab (Rs. 0.4 million), Miners Training at Choa Saidan Shah (Rs. 0.35 million) and establishment of mines sample testing at Lahore (Rs. 0.25 million) are among the new projects.

25. Labour Market Organization receives the third priority with an allocation of Rs. 1.7 million which is sufficient for four on-going projects. The projects are Vocational Guidance and Employment Centre at Lahore, Faisalabad and Rawalpindi (Rs. 0.35 million), Strengthening of Survey and Statistical Wing of the Directorate of Manpower and Training at Lahore and Faisalabad (Rs. 0.4 million) Introduction of Interviews System in employment exchanges throughout the province (Rs. 0.55 million) and Manpower and Planning Unit (Rs. 0.4 million).

26. Industrial Relations have been provided Rs. 1.48 million of five on going and one new projects. On-going projects are, Workers Education, Recreational and Free Counselling Centres, Lahore (Rs. 0.3 million), Multan (Rs. 0.22 million), Rawalpindi (Rs. 0.22 million), Faisalabad (Rs. 0.21 million) and strengthening of Medical Inspectorate of factories throughout the province (Rs. 0.13 million), while a new project entitled Public Relation Cell will be established at Lahore, (Rs. 0.4 million).

27. *Sind*.—A total amount of Rs. 1.2 million has been provided for one on-going and three new projects. It is proposed to complete the construction work for TTC Sukkur (Rs. 0.4 million) and continue work on international weight and measures Laboratory, Karachi (Rs. 0.3 million). Three new projects viz Central Rescue and Research Station at Lakha (Rs. 0.2 million), setting up of Institute for Industrial safety, health and factory inspection (Rs. 0.1 million) and additional facilities for Manpower Research and Planning Cell (Rs. 0.2 million) have been envisaged.

28. *Baluchistan*.—The ADP provision of Rs. 4.65 million will be sufficient for one on-going and three new projects. These are completion of about 72% construction work of Artisan Training School, (Rs. 25 million,) construction of new labour colony (Rs. 6.5 million) and office accommodation for Labour Directorate, (Rs. 1.5 million). All the above three projects of necessity will be located in Quetta. Besides, a Manpower Survey is envisaged at a cost of Rs. 0.15 million.

RURAL DEVELOPMENT

According to Planning Division's estimates for 1977-78, 72.6% of Pakistan's population inhabits rural areas, spread over some 45,000 villages. The rural sector provides the bulk of exports, directly and indirectly, and 36% of GNP. Poverty is widespread and 35% of the population are estimated to be below the poverty line. This is outcome of the existence of substantial underemployment in the rural economy, open unemployment being less than 2 per cent of the labour force. The 1974-75 Labour Force Survey points up towards this by showing that 34 per cent of the rural work force falls in the family-helper category. Also, 44 per cent of farm area consists of holdings less than 7.5 acre, which is below the subsistence size of holdings.

Fifth Plan Strategy

2. The Fifth Plan conceives rural development as an inextricable part of overall planning endeavour. Many projects have lateral linkages and hasty attempts to fix urban or rural tags may be at cross purposes with the Plan objectives. Similarly, most economic policies cut across sectoral demarcations in their impact. The Fifth Plan thus emphasises rural development as a major constituent of total national effort. Priority has been given to rural welfare within the limits set by resource availability, inescapable national commitments and the constraints on capacity to reach target groups. The overall development programme gives primary importance to agriculture, which lies at the centre of rural development. Attention has been focussed on the basic service needs of the rural sector through programmes of delivering potable water, sanitation, basic health care and school education. In addition, the infrastructural base of the rural society will be improved through a network of rural roads, village electrification, and better communications. These programmes will help to improve rural productivity in general and, supported by a skill development programme, facilitate agro-industrialization and development of rural crafts.

Objectives

3. The Fifth Plan objectives in regard to rural development are as under:
- (i) To meaningfully integrate rural development with the national socio-economic development efforts ;
 - (ii) To reduce the burden of under-employment ;
 - (iii) To increase the density of services provided to agriculture and other rural activities ;
 - (iv) To improve rural infrastructure ;
 - (v) To make a beginning towards providing social amenities to target groups and
 - (vi) To create an institutional framework for ensuring community participation in the implementation of the rural development programme.

4. The year 1978-79 being the first year of Fifth Plan envisages a shift of rural development strategy to this end through carefully chalked out programmes. Agriculture, employing 72.6 per cent of the rural work force, lies at the centre of rural development. This is also the sector hardest hit by underemployment. Therefore, it has been accorded its due recognition and a fair deal in the overall development programme. In the first place, there will be physical additions to the cultivable area as a result of the extra water availability during the Plan period. Secondly, efforts will be directed towards water conservation and economy, drainage and reclamation, and opening up of barani areas. Thirdly, inputs like better varieties of seed, fertilizers, plant protection and credit will be made available on a greater scale. Fourthly, a major push will be made to widen as well as deepen the coverage of extension services. Lastly, selective mechanisation will continue apace through increased availability of tractors and supply of power tillers.

5. Rural infrastructure will be improved through a network of farm to market roads, village electrification and better post and telecommunications. Farm to market roads will facilitate rural-urban and village-to-village integration, and promote intersectoral and intrasectoral mobilities. These links will be reinforced by the improved information flows following better communications.

Institutional Framework

6. *Representative Local Institutions.*—As of now, no representative system of local government exists. After the abolition of Basic Democracies System, no arrangements were made to replace it. The staff of Basic Democracies (District Councils/Union Councils) was utilized mainly by the local government departments for the implementation of IRDP and PWP programmes.

7. Community participation in the development effort is an essential ingredient in achieving rural development objectives. The existing arrangements to channelize the creative energies of the rural population are inadequate. Active involvement of the people in rural decision flows and organization structures ensures better implementation and accountability. Local democracy will, therefore, have to be the corner-stone of the new institutional framework being proposed for rural development in the Fifth Plan.

8. *Considerations in the Formulation of new Arrangement.*—A review of the past arrangements, as also the operations of PWP, IRDP and private sector, indicated that the distance of the delivering agencies from rural communities was very large, and the density of services provided was quite limited. These gaps need to be plugged before the Fifth Plan priority accorded to rural development can be translated into reality. Accordingly, a new rural development organization is being proposed in the Fifth Plan with the following strategic considerations in view :

- (i) The effectiveness of the implementation of rural development programme has to be ensured.
- (ii) The construction arrangements for numerous small and widely spread physical projects have to be supplemented with a system using indigenous skills and technology appropriate to rural areas.
- (iii) The functional overlaps and operational malcoordination among a large number of various agencies involved lead to wasteful duplication, delayed commissioning of facilities, and even project drop outs.
- (iv) Cooperative associations in rural areas are considered to be a major instrument for mobilizing local initiative and active involvement. Specialized training is required for the successful running of these associations.
- (v) The development of rural areas is a massive challenge which no government can meet within its limited resources, without voluntary local contribution in the form of land, labour and cash and generation of involuntary local resources in the form of taxation.
- (vi) Community participation and supervision is necessary not only at the planning and construction stage but also in operation of the projects. Moreover, it must help to create an environment where by each individual develops a stake in the preservation and stability of the institutions being developed.
- (vii) The new institutional arrangement must absorb the existing staff of PWP, IRDP and Local Government in a more constructive system by giving them functional responsibility for specific programmes to be undertaken in the rural areas.
- (viii) The awareness of the rural communities regarding the projects and allocations through a suitable publicity campaign would help to improve implementation of development programme.
- (ix) The local institutions must build up some rudimentary capacity in project planning and preparation to lay a sustainable basis for the ultimate evolution of local planning organizations.

9. *New Institutional Framework.*—In view of the above considerations, a new institutional framework is being proposed at the local level to support the rural development strategy. There are two models, both viable, in different local circumstances. In the first model there will be only two tiers. The top tier will be district council, at district level, with the markaz council providing the bottom tier. The Deputy Commissioner will be the Chairman of the District Council. However the day to day responsibility will rest with an Additional Deputy Commissioner (Dev.) who will be trained in planning and development work. Its composition will be intersectoral in nature bringing together all development departments at the district level. The markaz council having jurisdiction over 20 to 30 villages, will be headed by a Rural Development Officer, with all the line departments at the markaz level represented on it. Both the district and the markaz councils will have their own secretaries.

10. The second model consists of three-tier-system. At the lowest level there will be a union council with about 10 villages. The intermediate tier will be markaz covering an area equivalent to thana or about 50 to 75 villages. The district council will constitute the top tier in this model also.

11. Within broad concept of rural development and popular participation already decided upon by government, and subject to performance of minimum agreed functions, the provincial governments would be left free to devise their own arrangement with regard to number of tiers, additional duties and staffing pattern.

12. The functions of the proposed institutions may vary from province to province but generally the following functions are envisaged :

- (a) Construction and maintenance of primary and secondary schools, basic health units, rural health centres, rural roads, drinking water supply and sanitation systems and miscellaneous small scale local schemes.
- (b) Coordination and overall monitoring for the total development programme for the district/markaz.
- (c) Facilitating the formation of associations for the performance of tasks, that can be done only collectively or can better be performed collectively, for example, consumer associations for distribution of electricity, farmers' associations for water course management, associations for distribution of agricultural inputs, cooperative marketing associations, etc.
- (d) Development of rural skills and promotion of small scale industries, handicrafts, rural workshop, etc.
- (e) Mobilization of local resources through voluntary contributions, taxes on property, consumption and other sources identified by the community (except trade) and fees and charges for the use of utility services provided by the Councils such as water supply sanitation etc.

13. This institutional framework will become functional during 1978-79 and will be interwoven with elected local self-governing institutions to ensure the fullest realization of the creative energies of the rural populace.

PROGRAMME FOR 1978-79

14. Main elements of the rural development programmes envisaged during 1978-79 are set out below :

Agricultural Inputs

15. *Land and Water.*—Water availability at farm-gate is envisaged to increase from 91.77 MAF to 93.77 MAF during 1978-79 as a result of expansion of tubewell installation programme both in the private and public sectors. The number of tubewells is planned to increase from 161,210 in 1977-78 to 170,481 in 1978-79. The irrigation intensity will increase from 98% in 1977-78 to 100% in 1978-79.

16. *Fertilizer.*—The present off-take of fertilizer is 0.720 million nutrient tons from 4,600 sale points. Private sector is now playing the leading role in fertilizer distribution. It has established 3,000 sale points compared to 1,600 in public sector being operated through provincial agricultural supplies corporations and Agriculture Department (in Baluchistan).

17. During 1978-79, the consumption of fertilizers is envisaged to increase from the estimated off-take of 0.720 million nutrient tons in 1977-78 to 0.820 million nutrient tons. In terms of per acre use, fertilizer consumption would increase from 35 lbs. per cropped acre in 1977-78 to 39 lbs. per cropped acre in 1978-79.

18. *Distribution of Improved Seed.*—The provincial agricultural supplies corporations are responsible for the procurement of seed from the registered growers as well as for seed distribution. There are about 733 public sale points. Small farmers traditionally keep their own seed, or buy from private agents.

19. Against the estimated seed distribution of 1,848 thousand maunds in 1977-78 by the public sector, the target for 1978-79 has been placed at 2,442 thousand maunds. The seed distribution target for public sector proposed for 1978-79 is about 8 per cent higher than the estimated achievements of 1977-78. Special emphasis will be laid on continuous evolution of high yielding varieties of all the major crops and maintenance of purity of the improved varieties.

20. *Agricultural Credit.*—The expansion in the credit programme, particularly in recent years, has been impressive. As a result of this expansion, the credit availability per cropped acre is estimated to have increased from Rs. 4.75 in 1970-71 to about Rs. 32.6 in 1977-78. The credit availability is expected to further increase to about Rs. 47 per cropped acre by 1978-79.

21. Government has endeavoured to meet the credit requirements of the farmers through various institutional sources. The loaning procedure of the banks has been simplified by the introduction of 'Pass Book System'. These procedures, *inter-alia* ensure that small farmers are not neglected in availing these facilities. The agricultural credit target for 1978-79 has been fixed at Rs. 2.2 billion against Rs. 1.496 billion for 1977-78.

Agricultural Services

22. *Plant Protection.*—The main emphasis of plant protection is now on ground operation rather than aerial spray. Self-operation of plant protection is being encouraged in the Punjab, Sind and NWFP. The plant protection coverage is planned to be increased from 9.71 million spray acres in 1977-78 to 12.02 million spray acres in 1978-79 which means an increase of 24 per cent. The operations will be intensified, specially on cotton, sugarcane and rice where the infestation is fairly regular and usually, severe ranging between 25 to 30 per cent in normal years. Preventive measures consisting largely, of seed treatment against soil and seed-borne diseases and control of pests through cultural practices will be intensified during 1978-79.

23. *Farm Mechanization.*—Farmers own and maintain about 71,000 tractors for their own use and for hiring. Repair facilities are provided by a large number of private workshops that have sprung up in recent years. Provincial agriculture departments maintain 1,000 bulldozers for hire. Repair facilities are provided by 47 workshops run by the provincial agricultural engineering organizations.

24. The Government will continue to maintain a fleet of bulldozers for hiring out to farmers for land reclamation operations. The Provincial Governments proposed to purchase about 457 bulldozers during 1978-79. Target for the import of tractors for sale to farmers is 15,000.

25. Greater attention will be devoted to research and development of improved mechanical devices for sowing, harvesting, plant protection and other agricultural operations. Efforts will also be made to develop and popularize fractional tubewells (less than one cusec capacity) for the benefit of small farmers.

26. *Agricultural Extension.*—Determined efforts are being made to extend modern technology to small farmers and to the backward areas to overcome the communication barrier which prevents farmers from adopting more efficient and productive methods of agriculture. The measures include increase in number of the extension workers, improvement and re-orientation in training, greater specialisation, better supervision and more systematic modes of work advised on the basis of experience in Pakistan and other developing countries.

27. Agricultural extension service employs about 5156 extension workers (including supervisory staff) in 1977-78. There are normally two field workers at the union council level. On the average, four villages in Punjab and 10 villages in other provinces are covered by a field assistant. The ratio of farm families per extension worker will improve from 1000 farm families at present to 880 farm families in 1978-79.

28. *Storage Capacity.*—The government storage facilities are used for storing stocks of wheat, rice and cotton etc. for operation of price support policy and for export. The storage capacity available with Federal and Provincial Governments is estimated as 2.372 million tons by the end of 1977-78. Additional storage capacity of 0.446 million tons (0.409 million tons by provincial governments and 0.037 million tons by Federal Government) would be constructed during 1978-79 so as to have a total storage capacity of 2.818 million tons by the end of 1978-79.

Water

29. *Drainage and Reclamation.*—The main emphasis of the water sector programme would be on drainage and reclamation. It is estimated that 42.2 MA of land needs to be protected from water-logging and salinity. Of this 16.0 MA would have received protection by 1977-78. During 1978-79 it is envisaged to protect an additional 0.8 million acres. The cumulative total provided by drainage by the end of 1978-79 period will be 16.8 M.A.

30. *Water Management.*—A substantial beginning will be made with improved water management on the system as a whole, as well as on the farms. Pilot Projects for water management will be undertaken during 1978-79 to improve 186 water courses and to level 49,000 acres of land. Efforts will also be made to establish Water Users Associations in the irrigated areas.

31. *Flood Control.*—As a result of the successive floods of 1973, 1975 and 1976, it has become necessary to review and strengthen the flood protection measures. A master plan is being prepared and will be ready by December, 1978. In the meantime, work on Phase I (reconstructing and strengthening of existing bunds), which was undertaken on an emergency basis, will continue during 1978-79.

Posts and Telecommunications

32. *Post Offices.*—In term of area and population per post office, Pakistan has already achieved the target set for developing countries during Second United Nations Development Decade. By June 1978, 7586 post offices would be operating in 7,000 villages or 16 per cent of the total villages. During 1978-79 it is proposed to open new post offices in rural areas.

33. *Telecommunications.*—Greater emphasis will be laid on the provision of telecommunication facilities to rural and under-developed areas. The number of Public Call Offices will be increased from 900 in 1977-78 to 955 in 1978-79. Similarly, the number of trunk exchanges in rural areas will increase from 563 in 1977-78 to 590 in 1978-79.

Mass Media

34. T.V. coverage will be increased from 50 per cent of the total population in the country to 53 per cent during 1978-79. Special programmes on farming and basic agriculture practices will be telecast in cooperation with the Federal and Provincial agencies concerned.

35. The radio coverage is 88 per cent of the population and during the year programmes on farming, education, health and nutrition will be broadcast in the national and regional languages to benefit the rural population. No addition in the spatial coverage of radio is envisaged in 1978-79.

Village Electrification

36. Out of an aggregate of 45,000 villages in Pakistan by June, 1977, 5,830 villages *i.e.* 13 per cent of the aggregate were electrified. In past the performance in regard to village electrification was measured by the number of villages electrified. This yardstick is, however, not a representative of number of beneficiaries. In fact in some cases, it has been noticed that electricity is taken to the door steps of a village but only 10 to 15% of the total population of the villages get the electrical connection. The Fifth Plan proposes to transform the concept of village electrification from number of villages to the number of rural consumers. During 1978-79, 1200 villages will be electrified against an estimated 1431 villages electrified in 1977-78.

Rural Roads

37. It is estimated that by the end of 1977-78, Pakistan would have 58,000 miles of primary and secondary roads (18,000 metalled and 40,000 unmetalled). Besides there would be approximately 35,000 miles of extremely low standard rural roads. A mere 16 per cent of the villages lie on all weather roads and about 20 per cent have all weather connections to wholesale markets. According to a generally acceptable criteria (2 miles per sq. mile of cultivated area and 0.5 miles per sq. mile of other areas), the requirements of all sorts of roads works out to 240,000 miles 60,000 miles (25%) primary and secondary roads and 180,000 miles (75%) rural roads. Considering the resource and capacity constraints, it would take a long time to meet the requirements of rural roads in full. This underlines the need for utmost care in selecting projects and fixing priorities. During 1978-79, the rural roads construction programme will include the construction of 600 miles of new *atcha* roads and black topping of 400 miles of existing *katcha* roads.

Water Supply/Sanitation

38. *Potable Water.*—In 1977-78, only 14 per cent of rural population is covered by public supply of drinkable water. Thus, 86 per cent of rural population depends on its own sources of drinking water which are not always entirely safe from the point of view of health.

39. During 1978-79, potable water supply programme will be undertaken to serve an additional population of 1.827 million, increasing the coverage from 14% to about 17% of rural population. The major emphasis in this programme will be placed on the provision of water supply to those villages where the source of water is more than 2 miles away. About 15,000 handpumps would also be installed.

40. *Sanitation.*—During 1978-79, sanitation facilities will be provided to 0.353 million additional rural population. Thus the sanitation coverage of the rural population will increase from 0.25% in 1977-78 to 0.88% in 1978-79.

Health Care

41. At present, 32 percent of rural population is within 2 miles radius of health facilities, and 78.6 per cent of rural population lies within 5 miles radius of health facilities. This means that 21.4 per cent of rural population is without any medical facility even within 5 miles radius. The rural health programme which will be implemented during 1978-79 is so designed that by the end of 1978-79, 55% of rural population will be within 2—4 miles distance of health facility against the existing 45 per cent.

42. Besides this curative programme, a substantial preventive programme of immunization and malaria eradication, child spacing and nutrition programme for pre-school children and expectant and lactating mothers will be undertaken in rural areas during 1978-79.

School Education

43. In rural areas, there are 46,218 primary schools, 4,361 middle schools and 1,299 high schools with respective enrolments of 3.87 million, 0.69 million and 0.14 million. Teacher/Student ratio is 15 and 5 per thousand for primary and secondary schools. Some local participation also exists in that land for schools is generally donated by the community and, occasionally, building as well. On the whole, however, educational opportunity available to rural population is far below its requirements. The facilities that are available suffer from absence in the part of teachers due to lack of supervision, absence of a rational location criteria, departmental duplication in buildings construction, lack of proper maintenance and haphazard supply channels for furniture and equipment.

44. During 1978-79, 0.212 million children will be added to primary age group (5 to 9 years), 0.127 million in the middle age groups (10 to 12 years) and 0.080 million in the high school age group (13 to 14 years), in the rural areas of Pakistan. The 1978-79 target is to have 0.200 million children in the primary schools, 0.025 million and 0.008 million children in the middle and high schools, respectively. In order to accommodate the additional enrolment, 913 primary schools, 96 middle schools and 55 high schools would be constructed in rural areas during 1978-79. Besides agrotechnical studies would be introduced in 160 schools at middle stage and in 10 schools at high stage. By the end of 1978-79, the agrotechnical studies would be provided in 2519 schools at middle stage and 110 schools at high stage.

Rural Skills

45. Specific programmes will be undertaken for the promotion of industrial homes, domestic and cottage level crafts and trades, modest repairs of agricultural and other machinery, training of *dehi mazdoors* etc.

Rural Industries

46. Small scale enterprises based on agricultural raw materials will be located in the rural areas. These industries include rice and wheat milling, gur and sugar making, oil crushing, cotton ginning, hosiery and other textile craft, carpets, leather and footwear etc. Efforts will also be made to develop new industries based on agricultural by-products and waste products like molasses, wheat and rice straw etc. Public Sector investment in the programme during 1978-79 will amount to Rs. 130 million over and above Rs. 500 million estimated for the private sector.

CHAPTER 24

AZAD KASHMIR, FATA AND NORTHERN AREAS

AZAD KASHMIR

Review of 1977-78

The size of Azad Kashmir's Annual Development Programme for the year 1977-78 was fixed at Rs. 129.00 million. The revised estimates of expenditure in various sectors of region's economy indicate that the allocation was utilized in full. The sector-wise financial allocation and utilization upto the end of June, 1978 is given at Annexure I. A sector-wise financial and physical progress is summarised below :

AGRICULTURE

2. A sum of Rs. 19.38 million was provided for the Agriculture sector. The revised estimates of expenditure upto June, 1978 are placed at Rs. 18.68 million with the exception of physical progress in animal husbandry sub-sectors, the progress in case of crop and afforestation sub-sectors was far behind the targets set for the year. This calls for a renewed emphasis on crop and forest sub-sectors which are vital for the economy of the Azad Kashmir. The sub-sector-wise physical progress is as under :

	Target 1977-78	Achievement 1977-78
Fertilizer (M. tons) Distribution	2,400	1,590
Seeds (Mds.) Distribution	7,000	3,290
Plant Protection (coverage) (Spray acres)	65,000	33,250
Spray Fruit Plants	210,000	105,000
Extension Centres	16	16
Fruit Nurseries (Kanals)	14	14
Field Assistant Training Programme	25	74
<i>(a) Animal Husbandry</i>		
Animals treated (Nos.)	277,327	277,327
Poultry Birds treated (Nos.)	208,325	208,325
Animals vaccinated (Nos.)	206,169	206,169
Poultry Birds vaccinated (Nos.)	2,000,000	2,000,000
Veterinary dispensaries	4	4
Buffalo bulls	11	29
Cow bulls	27	22
Horse	1	2
Angora Bucks	60	25
Castration	15,627	15,627
Rams	5,938	5,938

	Targets 1977-78	Achievement 1977-78
(b) Forestry		
Reafforestation (acres)	9,000	123.5
Soil Conservation (acres)	1,000	329.5
Closure (acres)	12,000	12,000
Range Land (acres)	2,500	6,205
Wild-Life development	Construction of encubator room at Salkhala.	Completed
Forest nurseries	Maintenance of 65 acres.	115.5 acres
Tourism	36 two rooms tourist huts to be maintained.	Continued

WATER AND POWER

3. A provision of Rs. 18.01 million was made for the Water and Power sector. The revised estimates of expenditure amount to Rs. 20.01 million. The physical progress is given below :

Items	Targets 1977-78	Achievements 1977-78
(i) Villages to be electrified	120 (Nos.)	42 (Nos.)
(ii) Construction of H.T. Lines	158 miles	150 miles
(iii) Construction of L.T. Lines	114 miles	80 miles
(iv) Transformers to be installed	88 Nos.	36 Nos.
(v) Service connections	1,400 Nos.	5,600 Nos.

INDUSTRY AND MINING

4. A sum of Rs. 9.20 million was provided for Industry and Mining sector. The financial utilization upto June, 1978 comes to Rs. 6.06 million.

In the field of Cottage Industries, land was acquired for the proposed industrial estate at Bhimber, training was imparted to 455 persons in different trades. Moreover, maintenance of 22 artisans in various trades also continued. In the field of medium industry the targets and achievements for major industrial units are :

					Targets 1977-78	Achievements 1977-78
Textile plants	...	...	...	...	Completion and Operation	Completed
Vegetable Ghee	...	..	..	..	Do.	Do.
Match Manufacturing Plant	..	..	..	..	Do.	98%
Wool scouring and baling	..	...	...	...	Do.	95%

5. In the mining sub-sector, a mineral survey was conducted at Kotli and Poonch districts. Mapping of mineralized zones over 3.50 sq. miles were completed and equipment for exploration of Graphite deposits was procured.

TRANSPORT AND COMMUNICATIONS

6. A provision of Rs. 34.03 million was made for T&C sector. The revised estimates of expenditure are placed at Rs. 40.79 million. The physical progress is given in the table below :

					Targets 1977-78	Achievements 1977-78
<i>Roads</i>						
Widening	(Km.)	...	...	..	5.4	27.34
Metalling	(Km.)	...	...	..	49.6	33.31
Surfacing	(Km.)	...	..	...	42.7	42.7
<i>Bridges</i>						
Bridges at Malwani, Chella, Rajdhani and Chalpani.					100% Completion	Completed

PHYSICAL PLANNING AND HOUSING

7. A provision of Rs. 16.58 million was made for PP&H sector. The amount utilized upto June, 1978 comes to Rs. 10.87 million.

8. As regards the physical progress, 17 quarters for government servants and work on MLA Hostel is nearing completion. Under the water supply sub-sector, the Rawlakot water supply scheme was completed to the extent of 65% against the target of 67%.

EDUCATION

9. A provision of Rs. 12.58 million was made for the Education sector. The revised estimates of expenditure indicate that amount has been used to the extent of 96.2%. The physical progress is given below :

	Targets 1977-78	Achievements 1977-78
Primary Education		
Enrolment	170,000	170,000
Improvement of existing primary schools (Provision of a number of teachers)	636	181 teachers provided
Construction of primary schools	Nil	1
Middle and Secondary Education		
New Middle Schools (opened)	Nil	20
Provision of equipment and sports material to Middle Schools	55	55
Improvement of existing schools	195	195
Provision of equipment to high schools	44	41
Provision of additional accommodation in high schools	74	74
Enrolment (high schools)	39,000	39,000
Teachers Education		
Enrolment	370	370
Construction of Hostel for Teachers	1	Nearing completion.
Higher Education		
Enrolment	3,546	3,546
Construction of College buildings	5	60% work completed on 3 girls colleges at Muzaffarabad, Mirpur, Kharik and 100% completion of Pallandary College.

HEALTH

10. A sum of Rs. 8.86 million was provided for the health sector. The revised estimates of expenditure are placed at Rs. 10.53 million. The physical progress is summarised below :

	Targets 1977-78	Achievements 1977-78
Hospital beds	12	12 beds added.
Rural Health Centers	4	4 Completed.
Basic Health Units	30	30 Completed (cumulative).
MCH Centres	6	6 opened.
Doctors	10	8 (additional).
Nurses	32	Nil.
Lady Health Visitors	4	4
T.B. Clinics	8	8
Para-Medical Institution	1	College in hired building started.

RURAL DEVELOPMENT

11. A sum of Rs. 5.00 million was provided for undertaking different schemes under rural development programme against this provision, a sum of Rs. 5.80 million is expected to have been spent. The major physical achievements made are as under. The rural development programme caters to the need of local areas and undertake schemes of small gestation period. Therefore, no physical targets are fixed in this sector.

Name of sector	Est. Achievements for 1977-78
Communications	5-1/2 mile roads
Rural Water Supply	77 villages
Education (building Primary Schools)	7 Primary Schools
Maintenance of roads etc.	80 miles

Annual Plan 1978-79

12. In the Annual Plan 1978-79, a sum of Rs. 170 million has been earmarked for financing development projects in Azad Kashmir, which shows an acceleration of 31.78% over the 1977-78 allocation. The increased allocation has been accorded during 1978-79 to Agriculture being 17.65% T&C being 47.85%, Health being 70.36%, and Rural Development 260.00%. The allocation for industries sector has been reduced by 34.39% since the government intend to patronize the private sector which is shy in Azad Kashmir. The sector-wise financial break-down of allocation is given in the table below :

Annual Development Programme for 1978-79

Sectors	(Rs. Million)
	ADP Provision for 1978-79
Agriculture	10.000
Animal Husbandry	4.250
Forestry	8.550
Hill Farming Technical Development Project	16.000
Water	1.100
Power	15.000
Industries/Minerals	6.036
Transport and Communications	50.314
Physical Planning and Housing	15.000
Education	10.405
Health	15.094
Rural Development	18.000
Planning and Development Department	0.251
	Total .. 170.000

13. The sector-wise physical targets set for the year 1978-79 are enumerated below :

<i>Sub-Sectors</i>	<i>Targets (1978-79)</i>
Agriculture	
<i>Food Crops</i>	
(Wheat, Rice, Maize & Bajra)	152,285 tons
<i>Inputs</i>	
Fertilizer distribution	1590.6 tons
Seed distribution	6000 mds.
Plant Protection	41750 spray acres
Agriculture Assistants/Agricultural Officers	To be increased from 15 to 22
Demonstration plots	To be increased from 120 to 300
Animal Husbandry	30,000 (each of animals and poultry to be treated/vaccinated).
<i>Forestry</i>	
Compact plantation	12,000 acres
Establishment of nurseries	115.5 acres
Range Management	2500 acres
Water & Power	
Khari Irrigation Scheme	Irrigation of 9700 acres
Construction of H.T. Lines	60 miles
Construction of L.T. Lines	60 miles
Installation of Transformers	80 Nos.
Service Connections	5000 Nos.
Villages to be electrified	80 Nos.
Industries & Mining	
Skill development	570 persons to be trained.
Provision of Water supply & construction of building for Industrial Estate Bhimber.	Would be taken up.
Large scale mapping of 10 sq. miles to explore graphite deposits.	will be completed.
Transport & Communications	
<i>Roads</i>	
Widening/Metalling	72 Km.
Approach road of Challa Bandi.	to be completed (to the extent of 74%).
<i>Bridges</i>	
Rajdhani Bridge	completion by 2%
Chall Bani Bridge	completion by 5%
Physical Planning & Housing	
Water Supply for Assembly Building	Completion by 5%
Remaining 20% work on 17 Government Servant Quarters	to be Completed.
Construction of 4 F-type and 2 G-type quarters	Completion by 60%
Construction of 30 E-type quarters	Completion by 30%
Construction of 2 A-type and 5- D-type quarters	Completion by 50%
Master Plan for Muzaffarabad, Mirpur, Rawalakot and Kotli	to be finalized.

Education*Primary Education*

Enrolment 180,000 Nos.
 Provision of Primary Teachers to existing schools .. 455 Nos.

Middle and Secondary Education

Secondary school enrolment 45,000 Nos.
 Hostels for girls high schools at Mirpur, Pallandry, Akalgarh, Chak Swari, Bagh and Chikar. To be completed.

Teachers Education

Teachers hostel at Rawalakot Remaining 20% work to be completed
 Enrolment To be increased to 450 Nos.

Higher Education

College Enrolment To be increased to 4100
 Buildings for girls colleges at Muzaffarabad, Mirpur and Kharik. Remaining 30% work to be completed.

Health

(in number)

Providing doctors to hospitals	31
Providing nurses to hospitals	29
Lady Health Visitors	10
Hospital beds to be added	100
TB Clinics to be opened	2
Rural Health Centres to be completed	3
BHU's to be completed	20
MCH Centres to be opened	3

FEDERALLY ADMINISTERED TRIBAL AREAS

Review of 1977-78

A sum of Rs. 227.00 million was earmarked in the Federal Budget 1977-78 for the development programme of FATA. The allocation was subsequently raised to Rs. 230.00 million, out of which Rs. 171 million was put at the disposal of Government of NWFP and the balance of Rs. 59 million was given to Tribal Areas Development Corporation. The utilization of allocation on the part of former agency comes to 100.5% whereas in case of latter the utilization stands at 69.3% of the allocated sum. The sector-wise breakdown of allocation and expenditure is given at Annexure II.

2. The physical progress is summarised below :

AGRICULTURE

3. The major programme under implementation in this sector pertain to the reclamation and development of land, plant protection, maintenance of fruit farms, afforestation, raising/maintenance of forest nurseries, continuance of 3 sericulture centres and treatment of livestock/birds. During 1977-78, 3,932 acres of land is reported to have been reclaimed. The other programmes were also kept continued.

INDUSTRIAL TRAINING

4. At present 5 Industrial Training-cum-Production Centres (Metal Centres—Kohat Pass and Miranshah, Woollen Centres—Miranshah and Wana and Carpet Centre, Alizai) are functioning in the Federally Administered Tribal Areas. During the year, 108 tribal boys were receiving training in these centres in various industrial crafts.

TRANSPORT AND COMMUNICATIONS

5. In the transport and communications sector, 52.45 miles of new shingled and 21 miles of black topped roads were constructed. Besides, improvement of 83 miles of roads were carried out by the end of June, 1978.

POWER

6. In 1977-78, 171 villages were electrified against the target of the same number.

EDUCATION

7. In this sector, there were 50 schemes (29 on-going and 21 new) out of which work was reported to be in progress on 30 schemes. During the year, buildings for 57 Primary Schools, one Middle School and one College were completed. In addition, 21 Primary and 11 Middle Schools were upgraded to Middle and High Status, respectively.

HEALTH

8. In the Health Sector, schemes for the upgradation of 4 Civil Hospitals to Agency/Tehsil Headquarter hospitals, construction of 8 Basic Health Units, 2 Rural Health Centres, construction of one 8-bedded hospital, two 10-bedded hospitals and one T.B. Hospital were under implementation. Upto the end of June, 1978, 4 Dispensaries, 2 Basic Health Units and one Rural Health Centre were completed.

PHYSICAL PLANNING AND HOUSING

9. In this sector, 13 on-going schemes are under implementation. Work on all these schemes was in progress. The major schemes relating to the construction of Civil Colonies continued at Khar, Nawagai (Bajaur Agency), Ghallanai (Mohmand Agency), Miranshah and Razmak (North Waziristan Agency) and Kalaya (Orakzai Agency). During the year, 120 housing units (112 residential and 8 non-residential) were completed under these schemes.

10. Under public health engineering sub-sector originally 31 schemes for the supply of drinking water were included in the ADP for 1977-78. Subsequently, 14 more schemes were added as a result of special grant sanctioned by CMLA for improvement of drinking water facilities in these areas. However, 11 schemes were dropped during the year as these involved either political disputes or found not feasible. Work remained in progress on 30 schemes during the period under review.

RURAL DEVELOPMENT

11. In the rural development sector, 633 small schemes of local importance pertaining to communications, village improvement/flood protection, education, health and sanitation, irrigation, low cost housing, drinking water facilities and community buildings were executed. IRDP Markaz, Parachinar was also kept continued.

FATA-DC

12. During 1977-78, a sum of Rs. 59.00 million was provided for the schemes of FATA-DC pertaining to development of water resources, industries and minerals in the FATA. Against this allocation, an expenditure of Rs. 40.89 million is reported to have been incurred by the end of June, 1978 showing 69.3% utilization.

WATER RESOURCES DEVELOPMENT

13. The physical achievements are briefly discussed below :

Name of Scheme	Physical Progress Achieved
(a) Bara River Canals Schemes, Khyber Agency	95.7%
(b) Spin Plain Irrigation Scheme, S.W. Agency	73.0%
(c) Shalozan Irrigation Scheme, Kurram Agency	59.7%
(d) Tubewell Irrigation Scheme, Mirali Tehsil North Waziristan Agency	63.0%
(e) Pai Khel Irrigation Scheme, N.W. Agency	43.0%
(f) Improvement and extension of Tarkho Karez, Bajaur Agency	87.0%
(g) Urmani Irrigation Scheme near Jandola, F.R.D.I. Khan	100.0%

Besides, work was in progress on the improvement of existing irrigation channels in Kurram Agency, South Waziristan Agency and F.R.D.I. Khan. In addition, work also remained in progress on schemes regarding survey and investigation of groundwater resources throughout FATA.

INDUSTRIES

14. The physical progress of major schemes in industrial sector is summarised below :

Name of Scheme	Physical Progress upto 30-6-1978
(a) Leather Tannery at Spinkai Raghzai, South Waziristan Agency	100% completed
(b) Footwear and Leather Goods Factory at Spinkai Raghzai, South Waziristan Agency.	73%
(c) Carpet Yarn Factory, Miranshah, North Waziristan Agency.	Nearing completion.
(d) Marble Factory at Painsi Lalma, Khyber Agency	60%
(e) Vegetable Ghee Mill, Bara Khyber Agency	Factory completed. Work on residential colony was in progress and 92% work has been completed.

MINERALS

15. Under this sector, two schemes pertaining to investigation and large scale mapping of mineral bearing areas in FATA and exploitation of soapstone in Kurram Agency were under implementation. Under the first scheme, two detailed geological reports viz. "Geology of Orakzai Agency" and "Geology and Mineral Potential of Sherani area, F.R.D. I. Khan" had been finalized and were ready for publication, whereas under the second scheme 55.8% physical progress was achieved.

Annual Plan 1978-79

16. An allocation of Rs. 279.00 million has been provided in the ADP for 1978-79 for the development programmes of FATA. Out of this, a sum of Rs. 220.00 million has been placed at the disposal of Government of NWFP for the development schemes of FATA relating to sectors under their purview. The balance of Rs. 59.00 million will be utilized by the FATA Development Corporation for the development of water resources, establishment of industries and exploitation of mineral resources. The sector-wise break-up of allocation is given at Annexure III.

17. The major physical targets proposed to be achieved during 1978-79 are briefly discussed below :

AGRICULTURE

18. The targets are levelling of 2,975 acres of land, spraying of 23,250 acres of cropped area, opening of 8 new veterinary dispensaries, raising of 34 Forest Nurseries and distribution of 121,000 fruit plants.

COMMUNICATIONS

19. It is proposed to complete construction/improvement of 150 miles of roads (40 miles black topped, 65 miles shingled and 45 miles improvement). In addition, 11 bridges are also proposed to be completed by June, 1979.

POWER

20. In this sector, the plan aims at the supply of electricity to 180 villages and installation of 165 transformers.

EDUCATION

21. During 1978-79, it is proposed to construct 100 new primary schools and also to provide new buildings for 50 existing primary schools which are working without proper accommodation. Besides, 43 primary schools and 8 middle schools will be upgraded to middle and high status, respectively. In addition, construction of buildings for 7 colleges namely intermediate colleges at Khar, Landi Kotal, Darra Adam Khel, Wana and Ladha, Cadet College, Razmak and Degree College, Miranshah will be completed.

HEALTH

22. The programme for 1978-79 envisages construction of one hospital, 2 rural health centres and 39 basic health units. In addition, schemes pertaining to the upgradation of Civil Hospitals Parachinar and Landi Kotal to Agency Headquarter Hospitals and upgradation of Civil Hospital Jandola to Tehsil Headquarter Hospital will be completed.

PHYSICAL PLANNING AND HOUSING

23. During the period 1978-79 it is proposed to complete 9 schemes relating to office and residential accommodation for different government departments.

24. Under public health engineering sub-sector, it is proposed to complete 20 water supply schemes which will provide drinking water to a population of 91,400 persons.

PROGRAMME OF FATA DEVELOPMENT CORPORATION DURING 1978-79

25. *Water Resources Development.*—During 1978-79, the FATA Development Corporation envisages to complete 17 schemes (10 on-going and 7 new) relating to water development. Some of the major schemes like Bara River Canals Schemes, Irrigation Schemes of Spin-plain, Shalozan, Harseen and Sein Tangi are proposed to be completed. Besides, 41% progress is expected to be achieved on the scheme of installation of 150 tubewells in Bajaur Agency.

INDUSTRIES

26. In industries sector, the Annual Plan 1978-79 aims at completing the major on-going schemes like Footwear and Leather Goods Factory, Spinkai Raghzai (SWA), Vegetable Ghee Mill, Bara (Construction of residential Colony) and Sizing Unit (NWA).

27. In addition, 68% and 65% progress will be achieved on Card Board making factory (FR Bunu) and oil expelling and Refining Unit (Bajaur Agency) respectively.

MINERALS

28. It is proposed to complete the approach road to Daradar Valley of Kurram Agency for exploitation of soapstone. Besides, 60% of survey and investigation work for exploitation of mineral resources under the scheme "Investigation and exploitation of prospective areas in the FATA" will be done during 1978-79.

NORTHERN AREAS

Review of 1977-78

During 1977-78, an allocation of Rs. 73.910 million was made for the development programmes of Northern Areas. Expenditure incurred is estimated at Rs. 67.137 million showing utilization of 90.8%. A table showing A.D.P. allocation and expenditure for 1977-78 is placed at Annexure IV.

2. Allocations and actual expenditure indicate that priority was given to the development of Transport and Communications Sector followed by Physical Planning and Housing and Water and Power Sectors. Considerable importance were assigned to areas of activity connected with the socio-economic development of the Northern Areas.

3. Physical achievements in respect of various sectors is given below :

AGRICULTURE**1. Crop Production:**

- (i) Five schemes for purchase and distribution of fertilizer were included in the ADP for which about 50% of the allocation was utilized. About 20,000 bags were procured and transported from down-country and distributed to cultivators at subsidised rates. The Agriculture out-put per acre was reported to have increased by 20%. Two stores for fertilizers were constructed, one each in Ghizer and Diamir.
- (ii) Five schemes were under execution to provide plant protection services in Northern Areas. Sufficient quantity of insecticides, spray machines, and power spray machines, were purchased. About 10,987 acres of land and 110,000 plants/trees were chemically treated against the serious attack of codling moth, aphids, hairy-caterpillar, etc.
- (iii) In the field of horticulture, about 63,656 fruit plants of various kinds were distributed among the farmers on normal rates, 170,000 plants were raised in fruit nurseries. Four new fruit nurseries were established in Ghizer and Diamir Districts and all the old nurseries were maintained.
- (iv) Agriculture extension services were carried out throughout Northern Areas. Two hundred fifty group meetings were conducted and the cultivators were given necessary instructions regarding use of chemical fertilizer, improved seeds and benefits of fruit products in the long run.
- (v) In the field of agriculture research, about 500 mds. of improved seeds were produced from agriculture farms and distributed to growers. The Agriculture farms were maintained and 150 acres of land were reclaimed.

2. Animal Husbandry:

- (i) The demonstration and research poultry farms at Jutial, Gilgit, were maintained and improved. About 3000 layers and 10,000 broilers were available at the end of 1977-78. Chicks and eggs were sold out to public and an amount of Rs. 0.279 million was deposited in the treasury as sale proceeds.
- (ii) Construction work of 4 dispensaries in Gilgit, one hospital and 4 dispensaries in Diamir, 2 dispensaries in Skardu was completed. Ten new dispensaries were established in rented private buildings in various places of Northern Areas. Two mobile units were also established in Gilgit, existing veterinary hospitals, Gilgit and Astore, were taken in hand by Northern Areas Works Organisation (NAWO). The compound wall of Gilgit hospital and repair to old deteriorating veterinary hospital, Astore were completed. Construction work on new veterinary hospital at Ghizer District has been started by NAWO.
- (iii) Construction work for office and residential accommodation for Assistant Director, Animal Husbandry, Diamir was completed by 40% and one 'G' type quarter completed in Baltistan.

3. Forestry :

- (i) About 214,000 plants were planted in an area of 425 acres through-out Northern Areas by Forest Department and 70,000 plants/cutting were distributed to Army/public for plantation.
- (ii) Two new forest nurseries were established while remaining work on a nursery at Ishkoman completed.
- (iii) Maintenance, re-stocking and protection of existing nurseries and plantation carried out effectively. Planted ornamental plants, about 1000 cutting of roses and sowing of flower seeds in the beds were carried out. Fixed 350 iron tree guards under a scheme "Land-scape, planting/road avenues in Gilgit".
- (iv) Sowing of kail seeds over an area of 5 acres of forest land in Kharmang has been done and about 26 check dams have been constructed under water-shed scheme (Jalalabad Gilgit). Construction of divisional office, Gilgit, a clerical quarter and a forest hut at Skardu were completed.
- (v) One wildlife museum at Gilgit and one wildlife hut at Khunjerab National Park were completed. Protection/conservation of wildlife continued.
- (vi) Part payment of training charges of 4 B. Sc. trainees for the session 1977-78 was made.
- (vii) Drawing of agreements in respect of private forests of Chilas, Darel and Tangir with forest contractors is in progress. So far agreements have been drawn for a total volume of 3,259,772 Cft. Attestation of fresh sale deeds have been banned. An income of Rs. 445,000 has been recovered which includes royalty and organizational charges of the forests of Chilas, Darel and Tangir during 1977-78.

4. Fisheries :

- (i) Units of 1.5 holding were completed in Kargah experimental farm and 2.43 mds. fish put to sale realising sale proceeds of Rs. 16,910.
- (ii) Routine hatchery operations were conducted in the trout hatchery, Skardu, 30,000 green trouts were produced through artificial breeding. Fifteen thousand fry/fingerlings have been liberated into Satpars, Kachura and Sarfranga lakes.
- (iii) Construction work by NAWO is nearing completion for two schemes, establishment of trout hatchery at Bara Ghanche and Ghizer District has been completed while work on experimental fish cum-duck-culture in Nalter valley is in progress.

INDUSTRIES

4. The following physical progress in this sector has been achieved :

- (i) A fruit dehydration plant was established at Basin, Gilgit. The plant could not operate this year due to slow progress of work by the contractor and un-availability of electric power. Three existing vocational schools at Gilgit, Skardu and Hunza were maintained and provided training facilities to girls students of the areas. The Chilas match factory was shifted to Gilgit and a match manufacturing plant has been established at Konodas, Gilgit.

WATER AND POWER

5. Physical progress achieved during the year was as under :

- (i) Hydel Project 135 KVA at Shigar was completed and commissioned. Hydel Projects at Khaplu and Parkuta were completed in all respects and at present about 1200 houses have been provided electricity. Work on 7 Hydel Projects in Gilgit, Diamir and Ghizer was in progress. Hydel projects at Chilas and Astore are nearing completion.
- (ii) Work on improvement of Shaitan Nullah water channel, and construction of 7 miles water channel at Silpi was completed while water channel at Bunner 6 miles, Jallpur 5 miles and Lurk 5 miles are nearing completion. About 2-1/2 miles long water channel at Saindo has been improved.
- (iii) Ten pumping sets installed and commissioned against 4 lift irrigation schemes at Skardu Sarfaranga, Skardu airport and Hussainabad.
- (iv) Work on construction of 14 water channels in Northern Areas was also in progress.

TRANSPORT AND COMMUNICATIONS

6. Physical Progress achieved during the year 1977-78 is as follows :

1. Construction of black topped road and foot-paths	..	..	4 mls.
2. Construction of 3 tonner roads	..	..	10 mls.
3. Construction of Jeepable road	..	..	50 mls.
4. Construction of pony track roads	..	..	25 mls.
5. Improvement/repairs of roads	..	..	20 mls.
6. Construction/renovation of rest houses	..	..	14 nos.
7. Construction/improvement of suspension bridges	..	..	12 nos.

PHYSICAL PLANNING AND HOUSING

7. In this sector, construction of DC's house at Ghizer, Assistant Political Offices and Naib Tehsildar Office/residential accommodation at Yasin and Ishkoman were completed. Construction of residential/office accommodation for Judicial Commissioner and his staff at Gilgit was also completed. In addition, 2 C, 7 D, 10 E, 21 F, 19 G, and 11 H, type quarters were completed at various stations in Northern Areas. Construction of foodgrain godown at Gilgit and 7 godowns at Diamir, Ghizer and Skardu were completed. Similarly, Water supply schemes to Gilgit town, Eidgah, Jutial, Gilgit, Shigar and Olding villages were completed and 16 on-going water supply schemes were expected to be completed shortly, while the work on 7 schemes is in progress.

HEALTH

8. In the Health Sector, hospitals at Astore, Gupis, Chillas and Karimabad were completed and put to function. Three hospitals at Singal, Tangir and Bunji were also completed except their electric fittings. One hospital at Nagar was nearing completion. Improvement/modification of Khaplu, Shigar and Skardu hospitals were completed except some touching over in Shigar hospital. Construction of 50 bedded hospital at Skardu has been completed in all respect. Twentytwo dispensaries were completed and put to commission. In Gilgit areas, 17 C class dispensaries with G type quarters in Baltistan were completed while work on 9 C class dispensaries was nearing completion. Five ML rooms with staff quarter in Baltistan were also completed except one 'G' type quarter and 15 First-aid-Posts in Gilgit were completed out of which 5 were taken over and put to function. The 42-bedded TB ward and 10-bedded intensive therapy wards, physiotherapy departments and treatment shops were completed. Construction of mortuary, postmortem room and garages was in progress. Five diesel generators in Baltistan were purchased and 4 generators rooms completed. Four G type, 4 H type, 2 F type quarters and one nursing home were completed except sanitary and electric fittings. Twenty nursing candidates have been imparted training in Agency Hospital, Skardu.

9. In the Rural Health Programmes, 11 new health centres were opened, 180 health guards were trained, 1,020 trained health guards were retrained/refresher courses given, 24,000 BCG vaccinations were conducted, 4,914 medical kits were replenished to health guards and 32,000 patients were treated by mobile medical teams.

EDUCATION

10. In the Education Sector, construction of 40 primary school buildings were started in the Northern Areas and renovation/repair of primary school buildings was undertaken at a cost of Rs. 0.175 million. The buildings of 40 existing primary schools were reconstructed and equipment was supplied to primary schools at a cost of Rs. 0.500 million. Two middle schools were upgraded to high school standard and the on-going work of construction of the building for Degree College at Skardu continued.

IRD/PWP

11. Eleven IRD markez were opened and work on IRD markez building at Danyore was completed. One RHS dispensary was established at markez building with the help of RHS, Northern Areas and three vocational/industrial schools were established in the markez areas.

Annual Plan 1978-79

12. In the 1978-79 Annual Development Programme, Rs. 97.000 million have been allocated for execution of various on-going/new schemes in the Northern Areas. Priority has been assigned to construction of housing and office accommodation to provide the basic facilities for the implementation of the development programme in the area. This is followed by Education, Transport and Agriculture Sector programme. A statement showing the details of financial allocation (sector-wise) and percentage to total is given at Annexure V.

13. Sector-wise physical programmes to be implemented during the year 1978-79 are detailed below :

AGRICULTURE

14. An allocation of Rs. 4.000 million has been provided in the Annual Development Programme 1978-79 to agriculture sector. 55 % of the allocation i.e. Rs. 2.220 million will be utilized for procurement of 21000 bags of chemical fertilizer. 24 % amount i.e. Rs. 0.91 million will be utilized for execution of 5 on-going schemes for fruit development in Northern Areas.

15. Fifty thousand plants will be raised in the existing nurseries, 100,000 fruit plants will be distributed to public on nominal rates and 3 new nurseries will be established. Rs. 0.60 million (i.e. 15% of the allocation) will be utilized for execution of 5 schemes for plant protection services. Spary coverage will be provided to 150,000 fruit trees/plants and standing crops over an area of 20,000 acres. The remaining amount will be utilized for maintenance of seed farms, agriculture extension services and agriculture training facilities.

16. 1. *Animal Husbandry*.—An amount of Rs. 2.600 million has been proposed for Animal Husbandry Sector in the ADP 1978-79. The amount will be utilized for maintenance and operation of all existing Veterinary Hospitals, dispensaries, mobile units and poultry farms. One new veterinary hospital and eleven dispensaries will be opened during the year under review. Construction work will be carried out for 8 buildings for veterinary Hospitals and dispensaries/Centres in Northern Areas. Treatment will be imparted to 500,000 animals and 4,000 poultry birds. Approximately 250,000 eggs and 10,000 meat birds will be sold in the market for about Rs. 0.450 million. The market rates would be reduced by 2 % and the consumers will be getting chicks and eggs easily.

17. 2. *Forestry*.—An allocation of Rs. 3.000 million has been proposed in the ADP 1978-79 to forestry sector. Physical targets to be achieved are as follows :

(i) *Afforestation/Regeneration*

About 300,000 plants/saplings will be planted by Forest Department throughout Northern Areas and 100,000 plants/cuttings will be distributed to Army/Public for plantation

(ii) *Watershed Management/Soil Conservation*

Two Watershed Management Projects, one each for Diamir and Ghanche Districts, are under execution. Construction of 5 selected Nullahs of Ghanche district will be taken in hand and about 20 check dams will be constructed in Diamir District. Afforestation/regeneration work will be carried out in 50 acres and path sowing of grass seeds will be done in about 100 acres.

(iii) *Nurseries*

Four new nurseries of 2 acres each will be raised. Maintenance/upkeeping of existing nurseries will be continued.

(iv) *Wildlife*

Protection of wildlife in Northern Areas will continue. Construction of wildlife huts at Kargah and Rondu will be completed. Demarcation of National Parks, game sanctuaries and game reserves will be carried out by creating boundary pillars.

18. 3. *Fisheries*.—An allocation of Rs. 1,000 million has been proposed in the ADP 1978-79 for the fisheries sector. Physical targets envisaged for this sector are as follows :

(i) *Salmenids Development* :

1. Rectification of damages inflicted by floods to the farm units, protective bunds, water supply to farm, electrification of the existing farm quarters and rectification of faults in pipes lying for Kargah Hatchery and water supply work will be carried out by NAWO.
2. Acquisition of some land near Napur water spring, construction of two units of farms near Napur water spring, operation of Kargah experimental/research farm, functioning of fish, disease investigation laboratory, fish sale programme and procurement of about 5000 eyed ova of rainbow trout from Kargah valley will be carried out by Fisheries Department.

(ii) *Trout Hatcheries/Development* :

1. Completion of hatchery rooms, boundary walls, water supply quarters 4 nos. broad stock ponds and 6 nos. of nursery ponds through NAWO.
2. Land acquisition, building of proper trout brood stock, production of 35,000 green trout eggs and 25,000 trout/fry fingerlings, strippings of 80,000 green eggs, production of trout fry/fingerlings for liberation into trout water of Ghizer District and import of Mallard Ducks will be arranged by the Fisheries Department.

INDUSTRIES

19. An allocation of Rs. 1,000 million has been provided to Industries Sector. The amount will be utilized for the establishment of (i) furniture making factory, (ii) Vocational Schools, (iii) Pattoo Weaving centres (iv) Match Unit in Gilgit and (v) Extension of credit facilities to industries.

HEALTH

20. An allocation of Rs. 8,000 million has been provided for Health Sector including Rural Health System.

21. In the general health services, the amount will be utilized for completion of 12 on-going schemes and execution of 20 on-going schemes.

22. Under the Rural Health System, 10 new health centres will be opened in Northern Areas, 150 health guards will be retrained.

23. 25,000 BCG vaccinations will be conducted and 40,000 patients will be provided treatment by mobile medical teams and HQ Offices.

WATER AND POWER

24. An allocation of Rs. 10,460 million provided in the ADP 1978-79 for this sector will be utilized for completion of 20 on-going schemes including 10 hydel schemes, 3 lift irrigation schemes, one dam, 5 water channels and construction of water/power and survey and investigation office at Gilgit.

25. Twentyfour per cent amount will be utilized for execution of 5 on-going schemes for hydel station, 8 schemes for water channels in Northern Areas.

TRANSPORT AND COMMUNICATIONS

26. An allocation of Rs. 16,400 million has been earmarked in the ADP 1978-79 for this sector. Physical targets fixed for the year 1978-79 are as under :

27. Construction of Pucca road from Hunza Hotel chowk to Residency via Hospital road. Metalling of Road from Skardu to Airfield (mile 2—6) towards Astana village, Skardu will be completed.

28. Two schemes for 3 tonner roads, 6 schemes for construction of Jeep roads, one suspension bridge and two Rest Houses will be completed during 1978-79.

29. About 80.75% amount will be utilized for execution of 44 on-going and 8 new schemes.

30. Rs. 2.000 million has been provided for NATCO. This amount will be utilized for the purchase of buses, trucks and workshop machinery. Transportation facilities will be provided to the passengers from Rawalpindi to Gilgit and Gilgit to Rawalpindi in addition to augmenting passenger jeep/bus services on other routes in the Northern Areas.

PHYSICAL PLANNING AND HOUSING

31. Rs. 23.440 million has been provided in the ADP for 1978-79 for this sector. The physical targets envisaged during 1978-79 are as follows :

32. Construction of three cheap housing colonies at Skardu maidan and Sarfranga, and Hussainabad, Baltistan, will be completed to re-rehabilitate 190 war-affected families.

33. 27 on-going schemes will be completed during the year 1978-79 (including 8 D type, 38 E type, 36 F type, 22 H type, 25 G type quarters and Police Station, Foodgrain Godowns, Overseers' quarters and SDM Courts and Staff quarters at Baltistan, Nagar and Hunza).

34. 13 on-going schemes will be executed by completing 70 to 90% progress of work.

35. Construction of water supply office at Gilgit, Office/residential accommodation at Chillas, Gupis and Skardu will be completed.

36. Survey and investigations of schemes in water supply and sanitation sector and purchase of vehicles/machinery for water supply sector, Northern Areas, will be completed.

37. Ten on-going schemes of water supply at Jutial Dasa, Yasin proper, Astore proper, Bunji, Shigar, Sildi, Barmas village, Skardu and Khaplu will be completed.

38. Construction of filter beds at Chillas, Soniwal Kote, Pain Shaheen Laley and Botakot will be completed.

EDUCATION

39. Rs. 17.000 million have been provided for education for supply of equipment to primary & high schools, upgrading of middle schools to high schools and Inter Colleges to Degree College and opening of new schools in the Northern Areas. Federal Training Institute Building at Gilgit and office for District Inspector, Diamir and other residential quarters for Teaching Staff will also be constructed.

IRDP/FWP

40. An allocation of Rs. 9.100 million has been made in the ADP 1978-79 to this sector. This sector has been given special emphasis keeping in view the directive of the CMLA for acceleration of socio-economic conditions in rural area. The amount will be utilized for establishment of 11 IRDP newly opened markez. 70% of the allocation will be utilized for execution of small schemes for irrigation channels, water tanks, water supply, construction of roads, pony tracks cooperative, markets, societies, Agriculture farms, and nurseries. Agricultural machinery will be introduced in all marakez. About 2 to 3 villages will be provided electricity by executing small hydel schemes on self-help basis. 57 villages will be provided water supply facilities on self-help basis. Acquisition of lands for 11 IRDP markez and construction of markez building will be initiated during this year.

FINANCIAL ALLOCATION AND UTILIZATION DURING 1977-78

(AZAD KASHMIR)

(Rs. Million)

Sector	Allocation	Utilization	Percentage Implementation
Agriculture	19.38	18.68	96.4
Water & Power	18.01	20.01	111.1
Industries	9.20	6.06	65.9
Transport & Communications	34.03	40.79	119.9
Physical Planning & Housing	16.58	10.87	65.5
Education	12.58	12.10	96.2
Health	8.86	10.53	118.8
Urban & Rural Development	5.00	5.80	116.0
Planning & Development Department	1.36	0.16	11.8
World Bank Assisted Projects	4.00	4.00	100.0
Total	129.00	129.00	100.0

**FINANCIAL ALLOCATION AND UTILIZATION 1977-78
(FATA)**

(Million Rupees)

Sector	Allocation	Utilization	Percentage Implementation
A. FATA—NWFP			
1. Agriculture	10.60	12.88	121.5
2. Power	23.50	23.50	100.0
3. Industrial Training	0.97	0.90	92.8
4. Transport and Communications.. .. .	63.02	66.73	105.9
5. Physical Planning and Housing	19.70	19.46	98.8
6. Education	36.62	33.54	91.6
7. Health	11.59	9.80	84.5
8. Rural Development	5.00	5.00	100.0
Sub-Total (A)	171.00	171.81	100.5
B. FATA—DC			
1. Water	23.44	17.83	76.1
2. Industry	28.91	20.70	71.6
3. Mineral	6.65	2.04	30.7
4. Miscellaneous	—	0.32	—
Sub-Total (B)	59.00	40.89	69.3
Total (A + B)	230.00	212.70	92.5

**ANNUAL DEVELOPMENT PROGRAMME 1978-79
(FATA)**

(Million Rupees)

Sector	Allocation	Percentage to Total
A. FATA—NWFP		
1. Agriculture	21.10	9.6
2. Power	23.81	10.8
3. Industrial Training	0.90	0.4
4. Transport and Communications	63.17	28.7
5. Physical Planning & Housing	25.36	11.5
6. Education	56.42	25.7
7. Health	24.24	11.0
8. Rural Development	5.00	2.3
Sub-Total (A) ..	<u>220.00</u>	<u>100.0</u>
B. FATA—DC		
1. Water	31.45	53.3
2. Industry	21.83	37.0
3. Minerals	4.07	6.9
4. Miscellaneous	1.65	2.8
Sub-Total (B) ..	<u>59.00</u>	<u>100.0</u>
GRAND TOTAL (A + B) ...	<u>279.00</u>	—

SECTORAL ALLOCATION AND ESTIMATED EXPENDITURE 1977-78

(NORTHERN AREAS)

(Rs. Million)

S. No.	Sector	ADP Allocation	Expenditure 1977-78	Percentage Achievement
1.	Agriculture	10.600	9.158	86.3
2.	Industry	1.300	0.844	64.9
3.	Health	8.500	6.936	81.6
4.	Water and Power	10.000	9.036	90.4
5.	PP & H	16.000	13.300	83.1
6.	T & C	18.100	21.384	118.1
7.	Education	8.410	5.510	65.5
8.	PWP/IRDP	1.000	0.975	97.5
	Total	73.910	67.143	90.8

SECTOR-WISE ALLOCATION FOR NORTHERN AREAS
(1978-79)

(Rs. Million)

S. No.	Sector	Financial Allocation	Percentage to total
1.	Agriculture	10.600	10.9
2.	Water and Power	11.460	11.8
3.	Industry	1.000	1.0
4.	Transport and Communications (Including NATCO)	16.400	16.9
5.	Physical Planning and Housing	23.440	24.2
6.	Education	17.000	17.5
7.	Health (Including R. H. S)	8.000	8.3
8.	PWP/IRDP	9.100	9.4
	Total	97.000	100.0