ANNUAL PLAN

1974-75

Planning Commission
Government of Pakistan

JULY, 1974

ANNUAL PLAN FOR 1974-75

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INTRODUCTION

The Annual Plan provides for an overall framework for the direction of the economy. Within this framework sectoral policies are framed by concerned agencies of the Federal and Provincial Governments. The basic parameters for Annual Plan 1974-75 are based on decisions taken during May and June 1974. These have already been announced in the Budget 1974-75 and the Import Policy. The Plan document represents an overall view along with the physical targets in which these individual policies fit. It also provides a review of the progress made during 1973-74, the problems ecountered and the policies initiated to overcome these problems.

In a rapidly changing economic situation, the implementation of the Plan has to be undertaken in a flexible manner. Developments have been taking place in internatonal trading relations and additional information is becoming available regarding climatic and natural factors which have serious impact on agriculture production. Policies would have to be adjusted during the year to take account of these developments keeping in view the overall objectives of the Plan.

PART I
ECONOMIC FRAMEWORK

CHAPTER I

REVIEW OF 1973-74

The process of rehabilitation and recovery of the economy set in motion in 1972-73 gained strength in 1973-74. The Gross National Product, in real terms is estimated to have increased by 6.1 per cent, agricultural output by 5.4 per cent and large-scale manufacturing output by 7.0 per cent. This progress was achieved in spite of the colossal damage caused by the floods, the difficulties created by the world-wide scarcity and rapid increases in the prices of commodities, the import of which is crucial for the functioning of the economy. The sharp increase in the price of petroleum products was only one of the more dramatic examples of world-wide increase in the prices of essential materials. The performance of the economy, achieved in the face of great adversities clearly indicates the resilience and potential of Pakistan's economy, as shown in Table I.

TABLE I

Growth in Gross National Product at Constant Factor Cost

(Per cent)

	1972-73 Actuals	1973-74 Provisional
Commodity Producing Sectors	2.9	5.5
(*i*) Agriculture	1.7	5.4
Major Crops	1.9	7.7
Others	1.3	2.2
(*ii*) Manufacturing	9.7	6.1
Large Scale	11.8	7.0
Small Scale	2.9	2.9
Other Sectors	14.9	6.4
(*iii*) Construction	15.7	10.8
(*iv*) Trade and Transport	10.0	5.8
(*v*) Public Administration and Defence	17.3	8.0
(*vi*) Others	10.9	5.7
Total G.N.P.	7.6	6.1
Per Capita **Income**	4.7	3.2

1.2 An important feature of the growth in GNP in 1973-74 was that it was much more balanced than in 1972-73. The commodity producing sectors grew by 5.5 per cent in 1973-74 compared with 2.9 per cent in 1972-73. This is important in determining the availabilities of goods for consumption and export. *Per capita* income continued to grow although at a slower rate. *Per capita* income has increased by nearly 8.0 per cent in the last two years (1972—74) after declining by 4.0 per cent during 1970—72.

Realization of Plan Targets

1.3. The floods of August 1973 changed the economic outlook so drastically that the Annual Plan for 1973-74 had to be revised. The target for growth in GNP was reduced from 8.0 per cent to 5.0 per cent and the targets for agricultural and industrial growth were also reduced substantially. However, the overall performance of the economy was better than anticipated in the revised targets of the Annual Plan for 1973-74.

TABLE II

Sectoral Targets and Achievements 1973-74

(Per cent Growth.)

	Original	Revised	Likely Achievement
Agriculture	7.5	2.9	5.4
Manufacturing	11.4	6.7	6.1
Construction	9.9	12.9	10.8
Trade & Transport	9.5	5.0	5.8
G.N.P.	8.0	5.0	6.1

1.4. As mentioned earlier growth in Large Scale Manufacturing in 1973-74 is tentatively estimated at 7.0 per cent. This estimate was made in March 1974 when it was apprehended that production would suffer from some setback in the remaining three months of the year. However, factories have continued to operate smoothly and it is now estimated that the growth in Large Scale Manufacturing in 1973-74 may possibly be higher. This would mean that trade and transport, which is linked with the performance of industry, would also show a higher growth than reflected in the present figures.

Agriculture

1.5. The floods in August 1973 caused severe damage to the Kharif crop. The Annual Plan targets for agricultural production had therefore, to be revised and measures were taken to minimize the adverse effects of the floods. These measures included aerial spray of the rice crop to protect it from pest attack; the take-over by the Provincial Governments of fertilizer distribution to ensure adequate availability for the Rabi Crop; the provision of liberal credit to the farmers for rehabilitation and improvement of their land; the increase in procurement prices of rice and wheat and the large reconstruction and rehabilitation programme in the rural areas. The result was that most of the revised targets of the Annual Plan, 1973-74 were achieved and agricultural production recorded substantial growth over the previous year. The estimated achievements and the revised Annual Plan targets for 1973-74 are given in table III

TABLE III

Production of Major Crops, 1973-74

	Original	Revised	Likely Achievement
Wheat (Million tons)	8.5	8.5	8.5
Rice (Million tons)	3.0	2.6	2.4
Sugar Cane (Million tons)	22.0	23.0	22.4
Cotton (Million bales)	4.3	3.7	3.7

Targets

Industry

1.6. As in the case of agriculture, floods necessitated a revision of targets of industrial Production for 1973-74. Present estimates indicate that there may be some shortfalls particularly in the case of cotton yarn, cloth and cement. These shortfalls, would be the result of a combination of factors which include

transport bottlenecks, shortages in electricity and gas and a softening of the international markets for cotton products. The revised targets and likely achievements in 1973-74 are given in the Table IV

TABLE IV

Production of Major Manufactures 1973-74

	Original	Revised	Likely Achievement
White sugar (000 tons)	700	550	585
Vegetable Ghee (000 tons)	240	225	230
Cotton Yarn (Mil. Lbs.)	934	881	833
Millmade Cotton Cloth (Mil. yds.)	800	738	705
Fertilizers (000 tons)	700	700	775
Cement (000 tons)	3200	2800	2754

1.7. During the first six months of 1973-74, for which firm statistics are available the index of industrial production increased by 11.6 per cent. The increases in individual items are discussed in the Chapter on Industry.

Infrastructure Developments

1.8. Inadequate transport facilities resulted in interruption and inefficiency in freight traffic. This problem was aggravated by the floods during the first half of the year. Realising that transport bottlenecks could impede economic growth the Government prepared a three year crash programme for improving the efficiency of the railways and increasing their capacity to handle freight and passenger traffic. The Government also initiated studies on a major highway project and accelerated the programmes for improvement of roads.

1.9. Insufficient power generation capacity and serious gaps in the transmission system forced WAPDA to resort to load shedding to a variety of users of electricity during 1973-74. A crash programme for enhancing the generation in Northern Zone by 200 MW through installation of gas turbines was initiated. The allocations to this sector were increased but implementation fell short because of the difficulty in obtaining raw material.

1.10. Shortages also occurred in gas supply position. The bottleneck was transmission capacity. Therefore the Government decided to undertake, from its own cash resources, the first phase of the Indus Right Bank Pipeline project to provide relief to the extent of 12 MMCFD by the end of 1974. In the North the SNGP project III-A was undertaken from cash resources to enhance capactiy by 26 MMCFD by January 1975.

Investment

1.11. A major achievement in 1973-74 was the substantial increase in public investment, particularly in the less developed regions. The developmental momentum was preserved and the adverse effects of floods and high prices were overcome by additional resource mobilisation. The public sector development expenditure during 1973-74 was around Rs. 6000 million compared with the original plan target of Rs. 5570 million. Keeping in view the increase in investment costs, it is clear that while the financial targets for public investment were exceeded, in real terms there was a shortfall. However, compared to 1972-73, public sector investment in 1973-74 was larger, both in financial and physical terms.

1.12. Private investment in 1973-74 is estimated at around Rs. 4260 million. This implies an increase of 7 per cent over 1972-73. However, in real terms the decline in private investment continued. Private investment in housing, transport and communications, and agriculture increased satisfactorily. But private investment in the large sacle manufacturing sector continued to be sluggish. Total loan disbursements of PICIC and IDBP (reflecting investment decisions of previous years) were probably the lowest recorded in the last few years.

1.13. Total fixed investment in 1973-74 was around Rs. 10340 million and exceeded the plan target substantially in financial terms. However, since the investment price index is estimated to have risen by about 30 per cent during the year, in real terms investment was considerably lower and showed hardly any increase.

Balance of Payments

1.14. The balance of payments was adversely affected initially by floods and later by international economic changes. There was a steep rise in oil prices and this was accompanied by substantial price increase in other imports particularly in fertilizers, chemicals, iron and steel, wheat and edible oil. The impact of this international inflation on Pakistan's import bill can be judged from Table V.

TABLE V

Quantity and Value of Major Imports

	1972-73	1973-74*	Per cent Change
Wheat			
Quantity (000 tons) ..	1337	1260	—5.8
Value ($ million) ..	106	167	+57.6
Petroleum (Crude & Products)			
Quantity (000 tons) ..	3100	3274	+5.6
Value ($ million) ..	65	132	+103.1
Soyabean Oil			
Quantity (000 cwt) ..	1240	2410	+94.4
Value ($ million) ..	19	59	+210.5
Fertilizers			
Quantity (000 tons) ..	355	530	+49.3
Value ($ million) ..	37	64	+73.0
Iron & Steel by its Manufactures			
Quantity (000 tons) ..	340	350	+2.9
Value ($ million) ..	65	90	+38.5

*Estimated from 11 month's figures.

1.15. On the export side there was a slow down in the demand for cotton and cotton products significantly reducing the quantity of raw cotton and cotton textiles exported by the country. In 1972-73 the surge in exports was considered an important contributory factor to domestic inflation. However, as can be seen from the Table VI physical quantities of exports of most essential commodities declined sharply in 1973-74. The decline in the export of cotton and cotton products was not accompanied by corresponding increase in domestic availabilities partly because the cotton crop was smaller due to the floods and partly because of a build up in stocks.

TABLE VI

*Exports of Major Commodities**

	1972-73	1973-74**	Per cent Change
Raw Cotton (000 tons) ..	212	30	—85.8
Cotton Yarn (Million Lbs.) ..	402	225	—44.0
Cotton Cloth (Million sq. yds.) ..	618	430	—30.4
Rice-Basmati (000 tons) ..	109	225	+106.4
Coarse (000 tons) ..	668	345	—47.7

*These items account for nearly two-third of our export earnings.

**Estimated on the basis of 11 months data.

1.16. The slow down in the demand for Pakistan's major exports *viz*; cotton and cotton product combined with the steep rise in the prices of imports created a serious balance of payments problems.

Prices

1.17. Inflationary pressures continued in 1973-74. The sensitive Price Index recorded an increase of over 30 per cent during the year. Prices continued to rise inspite of the measures taken by the government and the increases in production recorded in the agricultural and industrial sectors. This happened because (a) the year began with a serious inflationary situation resulting from international price measures reinforced by a high rate of monetary expansion in the preceding two years ; (b) the devastating floods in August damaged standing crops, partially destroyed food stocks, interrupted industrial production and disrupted transport and communications; (c) the price of crude oil quaderpulated during the year and this was accompanied by increase in prices of fertilizers, chemicals and industrial machinery in which oil enters significantly as a raw material or as a source of energy ; (d) *per capita* incomes declined in 1970-71 and 1971-72 so that the improvement in *per capita* incomes in 1972-73 and 1973-74 coupled with the growth in production, the demand for essential commodities increased rapidly during this period and (e) although the increase in GNP in 1973-74 was much more balanced than in the previous year with increases taking place in the commodity producing sectors, a substantial portion of the increase in production went into stocks and did not go towards increasing availabilities. The last mentioned factor was particularly significant in the case of cotton (and cotton products) and wheat. Cotton (and cotton products) stock were built up because of a slackening in the international demand. The wheat crop comes in towards the end of the fiscal year. Consequently, most of the wheat output of any year goes into stocks so that the benefits from increases in production accrues in the following year.

1.18. To control inflation, the Government took a number of measures during the year. Interest rates were increased to encourage savings ; two Wage Price Packages were introduced to bring about an orderly adjustment of prices and to compensate the people in fixed income brackets. Vegetable ghee industry and distribution of POL products was nationalised to overcome shortages in these commodities ; banks were nationalised to channel funds away from speculation and hoarding into productive activities ; price incentives were provided for increasing agricultural production and the level of deficit financing was significantly reduced.

Conclusion

The major areas of concern that need urgent attention are (a) the high rate of inflation, (b) deterioration in the balance of payments and (c) low level of investment activity. In the public sector, despite the recent increase in the development programmes, the low level of investment in the past has resulted in bottle-necks in the power and transport sector. In the private sector, the decline in investment in large scale industry is affecting prospects for industrial growth.

CHAPTER 2

OVERALL APPROACH OF THE ANNUAL PLAN

The change in the economic and socio-political context in 1972 led to the replacement of Fourth Five Year Plan by a series of Annual Plans designed to provide a more flexible response to the urgent and pressing problems of the nation. The Annual Plan for 1972-73 was directed towards the objective of bringing about recovery of the economy and revival of production process based on the socio-economic reforms introduced by the new Government during the first half of 1972. The success in regaining the momentum of growth in production in bringing about an increase in investment from the extremely low levels to which it had sunk in earlier years, and in raising exports rapidly was accompanied by emergence of severe inflationary pressures by the close of 1972-73. The task in 1973-74 was to strengthen the process of economic recovery and to make it much more balanced and broad-based, while initiating a strong anti-inflationary policy.

2.2 The review of the progress of the economy during 1973-74 in the preceding Chapter shows that economic recovery process has gained momentum. An annual growth rate of 7 per cent or higher in G. N. P. appears to be consistent with the present level of activity and can be accelerated further as investment increases in the economy and various bottlenecks are removed. Growth rate in agriculture exceeded 5 per cent during 1973-74, d spite the flood damage , while industrial growth rate is likely to be a minimum of 7 per cent, with a strong probability that it may be in the neighbourhood of 10 per cent. The anti-inflationary policy of the Government has, however, yet to make its impact. Price increase, measured by the change in consumer price index was roughly 31 per cent during 1973-74. The rate of domestic monetary expansion was slowed down to about one-half of 1972-73, by reducing deficit financing. However, the international factors proved for strong and some of the delayed price adjustments in August 1973 and June 1974 led to sharp increase in the cost of living, which could only be compensated by planned increases in the income of wage-earners and salaried classes.

2.3 In the meantime, a new set of problems has emerged for the economy of Pakistan as a result of changing trends in the world price situation. The prices of Pakistan's major exports are no longer rising. In fact a reversal of the earlier gains in the prices of Pakistan's major exports began towards the latter part of 1973-74 in the midst of slackening demands from major trading partners. On the other hand, Pakistan was required to bear a heavy burden arising from rising prices of major import items. The increase in the cost of imports was quite large and spread over a wide spectrum of import items. The most widely known of these price increases has occured in oil products which directly raised the energy bill and indirectly affected the cost of items which are influenced by petroleum prices as raw material or energy input. The balance of payments which had emerged as the strongest element in 1972-73 registered a sharp adverse swing.

2.4 The effects of changes in international price relationships were not confined only to balance of payments. These go further in influencing the total availability of resources for consumption and saving, the adverse terms of trade involving a net loss of national resources and further impoverishing the nation, empolyment generation and price situation. The response to these set of problems has to determine the strategy of further development effort, the size and composition of domestic investment and the policy relating to management of balance of payments.

2.5 The Annual Plan for 1974-75 is the third in the current series of annual plans. Unlike the earlier two plans which aimed mainly to attain the short-term goal of revival of the economy in a balanced setting of distributional justice, reform of the economic system and price stability, the Annual Plan for 1974-75 while strengthening the already established framework of policies for realising these objectives, goes much further in initiating programmes and policies for meeting the longer-term problems. The longer-term problems of the economy and its vulnerability to international factors have been highlighted by developments during 1973-74.

2.6 The long-term strategy has to be consolidated in a 5-year Plan which is currently being prepared. The Annual Plan for 1974-75 provides the necessary bridge towards the introduction of such a coordinated and comprehensive plan. It is seeking to provide necessary preparation for the introduction of plans and programmes in various sectors and the commencement of initial work which would have fuller impact only in the medium and long-term future.

2.7 The major problem is to overcome the impact of world energy crisis and the imported inflation. This requires not only an interim solution in the form of efforts to maintain a viable balance of payments, mobilize higher domestic saving and obtain larger foreign resource inflow, but also a strategy to strengthen the domestic economic base with particular emphasis on sectors where our vulnerability has been exposed by recent world developments.

2.8 Pakistan has to seek to accelerate the pace of investment to overcome the bottlenecks created by slower pace of investment since the late sixties and accelerate the rate of growth in the economy for which the potential has been amply demonstrated by the experience of last two plans. The development has to be concentrated more sharply in areas which would reduce Pakistan's dependence on international factors. These would include larger production of foodgrains and essential agricultural and industrial inputs with a much more accelerated development in sophisticated and basic industries. Self-sufficiency has to be sought on a secure foundation in respect of food, fertilizer, and steel along with a sharp reduction in dependence on imported sources of energy.

2.9 The main elements of a longer-term strategy of development, as are outlined above now find initial expression in the Annual Plan for 1974-75. Specifically, the objectives of the Annual Plan 1974-75 are ;

(i) to develop agriculture and to give the highest priority to measures to combat waterlogging and salinity The development programme for agriculture includes provision in other sectors such as water, power and transport.

(ii) to improve the transportation and communication system with special emphasis on removing bottlenecks and providing facilities for backward areas.

(iii) to remove power shortages, extend the power net work to new areas and develop indigenous energy resources so as to reduce dependence on imports.

(iv) to develop agro-industries for provision of inputs to agriculture and processing of agricultural raw materials.

(v) to develop basic industries, such as steel manufacture.

(vi) to accelerate development of backward regions and their integration with more developed centres, through a favourable treatment of poorer Provinces in the allocation within Provincial programmes as well as through investments in the Central Programme.

(vii) to move towards attainment of the social objectives in the field of education, health, housing and population planning.

(viii) to ensure availability of essential consumer goods and to minimise the adverse effects of inflation in the context of an equitable distribution of income.

2.10 The major step in the Annual Plan for 1974-75 is a determined attempt to accelerate the level of investment activity in the country. Total investment is planned during 1974-75 at Rs. 15380 million. This shows an increase of 50 per cent over the level of Rs. 10340 million of investment programme implemented during 1973-74.

2.11 The investment programme in 1973-74 was implemented in a period when prices were rising rapidly both internally and internationally. Thus only a part of the 1973-74 programme was affected by the full range of price increase. The 1974-75 programme takes into account of the price increases which had affected costs until the preparation time of the programme began. Though the full effect of the price increase is probably still not reflected in investment size, it would be fair to say that a part of the increase in investment reflects price increases.

2.12 Inspite of this, the acceleration in real investment planned for 1974-75 is of a significant order. This acceleration is planned in detail with adequate preparation of projects for the public sector. For the private sector, apart from taking note of the gradual revival of interest in large-scale industry (reflected in sanctions and letters of credit), the projections are backed by a policy frame work designed to strengthen particular areas where investment demand has been active in the recent past.

2.13 The Government is committed to a positive and expanding role of the public sector in the social and economic development of the country the scope of which has been spelt out through different reforms and measures. The level of public sector development expenditure has accordingly been increasing. From the level of Rs. 2620 million in 1971-72, public sector outlay increased to over Rs. 6000. million in 1973-74. Further acceleration of about 40 per cent is indicated for 1974-75.

2.14 Bulk of the increase is allocated to accelerate the effort for removing power and transport bottlenecks. The transport sector has acquired crucial significance because of the rapid increase in agricultural production, and concomitant increase both in exports of surplus produce and imports of required inputs. Railways were neglected in the past and their role continued to decline *vis-a vis* road transport which expanded in an unplanned manner. The Plan for 1974-75 seeks to initiate a correction of this imbalance. The gains are relatively small in the first year and increase of 5 per cent in the cargo-carrying capacity of railways provided against some of the locomotives but over the longer run, the programme would begin a more co-ordinated aproach for the development of railways, road and port facilities. Roughly7 per cent of the allocation in transport sector in 1974-75 is for the development of Port Qasim and improvement of facilities at Karachi.

2.15 In the power sector, the immediate task is to improve thermal generating capacity and expand transmission facilities so as to be ready in time to use Tarbela power. In the meantime, programme is designed to meet the growing power requirements without any significant load-shedding. Simultaneously a big programme has been launched for expansion of gas transmission, expansion of oil refining facilities, and for intensified search for new discoveries of oil and gas. The use of gas is expanding fast and until work on new transmission facilities currently in progress is completed, shortages in gas supply in some areas would be inevitable.

2.16 Another area in which a large increase in public sector development expenditure is being attempted in the Annual Plan relates to basic industries. The allocation for industries sector in 1974-75 is Rs.1,275 million against Rs. 383 million in 1973-74. The increase is entirely due to expenditure on Karachi Steel Mill and Multan Fertilizer Factory. Both these projects are an important part of the strategy to move towards greater self-reliance and to reducing dependence on imported materials.

2.17 The private sector investment is expected to rise by 60 per cent during 1974-75 from Rs. 4260 million to Rs. 6450 million. Major increase is planned in the transport sector. There is considerable demand for trucks and buses in the country. Main constraint has been the availability of foreign exchange for the import of transport equipment. It is now proposed to substantially increase these imports. The import of trucks is planned at the level of 8000 in 1974-75 against 4000 in 1973-74. Similarly 5700 (1,500 for the Private sector) buses are being imported in 1974-75 against 3500 in 1973-74.

2.18 Agriculture is the key sector of the economy and has shown considerable buoyancy in recent years. With favourable prices for agricultural produce and increasing yields, this sector is for the first timse experiencing an improvement in command over resources which enables it to undertake a substantial increase in investment. This is reflected in the demand for tractors, agricultural implements and tubewells. The Government is encouraging this trend by providing facilities for credit and by suitable subsidy policy on tubewells in seclected areas. The import policy has been formulated with a view to making it possible for the agricultural sector to expand investment in tractors, tubewells and other improvements on land.

2.19 Agricultural growth is projected at 6.0 per cent for 1974-75. However, recent information indicates abnormally low water availability. If the canal flows continue at the present low level, crop production target are likely to be affected adversely.

2.20 In the case of large scale industry, while policies have been initiated to identify areas for private investment more clearly and assist new entrepreneurs to enter the field, the investment estimates during 1974-75 reflect only that part of the improved investment demand which has already been translated into actual letters of credit.

2.21 The acceleration in investment is essential not only for maintaining the tempo of increase in production in the country but also to overcome the problems arising from recent international developments. However, this additional investment is to be financed at a time when the country's own resources are being squeezed as a result of the adverse turn in world price relationships. It has been estimated that Pakistan stands to lose roughly $ 500 million annually as a result of recent worsening in its terms of trade. This is roughly 6 per cent of Pakistan's GNP and is enough to neutralize one year's increase in the country's GNP. It may not permit any growth in *per capita* incomes for two years at the current rate of increase in GNP.

2.22 It is, therefore, inevitable in the short run for Pakistan to seek a larger net inflow of resources from abroad. Pakistan had, therefore, to seek a rescheduling of foreign debts and has obtained a larger gross flow of foreign assistance. As a result the net inflow during 1974-75 would amount to $700 million against $550 million in 1973-74. It may, however, be observed that the real content of aid is much less, if account is taken of the recent sharp increases in the prices of commodities which are imported under these arrangements.

CHAPTER 3

PRODUCTION AND GNP TARGETS

The targets for the Annual Plan when formulated in June, 1973 anticipated large production gains in response to larger fertilizer input, price incentives in agriculture and better utilization of capacity in the industrial sector flowing from increased raw material inputs. The GNP was projected to grow by 8.0 per cent and within it value-added in major crops by 10 per cent and in large scale manufacturing by 14 per cent.

3.2. The attainment of these targets was thwarted by floods in the late summer of 1973 which destroyed or damaged vast areas of standing Kharif crops, cotton being the hardest hit crop. The performance of the large scale manufacturing sector was also affected to a limited extent, because the floods disrupted production temporarily, added to transport bottlenecks and reduced the supplies of agricultural raw materials.

3.3. To take account of the effect of the floods, the Annual Plan document was delayed. The document finally released had a new set of targets[1]. The original targets, the revised figures and the estimated achievement for principal agricultural and industrial products are presented in table 1.

TABLE 1

Production Performance in 1973-74

	Output in 1972-73	Original Targets for 1973-74	Revised Targets/ Estimates 1973-74	Estimated Achievement 1973-74
Agriculture				
Wheat (Mln. tons)	7.3	8.5	8.5	8.5
Rice (Mln. tons)	2.3	3.0	2.6	2.4
Sugarcane (Mln. tons)	19.6	22.0	23.0	22.7
Cotton (Mln. bales)	3.9	4.5	3.7	3.7
Manufacturing. L.S.				
Cotton Yarn (Mln. lbs.)	829	934	881	833
Cotton Cloth (Mln. yds.)	704	800	738	703
Sugar (000 tons)	432	700	550	585
Vegetable ghee (000 tons)	210	240	225	230
Cement (000 tons)	2830	3200	2800	2754

3.4. Notwithstanding the losses in the Kharif crops, the rate of production showed a reasonable improvement over the previous year. GNP increased by upwards of 6 per cent. Although the growth rate in 1972-73 was much higher at 7.6 per cent, there was a decided improvement in the composition of growth during 1973-74. The commodity producing sectors *viz*, agriculture and industry, contributed 48 per cent in the growth in 1973-74 compared with only 28 per cent in preceding year.

Outlook for 1974-75

3.5. The agricultural and industrial targets for 1974-75 portray a growth target of 7.2 per cent with a further improvement in the composition of growth—the commodity producing sectors contributing 48.5 per cent of the additional GNP. The growth targets for GNP and some sectors is presented in table II.

(1) For many items, especially the output of Kharif crops, the revised figures were more in the nature of estimated achievements than targets.

TABLE II

GNP Growth Targets

(Constant Prices)

(Million Rupees)

	1972-73 Actual	1973-74 Estimated	1974-75 Target	Growth Rates % 1973-74 / 1972-73	Growth Rates % 1974-75 / 1973-74
Agriculture	**12821**	**13515**	**14326**	5.4	6.0
Major crops	7473	8050	8710	7.7	8.2
Other	5348	5465	5616	2.2	2.8
Manufacturing	**5474**	**5808**	6300	6.1	8.5
Large-scale	4265	4564	5020	7.0	10.0
Small-scale	1209	1244	1280	2.9	2.9
Construction	1346	1492	1671	10.8	12.0
Trade and Transport	7063	7473	8220	5.8	10.0
Miscellaneous	8474	9032	9490	6.6	5.1
Total ..	35178	37320	40007	6.1	7.2

3.6. Table III provides information on key agricultural and industrial targets which determine to a significant extent the performance of the economy. The targets for the Kharif crops display a marked increase over the damaged crop of 1973-74. The targets are less ambitious than those proposed last year as they take a more realistic view of fertilizer demand and availabilities at ruling domestic and international prices. Even these targets may be jeopardized if the low-level of canal flows being experienced so far this year persists much longer. The targets for wheat, the major Rabi crop, has been retained at last year's level. As a result of the floods, destroyed Kharif acreage was diverted and sailaba acreage added to normal area sown to wheat. It is, therefore, anticipated that wheat acreage will be lower in 1974-75. The increase in yields as a result of enhanced fertilizer application will barely compensate to retain production at the 1973-74 level.

TABLE III

***Production targets for* 1974-75**

	Output in 1973-74	Target for 1974-75	Per cent Increase
Wheat (mln. tons)	8.5	8.5	—
Rice (mln. tons)	2.4	2.8	16.7
Sugarcane (mln tons)	22.7	23.5	3.5
Cotton (mln. bales)	3.7	4.5	21.6
Manufacturing, L.S.			
Cotton Yarn (mln. lbs.)	833	950	14.0
Cotton Cloth (mln. yds.)	703	750	6.7
Sugar (000 tons)	585	640	9.4
Vegetable ghee (000 tons)	230	275	19.6
Cement (000 tons)	2754	3030	10.0

3.7. The attainment of the crop targets, already threatened by very low canal water flows, will require much larger fertilizer and insecticide applications. The Annual Plan provides for an increase in fertilizer usage from 415 thousand nutrient tons in 1973-74 to 600 thousand nutrient tons in 1974-75. Concern is expressed in some quarters that the recent hike in fertilizer prices will dampen demand. To combat any such tendencies output prices have to be adjusted for those crops where procurement prices have not been changed and credit provision for fertilizer need to be stepped up. However, the projected increase in fertilizer usage is more than is needed for attainment of the crop targets which provides some margin for shortfalls in fertilizer consumption. Plant protection coverage and effectiveness will also be stepped up which will require programming adequate insecticide import and an improvement in the efficiency of extension work pertaining to the timing, method and type of insecticide use.

3.8. The targets in the large-scale industrial sector assume, in most cases, a significant improvement and a high achievement rate in capacity utilization because additions to capacity will be significant during 1974-75. Stepping up the rate of capacity utilization to the extent envisaged will call for a combination of smooth and adequate raw material supply (including fuel and power), an absence of plant breakdowns due to technical factors or plant shut-downs due to labour management disputes and sufficient domestic and international demand. The allocations provided in the ADP for power and transport capacity combined with reduction in export duties for cotton products should facilitate the attainment of the industrial targets.

3.9. The expenditure accounts for 1972-73, 1973-74 and projections for 1974-75 are presented in Table IV. The figures for 1972-73 and 1973-74 are in current prices and do not give a fair idea of the relative changes in the different categories in real terms. The year 1973-74 witnessed a high rate of inflation the incidence of which was not uniform over investment, consumption, exports, imports and other key aggregates. At the moment, the price movement for different categories is not precisely known and it is not possible to provide analysis of the real movements in different categories. However, preliminary estimates indicate that private consumption increased by over 5% in real terms, fixed investment increased by less than 5%, exports were down by about 15% and imports up by more than 20%.

3.10. The projections for 1974-75 anticipate an increase in Gross Domestic Porduct by 7.2%, in fixed investment by 49%, in export by 33%, in imports by 31%, in Government consumption by 20% and in private consumption by 7%. These figures do not take into account price increases that will occur after June, 1974 but include the effect of price increases which have occurred in the later half of 1973-74. In other words, the projections are in June, 1974 prices and not in the average price during 1973-74. Therefore, the real increase in each category will be somewhat lower than that forecast in the projections except perhaps in the case of exports where the projections have built into them a decline in the prices of certain major exports.

TABLE IV

(Million Rupees)

National Expenditure Account (Current prices)

	1972-73 Actual	1973-74 Provisional	1974-75 Projections	Growth % 1974-75 / 1973-74
Sources				
1. GDP at factor cost	60480	77380	82950	7.2
2. Indirect Taxes less subsidies	4910	5400	8170	51.3
3. GDP at market prices	65390	82780	91120	10.1
4. Imports of Goods & services	9660	17000	22500	32.3
Total Resources	75050	99780	113620	13.9
Uses				
5. Private consumption	48710	65730	70570	7.4
6. Govt. consumption	7560	8960	10720	19.6
7. Fixed investment	7740	10340	15380	48.7
8. Changes in Stocks	1000	2350@	500	Neg.
9. Exports of Goods & Services	10040	12400	16450	32.7
Total Expenditure	75050	99780	113620	13.9

@ 1. Increase in wheat stocks .. Rs. 1150 million
2. Increase in fertilizer stocks .. Rs. 250 million
3. Increase in cotton, cotton yarn & cotton cloth stocks .. Rs. 450 million
4. Increase in other stocks .. Rs. 500 million

CHAPTER 4

INVESTMENT PROGRAMME 1974-75

A sharp increase in investment activity is being planned for 1974-75. It is estimated that investment in public and private sectors combined was around Rs. 10,340 million in 1973-74. Against this, investment programme for 1974-75 is projected at Rs. 15,380 million as under :

(Million Rupees)

	1973-74 (Estimates)	1974-75 (Projections)
Public/Semi Public Investment	6000	8500
Private Investment	4260	6450
B.I.M. Investment	80	430
Total	10340	15380

PUBLIC SECTOR DEVELOPMENT EXPENDITURE

Review of ADP 1973-74

4.2. The size of the ADP for 1973-74 was originally fixed at Rs. 5,575 million which represented an increase of 34% over the original ADP for 1972-73. As a result of the post-budget authorizations of additional expenditures due mainly to flood repairs and reconstruction programme in the provinces, particularly the Punjab and Sind, the level of gross development expenditure was increased to about Rs. 6,140 million.

4.3. The Provincial allocations, as included in the original ADP of Rs. 5,575 million amounted to Rs. 2,070 million. The revised estimates of Federal and Provincial ADPs are now placed at Rs. 3,943 million and Rs. 2,170 million respectively. The revised estimates of expenditure, thus, amount to Rs. 6,113 million as shown in the Table 1. The final estimates may be somewhat lower but are not likely to be significantly below Rs. 6,000 million.

TABLE I

Public Sector Development Expenditure 1973-74 (*Revised Estimates*)

(Million Rupees)

Federal Government	3942.80
Provincial Governments	2170.60
Punjab	1122.00
Sind	556.90*
NWFP	281.20
Baluchistan	210.50
Total	6113.40

ADP 1974-75

4.4. The size of the Annual Development Programme for 1974-75 has been fixed at Rs. 8500 million which represents an increase of about 53% over the original ADP for 1973-74. The Federal Government would under-take a gross programme of Rs. 6,883 million. Allowing for a likely shortfall of about 10% the net size of the programme will be Rs. 6,240 million as against Rs. 3,505 million during 1973-74. The Provincial Government's programme would be of the gross size of Rs. 2587 million (net of Rs. 2260 million consisting of the net programmes of Rs. 1,200 million for Punjab, Rs. 450 million for Sind, Rs. 400 million for N W F P and Rs. 210 million for Baluchistan. This year the water logging and salinity programme and fertilizer subsidy have been shifted from the Provinces to the Federal Government. If these programmes are included in the Provincial ADPs the comparable figure for 1974-75 would be around Rs. 3,000 million as against Rs. 2,070 million provided in the original budget for 1973-74. There is thus, an increase of about 45 per cent.

*Includes Rs 144.10 million reimbursed to the Government of Sind on account of over run of ADP, 1972-73

4.5. Of the total Provincial Programmes of Rs. 2,260 million the amount of Rs. 2,000 million has been distributed among the four Provinces on the basis of population as follows :—

(Million Rupees)

Punjab	1200
Sind	450
NWFP	270
Baluchistan	80
Total	2000

Over and above this allocation, the two less developed Provinces of Baluchistan and NWFP have been given a special allocation of Rs. 130 million each to provide them the necessary weightage. This has increased their respective shares from Rs. 80 million and Rs. 270 million to Rs. 400 million and Rs. 210 million.

4.6. Sector-wise distribution of the development programme for 1974-75 is presented in Table II. Detailed breakdown by executing authorities and between the Provinces and the Federal Government appears in Appendices I and II respectively.

TABLE II

Sector-Wise Distribution of ADPs, 1973-74 and 1974-75

(Million Rupees)

	Original A.D.P. 1973-74	A.D.P. 1974-75	Percentage increase in 1974-75 over 1973-74
1. Agriculture	(1) 616.67	997.90	61.8
2. Water	405.26	892.60	120.0
3. Power	1001.85	1302.37	30.0
4. Industry	382.52	1276.08	233.7
5. Fuels	155.30	382.79	146.5
6. Minerals	22.15	27.43	23.8
7. Transport and Communications	1108.22	2088.78	88.5
8. Physical Planning and Housing	501.98	728.33	45.1
9. Education & Training	313.05	485.65	55.1
10. Health	192.16	309.00	60.8
11. Population Planning	(2) 35.00	145.00	314.3
12. Social Welfare	10.11	14.65	44.9
13. Manpower and Employment	39.19	27.95	—
14. People's Works Programme	82.50	109.85	—
15. Miscellaneous Programme	1.17	—	—
Total (Gross)	4967.13	8788.38	76.9
Less Shortfall	124.50	970.47	—
Total (Net) ..	4842.63	7817.91	61.4
Indus Basin/Tarbela ..	(3) 732.37	682.09	—
Grand Total (Net) ..	5575.00	8500.00	52.5

(1) Includes Rs. 3.20 million for purchase of pumps and equipment of wells, etc., in Baluchistan shown under Water sector in consolidated ADP 1973-74.

(2) Subsequently increased to Rs. 102.50 million by adding Rs. 67.50 million from USAID.

(3) Includes Rs. 186.20 million for Fifth Tunnel.

4.7. Agriculture occupies a prominent place in the overall economic development programme. Allocation for this sector has, therefore been increased from Rs. 616.70 million in 1973-74 to Rs. 997.90 million 1974-75. This includes Rs.324.93 million on account of subsidy on fertilizers in 1974-75 against Rs.283.35 million in 1973-74. Provision for plant protection coverage in the Federal ADP has been increased from Rs. 37.45 million in 1973-74 to Rs. 129.38 million in 1974-75. Special credit facilities are being arranged to enable the farmers to purchase required inputs. In order to promote basic research in the field of agriculture, Agricultural Research Council has been provided Rs. 3.40 million as against Rs. 0.10 million in 1973-74. A provision of Rs. 60 million has also been made for constructing foodgrain storage in the Federal ADP, 1974-75.

4.8. The allocation for the Industrial Sector in 1972-73 was Rs. 191.10 million. It was raised to Rs. 382.52 million in 1973-74. An allocation of about Rs. 1275 million has been provided for the Industrial Sector in 1974-75 showing an increase of over 230 percent compared with 1973-74. In this sector, about 36 percent of the allocation is meant for agro-related industries either to produce modern agricultural inputs, such as fertilizers, or to process agricultural commodities such as sugarcane and cotton. Further in order to strengthen the base of the economy by developing basic industries in the public sector and to move towards self-reliance roughly 40 per cent of the allocation is earmarked for the iron and steel and heavy engineering industries.

4.9. In the Minerals Sector a provision of about Rs. 21.50 million has been made for exploration and development work including Rs. 19.00 million for Geological Survey of Pakistan schemes. Another Rs. 1.2 million have been allocated for PIDC Mineral Development Programme.

4.10. A sum of Rs. 1,574.70 million has been provided for the Water Sector Programme during 1974-75. Of this, Rs. 682.09 million are for Tarbela/Indus Basin Works and Rs. 376.54 million for the Accelerated Programme for the control of waterlogging and salinity which has been assigned the highest priority. In addition, sufficient funds have been set aside for investigation schemes in all the four Provinces.

4.11. The allocation for Power Development by WAPDA during 1974-75 has been put at Rs. 1204.97 million. This represents an increase of about 26% over the ADP 1973-74. Additional generation to the extent of 277 MW will become available during 1974-75 on account of completion of 200 MW Lyallpur Gas Turbine Station, 50 MW Gas Turbine Station at Kotri and 25 MW Gas Turbine at Quetta Thermal Station. It is planned to add 1,80,000 new consumers all over the country and to electrify about 1,000 villages during 1974-75.

4.12. Towards the end of 1973-74 it became clear that transport and energy bottlenecks were becoming serious impediments to growth and economic development. ADP for 1974-75 includes specific provisions to realize short-term improvements in this situation during the year as well as increased allocation for long-term programmes to remove these bottlenecks on a more permanent basis. In the Transport sector the allocation for Railways has been increased from Rs. 208.63 million in 1973-74 to Rs. 770 millilon in 1974-75. This allocation is primarily meant for the purchase of locomotives to improve the utilization of existing stock and enhance the operational capacity of the railways. In the area of energy, allocation for power and fuels sectors have been made to fully accommodate programmes which were ready for implementation.

4.13. An allocation of Rs.100 million has been made for Port Qasim to ensure the construction of 2nd Port at a desired speed to relieve congestion at Karachi Port within the shortest possible time. Adequate provision has also been made for further studies for the establishment of a port on Mekran Coast.

4.14. In the field of telecommunications, it is proposed to instal 30,000 new telephone lines, besides provision of other complementary facilities, at a cost of Rs. 300 million. The total number of telephones at the end of 1974-75 would be about 2,84,000.

4.15. An allocation of about Rs. 728 million has been made for housing and related amenities. Rs. 100 million are provided for the House Building Finance Corporation to encourage housing construction in the private sector. The Physical Planning and House Sector's policies and programmes for 1974-75 have been designed to meet the housing needs of the common man for a safe and healthy environment. Higher priorities have been assigned and adequate allocations made for the following programmes so that maximum benefits could be provided to low income families :—

(*i*) Development of maximum number of plots especially for low income families so as to enable them to build their own houses ;

(*ii*) Acceleration of the programme of providing water supply and sanitation in both urban and rural areas with a view to providing facilities to the majority of population in a reasonable preriod of time ;

(*iii*) Programme of installing 1,00,000 hand pumps in flood affected areas of the Punjab and Sind ;

(*iv*) Development of plans for towns and cities to facilitate the preparation of comprehensive housing, water supply and sewerage schemes ;

(*v*) Construction of people's waiting halls and improvements of subordinate courts ;

(*vi*) Sectoral programme of the under developed regions like Azad Kashmir, Northern and Tribal Areas.

4.16. In the field of education the programme of development is generally restricted to on-going projects which will either be completed or will reach near completion stage. An allocation of Rs. 30 Million has been made for the programme under the new education policy . Educational institutions damaged by floods in the Provinces of Punjab and Sind will be reconstructed while hostel buildings will be constructed with the secondary schools, colleges, professional/technical institutions under the Federal Student Hostel Programme throughout the country. Special emphasis will be given for creating such facilities in less developed regions of Pakistan.

4.17. The allocation for Health Sector has been raised from Rs. 192.16 million in 1973-74 to Rs. 309.00 million in 1974-75. For Population Planning Programme Rs. 145 million have been provided as against Rs. 102.50 Million in 1973-74. The programme aims at improving the health facilities in the less developed areas, developing more rural health centres, basic health units and rural dispensaries on the pattern as laid down in the proposed People's Health Scheme.

4.18 The integration of the Malaria Eradication Programme with general health service will be initiated during the year and Rs. 50. 50 million have been provided by the Federal Government for insecticides. The hospital facilities will be strengthened mainly at tehsil and district levels so that non-ambulatory patients get better treatment closer to their homes.

4.19. The share of Social Welfare, Manpower and PWP Sectors works out to be around 2 per cent of the total programme. In the Social Welfare Sector, Rs. 14.65 million has been provided for grants in aid to social welfare agencies and welfare of *ex*-service men. In order to provide job opportunities to educated and technical manpower, the National Development Volunteer Programme would continue to receive development funds as required by the programme. Rs. 27.95 million have been provided for manpower training and employment. An amount of Rs. 109.85 million has been allocated for People's Works Programme including the Rural Works Programme.

Private Investment

4.20. Private Investment in 1973-74 continued to be sluggish. Provisional estimates indicate an increase (in current prices) of 7.2 per cent in 1973-74. Since there has been an increase of about 27 per cent in the prices of the major inputs of investment, 1973-74 level of private investment in real terms, declined by about 15.6 per cent over the preceding year. The decline was mainly concentrated in the large-scale manufacturing sector where the level of investment was less than half of 1972-73 even in current prices.

4.21. Private investment in major economic sectors for the last 3 years and projections for 1974-75 are given in Table III :—

TABLE III

Private Investment by Major Economic Sectors

(Million Rupees)

	1969-70 (Actual)	1972-73 (Provisional)	1973-74 (Estimated)	1974-75 (Projection)
1. Agriculture	476.10	612.10	810.00*	1289.10
2. (*i*) Large Scale Manufacturing	1208.70	708.90	232.25	610.00
(*ii*) BIM industries		80.00	75.00	430.00
3. Small Scale Manufacturing	187.70	300.00	400.00	500.00
4. Transport and Communications..	514.70	968.00	1177.30	2283.00
5. Ownership of Dwellings	502.30	750.00	900.00	1000.00
6. Services	388.80	444.40	470.00	490.00
7. Others	238.30	189.00	270.00	280.00
Total (Incl : BIM industries)	3516.60	4052.40	4334.55	6882.10
Total (Excl : BIM indusleies)	—	3972.40	4259.55	6452.10

*Includes non-monetized investment of Rs. 150 million and Rs. 250 million for 1973-74 and 1974-75 respectively.

4.22. A steep acceleration of about 60 per cent is being projected in 1974-75 for private investment. This projection is supported by policy measures most of which have already been put into effect. In large scale manufacturing the projected increase is based on (a) the anticipated favourable response to the tax relief provided in the budget on investment incomes, the announcement of the industrial investment schedule and the continuation of the liberal import policy ; (b) operations of financial institutions such as PICIC and IDBP which are pointing to a gradual recovery in investment demands for their loan fund. There are sizeable amounts of letters of credit outstanding with these institutions for import of machinery and a sizeable portion of these is likely to materialize in actual investment in 1974-75. In the other sectors as well, the projections are backed by suitable policies. In agriculture and transport sectors the constraint on investment has been the availablility of foreign exchange. In the foreign exchange budget for 1974-75 adequate provisions have been made for the import of such items as tractors, trucks, buses, light vehicles etc. In the housing sector an increase in institutional credit is being provided and tax incentives for construction of small houses have already been given in the budget for 1974-75.

4.23. Brief description of private investment in the major sectors of the economy is given in the following paragraphs.

I. AGRICULTURE

4.24. Details of revised estimate for 1973-74 and projections for 1974-75 are contained in Appnedix V. Investment in major items like tractors, tubewells, trailers etc. which amounts to Rs. 442 Million is more than 50 per cent of the total agricultural investment in 1973-74 as shown below :

5000 Tractors	valued at Rs. 190 million
9000 Tubewells	valued at Rs. 212 million
5000 Cultivators	valued at Rs. 20 million
2500 Trailers	valued at Rs. 20 million

4.25. The remainder of investment comprises various types of agricultural implements like ploughs, cane crushers, drills etc. farm buildings, storage buildings and non-monetized investment. Precise information even on the main items that are listed above is difficult to obtain. However, attempt is made to adopt the most reasonable figures after reconciliation of different sources. The figures on tractors, cultivators and trailers are further supported by the findings of the Agricultural Credit Advisory Committee. Information on the number of tubewells installed during the current year varies from one source to the other and ranges between 5 to 9 thousand. Adoption of the figure of 9,000 based on the information received from the Government of Punjab on the basis of WAPDA connections for tubewells aud the subsidy/credit provided for this purpose.

4.26. The targets for 1974-75 in respect of the major items of agricultural investment are :

10,000 Tractors	valued at Rs. 440 million
10,000 Tubewells	valued at Rs. 235 million
3,000 Trailers	valued at Rs. 24 million
6,000 Cultivators	valued at Rs. 30 million

The doubling of tractors in 1974-75 compared with the current year is targetted in view of the strong demand in the market. The required amount of foreign exchange for import has already been provided in the 1974-75 foreign exchange budget.

4.27. An increase of one thousand each of tubewells, trailers and cultivators seems realistic in view of increased agricultural incomes coupled with the increasing incentives afforded by appropriate Government policies in the form of credit/subsidy at very easy terms.

II. LARGE SCALE MANUFACTURING

4.28. Sharp decline in the large-scale industrial sector is indicative of the continued impact of past decisions of the private investor. The position has shown improvement with regard to new sanctions for

industrial investment as well as disbursement of loans by PICIC and IDBP as shown in Table IV.

TABLE IV

Sanctions and Disbursements

(Million Rupees)

	1970-71	1971-72	1972-73	1973-74
1. PICIC				
(*a*) Sanctions	233	73	176	490
(*b*) Disbursements	463	284	86	59
2. IDBP				
(*a*) Sanctions	90	35	164	372
(*b*) Disbursements	72	90	22	35
3. PAYE Scheme				
(*a*) Sanctions	14	2	8	226
(*b*) Disbursements	6	9	1	8
4. Repatriable and Non-Repatriable Investment				
(*a*) Sanctions	122	22	24	316
(*b*) Disbursements	21	—	21	19

4.29. The utilization of loans is also picking up though at a somewhat slower rate than sanctions. The data relating to the letters of credit established so far and those still outstanding during the current fiscal year confirms the indication regarding the revival of industrial investment activity from the depressed level of 1972-73. This is shown in the Table V.

TABLE V

L/C's Outstanding/Established

(Million Rupees)

	PICIC	IDBP
L/C's Estimated		
1970-71	357.20	80.10
1971-72	51.10	29.60
1972-73	10.40	22.20
1973-74	61.30*	146.60
L/C's Outstanding		
as on 30 June, 1972	129.4	62.35
as on 30 June, 1973	41.7	44.15
as on 31 Dec. 1973	84.7	123.25
as on 30 June, 1974	233.7	128.63

4.30. A break-up of the letters of credit that were outstanding with IDPB at the end of May 1973 indicates that a large proportion of these was concentrated in the Textile Group of industries as shown below :

(Million Rupees)

Cotton Textiles (spinning, weaving & finishing) ..	109.42
Other Textile ..	13.45
Printing & Publishing ..	1.39
Leather taining ..	1.15
Oil Refinery ..	2.02
Others (chemicals, chemical products, food, non-metallic mineral productions, foot wear) ..	0.98
Total ..	128.41

4.31. PICIC loans on the other hand are spread over a variety of industries as shown by the outstanding L/C's as on 31st May, 1974 given below :

(Million Rupees)

Food Products Processing ..	35.99
Textiles ..	87.87
Leather and Rubber Products ..	6.26
Chemicals ..	25.22
Tourism ..	14.62
Others (paper, paper products, engineering,cement, clay and glass) ..	6.79
Total ..	**176.75**

4.32. In the light of the information about sanctions and the outstanding L/C's as well as actual disbursement of foreign loans that has taken place by the close of 1973 -74 estimates of investment have been made for the entire year and projections made for 1974-75. These are given in the following Table VI.

TABLE VI

Estimates of Investment

(Million Rupees)

	1973-74 (Estimates)	1974-75 (Projections)
1. **PICIC**		
Disbursement (foreign loans) ..	70*	120
Matching Investment ..	60	100
Sub-total ..	130	220
2. **IDBP**		
Disbursement (foreign loans) ..	40**	98
Matching Investment ..	35	90
Sub-total ..	75	188
3. Investment under PAYE/Repatriable and non-repatriable schemes ..	27	200@
4. B.I.M. ..	75	430
Total (1+2+3+4) ..	307	1038

(*) Disbursements of loans during the first 10 months (July 1973 to April 1974) amounted to Rs. 5.9 Million.

(**) Disbursements during 11 months period from July 1973 to May 1974 amounted to Rs 3.5 Million only.

(@) Includes investment in Hotel industry.

Sharp acceleration in investment to be financed from PICIC and IDBP loans is derived mainly from the outstanding letters of credit which are likely to materialize next year. Specifically, it is assumed that two-thirds of L/C's outstanding at the end of the current financial year will materialize during 1974-75 as shown by an exercise carried out by the financing institutions.

III. TRANSPORT AND COMMUNICATIONS

4.33. According to available information on various transport vehicles like Trucks, Buses, Wagons etc. there is an estimated increase of Rs. 250 million in transport investment during 1973-74 over the preceding year. Specific allocations have been made for the import of various transport vehicles in the 1974-75 Foreign Exchange Budget. On the basis of available information in this respect, estimates for 1972-73 and 1973-74 alongwith projections for 1974-75 are shown in Table VII.

TABLE VII

Investment in Transport

	1972-73 (Actuals)		1973-74 (Estimated)		1974-75 (Projections)	
	Nos	Million Rupees	Nos	Million Rupees	Nos	Million Rupee
Trucks	2,779	330.50	4,000	480.00	10,000	1200.00
Buses	227	29.51	400	52.00	1,500	195.00
Wagons/Pickup	900	49.50	1,200	78.00	4,400	308.00
Taxis	750	9.00	1,000	15.00	1,200	20.60
Rickshawas	900	16.20	950	19.00	1,000	26.40
Sub-total ..		434.71		644.00		1750.00
Others		533.29		533.29		533.29
Total ..		968.00		1177.29		2283.29

4.34. Acceleration in transport investment is indicative of the expenditure only on the identifiable items. A sizeable portion of unidentifiables in this sector lumped under 'Others' are assumed to remain constant.

IV. SMALL INDUSTRIES

4.35. While figures for this sector are difficult to obtain directly, certain indirect evidence is indicative of substantial acceleration. According to the Board of Industrial Management the production of approximately 4,000 looms would imply an investment of Rs. 100 million in the small industries sector with the share of 1,000 looms.

4.36. The increase in production of carpets, leather goods, sports goods, footwear and handicrafts points to further investment taking place in these industries. Moreover, substantial investment is taking place in the small/medium industries for locally fabricated machinery.

V. HOUSING

4.37. Investment in housing is estimated at Rs. 900 million in 1973-74 by the Working Group on Investment in Housing. The Working Group prepared its estimates on the basis of an amount of Rs. 350 million of loans granted by the financial institutions for house construction during 1973-74 as mentioned below :

	(Million Rupees)
House Building Finance Corporation	250
Commercial Banks	50
Housing Building advances by the Government Departments	50

It was assumed that total investment in housing was three times the amount of loans granted by the financial institutions. This assumption, in turn, was based on the observation that where loans were availed of, owners contribution was around fifty percent of the total construction cost. In addition houses were constructed through own resources without recourse to loans from these financial institutions.

4.38. The Projections for 1974-75 are based on the plans of the above mentioned financial institutions. In view of the sharp increase in the tempo of housing investment as indicated by the strong demand for its major inputs despite a steep rise in their prices over the years, next year's target is realistic. This target implies new construction of about 25,000 houses in 1974-75.

APPENDICES

I—VII

(24—31)

DEVELOPMENT PROGRAMMES FOR 1973-74 AND 1974-75 BY EXECUTING AUTHORITIES

(Million Rupees)

	1973-74 (Budget)	Allocation for 1974-75	Percentage Increase
1	2	3	4
1. Federal Programme			
(a) Federal Govt.	1431.08	2753.48	92.4
(b) WAPDA			
(i) Water (1)	159.34	400.00	151.1
(ii) Power	959.74	1204.97	25.5
(c) Pakistan Railways	208.63	770.00	269.1
(d) Industrial & Mineral Development Corporations	172.00	1072.56	523.6
(i) Karachi Steel Mills Corporation	—	410.00	—
(ii) PIDC	172.00	78.50	—
(iii) National Fertilizer Corporation of Pakistan	—	393.00	—
(iv) Federal Chemical & Ceramics Corporation	—	43.30	—
(v) State Heavy Eng. Corporation	—	105.76	—
(vi) State Petroleum Refinary and Petrochemical Corporation	—	31.50	—
(vii) Other Industrial & Mineral Dev. Corporations	—	10.50	—
(e) Indus Basin/Tarbela	732.37 (2)	682.09	—
(f) Misc. Federal Programme	1.17	—	—
Total Federal Programme (Gross)	3664.30	6883.08	87.8
Less Shortfall	—	643.08	—
Total (Net)	3664.30	6240.00	70.3
2. Provincial Govts. (Net)(3)			
(i) Punjab	1075.80	1200.00	11.5
(ii) Sind	391.00	450.00	15.1
(iii) NWFP	263.90	400.00	51.6
(iv) Baluchistan	180.00	210.00	16.7
Total Provincial Programmes (Net)	1910.70	2260.00	18.3
Total ADP (Net)	5575.00	8500.00	52.5

(1) Shifted from Provincial Programmes.

(2) This includes Rs. 186.20 million for the Fifth Tunnel.

(3) Exclusive of WAPDA (Water) Programme reflected in the Federal Programme.

ANNUAL DEVELOPMENT PROGRAMME 1974-75

BY PROVINCES AND FEDERAL GOVERNMENT

(Million Rupees)

Sl. No.	Sector	Federal	Punjab	Sind	NWFP	Baluchistan	Total
1.	Agriculture	586.51	(4) 232.40	(7) 61.85	(14) 76.25	(19) 40.89	997.90
2.	Water	(1) 518.38	(5) 187.00	(8) 86.58	48.72	51.92	892.60
3.	Power	(2) 1302.37	—	—	—	—	1302.37
4.	Industry	(3) 1095.99	79.90	13.15	(15) 67.53	19.51	1276.08
5.	Fuels	382.79	—	—	—	—	382.79
6.	Minerals	26.06	0.60	—	0.27	0.50	27.43
7.	Transport and Communications.. ..	1516.71	280.00	(9) 163.89	79.15	49.03	2088.78
8.	Physical Planning and Housing ..	274.65	256.50	(10) 94.34	(16) 62.95	(20) 39.89	728.33
9.	Education and Trainning	213.55	(6) 149.60	(11) 42.22	(17) 60.74	(21) 19.54	485.56
10.	Health	96.55	112.00	(12) 40.15	49.78	10.52	309.00
11.	Population Planning	145.00	—	—	—	—	145.00
12.	Social Welfare	5.45	6.00	2.17	1.03	—	14.65
13.	Manpower & Employment	17.00	6.00	0.60	(18) 1.15	3.20	27.95
14.	Peoples' Works Programme	20.00	60.00	(13) 13.25	11.60	5.00	109.85
	Total (Sectoral Programme) ..	6201.01	1370.00	518.20	459.17	240.00	8788.38
	Indus Basin/Tarbela	682.09	—	—	—	—	682.09
	Total (Gross) ..	6883.10	1370.00	518.20	459.17	240.00	9470.47
	Less Shortfall	643.10	170.00	68.20	59.17	30.00	970.47
	Total (Net) ..	6240.00	1200.00	450.00	400.00	210.00	8500.00

(1) Include Allocations for Mechanised Construction Corporation and Tubewell Construction Corporation.

(2) Includes allocation of Rs. 9.00 million for Power Construction Corporation.

(3) (a) Excludes allocation of Rs. 77 million shown under N. R. Division in the Federal A D P.

(b) Includes allocation of Rs. 3.00 million for Petro-chemical Complex.

(4) Includes allocations for Agriculture University, Lyallpur and Animal Husbandry College, Lahore but excludes Subsidy on Tubewells.

(5) Includes Subsidy on Tubewells shown in the Agriculture Sector in the Provincial A D P.

(6) Excludes allocations for Agriculture University, Lyallpur and Animal Husbandry College, Lahore.

(7) Includes allocations for IRDP, Agriculture University, Tando-Jam, Kohistan Development Plan, Thar Development Plan and Animal Husbandry scheme of Nara Development Plan.

(8) Includes allocation for lift irrigation for Nara Canal.

(9) Includes allocation for Construction of a bridge over Nara Canal.

(10) Includes allocations in respect of Agrovilles, Regional Planning Organisatin, Bhit Shah Development Complex, Sehawn Development Complex, Development around Shah Jahan Mosque, Thatta, Sind House, Islamabad and temporary accommodation for Police Stations and Police Posts.

(11) (a) Excludes allocation for Agriculture University, Tando Jam.

(b) Includes allocations relating to Research and Statistics and Nara Development Plan scheme for Girls Schools.

(12) Includes allocation for Mobile Health Dispensaries.

(13) Includes allocation of Rs.0.11 million for Peoples Works Programme under " Special Projects " Nara Development Plan.

(14) (a) Includes allocations in respect of IRDP, Cooperatives, Rural Credit and Directorate of Rural Development.

(b) Excludes Subsidy on installation of Tubewells.

(15) Includes allocations for industrial projects of Sarhad Development Authority.

(16) Includes allocations in respect of Regional Planning (Rs.0.4 million), Agrovilles, Aid to Municipal Committees and Urban Development.

(17) Includes allocations for Bureau of Statistics, Library and Pre-investment Studies.

(18) Includes allocation in respect of Technical Training Centre, D.I. Khan and Occupational Rehabilitation Centre. Kalabat, District Hazara, shown under Education Sector in the Provincial A D P.

(19) Includes allocations in respect of IRDP.

(20) Includes allocations for Public Health Engineering schemes in the Provincial ADP under water Sector and Agrovilles.

(21) Includes allocation of Rs.0.25 million for Research, Evaluation and Feasibility and Research Studies.

Appendix III

PRIVATE INVESTMENT

(Million Rupees)

	1969-70	1970-71	1971-72	1972-73	1973-74		1974-75
					Original	Estimated	(Projections)
1. Agriculture	476.10	447.20	478.80	612.10	750.00	810.00	1289.10
2. Large Scale manufacturing	1208.70	1225.50	934.30	788.90	1400.00	232.25	610.00
3. Small Scale Manufacturing	187.70	194.80	196.80	300.00	400.00	400.00	500.00
4. Transport & Communications	514.70	513.80	547.40	968.00	1006.00	1177.30	2283.00
5. Ownership of Dwellings	502.30	530.50	538.50	750.00	900.00	900.00	1000.00
6. Services	388.80	368.70	369.80	444.40	470.00	470.00	490.00
7. Others	238.30	189.20	140.70	189.00	180.00	270.00	280.00
Total ..	3516.60	3469.20	3206.30	4052.40	5100.00	4259.55	6452.10@

Note : Estimates upto 1972-73 are those of the Statistical Division with the following exception in respect of 1972-73 :

Estimates in respec of Ownership of Dwellings and Small Industries are adopted from the reports of the Sub-Groups of the two sectors.

@Exclung BIM investment.

PRICE INDEX FOR INVESTMENT

(1969-70 = 100)

Sector	1970-71	1971-72	1972-73	1973-74
1. Large Scale Manufacturing	104.89	117.63	177.62	250.45
2. Small Scale Manufacturing	104.45	115.92	169.51	237.48
3. Agriculture	113.81	114.88	182.17	206.70
4. Construction	103.48	106.61	119.10	152.25

Source and Methodology

The above index was constructed in consultation with the Statistical Division. Separate indices were prepared for the major sectors indicated above. In the case of Large-Scale Manufacturing indices were constructed from 1970-71 to 1972-73 which were weighted by the type of fixed assets *viz* buildings, machinery, transport equimpent, furniture and fixture. Indices were constructed for each type of asset separately. Applying value of each type of asset in the base-year 1969-70 as weight, a weighted index for each sector was derived.

For Agricutlture and Small industries investment, a similar procedure as for Large-scale manufacturing was applied to obtain the weighted index for investment in these two sectors.

In the case of construction, however, the price indices of major inputs of construction like cement, steel, bujri, bricks and labour etc. were weighted by the base-year weights borrowed from the Final Report of the National Income Commision.

Appendix V

ESTIMATES OF PRIVATE INVESTMENT IN AGRICULTURE, 1973-74 AND 1974-75

S. No.	Category	1973-74 (Revised) Physical Number	1973-74 (Revised) Value Mln. Rs.	1974-75 Projections Physical Number	1974-75 Projections Value Mln. Rs.
1.	Tractors	5,000	190.00	10,000	400.00
2.	Tubewells/Pumps	9,000	212.00	10,000	235.00
3.	Farm Implements				
	(i) Cultivators	5,000	20.00	6,000	30.00
	(ii) Combines	250	17.00	300	24.00
	(iii) Trailers	2,500	20.00	3,000	30.00
	(iv) Threshers	1,000	10.00	1,000	12.00
	(v) Drills (bullock drawn)	2,500	0.25	3,000	0.36
	(vi) Ploughs	140,000	3.40	150,000	4.50
	(vii) Cane crushers	16,000	10.80	18,000	14.40
	(viii) Implements for newly colonized area (holdings)	5,400	2.70	6,000	3.60
	(ix) Drills (Tractor)	1,000 -acres-	3.00	1,000 -acres-	4.00
4.	Land development	140,000	56.00	185,000	129.50
5.	Digging of Channels	140,000 -number-	1.40	185,000 -number-	2.20
6.	Farm buildings	120,000	55.00	120,000	72.00
7.	Plant protection equipment				
	(i) Hand sprayers	6,000	1.94	8,000	3.00
	(ii) Power sprayers	500 -acres-	0.90	1,000	2.00
8.	Orchard Plantings	2,000 -tons-	0.72	—	1.06
9.	Foodgrain Storage				
	(i) House type (wheat)	320,000	10.00		11.00
	(ii) House type (Rice)	150,000	15.00		16.00
10.	Dairy & Broiler Plant and equipment	—	2.00	—	2.50
11.	Fisheries	-number-		-number-	
	(i) Mechanized boats	90	9.00		30.00
	(ii) Small boats	1,200	10.00		
	(iii) Others	—	5.93		
		million acres		-million acres-	
12.	Land consolidation	2.0	2.00		2.00
13.	Cooperation				10.00
	Sub-total		659.54		1039.12
14.	Non-monetized		150.46		250.00
	Total		810.00		1289.12

Source : Sub-Group on Agriculture.

Appendix VI

SANCTIONS AND DISBURSEMENTS/UTILIZATIONS

(Million Rupees)

	1970-71	1971-72	1972-73	1973-74
PICIC				
Sanctions	233.5	73.4	167.1	489.65
Disbursements	463.3	283.9	85.8	59.3@
IDBP				
Sanctions	90.1	35.43	164.04	371.6
Disbursements	71.5	89.61	22.10	34.8&
PAYE Scheme				
Sanctions	13.9	2.28	7.89	226.10
Utilization	5.83	1.00	0.59	7.97
Repatriable Investment				
Sanctions	121.68	22.23	3.43	258.05
Utilization	20.55	—	0.39	4.30
Non-Repatriable Investment				
Sanctions	0.40	0.15	20.77	57.70
Utilization	0.40	0.15	20.77	14.90

(@) For the first 10 Months (July-April)
(&) For the first 11 Months (July-May).

MACHINERY AND MILLWORK

(Million Rupees)

	Total	New Units	Balancing and modernisation	Maintenance spares
1972-73				
Cash	213.20	—	40.20	173.00
Credits	180.70	—	81.80	98.90
Barters	31.10	24.90	6.20	—
Total ..	425.00	24.90	128.20	271.00
1973-74 (11 months only)				
Cash	373.20	2.80	45.80	324.60
Credits	34.80	4.40	19.00	11.40
Barters	29.90	22.90	4.50	2.50
Total ...	437.90	30.10	69.30	338.50

Source : CCI & E's Office.

CHAPTER 5

FINANCING OF INVESTMENT

The Annual Plan for 1974-75 envisages an investment outlay of Rs. 15,380 million, Rs. 8500 million in the public sector and Rs. 6880 million in the private sector (including BIM investment). The acceleration provided for in investment expenditure is necessary to accommodate essential targets. The ratio of fixed investment to GNP will rise from 12.5 per cent in 1973-74 to 16.8 per cent in 1974-75.

5.2. As these outlays are more than 50% higher than the estimated investment during 1973-74, it will be necessary to mount a considerable effort for mobilising resources required for their financing. The net inflow of foreign resources is not likely to exceed Rs. 7000 million (about 44 per cent of the total gross investment envisaged) and, therefore, efforts would have to be made to generate domestic resources to the extent of Rs. 8880 million as against the estimated actual domestic effort of Rs. 7190 million during 1973-74. Investment and its financing for the years 1973-74 and 1974-75 is given in Table I :

TABLE I

Investment and its Financing

(Million Rupees)

	1973-74	1974-75
Merchandise Exports	10,300	14,500
Invisible Earnings	3,450	3,350
Total Earnings	13,750	17,850
Merchandise Imports	14,500	20,000
Invisible Payments	3,750	3,850
Interest Payments	1,000	1,000
Total Payments	19,250	24,850
Net External Inflow	5,500	7,000
Domestic Savings	7,190	8,880
Total Investment	12,690	15,880

5.3. The key element in realising the investment target would, thus, be the achievement of a higher marginal rate of saving. Suitable policies have been devised to achieve the objective of siphoning of a large proportion of additional income (around 20 per cent) expected to be generated during the year, 1974-75 without jeopardising the consumption target of essential commodities. The fiscal measures announced in the budget for 1974-75 have been taken specifically with this end in view. In addition, the monetary policy would have to be devised so as to encourage investment in the private sector.

5.4. The magnitude of this saving effort should be seen in the light of the sharp adverse movements that have already occurred and are being projected in Pakistan's terms of trade. This adverse movement has not only made the financing of real consumption costlier but has depreciated the worth of aid inflow. Thus, the large increase in aid inflow will substantially go towards financing the price increases in petroleum, its derivatives and capital goods. In other words, the saving effort is more impressive in real terms than in current prices.

5.5. Details of the finaucing pattern of the public and private sector outlays are discussed in the subsequent paragraphs.

Financing of the Public Sector Development Expenditure

5.6. The Annual Plan for 1973-74 aimed at a sizeable acceleration in the level of public sector development expenditure. The attainment of this objective was largely dependent upon increased efforts in resource mobilization. The original budget as presented in June 1973 therefore, provided for new measures which were

expected to yield additional revenue of Rs. 600 million. The budget also aimed at an increase in savings in the economy as part of the anti-inflationary policy. With these and other fiscal measures, the original budget for 1973-74 had projected an increase in the domestic resource availability which had been considerably reduced in the preceding years after the break-up of the country. It was thus possible to plan the public sector development outlay at a level of Rs. 5570 million which represented an increase of 34% over the original ADP for 1972-73.

Progress in 1973-74

5.7. The public sector development programme of Rs. 5570 million was proposed to be financed by Rs. 4210 million of gross foreign resources and Rs. 1360 million of domestic resources. The estimates of foreign assistance were based on increased availability of project assistance as well as rupee generating aid. The projections of domestic resources assumed increases on account of new fiscal measures, higher tax receipts following the projected growth in the economy and an improvement in the self financing effort by autonomousbodies.

5.8. There were many post-budget developments which caused significant changes in the budgetary position for 1973-74. The export duties were revised upward twice in July 1973. A wage/price package was announced by the Government in early August 1973. The floods which hit the country in July and August 1973 necessitated expenditure on relief operations as well as repairs and reconstruction programmes particularly in the Provinces of the Punjab and Sind. In order to meet this emergency, fresh taxes estimated to bring additional revenues of about Rs. 800 million were imposed by the Government in September 1973. The flood damage reduced the exportable surplus of raw cotton. The energy crisis also led to a slowdown in exports. This resulted in a reduction in the revenue yield from export duties which would have otherwise, increased considerably after the revision of rates in July 1973. The international price increases of wheat and edible oils necessitated larger expenditure on subsidies despite the increase in the retail prices of these items in the wage/price package announced in August, 1973. The new wage policy and the damage caused by the floods reduced the resources of Provincial Governments and public corporations. The prices of chemical fertilizer were increased in April 1974 in view of the abnormal increase in its international prices. This adjustment released some resources for development indirectly through a saving in the expenditure on fertilizer subsidy. The inflow of foreign assistance was slightly higher than budget expectations.

5.9. As a result of the changes indicated above, the total non-inflationary resources and foreign aid are placed at Rs. 5860 million in the revised estimates for 1973-74 as against the original budget estimates of Rs. 4920 million. The various items of estimates are discussed in the subsequent paragraphs.

Revenue Receipts

5.10. The tax receipts of the Federal Government including the effect of new measures were estimated at Rs. 7720 million in the original budget for 1973-74. According to the revised estimates, these receipts show an improvement of Rs. 1110 million. The comparative position of the original budget and the revised estimates in respect of various tax heads is given below in Table II :

TABLE II

Tax Receipts, 1973-74

(Million Rupees)

	1973-74 Budget	1973-74 Revised
Export Duties	1,750	1,710
Import Duties	1,870	2,200
Taxes on income	1,030	1,150
Sales Tax	500	650
Excise Duties	2350	2770
Other Taxes and Surcharges	220	350
Total ..	7,720	8,830

5.11. The yield from export duties would have been much higher after the revision of rates in July, 1973 but for the reduction in the quantum of exports particularly cotton and a downward revision of the rate of duty on cotton yarn made during the year. The improvement under import duties, taxes on income, sales tax and excise duties is due mainly to the imposition of flood surcharge. The prices of chemical fertilizer were increased in August 1973 and April, 1974 as a result of which the receipts accruing on account of surcharge on fertilizer are estimated to increase by Rs. 140 million in the revised estimates for 1973-74. This explains the increase in the revised estimates of other taxes and surcharges.

5.12. In the case of non-tax receipts, the interest receipts of the Federal Government stand reduced by Rs. 350 million due mainly to the write-off of the Federal loans of the Provinces of the Punjab and Sind during 1973-74. The profit on the sale of rice which forms a part of the non-tax receipts is estimated to increase from Rs. 300 million provided in the original budget to Rs. 720 million in the revised estimates. Other non-tax-receipts would also be higher by Rs. 410 million mainly on account of increases in the surplus profit of State Bank of Pakistan accruing to the Government, defence receipts and other miscellaneous items. On an overall basis, the non-tax receipts are estimated to show an increase of Rs. 480 million over the original budget estimates of Rs. 2,210 million.

5.13. The gross revenue receipts of the Federal Government are thus placed at Rs. 11,530 million in the revised estimates for 1973-74 as compared with the original budget provision of Rs. 9,930 million. After deducting a sum of Rs. 910 million provided to the Provinces and the A.K Government as revenue assignments, the net receipts in the revised estimates would be Rs.10,620 million as against the original budget provision of Rs. 9,020 million.

Non-Development Expenditure

5.14. The non-development revenue expenditure of the Federal Government is likely to increase from Rs. 9,320 million provided in the original budget to Rs. 10,890 million in the revised estimates for 1973-74. The increase of Rs. 1,570 million is mainly on account of large expenditure on wheat subsidy, the revised estimates in respect of which are placed at Rs. 1,670 million as against the original budget provision of Rs. 1,190 million. No provision on account of edible oil subsidy was made in the original budget for 1973—74. The sale of vegetable ghee had however, to be subsidized during the year as a result of the abnormal increase in the international prices of edible oils. This is estimated to cost Rs. 270 million during the course of the year. Other items leading to the increase in non-development expenditure are Defence Services which claimed Rs. 4740 million in the revised estimates as against the original provision of Rs. 4,230 million and additional requirements for grants-in-aid to Provinces and general administration.

Net Capital Receipts

5.15. The net capital receipts of the Federal Government which were estimated at Rs. 780 million in the original budget are placed at Rs. 1500 million in the revised estimates for 1973-74. The increase of Rs. 720 million was mainly from a contribution of about Rs. 210 million to the Prime Minister's Relief Fund and improvement in the proceeds of small saving schemes.

Provincial Contributions.

5.16. The original budget for 1973-74 did not envisage any contribution by the Provincial Governments to the financing of the ADP. The debt liability of the Punjab and Sind was written off by the Federal Government during the year as a result of which a relief of Rs. 360 million consisting of Rs. 220 million for the Punjab and Rs. 140 million for Sind became available to these Provinces on the servicing of their debts. The resultant improvement expected in the Provincial resources was, however, adjusted partly towards on meeting additional expenditure of about Rs. 180 million on wage increase and a fall of Rs. 30 million in the revenue assignments by the Federal Government. The Provinces of the Punjab and Sind were thus expected to contribute a sum of Rs. 150 million to the financing of their revised ADPs for the year 1973-74.

Autonomous Bodies

5.17. The self financing effort by the Autonomous Bodies estimated at Rs. 230 million in the original budget (WAPDA Rs. 160 million and Pakistan Railway Rs. 70 million) indicated a deterioration of Rs. 150 million in the revised estimates for 1973-74. The decline has occurred as a result of reduction in the earnings of these bodies and an increase in their non-development expenditure after the floods of July-August 1973.

External Resources

5.18. The original budget for 1973-74 provided for external resources at Rs. 4,210 million consisting of Rs. 950 million as project aid, Rs. 2,050 million as rupee generating non-project assistance and Rs. 1,210 million as gross food aid. The actual inflow of foreign assistance is likely to be more than the original budget though component wise there have been some variations.

Overall position

5.19. Actual resource mobilisation for financing the public sector development expenditure in 1973-74 is likely to be around Rs.5350 million as against the original target of Rs.4, 920 million and the revised estimate of Rs. 5860 million. The size of development programme was increased during the course of the year as explained in the chapter on Investment, programme. Actual implementation of the ADP is however. not expected to be more than Rs. 6000 million.

Financing of ADP 1974-75

5.20. The size of the development programme for 1974-75 has been fixed at Rs. 8500 million. It is proposed to finance almost the entire programme from non-inflationary resources. The domestic resource mobilization effort for 1974-75 does not include any new tax. Instead, the budget for 1974-75 provides tax reliefs and reductions in duties. A new wage/price package has also been announced as part of the new fiscal measures.

5.21. The Annual Development Programme of Rs. 8500 million will be financed from domestic resources of Rs. 2930 million and foreign resources of Rs. 5570 million. Broad details of the availability of resources are shown in Table III below :—

TABLE III

Financing of ADP 1974-75

(Million Rupees)

Net Development Programme ..	8,500
Financed by :	
A. Internal resources (a+b+c) ..	2,930
(a) Existing basis ..	3,280
(*i*) Federal Government ..	3,060
(*ii*) Provinces ..	—
(*iii*) Autonomous Bodies ..	220
(b) New Fiscal Measures ..	(—)670
(*i*) Tax reliefs and reduction in duties ..	(—),1060
(*ii*) Wage/Price Package ..	390
(c) Uncovered gap ..	320
B. External Resources ..	5,570
(*a*) Project Aid ..	1,730
(*b*) Commodity Aid ..	3,580
(*c*) Food Aid ..	260
Total Financing ..	8,500

Revenue Receipts of Federal Government

5.22. Gross receipts of the federal government for 1974-75 at 1973-74 tax rates are estimated at Rs. 13,880 million which implies an improvement of Rs. 2,350 million over the previous year's revised estimates. Of this, an improvement of Rs. 1,890 million occurred in tax receipts without taking into account the effect of the new tax measures. The improvement in tax receipts at 1973-74 rates is based on the continuance of liberal import policy, better export prospects due to availability of more cotton, cotton manufactures and rice during 1974-75 and normal growth in the industrial sector of the economy. The estimates of tax receipts excluding the effect of new measures also include a deficit of Rs. 530 million in the receipts from petroleum surcharge due to increase in the cost of imported POL and reimbursement of higher cost of crude imports to the refineries. The non tax receipts for 1974-75 reflect increased recoveries of interest from various agencies and more profit from export of rice.

5.23. The revenue assignments to Provinces are estimated at Rs. 1280 million in 1974-75. Exclusive of these assignments, the net revenue receipts of the federal government are estimated at Rs. 12,600 million without the effect of new tax measures.

Non-Development Revenue Expenditure

5.24. The non-development revenue expenditure of the federal government for 1974-75 excluding the effect of wage increase is estimated at Rs. 10,850 million as compared with Rs. 10890 million in the revised estimates for 1973-74. At Rs. 5580 million in 1974-75, the defence expenditure is higher by Rs. 840 million than the revised estimates for 1973-74. The provision of Rs. 2,060 million for debt services takes into account

a debt relief of Rs. 2,120 million on the servicing of external debt. The expenditure of administrative and development departments and other miscellaneous expenditures will be higher by Rs.130 million over the revised estimates for 1973-74 on account of increased requirements of various departments. Expenditure on wheat subsidy will come down from Rs. 1670 million in 1973-74 to Rs. 580 million in 1974-75 as a result of the anticipated decrease in imports of wheat. Subsidy on edible oil has been eliminated as a result of the wage/price package.

Net Capital Receipts

5.25. The net capital receipts of the federal government for 1974-75 are estimated at Rs. 1310 million as against Rs. 780 million in the original budget for 1973-74. The improvement has occurred due mainly to greater mobilization of resources under the small savings schemes, the net receipts in respect of which are estimated at Rs. 840 million in 1974-75 as against Rs. 350 million only in the original budget for 1973-74.

Contribution of Provinces

5.26. The provincial governments are not expected to make any contribution to the financing of the ADP for 1974-75. Although the revenue sources of the provincial governments are inelastic, they have been making efforts during the last three years to improve their revenue receipts. The tax receipts of the four provincial governments indicate an annual compound growth rate of about 10 per cent during the FourthFive-Year Plan. Non-Tax receipts are also estimated to have registered an annual compound growth rate of about 13 per cent during the same period. On the other hand, the revenue assignments by the federal government which have remained almost at a constant level during 1970-71 to 1973-74 are not likely to increase significantly during the year 1974-75 as well. The increase in provincial revenue receipts was however in significant as compared with the fall in the net irrigation receipts as well as an increase in their non-development expenditure. The net irrigation receipts which were estimated at about Rs. 110 million in 1969-70 and Rs. 77 million in 1971-72 now stand eliminated in full. The non-development expenditures have registered an annual compound growth rate of about 18 per cent during the Fourh Five Year Plan due mainly to abnormal increases in the expenditure of development departments, larger provisions for wheat subsidy and an upward movement in the expenditure on general administration. The provinces of NWFP and Baluchistan are not in a position even to balance their revenue budgets the deficit in respect of which are being met by the federal government.

Autonomous Bodies

5.27. The federal autonomous organisations are expected to contribute Rs. 220 million by way of self-effort to the financing of their ADPs. This includes Rs. 140 million by WAPDA excluding the effect of revision of rates, Rs. 30 million by railways also excluding the revision in passanger fares and Rs. 50 million by other bodies.

External Resources

5.28. The external resources are estimated to contribute Rs. 5,570 million including Rs. 1,730 million of project aid, Rs. 3580 million of rupee generating non-project assistance and Rs. 260 million of gross food aid. Detailed projections and assumptions for adopting these estimates are shown in the chapter on balance of payments.

New Fiscal Measures

5.29. The fiscal measures for 1974-75 pertain to :—

(*a*) Tax reliefs and reduction in duties ;

(*b*) Price increases ; and

(*c*) Increase in wages.

Tax Measures

5.30. The tax proposals are aimed at providing incentives for private savings and encouragement for investment. These measures are explained below.

(*a*) *Income Tax.*—Exemption limit has been raised from Rs. 9000 to Rs. 12,000. Rate structure has been revised providing for graduated progression in rates. Earned income relief has been raised both for salaried and non-salaried persons. Tax credit has been allowed to companies making initial investment in equities of new industrial undertakings at different rates depending upon the location of the industry. Capital gains will not be taxed in the next two years but capital losses during these years will be carried forward to be set off against future

capital gains. Interest on bonds of taken-over industries and interest on securities has been exempted upto Rs. 5,000. The exemption limit of corporate dividends has been raised from Rs. 2,000 to Rs. 5,000 and of NIT and ICP dividends from Rs. 2,000 to Rs. 10,000. Flood Relief Surcharge on income tax has been abolished. It has also been provided that the combined liability for income tax and wealth tax will not exceed the aggregate income. Houses constructed between July, 1974 and June, 1980 will be granted certain exemptions.

(*b*) *Customs.*—The flood relief surcharge of 25% on import duties has been merged with the basic rate subject to certain marginal adjustments. Concessionary rates of duty have been allowed in the case of tendu leaves and small cars. Loose tea has been exempted from regulatory duty and flood relief surcharge. The export duties have been substantially reduced on most of the dutiable items. The export duty on staple cotton has been reduced to a flat rate of 35%. In the case of desi cotton, the duty has been reduced from 30% to 25%. The export duty on yarn has been reduced from 35% to 20% plus 40 paisa per pound for counts 21 to 24. Grey cloth will be subject to a rate of 15% against the previous rate of 25%. The varying rates of export duties on finished cloth other than dyed or printed, cotton-cloth bags, towels, cotton hosiery and cotton thread have been reduced to a single rate of 10%. The duty on cotton yarn waste has been reduced from 25% to 15% and on other cotton waste from 45% to 35%. Complete exemption has been granted from duty to canvas cloth, finished, dyed or printed cloth in order to encourage its export. The export duty on semi-tanned and tanned hides and skins has been reduced from 40% to 30% and that on fish meal from 30% to 25%.

(*c*) *Federal Excise.*—The flood relief surcharge on sugar and cement has been merged with the basic rate of duty. The surcharge on cigarettes has been converted into the normal surcharge. Duty on natural gas has been raised by 75 paisa per thousand cubic feet.

(*d*) *Sales Tax.*—Non-leather foot-wear priced upto Rs. 15 per pair and steel furniture has been exempted. Locally produced raw materials and packing materials used in the manufacture and packing of medicines have also been exempted.

(*e*) *Wealth Tax.*—The exemption ceiling of Rs. 20,000 on professional tools has been removed.

(*f*) *Estate Duty.*—Gifts made within 5 years of donor's death will not be included in the taxable estate if the same have been subjected to gift tax.

Price Increases

5.31. Certain price increases became unavoidable as the Government could no longer bear the heavy subsidies which were required to maintain the prevelant prices. Moreover, if the price distortions were not corrected, they would have given rise to serious economic difficulties in future. The adjustments made in prices are as follows :—

(*a*) The price of kerosene oil has been increased from Rs. 2.50 per gallon to Rs. 3.00 per gallon, of diesel oil from Rs. 3.75 to Rs. 4.00 per gallon, of petrol from Rs. 9.00 to Rs. 9.50 per gallon, high octane from Rs. 11.50 to Rs. 12.00 per gallon, and of HSD from Rs. 5.00 to Rs. 5.50 per gallon.

(*b*) The price of vegetable ghee has been increased from Rs. 6.00 per seer to Rs. 7.50 per seer to cover the cost of imported oil.

(*c*) The price of gas has been increased by 50% for all except domestic consumers.

(*d*) Power tariff has been raised by 10% for all except for domestic and general consumers.

(*e*) The price of sugar has been increased by 50 paisa per seer.

Increase in Wages

5.32. In order to rectify the situation created by the increase in prices, dearness allowance of 10% of salary subject to a minimum of Rs. 50 and maximum of Rs. 150 per month has been granted to all Government servants, and employees of autonomous bodies. Industrial and commerical workers with salaries not exceeding Rs. 1100 per month have also been allowed this dearness allowance subject to adjustment of any dearness allowance which may have been allowed to them since Government sanctioned the last wage increase of Rs. 35 per month. The pensioners have also been given an increase of 15% subject to maximum of Rs. 100 per month.

Overall Position

5.33. The tax reliefs and reductions in duties will reduce the revenue receipts of the federal government by Rs. 1,060 million. The net effect of the wage/price package will be an addition of Rs. 390 million to Government resources for development. Thus, on an overall basis, the new fiscal measures will reduce the internal resources for development by Rs. 670 million. This would convert the improvement of Rs. 350 million envisaged in the budget without the effect of new fiscal measures into a small gap of Rs. 320 million for financing the total cost of the development programme of Rs. 8500 million. The ADP for 1974-75 is thus expected to be financed almost in full from non-inflationary resources and it is again the firm intention of Government not to meet any part of the development expenditure through deficit financing.

Financing of the Private Sector

5.34. It is difficult to identify in exact terms the sources from which private investment will be financed during 1974-75. Nevertheless, broad magnitude, the fulfilment of which would depend on the implementation of suitable fiscal and monetary policies, can be indicated. The gross investment of Rs. 6,880 million in the private sector will be financed by private savings, financial institutions, commerical banks, inflow of foreign aid for the private sector and foreign private investment. The likely pattern of financing is given in Table IV and explained in the subsequent paragraphs :—

TABLE IV

Financing of Private Investment

(Million Rupees)

Gross Investment	6880
Financed by :	
1. Inflow of Foreign resources	1430
2. Contribution by the specialised credit institutions	800
3. Commerical Banks	2000
4. House hold savings	2650

5.35. The foreign aid disbursements assumed in the above table are being channalised mostly through specialised credit institutions like PICIC, IDBP and Agricultural Development Bank of Pakistan. The necessary foreign loans for these institutions have already been arranged. However, the quick disbursement of the foreign aid would be dependent on the timely availability of rupee resources. Foreign investment is likely to materialise for oil and gas exploration.

5.36. In the credit plan for next year, bulk of the monetary expansion has been earmarked for the private sector. It is proposed to provide a minimum amount of Rs. 3500 million to the private sector through the banking system. Though a part of the credit expansion will finance the increased requirements of the trade, a substantial portion—a minimum of Rs. 2000 million will go to meet the credit requirements of new investment.

5.37. A substantial part of investment is proposed for agriculture and private housing. In the case of private housing, public sector is making investment to develop plots and special tax incentives for low cost housing have been given in the budget. It is expected that the private sector would invest at least Rs. 400 million in this sector through its own savings. Large investment is also expected in the agriculture sector particularly in tube-wells, tractors and other agricultural implements financed by the agriculture sector's own savings.

CHAPTER 6

BALANCE OF PAYMENTS

The Balance of Payments strategy for 1974-75 is set against the background of developments in 1973-74, when rising import prices—especially of wheat, edible oil, petroleum, fertilizers, and machinery—led to an estimated trade deficit of about $ 400 million. The deterioration in the terms of trade will bring about a drawdown of the country's foreign exchange reserves by about $ 130 million. The strategy for 1974-75 is to concentrate on a major effort at import substitution—particularly in wheat and energy—while boosting exports by over 40 percent. Despite these measures the impact of the import price rises will not be fully offset, and it is expected that the external sector will remain under strong pressure during fiscal 1975.

6.2 There is considerable uncertainty regarding the level of imports in 1974-75 as the effects of rapid changes in international prices and lengthening delivery periods may reduce demand and actual arrivals much below the projected levels. Moreover, a large part of the imports is contingent on the availability of aid, and will not materialise if there are shortfalls in external assistance. On a "commitments" basis merchandise imports have been projected at $ 2200 million, but for the reasons mentioned above they may be lower by about $ 200 million or so. There may thus be a reserve loss of $ 100—150 million.

Review of 1973-74

6.3 The export target was originally set at $ 900 million, but was later revised to $ 1100 million to take into account the rising prices in the world market. The actual outcome was a level of earnings of about $ 1030 million, which is 34 percent* above that of 1972-73. This effort is quite creditable, but it is still short of the growth in world trade, which is estimated at 37 percent during the year. There were three major causes for this shortfall in earnings.

6.4 First, Pakistan was hit by the worst floods that it had ever experienced. Apart from the loss of life and the damage to the physical infra-structure, the floods destroyed about 600,000 bales of cotton, which at the prevailing export prices would have fetched about $ 150—180 million. Second, exports began running into production constraints, caused largely by the decline in investment which had started in the late sixty. As a result of this, while the export price of many items remained attractive, it was not possible to generate a large physical surplus for export.

Third, the energy crisis led to a slowdown in some of Pakistan's main markets, especially Japan and the United Kingdom. In the case the situation was made more acute as a result of labour problems. It was also inevitable that Hong Kong, whose major imports from Pakistan are largely for further processing and shipment to Japan and the UK, would also be affected. The chief impact of this economic slowdown was on the export of cotton yarn, the exports of which had been largely concentrated (over 60 percent in 1972-73) to these countries. The composition of export receipts is shown in Table I.

TABLE I

Export Receipts, 1972-73 *and* 1973-74

($ million)

	1972-73	1973-74 (Estimated)	Percent Change
1. Raw Cotton	133	51	—62
2. Cotton Yarn	174	207	+19
3. Cotton Cloth	105	166	+58
4. Rice	96	180	+87
5. Leather	52	40	—23
6. Fish	23	27	+17
7. Carpets and Rugs	33	50	+52
8. Others	173	309	+79
	789	1,030	+30

*In rupee terms the growth was less, as the rupee was implicitly revalued against the dollar by about 10 percent in February 1973.

6.5 A disturbing feature of the export behaviour in 1973-74 was the decline in the quantities shipped of virtually all the major items as shown in Table II. The fall in raw cotton is, of course, the result of the flood's but that of the other commodities must be attributed to the decline in investment that has occurred in Pakistan during the last several years.

TABLE II

Quantities of Major Exports 1972-73 *and* 1973-74

		1972-73 (July—May)	1973-74 (July—May)	Percent Change
1. Raw Cotton	000 tons	211	27	—87
2. Cotton Yarn	mn lbs.	369	206	—44
3. Cotton Cloth	mn sq. yds.	563	392	—30
4. Rice—Basmati	000 tons	109	207	+90
Coarse	000 tons	612	314	—49
5. Leather	000 cwt	402	220	—45
6. Fish and Fish Products	000 cwt	369	296	—20

6.6 Except for the fine varieties of rice (Basmati), all the major exportable commodities show a decline in the quantities shipped in the current year. The main reason is that production is not growing fast enough to meet the increasing domestic requirements and to leave a rising margin for the international market. The problem is exacerbated by the fact that Pakistan's major exports consist largely of wage goods. Hence, any increase in domestic incomes increases the internal demand for these products, and sharpens the competition between the domestic and the international markets. The Government seems concerned at the consequent rise in domestic prices, and takes measures to slowdown the export of some commodities. The only way in which a consistent and successful export policy can be pursued is by diversifying the range of exports, and by increasing production at a sufficiently rapid rate so as to leave a growing surplus over home consumption.

6.7 Another element in the performance during 1973-74, is that the international demand for some major items, particularly cotton yarn, dropped off. This was partly the result of the threatened slowdown in the economies of Japan and Hong Kong but may have also been in part caused, by the over-buying of the previous year, which would have given an adequate level of stocks in these countries.

6.8 On the other hand, all the items mentioned in Table II earned more foreign exchange in 1973-74 than in the previous year. This, of course, was a consequence of the higher prices received. This underlines the fragility of the current export boom : a decline in export prices (of which there are already signs) would cause earnings to diminish substantially, unless a larger exportable surplus could be available to offset the effects of the fall in prices.

6.9 The chief cause of the deterioration in the balance of payments was the rise in import prices. While the prices of almost all the major imported items escalated steeply, the most important increases—because of their weight in the total-were for wheat, edible oils, petroleum (both crude oil and finished product), and fertilizers. The prices of wheat rose from $ 85 per ton in 1972-73 to over $ 200 per ton in 1973-74, that of soybean oil from $ 312 to nearly $ 700 per ton, of crude oil from about $ 18 to $ 52 per ton, of petroleum products from an average of $ 25 per ton to $ 85 per ton, and of fertilizers from $ 105 to $ 300 per ton. As a consequence, the bill for these items was about $ 400 million more in 1973-74 than in the previous year.

6.10 The price of other key items, such as capital goods also increased sharply, while some other important commodities, for example, steel billets, became almost unavailable. In spite of the " rationing through price increases " that persisted throughout 1973-74, the total import bill is estimated at $ 1450 million.

Projections for 1974-75

Exports

6.11 Merchandise exports in 1974-75 have been projected at $ 1450 million—an increase of 41 percent over 1973-74. The bulk of the increase will result from the greater availability of raw cotton, but larger amounts of other items are also expected to become available for export. The export projections take into account some decline in international prices from their current levels. Thus, we shall have to ship much higher quantities of almost all the major commodities. This will raise many problems of handling, transportation, port capacity and shipping space. Policy decisions will have to be taken well in advance to ensure the success of the export drive.

6.12. The trade policy for 1974-75 aims at increasing the attractiveness of the world market for Pakistan's major exports. The export duty on long staple cotton has been reduced from 45 to 35 percent, on short staple varieties from 30 to 20 percent, on cotton yarn from over 40 to 20 percent, on grey cloth from 25 to 15 percent, on finished cloth from 15 to 10 percent, and on leather from 40 to 30 percent. This has increased the rupee return per unit of foreign exchange earned by all these commodities, as set out in Table III below. The weighted effective exchange rate for total merchandise exports also increased by about 15 percent. Rs. 6.47 U.S. $ to Rs. 7.44 U.S. $ after the Budget.

TABLE III

Export Duties and Effective Exchange Rates

Items	Export Duties		Effective Exchange Rates (Rs./$)	
	Before Budget 1974-75	After Budget 1974-75	Before Budget 1974-75	After Budget 1974-75
Cotton :			**5.61**	**6.60**
(Staple)	45%	35%	(5.45)	(6.44)
(Desi)	30%	20%	(6.93)	(7.92)
Cotton Waste	40%	30%	**5.94**	**6.93**
Cotton Yarn :	—	—	**5.88**	**7.92**
(Count 21—24)	(Rs. 0.40/lb+) 40%)	20%	(5.54)	(7.92)
(Other Count)	40%	20%	(5.90)	(7.92)
Cotton Cloth :	—	—	**7.90**	**8.65**
(Grey)	25%	15%	(7.43)	(8.42)
(Finished)	15%	10%	(8.42)	(8.91)
Other Cotton :				
Manufs.	10%	10%	**8.91**	**8.91**
Rice :	—	-	**2.65**	3.96
(Basmati)	(Rs. 34/cwt)	(Rs. 34/cwt)	(2.31)	(3.60)
(Other)	30%	30%	(3.00)	(4.31)
Raw Wool	**Rs. 2.20/lb.**	**Rs. 2.20/lb.**	**6.76**	**6.76**
Leather	40%	30%	**5.94**	**6.93**
Other Items	*NIL*	*NIL*	**9.90**	**9.90**
Average	..	..	6.47	7.44

6.13. The main increase in earnings is from raw cotton, whose exports are expected to go from $ 51 million in 1973-74 to $ 220 million in the following year. Other important increases are in cotton yarn, (45 percent) and rice (67 percent). The details are shown in Table IV.

TABLE IV

Export Receipts 1973-74 *and* 1974-75

($ million)

	1973-74 (Estimated)	1974-75 (Projected)	Percent Change
1. Raw Cotton	51	220	+331
2. Cotton Yarn	207	300	+45
3. Cotton Cloth	166	170	+2
4. Rice	180	300	+67
5. Leather	40	45	+13
6. Fish	27	30	+11
7. Carpets and Rugs	50	55	+10
8. Cement	17	20	+18
9. Sports Goods	20	20	—
10. Others	272	290	+7
	1,030	1,450	+41

Imports

6.14. Import requirements will remain very high and will be the main reason for the large trade deficit in 1974-75. The import bill in a very large measure is a function of rising prices, and reflects the movement of the terms of trade against Pakistan.

6.15. The import bill projected at $ 2200 million for 1974-75 will remain high also because the full impact of the rise in import prices was not reflected in import payments during 1973-74. For example, the oil price increase affected imports arranged mainly during the second half of the fiscal year ; thus 1974-75 would be the first full fiscal year to record the impact of these increases. Moreover, the prices of many key commodities are still continuing to increase, while factors such as increased population and urbanisation will push up the demand for several products.

6.16. There will, of course, also be an increase in the quantities imported of many items. As is discussed below, much of this demand is in the nature of a " catching-up " to compensate for previous shortfalls in investment, or is a reaction to the balance of payments difficulties that it is foreseen will arise.

6.17. The demand for POL imports in 1974-75 is projected at 3.22 million tons of crude oil (the same as in the current year as the refining capacity has not increased), and 1.13 million tons of finished products (compared with 0.89 million tons in the current year). Forecasting the future movement of oil prices is particularly hazardous because of the abnormal conditions prevailing in the world market. Moreover, the oil producing countries have decided to post prices only for period of three months, after which they are subject to review. The import estimates for 1974-75 are based on the January—April 1974 contract prices of about $ 82 per ton for crude oil and $ 113 per ton for finished products. Thus, in effect oil prices have continued to rise, in the sense that the distinction between the posted price and the market price is becoming blurred, and Pakistan is having to arrange almost all her imports close to the posted price of $ 11.65 per barrel. The bill for POL imports is estimated at $ 385 million for 1974-75, which represents a further increase of $ 165 million over that already recorded in 1973-74.

6.18. The agricultural targets for 1974-75 are contingent upon a high rate of fertilizer use. The target for fertilizer distribution in 1974-75 has been fixed at 600 thousand N tons, of which half will be manufactured domestically.

6.19. A substantial part of the fertilizer imports which arrived during 1973-74 were at prices contracted before the big price increases. Currently, Pakistan is being required to make arrangements for next year's supplies at around $ 400 per metric ton, depending on the type of fertilizer. Taking available stocks into account, an import allocation of $ 130 million has been made.

6.20. Pakistan hopes to make a considerable reduction in the import of foodgrains and edible oil. With a wheat crop of about 8.5 million tons being harvested in the current Rabi (winter) season Pakistan's wheat imports are likely to be reduced from over 1.1 million tons in 1973-74 to 350,000 tons during 1974-75. With higher domestic production it is expected that government procurement will be considerably raised, but it would be unrealistic to assume that the entire increase in output would be available for distribution through the rationing system. This, of course, is due to the fact that the additional production will not be concentrated exclusively on farms that produce for the market, but will also take place on smaller units which are close to the subsistence level. Even this reduced quantity of wheat imports is likely to cost roughly $ 60 million.

6.21. The demand for edible oils in 1974-75 is estimated at 470,000 tons, of which 315,000 tons would be for vanaspati manufacture and the rest for industrial and direct consumption. With a larger cotton crop expected in the coming year (4.5 million bales compared with 3.7 million bales in 1973-74), the production of cotton-seed oil will be about 170,000 tons. In addition, other edible oils (primarily from rape and mustard seed) amounting to 130,000 tons should be available. Thus, edible oil imports are projected at 170,000 tons a reduction of 15 percent compared with the current year despite the increase in population and urbanisation. However, even these lower imports will require about $ 100 million.

6.22. The Import Policy for 1974-75 continues the liberal trend set in the previons two years. Again, the aim is to leave decision making, as far as possible, to market forces and to encourage the maximum utilization of capacity. A particular feature of the current import policy is that a separate and liberal allocation has been made for the import of essential raw materials and for the transportation sector. Separate allocations have also been made for all the key items such as wheat, edible oil, fertilizer, petroleum (both processed and crude), and pesticides. Apart from these specific allocations, private sector imports of around $ 800 million have been built into the projections.

6.23. The upshot of these projected requirements and the rapidly rising international prices is a hnge rise in the import bill. The projected level of imports for 1974-75 is over 50 percent higher than in 1973-74. A redeeming feature of this large bill is that there is a very substantial increase in the investment component

of imports. The import of capital goods is projected to increase from 27 to 30 percent of total imports and that of raw material for capital goods from 7 to 10 percent. This movement largely reflects two factors :

(*a*) an attempt to reverse the decline in investment that has been taking place over the last several years ; and

(*b*) the commencement of a vigorous policy of import substitution in a mumber of important areas such as foodgrains, fertilizers, energy, and transportation, that will characterise the development strategy throughout the period up to the end of the Fifth Five Year Plan.

TABLE V

Composition of Imports 1973-74 *and* 1974-75

($ million)

	1973-74		1974-75	
	Value	Percent	Value	Percent
Consumer Goods	365	25	430	20
Raw Material for Consumer Goods	595	41	870	40
Raw Material for Capital Goods	100	7	260	10
Capital Goods	390	27	640	30
	1,450	100	2,200	100

Invisibles

6.24. The projections for invisible receipts and payments show a deficit of about $ 50 million. Invisible receipts are projected at $ 335 million, including home remittances of $ 140 million. It will be seen that the projection for total receipts in 1974-75 is lower than the estimate for the previous year. This is explained by the fact that in 1973-74 Pakistan received a substantial amount of donations, mainly for flood relief.

6.25. Invisible payments in 1974-75 are put at $ 385 million, but this amount may have to be revised due to upward movements in international freight and insurance rates.

6.26. Debt servicing due in 1974-75 amounts to approximately $ 370 million. Pakistan has however, negotiated an agreement with her main creditors for a rescheduling of a part of these payments. The net service due in 1974-75 then works out at approximately $ 195 million.

Balance of Payments

6.27. The developments expected during 1974-75 are likely to lead to a large deficit on the balance of payments. The size of this deficit is difficult to quantify because rising import prices should themselves act as a brake on import demand, while lengthening delivery periods and the non-availability of certain commodities should reduce the actual arrivals to below the level projected. Moreover, since a substantial portion of the imports are tied to aid availability, any shortfalls in aid will be automatically reflected in lower imports.

6.28. The balance of payments projection given below is on a " commitments " basis and the deficit shown reflects the higher end of the likely range. Actual imports may be perhaps $ 200 million lower because of the factors mentioned above, and the drawdown of reserves or short-term borrowing required to meet the gap may be about $ 100—150 million.

TABLE VI

Summary Balance of Payments, 1973-74 *and* 1974-75

($ million)

	1973-74 (Estimated)	1974-75 (Projected)
A. Payments :		
1. Merchandise Imports	1,450	2,200
2. Invisible Payments	343	385
3. Debt Servicing	197	195
Total Payment	1,990	2,780
B. Financing :		
1. Merchandise Exports	1,030	1,450
2. Invisible Earnings	345	335
3. Gross External Inflow	485	700
4. International Financial Institutions (net)		70
5. Short-term Borrowing and Drawdown of Reserves	130	225
Total	1,990	2,780

CHAPTER 7

MONETARY AND CREDIT POLICY

Review of 1973-74

The developments in the fields of money and banking during 1973-74 may be seen in the background of abnormal monetary expansion of over 30 percent during 1972-73. This large expansion in monetary assets during 1972-73 contributed to the inflationary pressures with money supply expanding more rapidly than growth of goods and services. This tendency was accentuated by the growth of foreign exchange reserves and sizeable Government deficit with these contributing 78% of total expansion of Rs. 6157 million in monetary assets.

7.2. The Annual Plan for 1973-74 prepared in this background recommended a very conservative and cautions monetary policy in view of the need to allow the absorption of the preceding year's increase in monetary assets and to contain inflationary pressures. Simultaneously it was made a major policy objective of the Government to keep the monetary expansion in the public sector under check.

7.3. The growth in monetary assets was significantly lower than the abnormal expansion during 1972-73. Deficit financing during the year was as planned despite extra-ordinary flood expenses which were met by additional taxation. In order to curb undue expansion of bank credit to the private sector various measures were taken during the course of the year such as the increase in bank rate from 6 % to 8% and liquidity ratio from 30% to 35%. All these anti-inflationary measures have met with a reasonable degree of success.

Monetary Assets

7.4. Monetary assets during the year expanded by Rs. 3536 million as against an expansion of Rs. 6157 million during 1972-73. The causative factors for changes in monetary assets during 1972-73 and 1973-74 are shown in Table I :

TABLE I

Causative Factors for changes in Monetary Assets 1972-73 *and* 1973-74

(Million Rupees)

Expansion (+) Contraction(—)	1972-73	1973-74
1. Private Sector	+ 1606@	+ 2713@
2. Government Sector	+ 2279@	+ 1502@
(*a*) Budgetary deficit	+ 1748	+ 646
(*b*) Commodity Operations	+ 531	+ 856
3. Foreign Sector	+ 2336	— 418
4. Miscellaneous Factors	— 64	— 261
Total Causative Factors	+ 6157	+ 3536

@ As per IMF definition of credit ceiling

7.5. It would be seen that among the causative factors affecting the monetary assets the private sector contributed Rs. 2713 million to total monetary expansion during the year as compared to Rs. 1606 million during 1972-73. This expansion was, however more pronounced during the first half of the year. During the first quarter (Jul—Sept 1973-74) an expansion of Rs. 359 million took place in the private sector in contrast to a contraction of Rs. 130 million during the corresponding period of preceding year. Higher credit demand in the private sector was attributable largely to the higher prices of internationally traded goods and services. The expansion during this quarter was also due to the fact that the retirement of bank advances could not take place as the stocks could not move due to flood damage to the communication system. During the second quarter (October-December 1973-74), the private sector credit expansion amounted to Rs. 1640 million which was roughly of the same order as in the corresponding quarter of the preceding year. During the Third quarter (January. March, 1973-74), the period after bank nationalisation, bank credit expansion in the private sector amounted to Rs. 416 million. During the fourth quarter the credit expansion in the private sector was about Rs. 297 million only.

7.6. The Government exercised strict financial discipline in its own operations and deficit financing was as planned. Excluding state trading operations of the Government, the Government sector on the whole was expansionary to the extent of Rs. 646 million during the year as a whole. The foreign sector showed a contraction of Rs. 418 million during the year. This contraction was due to the increase in the value of imports and fall in exports.

7.7 The composition of monetary assests also underwent a noteable change during the course of the year. Component-wise break-up of the increase in monetary assets is given in table II.

TABLE II

Increase in Monetary Assets by component

Expansion (+) Contraction (—)	(Million Rupees)
1. Currency in circulation	(+) 2026
2. Demand liabilities of the scheduled banks (excluding inter banks items)	(+) 1324
3. Time liabilities of the scheduled banks (excluding inter banks items)	(+) 266
4. Other deposits with S B P	(+) 1
5. Deposits of non-scheduled and cooperative banks with State Bank of Pakistan	(—) 181
6. Post Office saving Bank deposits	(+) 100
Total change in monetary assets	(+) 3536

7.8. Bulk of increase in the monetary assets occured in currency in circulation which went up by about Rs. 2026 million. Demand deposits of the scheduled banks increased by Rs. 1324 million while time deposits showed an increase of Rs. 266 million. The more active component of money *i.e.* currency in circulation thus increased faster. The ratio of currency in circulation to total monetary assets rose from 29.1% by the end of June, 1973 to 32.2% by the end of June, 1974.

Credit Policy

7.9 In the monetary field both quantitative and qualitative credit control measures were taken with a view to contain credit expansion within reasonable limits and discourage the use of bank funds for less essential and speculative purposes. In Auguust, 1973, the bank rate was increased from 6% to 8% and the minimum liquidity ratio of the scheduled banks from 30% to 35%. Further, to discourage holding of stocks and to reduce the level of prices of daily necessities, the State Bank of Pakistan completely banned bank advances against grams, other grains, pulses, kariana and spices, onion and potatoes with effect from September, 5 1973. Advances against cotton seeds already stood banned except to vanaspati mills for whom the margin restrictions was 25% while those against oil seeds, other than cotton seeds were subjected to a minimum margin requirement of 75%. Advances against rice and paddy were banned except to rice mills for whom the minimum margin requirements was 50% both for coarse and superior varieties. Advances against rice to Trading Corporation of Pakistan and against approved and valid Export Price Check forms were exempted from these restrictions. Advances against cotton textiles (indigenous) were subjected to a minimum margin requirement of 25%. These advances were to be approved/adjusted by September 30, 1973.

7.10. Subsequently with effect from October19, 1973 it was decided to allow advances against maize to manufacturers of corn oil and corn products subject to a minimum margin requirements of 25%. As from October 20, 1973, the exemption from ban on advances against rice and paddy was extended to the authorised dealers holding valid licences from the Provincial Food Departments. Advances to the rice dealers were permitted only against stocks of rice/paddy declared to the Food Department. The minimum margin requirement of 50% prescribed earlier both for coarse and superior varieties of paddy and rice was continued. The minimum period of advances to any borrower was restricted to three months. Advances against rice to TCP and those against approved and valid EPC forms were exempted from these restrictions.

7.11. With effect from November 16, 1973, the margin restriction on advances against indigenous cotton textiles was raised from 25% to 50% and a minimum margin requirement of 50% was prescribed for advances against woolen textiles and all artificial silk fabrics. Banks were directed to regularise accordingly all the existing advances against these commodities by 30th November, 1973. The maximum permissible limit for clean advances, or advances secured by guarantees was also reduced from Rs. 50,000 to Rs. 25,000 per party. These advances were to be given for a period of two years. Advances exceeding the reduced limit were to be adjusted by December 31, 1973. However, these restrictions were not made applicable to :—

(*i*) Advances granted to finance exports under confirmed irrevocable letters of credit or firm orders up to the amount for which letters of credit were opened or firm order received ;

(*ii*) Packing credit for exports ; and

(*iii*) Pre-shipment credits granted for financing exports of goods covered by firm contracts made or confirmed irrevocable letters of credit opened by foreign importers in favour of exporters in Pakistan provided that the advances do not exceed the amount specified in the contract or the letter of credit.

7.12. Relaxations were, however, introduced where hardships were felt. Ban on bank advances against " other grains and pulses " announced on September, 1973, was lifted in the case of manufactures of chicken feed from March 22, 1974. These were subjected to a minimum margin of 25%. Through another modification it was decided to reduce the minimum margin to be retained by the banks on advances to textile mills on the security of cotton yarn from the existing 50% announced on November 16, 1973, to 25% w. e. f March 29, 1974. On April 1, 1974 the minimum margin requirement on advances against cotton yarn was completely removed.

Credit Budget

7.13. A system of credit budgeting was introduced by the Government in 1972. The aim of credit budgeting was to lay down specific targets for banks for provision of credit to the hitherto neglected areas of agriculture, small business and industry and housing. For this purpose a National Credit Consultative Council was set up and charged with the responsibility of setting the safe limits of credit expansion and distribution of credit among the various sectors of the economy. The Council fixed a total credit expansion target of Rs. 4780 million for 1973-74. Out of this, a sum of Rs. 1860 million (Rs. 1000 million to meet the budgetary deficit and Rs 860 million for Government's commodity operation) was earmarked for Government. Private sector credit expansion was projected at Rs. 2920 million during 1973-74. At the same time, a sum of Rs. 1000 million was projected as the draw-down of foreign exchange reserves. In this way, monetary expansion was fixed at Rs. 3780 million during 1973-74.

7.14.The Council approved a credit Plan for 1973-74 envisaging an increase of Rs. 2350 million in the bank credit to be provided by the commercial banks to the private sector. This was to be distributed among the various sectors as under :—

(Million Rupees)

Manufacturing	1200
Agriculture	300
Housing	50
Transport	100
Commerce	500
Other Sectors	200
Total	2350

7.15. The available information indicates that ceiling fixed in the credit budget for the year 1973-74 has been adhered to. The actual budgetary deficit has been lower than planned. The Government commodity operations, too were within the limit of Rs 860 million prescribed by the Council. However, the expansion in the private sector at Rs. 2713 million has been lower than the limit of Rs. 2920 million set by the Council.

Projection of Monetary and Credit Expansion during 1974-75

7.16. It is generally recognised that the rate of monetary expansion must keep pace with the growth of the economy. However, the projections of safe limits for such expansion always present a difficult problem. During 1974-75, GNP is likely to grow at a much faster rate than the year 1973-74. The net inflow of foreign resources would also be substantially higher. Taking into account the above factors as well as the relative shrinkage in the size of subsistance sector, we have projected that monetary assets could grow by about Rs. 3500-3600 million during 1974-75. Such an expansion in monetary assets would be substantially lower than the growth of over 30% during 1972-73 and 14% during 1973-74. The Annual Plan 1974-75 envisages a drawing-down of foreign exchange reserves to the extent of Rs. 1200—1300 million. Thus, the domestic credit expansion could be about Rs. 4800 million without jeopardising the objective of price stability.

7.17. As has been explained in the preceding paragraphs, monetary and credit policy during 1973-74, was devised with the major objective of containing inflationary pressure. The implementation of this policy was met with a considerable success. In view of the present price situation, it is intended to continue this conservative and cautious policy during the next fiscal year also. The caution is justified in view of the need to allow the absorption of the preceding year's increase in money supply and to safeguard against undue pressures developing on the balance of payments.

7.18 The proposed credit expension during the next fiscal year is to be allowed mainly for the private sector and State Trading operation of the Government. The overall allocation will permit an expansion of Rs. 3800 million in the private sector as against an estimated expansion of Rs. 2713 million during the current financial year. Although these projections provide for about Rs.1200—1300 million of an expansion in the public sector. This would be primarily to meet the additional cost of the state trading operations of the Government and the recourse to the deficit financing during the year would be almost of a marginal nature. Even the state trading operations of the Government are likely to be offset by the contractionary influence of the deficit in the balance of payments.

7.19 The only expansionary force on money supply would be operating from the credit expansion of the banking system. The increase in bank rate and changes in lending and deposits rates of the banks during 1973-74 have set an interest rate policy designed to keep the private sector credit expansion within the reason able limits. This policy was further strengthened by a change in the liquidity ratio.

7.20 The domestic credit expansion in the private sector has been projected at Rs. 3800 million. Of this, Rs. 3000 million would be the credit expansion by the commercial banks and the balance by the specialised credit institutions. The detailed credit budget for each sector would be prepared by the National Credit Consultative Council on the basis of the targets and the policies set out in the Annual Plan. However, tentatively it appears that out of a provision of Rs 3000 million of the credit expansion by the commercial banks, roughly 50% or about Rs.1500 million may have to be earmarked for industries.

7.21 In view of the liberal import policy and increased exports, the requirements of commerce are placed at around Rs.700 million as against a provision of Rs.500 million during 1973-74. The bulk of the requirements of agriculture and housing would be met through specialised credit institutions and bank credit to be provided to these sectors by the commercial banks will be slightly higher than the last year. However, the requirements of the transport sector may be considerably higher than the last year credit budget of Rs.100 million only and might be around Rs. 200 million.

CHAPTER 8

PRICES AND CONSUMPTION PLANNING

Price and consumption trends were somewhat similar in 1973-74 as in the previous year. A general increase in the availabilities of essential commodities was accompanied by sharp increases in their prices. Odd though it may seem, the two phenomena were interlinked. The link was forged by steep upward movements in the prices of essential imports. Although escalating prices of petroleum products (which had widespread effects on cost of living and cost of production) was the most spectacular, increases in the international prices of wheat, edible oils and fertilizers were no less costly.

8.2. It was the upsurge in the international prices of these commodities, superimposed upon an existing international price level substantially above local prices that necessitated Government actions to protect short and medium run availabilities resulting in adverse price effects in the short run . In order to increase the availability, it was essential in the short term to resort to imports of wheat and edible oils which resulted in a cost-push pressure for increasing prices owing to the very high international prices of these commodities. On the other hand, to induce larger production of agricultural commodities, it was necessary to offer price incentive to farmers which led to higher money incomes and a demand-push inflation ; at the same time to enable the achievement of a large crop production it was necessary to import substantial amount of fertilizer which also led to cost-push inflation as in the case of wheat and edible oil imports. Added to these factors was the widespread damage by the floods in the late summer of 1973 which prevented the realization of larger crop production targets and negated to a large extent the response to input and price supports offered to the farm sector.

8.3. According to the sensitive price indicator prepared by the Statistical Division which covers eighteen essential commodities in a number of urban centres, the consumer price index has risen by roughly 35% during 1973-74 (*see* Table I). The wholesale price index had risen by 21% by April, 1974 compared with April, 1973. The difference in the wholesale and retail price indices may reflect two major factors, *i.e.*, differences in weight and actual differences in the trends in wholesale and retail prices. Although higher increase in retail price may reflect an increase in retail margins in response to the inflationary situation, particularly as prices are less amenable to control at the retail level, an important element in this difference may have been the lagged response of retail prices to earlier increases in wholesale prices. In this connection, it may be noted that in 1972-73 wholesale prices had risen faster. Indeed, the major explanation of this trend probably relates to the increases made by the Government in retail prices of essential commodities as an adjustment to the inflation that had already occurred elsewhere and which was reflected in wholesale price trends.

TABLE I

Percentage Change in Price indicators during the Year 1973-74

(Base: 1969-70=100)

	June 1973	June 1974	% Change
Industrial ...	131.17	178.21	35.9
Commercial ..	132.75	178.54	34.5
Government ..	132.33	176.99	33.7
All combined	132.21	178.09	34.7

8.4. The trends in the cost of living of various categories of employees and various income groups are shown in Table II. It appears that the increase in the cost of living during the twelve months ending April, 1974 was around 31% uniformly distributed over all income groups of employees.

TABLE II

Combined Consumer Price Index (General)

(1969-70=100)

% Change April 74/April 73

Groups	Up to Rs. 300	Rs. 301—500	Rs. 501—1,000	Above Rs. 1,000	All income Groups
1. Industrial Employees	32.3	31.5	31.8	31.3	31.6
2. Commercial Employees	32.7	31.4	31.2	31.0	31.4
3. Government Employees	31.9	31.5	31.6	31.4	31.1
4. All combined	32.5	31.5	31.5	31.1	31.3

8.5. Prices of items included in the Consumption Plan also recorded steep increases (*see* Table III) although somewhat less than the average rate of inflation. Keeping in mind the increases in the *per capita* availabilities of commodities and the fact that incomes increased along with retail prices, it appears that the average living standard during the year showed an improvement. However, this average would mask the distributional impact of inflation which is likely to be very significant. On the other hand, the increase in the level of government spending, both developmental and non-developmental must have contributed significantly to increasing employment and, therefore, providing relief to the poorest class in the economy *i.e.*, the unemployed ; the increase in price of farm products would have raised the general level of income in the agricultural sector ; and finally, the wage-price package announced by the Government first in August, 1973 and again in the budget for 1974-75 (although the latter will not have affected the situation in 1973-74) offered relief to a large segment of the group that is worst hit in inflation, *i.e.* the fixed low-paid income group. On the other hand, inflation must have impinged on segments of the population in different occupations whose money incomes did not rise sufficiently to cover the increase in prices. These groups must have suffered a decline in the standard of living during 1973-74.

TABLE III

Retail Prices of Essential Commodities

KARACHI

Rs.

Item	Unit	30-6-1973	30-6-1974	% Change 30-6-1974 / 30-6-1973
Wheat (Avg. qlty)	per seer	0.75	0.95	26.66
Rice Basmati (Broken)	,,	1.46	2.00	36.98
Pulses (Gram)	,,	1.42	1.50	5.63
Potatoes	,,	1.35	1.97	45.92
Onions	,,	0.84	0.36	(—)57.15
Sugar (Rationshop)	,,	2.50	3.50	40.00
Gur	,,	2.62	1.95	(—)25.58
Veg. Ghee (Loose)	,,	4.75	7.50	57.89
Washing Soap (Avg. qlty)	per cake	0.62	1.00	61.29
Long Cloth (15000)	per yard	3.75	5.00	33.33

8.6. It may be argued that by increasing subsidies, the Government could have cushioned the impact of international inflation and of higher prices to the farmers than the price charged to the consumers. Indeed, the Government did bear considerable subsidies during the year amounting to about Rs. 3000 million. Even when prices were raised in August, 1973 and June, 1974, the full impact of international inflation and higher support prices was not passed on to the consumers. It has been estimated that the inflationary impact of an increase in the price of four major imported commodities (wheat, edible oil, petroleum products and fertilizer) fully reflecting international trends would have led to an inflation of 50%.

8.7. At the same time, it needs to be emphasized that a further increase in the subsidy bill would have required a curtailment in development expenditure and other expenditures of the Government or a resort to large-scale deficit financing. It is evident that the latter course would also be inflationary. The curtailment in development expenditure and other expenditure of the Government would have called for the sacrifice of growth and the increase in availabilities of commodities in future years, as well as that of a number of other socio-economic objectives of the Government especially that of employment.

Review of Consumption Plan 1973-74

8.8. The *per capita* availability of the items included in the Consumption Plan for 1973-74 are presented in Table IV. Since these availabilities include an unknown quantity of private stocks, the comparison between 1972-73 and 1973-74 may, in some cases, be misleading. In particular, the figures for wheat and cotton cloth tend to provide an erroneous impression. It is known that at the end of 1972-73, substantial stocks of wheat were available in the private sector some of which were procured by the Government last year. If

allowance is made for these factors, it appears that there would have been an increase in the availability of wheat rather than the decline that is shown in Table IV. The reverse is probably true of cotton cloth availability. The stocks of cotton cloth at the close of 1973-74 were much larger owing to slow-down in exports. Only a part of the larger stocks have been accounted for under mill sector inventories and the sharp increase shown in availability provides an unrealistic impression of the actual increase in consumption. At the moment it is not possible to quantify the movements in private stocks which necessitate reliance on quantitative judgements.

TABLE IV

Per Capita Availability

Items	Unit	1972-73 (Actual)	1973-74 (Estimated)	% Growth 1973-74 / 1972-73
Wheat	ozs. per day	11.41	10.92	(—) 4.30
Rice	,,	2.00	2.36	18.00
Pulses	,,	0.75	0.77	2.66
Sugar Refined	lbs. p.a.	17.37	19.52	12.37
Sugar Raw	,,	39.03	41.55	6.45
Vegetable Ghee	,,	7.24	7.70	6.35
Cotton Cloth	yds. p. a.	11.92	13.32	11.74
Total				3.85

Consumption Plan 1974-75

8.9. The Annual Plan for 1974-75 provides for significant increases in the availabilities of various commodities. The need for enlarging the coverage of commodities to include vegetables (particularly, potatoes and onions), washing soap, livestock and poultry products was recommended by a Working Group set up to advise upon consumption plan. These commodities are important both from the point of view of nutrition and because their prices have shown a marked increase in 1973-74. However, both the factual knowledge about the availabilities of these commodities and the ability of the Government to influence their production is at the moment so limited that it is not possible to include these items in the plan.

8.10. The increases in availabilities of commodities included in the consumption Plan are presented in Table V.

TABLE V

Per Capita Availability

Items	Unit	1973-74 (Estimated)	1974-75 (Forecast)	% Growth 1974-75 / 1973-74
Wheat	ozs. per day	10.92	11.42	4.57
Rice	,,	2.36	2.76	16.94
Pulses	,,	0.77	0.80	3.89
Sugar Refined	lbs. p. a.	19.52	21.00	7.58
Sugar Raw	,,	41.55	40.62	(—) 2.24
Vegetable Ghee	,,	7.70	8.95	16.23
Cotton Cloth	yds. p. a.	13.32	15.00	12.61
Total				8.00

These availabilities have been determined from a combination of the income elasticity, the availability and nutritional approaches. Thus, the sharp increase in the availability of rice is a reflection of a high target for rice production some of which will be exported in the coming years. The increase provided in the case of vegetable ghee is largely based upon the income elasticity approach and designed to curtail the scarcity and shortages faced in 1973-74. The increase in the availability of pulses reflects a compromise between its importance from the nutritional stand point and the inability of the Government to have its production increased in the shortrun.

8.11. The availabilities projected for 1974-75 are higher in case of most of the commodities than the demand assessed on the income elasticity basis. This has been found possible by the following factors :

(*a*) Consupmtion level achieved during 1973-74 was suppressed because of abnormal situation created by the floods.

(*b*) It is expected that there will be more equitable distribution of income favouring the poor having higher income elasticity of demand.

(*c*) Increased supply is needed to ensure stability in prices and improvements in nutritional status.

The comparative statement of projected demand and supply during 1974-75 is given in table VI.

TABLE VI

Item	Unit	Demand Projected on Income Elasticity basis	Availability (Details at Annexures I—VI)	% Excess/ in the availability over demand
Wheat	000 tons (ozs. per day 1)	7,750 (11.06)	8,000 (11.42)	3.2
Rice	"	1,696 (2.42)	1,932 (2.76)	13.9
Pulses	"	551 (0.79)	564 (0.80)	2.3
Sugar	"	617 (0.88)	645 (0.92)	4.5
Vegetable Ghee	"	356 (0.51)	361 (0.52)	1.4
Cotton	Mln. yds. (yds p. a.)	955 (13.88)	1,032 (15.00)	8.0

Figures in parentheses indicate *per capita* availability.

By and large, these targets are feasible from the point of view of availability and should satisfy the demand that high income will generate and will make major contribution to reducing nutritional deficiencies. Commodity-wise discussion of the Consumption Plan is given in the following paragraphs :

Wheat

8.12. The *per capita* availability of wheat shown in annexure i depicts a decline in availability during 1973-74 but this is probably a misrepresentation of consumption trends. As has been mentioned earlier the comparison between 1972-73 and 1973-74 is affected by stocks in the private sector which were believed to be fairly large at the end of 1972-73. It is known that the Government had procured about 2 lakh tons of wheat from 1972-73 crop in 1973-74. If this adjustment is taken into account the *per capita* availability in 1973-74 was somewhat higher than in 1972-73. Also, the exact amount of losses due to the floods is not known. The actual distribution of wheat related to flood damage was slightly over 1 lakh tons. Assuming that the distribution did not fully cover the entire losses due to the floods, it is assumed in the annexure that total flood losses were 1.75 lakh tons.

8.13. The projections for 1974-75 allow for an increase of 1.9% in *per capita* consumption over the adjusted figure of 1973-74. This increase provides a margin over the estimated demand based upon an income elasticity of 0.3. The target also provides for maintenance for fairly high level of stocks, although this would depend upon the success of the procurement and the attainment of the import target.

8.14. Within this overall availability of wheat, it is adviseable to identify separately the Government operations. In 1973-74 Government off-takes amounted to 22.75 lakh tons of which roughly 1 lakh ton was related to compensation for flood losses. Allowing a 5% increase over the normal demand of 21.75 lakh tons in 1973-74, Government off-takes in 1974-75 are estimated to be 22.85 lakh tons. The Government has set up a procurement target of 22 lakh tons and is providing for 3.5 lakh tons of imports. In addition, it was carrying 2 lakh tons of stock on the 1st of May, 1974. Therefore, there is a considerable margin of flexibility in the meeting of the off-take demand.

Rice

8.15. The availability of rice during 1973-74 showed a signification improvement over the previous year. Even allowing for procurement for export amounting to 6.5 lakh tons which is about one lakh ton more than the actual export during the financial year *per capita* availability of rice is estimated to have gone up by 18%. This seems to indicate that considerable stocks will be left in the private sector. The production for next year provides for an additional increase in *per capita* availability by 17%. Once again this is very much higher than the income elasticities would lead one to expect besides providing a generous amount of 7 lakh tons for export of coarse and basmati rice.

Pulses

8.16. The information on the production and distribution of pulses is poor and the possibility of Government intervention in this regard remote. The available indications suggest that there was a substantial increase in the production of gram in 1972-73 (available for consumption during 1973-74) and only a nominal increase in case of other pulses. The production of gram is also reported to be substantially higher in 1973-74 (available in 1974-75) which should keep the prices reasonably stable. A significant increase in the production of other pulses has been provided relying upon the high prices to provide the production incentives and the availability of a high yeilding variety *moong*. If these targets materialise, the *per capita* availability of pulses would increase from 0.77 ounces to 0.80 ounces per day.

Sugar

8.17. The production of refined sugar during 1973-74 was estimated at 5.85 lakh tons showing a substantial increase over the production of 4.32 lakh tons in 1972-73. As a result, the economy was able to meet the rising requirements without resort to any import (compared to imports of 1.10 lakh tons in 1972-73). The average *per capita* availability of refined sugar increased from 17.3 to 19.5 lbs per annum.

8.18. The working Group on Consumption Plan recommended a production target of 6.40 lakh tons in 1974-75 which would increase the availability to 21 lbs per annum. This target is based upon the sugarcane production of 23.5 lakh tons and a constant use of sugarcane for raw sugar production. Thus the increase in the *per capita* consumption of sugar makes allowance for some substitution from raw to refined sugar consumption.

Vagetable Ghee

8.19. The availability of vegetable ghee is estimated to have increased from 7.24 lbs *per capita* per annum in 1972-73 to 7.70 lbs in 1973-74. There was also an increase in other oils including imported butter oil. However, the increase in the availability of ghee did not keep pace with the increase in demand resulting in shortages.

8.20. A substantial increase in the production of vegetable ghee is provided for next year which will raise the *per capita* availability from 7.70 to 8.95 lbs per annum. With this increase it should be possible to meet the normal increase in demand by consumers. However, production of this amount of vegetable ghee will critically depend upon both an increase in cotton production from 3.7 to 4.5 m. bales and imports of edible oils of 150 thousand tons.

Cotton Cloth

8.21. Owing to a slowdown in export of yarn and cloth and a very small amount of raw cotton export the availability of cotton textiles has significantly increased during 1973-74. Most of the developments on the export side took place in the later half of the 1973-74. Earlier in the year the world market prices of cotton yarn had risen steeply, increasing the cost of production of cloth in the country. This caused a sharp increase in the price of cloth during this period and although prices stabilized in the later half of the year, the price of cloth was substantially higher than in 1972-73.

8.22. The availability of cloth during 1974-75 is projected to show a significant increase if the cotton output target of 4.5 m. bales materializes and the capacity in the yarn sector is fully utilized. The mills will also be in a position to draw down their stocks accumulated during 1973-74.

Annexure I

AVAILABILITY OF WHEAT

(MAY—APRIL)

(000 tons)

	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
1. Opening Government Stocks	74	86	200
2. Local Production	6,782	7,325	8,500
3. Deduction for Seed and Wastage at @ 10%	678	9072	850
4. Net domestic Production (2-3)	6.104	6,393	7,650
5. Imports	1,464	1,134	350
6. Closing Government Stocks	86	200	200
7. Net total availability	7,556	7,438	8,000
8. Population (Mln.)	65.0	66.9	68.8
9. Per Capita availability (ozs. per day)	11.41 (11.11)[3]	10.92 (11.21)[3]	11.42

1 A period of one year has been taken as time lag between production and consumption.

2 Including estimated flood losses of 1.75 lakh tons.

3 In case private stocks of 2 lakh tons are carried over from 1972-73 into 1973-74.

AVAILABILITY OF RICE

(JULY—JUNE)

(000 tons)

	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
Production	2,288	2,405	2,800
Deduction for seed and wastage @ 6%	138	144	168
Procurement by the Government for exports	135	650	700
Exports by private traders/TCP	698	—	—
Net availability	1,317	1,611	1,932
Per capita availability ozs. per day	2.00	2.36	2.76

Annexure III

AVAILABILITY OF PULSES

(000 tons)

	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
Production			
Gram	502	544	575
Other Pulses	198	200	220
Gram @ 36% deduction for seed, feed and wastage	180	196	207
Other pulses @ 11% .. .. — — —	22	22	24
Net availability Total .. .. —	498	526	564
Per capita availability (Ozs. per day) Total	0.75	0.77	0.80

1 One year time lag between production and consumption.

Annexure IV

AVAILABILITY OF SUGAR

(NOV—OCT.)

(000 tons)

	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
I. Sugarcane			
Production	19,632	22,708	23,500
Deduction for seed feed and wastage @ 10%	1,963	2,271	2,350
Crushed by mill sector @ 8.5% sugar recovery	5,082	6,647	7,294
Available for raw sugar production	12,587	13,790	13,856
II. Refined Sugar			
Opening Stocks	10	48	50
Production	432	585	640
(From cane)	(432)	(565)	(620)
(From beet)	—	(20)	(20)
Imports	110	—	—
Total availability	552	633	690
Closing Stocks	48	50	45
Consumption	504	583	645
Average *per capita* availability lbs. p. a.	17.37	19.52	21.00
III. Raw Sugar			
Production @10% recovery	1,259	1,379	1,385
Deduction for animal feeding @10%	126	138	138
Net availability	1,133	1,241	1,247
Per capita availability lbs. p.a.	39.03	41.55	40.62

Annexure V

AVAILABILITY OF VEGETABLE GHEE AND OILS.

(JULY—JUNE)

(000 tons)

	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
Edible Oil			
1. Opening Stocks	15	24	30
2. Domestic Production	248	202	270
(i) From Cotton Seed	141	991	161
(ii) From Rape, Mustard	96	92	98
(iii) From groundnut and linseed	11	11	11
3. Imports	70	167	150
4. Total Availability	333	393	450
Uses			
1. Industrial use	23	38	45
2. Oil refined	25	33	36
3. Direct Consumption	40	50	50
4. Consumed in Vanaspati mfg.	221 (210)	242 (230)	289 (275)
5. Closing Stocks	24	30	30
6. Total uses	333	393	450
Availability			
1. Vanaspati	210	230	275
2. Refined Oil	25	33+152	36
3. Oil directly consumed	40	50	50
4. Total	275	328[2]	361
***Per Capita* Availability (lbs. p.a.)**			
1. Vanaspati	7.24	7.70	8.95
2. Total	9.48	10.98[2]	11.75

[1]Based on the view that only 80% Cotton has been ginned and 14% recovery rate due to flood damages.
[2]Including 15,000 tons of imported butter oil.

Annexure VI

AVAILABILITY OF COTTON CLOTH

	Unit	1972-73 Actual	1973-74 Estimated	1974-75 Forecast
Yarn				
Operating Mill Sector Capacity	(lac-spindles)	30.57	31.82	32.77
Mills Opening Stocks	(Mln. lbs.)	38	25	150
Yarn Production	,,	829	833	950
Consumption by Mill Sector	,,	198	198	212
Exports	,,	407	225	500
Required for Hosiery etc.	,,	70	90	100
Mills Closing Stocks	,,	25	150	50
Available for Non-Mill Cloth Producing Sector	,,	167	195	238
Cloth				
Operating Mill Sector Capacity	(000 looms)	27.00	27.00	27.50
Mills opening Stocks	(Mln. yds)	139	68	120
Production by Mill Sector	,,	704	703	750
Production by Non-Mill Sector @ 4 yds. per lb. of yarn ..	,,	668	780	952
Total Production	,,	1,372	1,483	1,702
Exports	,,	618	430	630
Required for Cotton bags	,,	50	110	110
Mills Closing Stocks	,,	68	120	50
Available for Domestic Consumption	,,	775	891	1,032
Per Capita availability	(Yds. p.a.)	11.92	13.32	15.00

PART II

PRODUCTION PROGRAMMES AND PHYSICAL INFRA-STRUCTURE

CHAPTER 9

AGRICULTURE

To promote the principal socio-economic objectives of the Government, agriculture has been accorded the highest priority in the Annual Plan for 1974-75. Progress towards self sufficiency in foodgrains on a permanent basis and an orientation of agricultural development towards meeting respectable dietary standards are among the main targets of the Plan. To this end, policy measures are recommended in the Plan for adequate supplies of key inputs like fertilizer and pesticides at reasonable prices and at the same time for ensuring an appropriate relationship between the prices of agricultural produce and necessary inputs through continuous review of support prices. Highest possible allocations have also been envisaged for sectors such as Water, Power and Transport which have a direct bearing on agricultural development. The impact of modern technology has so far been confined mainly to cultivation of a few crops in the irrigated areas. Orientation towards diversification in crop cultivation with particular emphasis on the barani areas as well as to increase production in sub-sectors such as animal husbandry, forestry and fisheries is a longer-term process. But the essential first step has been taken through large increases in the allocations for basic research to be carried out in this connection.

9.2. The ADP 1974-75 reflects the above strategy as it shows nearly 50 per cent increase in the allocation for programmes in support of various policies outlined above. Among its sub-sectors, allocations for animal husbandry and fisheries have been increased by 63 per cent and 151 per cent, respectively. Smilarly, manifold increases in allocations for foodgrain storage facilities in the public sector, for the Integrated Rural Development Programme and for basic research are being envisaged. In the case of fertilizer, the Government increased its price in April, 1974 with a view to sharing the burden of price increase which had been brought about by the international situation at least partially, with the farmers. The Plan target of fertilizer off-take has been fixed at 600 thousand nutrient tons as against the off-take of 404 thousand nutrient tons in 1973-74. As mentioned above the Government has recently announced increase in the sale prices of fertilizer. This increase was necessitated by a steep increase in world prices of chemical fertilizers. The Government attempted to moderate the impact of world price increase and has provided a sum of Rs. 325 million for fertilizer subsidy during 1974-75.

9.3. Increase in allocation for plant protection is as high as 141 percent in 1974-75 Plan compared with the preceding year. The area proposed to be covered by curative measures during 1974-75 both by the aerial and the ground operations is estimated to be 13.55 million spray acres (4.08 million spray acres by the aerial operations and 9.47 million spray acres by the ground operations) as against the estimated coverage of 6.39 million spray acres (3.08 million spray acres by the aerial operations and 3.31 million spray acres by the ground operations) during 1973-74.

9.4. The Government uses the price machanism as a means for accelerating farm production and income. The provision of support or guaranteed minimum prices of several crops has served as an incentive to increase area under these crops and to adopt better cultural practices and new technologies resulting in higher acre- yields and total production. The programme of support or guaranteed minimum prices is reviewed periodically to provide the necessary incentives for increased production.

9.5. The procurement price of wheat was raised from Rs. 17.00 per maund to Rs. 22.50 per maund for the 1972-73 crop and to Rs. 25.50 per maund for 1973-74 crop. It is expected that the procurement price of wheat for the 1974-75 crop will be announced well before its sowing time. Similarly, the procurement prices of different varieties of rice have been raised from time to time.

9.6. With a view to ensuring increased sugarcane supply to the mills, the prices of cane at the mill-gate have been increased from time to time.

9.7. The need for increasing cotton production can hardly be over-emphasized. After a careful study of the international cotton market and its implication on price of cotton in Pakistan, the Government estimates that the price of seed cotton (Phutti) for the next crop should be above Rs. 100 per maund for quality produce which will provide adequate return and incentive for the grower.

9.8. The Government foodgrain storages are required for operation of price support policy programmes, for price stablization, and for storing of commodities meant for export. The total foodgrain storage capacity available with the Government on June 30, 1974 was about 1,641 thousand tons.

During 1973-74, construction of a storage capacity of 15,000 tons was almost completed in the various provinces. Repairs of the flood-damaged storages were also undertaken in Punjab and Sind. In addition, minor works were completed at the Federal Government's storages at Pipri and Landhi.

In view of the increased requirements for storage, the Provincial Governments shall construct a storage capacity of 30,000 tons during 1974-75. The Federal Government will initiate a project for construction of a storage capacity of 620 thousand tons in Punjab and Sind during the year. Allocation of Rs. 60 million has been made for this purpose in the ADP for 1974-75.

With the completion of the construction programme envisaged during 1974-75, the total foodgrain storage capacity available with the Government would be about 1.89 million tons.

Financial Allocations

9.9. A sum of Rs. 997.90 million has been provided for the agriculture sector for 1974-75 against Rs. 608.10 million provided in 1973-74, showing an increase of about 64 per cent. The estimated utilization during 1973-74 is Rs. 639.20 million which has exceeded the allocation for the year by 5 per cent. The break-down of these allocations/utilizations for 1973-74 and allocation, for 1974-75 by executing agencies is given in Table I. The details are given in Appendices I—VI.

TABLE I.

ALLOCATION/UTILIZATION FOR 1973-74 *AND* 1974-75 *BY EXECUTING AGENCIES*

(Million Rupees)

Agency	1973-74 Allocation	1973-74 Utilization	1974-75 Allocation
Provincial Programmes			
Punjab	367.60	339.30	232.40
Sind	63.50	91.80	61.85
N.W.F.P.	68.90	67.20	76.25
Baluchistan	28.60	27.50	40.89
Sub-Total	528.60	525.80	411.39
Federal Programmes			
Agriculture Wing	48.50	87.00	494.56
Food Wing	2.00	2.00	61.00
Finance Division	12.50	2.50	2.50
Science and Technology Division	0.30	0.40	0.32
Kashmir Affairs Division	12.60	17.90	20.86
Federally Administered Tribal Areas	3.60	3.60	7.27
Sub-Total	79.50	113.40	586.51
Total	608.10	639.20	997.90

9.10. Physical achievements during 1973-74 and targets for 1974-75 in respect of various sub-sectors are discussed in the subsequent paragraphs.

CROP PRODUCTION

(*a*) *Major crops.*

9.11 Preliminary estimates show that inspite of heavy floods during 1973-74, the production of major crops, except for cotton, would be higher than achieved during 1972-73. It is now estimated that production target of wheat for 1973-74 would be realised but the sugarcane production might be slightly less than the

production target. The production of other crops *i.e.* cotton, rice, maize, etc. during 1973-74 is estimated to remain below the targeted production mainly on account of heavy floods, attack of insect pests,etc. It may be mentioned that the increased availability of soil moisture subsequent to floods and followed by the grow-more-wheat campaign launched by the Provincial Governments, enabled sowing of larger acreage of wheat. It is estimated that a record production of 8.5 million tons of wheat has been harvested during 1973-74. The crop production targets for 1974-75 alongwith the estimated production during 1972-73 and 1973-74 are presented in table II.

TABLE II

Production of Major Crops 1972-73, 1973-74 *and Targets for* 1974-75.

Crop	1972-73 Actual	1973-74 Target revised	1973-74 Likely achievement	1974-75 Target
		—Thousand tons—		
Wheat	7,325	8,500	8,500	8,500
Rice	2,293	2,600	2,405	2,800
Maize	695	830	755	840
Other foodgrains	703	700	700	820
Total Foodgrains	11,016	12,630	12,360	12,960
Sugarcane	19,632	23,000	22,708	23,500
Edible Oilseeds	1,717	1,660	1,656	1,952
Cotton seed	1,381	1,295	1,296	1,575
Rape and Mustard	282		300	310
Groundnut	44	} 365	40	55
Sesamum	10		10	12
		—Thousand bales—		
Cotton (Lint)	3,947	3,700	3,704	4,500

9.12. It may be seen that the total foodgrains production is expected to increase from 12,360 thousand tons in 1973-74 to 12,960 thousand tons in 1974-75. The sugarcane production is estimated to increase from 22,708 thousand tons in 1973-74 to 23,500 thousand tons in 1974-75, while cotton (lint) would increase from 3,704 thousand bales to 4,500 thousand bales and the oilseeds production would increase from 1,656 thousand tons to 1,952 thousand tons.

9.13. The detailed data regarding the targeted acreage, production and acre-yield of major crops during 1974-75 have been compared with the actual data for 1972-73 as the information for 1973-74, except for cotton, and maize is not yet available. The data given in Appendix VIII show that increased production of various crops would be achieved both through increase in acreage as well as in acre-yields. The acreage under the various crops during 1974-75 is expected to increase on account of higher cropping intensity because of availability of increase irrigation water due to higher rate of installation of tubewells and also larger purchase of tractors in private sector. Furthermore, some increase in acreage would also be possible due to shift in acreage from one crop to the other because of support prices announced by the Government. The increase in acre-yields during 1974-75 would result from the targeted input programmes described from paragraphs 9.21 to 9.27

9.14. It is expected that the dwarf wheat varieties would be grown over 70 per cent and 4 per cent of irrigated and the barani areas, respectively. This means that on an overall basis, about 54 percent of wheat acreage during 1974-75 would be under the dwarf wheat against 56 per cent and 57 per cent during 1972-73, and 1971-72, respectively. The likely fall in the dwarf wheat acreage during 1974-75 would possibly be due to the fact that the improved seed available with the farmers in the flood affected area had been lost and it would be difficult for the public agencies to meet the demand in full in these areas. It is further estimated that of the total additional quantity of 48 thousand nutrient tons of fertilizer expected to be used on wheat, nearly

95 per cent(82 per cent on dwarf and 13 per cent on local wheat varieties) would be used in the irrigated areas while the balance of 5 per cent would be applied to the barani dwarf wheats. The breakdown of the targeted production of wheat for 1974-75 by irrigated, unirrigated areas and by varieties are presented in Appendix IX.

9.15. The expected annual growth rate in the acre-yields during 1974-75 over 1972-73 and the actual rate of growth achieved during the period 1968-69 through 1972-73 are given in Table III.

TABLE III

Annual Growth Rate in Acre-yield of Major Crops, 1968-69, 1972-73 and 1974-75

CROP	Acre yield 1968-69 —(actual)—	Acre yield 1972-73 —(actual)—	Growth rate 1968-69 to 1972-73	Acre-yield 1974-75 (Targets)	Growth rate 1972-73 to 1974-75
	mds/acre		per cent	mds/acre	per cent
Wheat	11.6	13.5	3.8	14.9	5.1
Rice	14.2	17.1	4.8	19.0	5.4
Maize	11.0	11.9	2.0	13.8	7.7
Sugarcane	440.0	405.2	—	420.5	1.8
Rape and Mustard	5.6	5.8	0.9	6.2	3.4
Sesamum	3.2	3.8	4.4	3.7	—
Ground-nut	16.5	15.4	—	16.3	2.8
Cotton	3.3	3.8	3.6	4.1	3.8

It may be seen that the acre-yield of wheat would increase at an annual growth rate of 5.1 per cent during the period 1972-73 to 1974-75 as compared to 3.8 percent achieved during the period 1968-69 to 1972-73. Similarly, a growth rate of 5.4 per cent, 3.8 per cent, and 7.7 per cent in the acre-yields of rice, otton and maize is anticipated during 1972-73 to 1974-75, against 4.8, 3.6 and 2.0 per cent realised druring the period 1968-69 to 1972-73. The expected growth rates in the acre-yield of wheat, rice, sugarcane and cotton as shown in Table III appea to be feas ble while those of ma ze, rape and mu s ard, and groundnu seem to be somewhat optimistic. None he less, there seems to be a great scope for increasing acre-yields. Hence, it is suggested that the Provincial Governments may prepare suitable action plans to realise the targetted increase in the acre-yields of these crops.

(*b*) *Vegetables*

9.16. The Provincial Governments have been directed by the High Powered Agricultural Policy Committee to prepare action plans for augmenting vegetable production during 1974-75. Normally, mid-season vegetables are sown by the farmers which glut the market over a limited period and, therefore, the farmers receive very low prices. To over come this problem the Agriculture Departments hould also ensure supply of certified vegetable seeds of early and late season varieties, in addition to supply of only normal season seeds. The field staff may also be instructed to educate the farmers in sowing of early, mid and late season varie ies of vegetables instead of concentrating on only mid season (normal sowing) varieties. If adopted on a large scale, such steps would help assure regular supply of vegetables to the market. It would be desirable also to educate the farmers in the simple techniques of preserving vegetables through drying methods, etc.

(*c*) *Pulses*

9.17. The production of pulses, a very important source of vegetable protein, is almost static since 1965-66. Largely because of short supplies, the prices of pulses have been rising sharply. The main factors responsible for low production of pulses are poor yield potential of the var ties being grown by the farmers, poor quality seeds, and attack of pests and diseases. In the past, development funds were provided for research work on pulses, but no ignificant results have been reported. The Provincial Governments should give greater emphasis to increase their production through evolution of high yielding and pests and disease-resistant varieties of pulses.

(d) Oilseeds

9.18. Since the production of oilseeds in the country has remained inadequate, large quantities of vegetable oil had to be imported to meet the increasing demand of the vegetable ghee industry. Amongst the oilseeds, the main crop is cotton, which is grown mainly as a fibre crop and cotton seed is obtained as a by-product. Thus, by and large, cotton production is affected by demand for its fibre by the local textile industry and for export. Although the development programmes implemented so far for improvement of the crop have yielded significant results, yet more efforts are needed to improve the acre-yield, which is still amongst the lowest in the world. Next in order come the rape and mustard crops. The production of these crops has not significantly increased despite the implementation of many development programmes. The area under these crops is about 131 thousand acres and their production is estimated at 282 thousand tons. The average acre-yield comes to 5.7 mds, which is very low. The poor yield is due to the low yield potential of the varieties and their high susceptibility to insects and pests. To increase production of these crops, it is necessary that the agricultural research organizations evolve varieties which have high yield potential and are resistent to pests and diesases. The other oilseed crop is groundnut, which is concentrated mainly in the Rawalpindi Division. The main problems faced by the groundnut growers are lack of an assured market, shortage of labour at the harvest time, and attack of field rats, etc. It has been recommended many times that a goundnut oil extraction plant be established at a suitable place in the Rawalpindi Division. Despite its inclusion in the industrial schedule, no progress has been made towards the establishment of such a plant. Now when the vegetable ghee industry is in the Public Sector, it would seem that there should be no difficulty in establishing groundnut oil extraction plant in the area. As regards harvesting of groundnut, some useful work on mechanical harvesting (of the crop) has been done at the Directorate of Agricultural Engineering, Lyallpur, in evolving a mechanical digger. The groundnut farmers have not yet taken to this machine. It would be desirable that the Punjab Government concentrate on evolving a cheap machine for digging groundnut. Also, the Punjab Government may launch a campaign on systematic basis for control of field rates for the entire groundnut area in preference to adopting piecemeal/small scale measures.

9.19. The new oil crops *i. e.* sunflower, soyabean, etc. have not been adopted by the farmers on a large scale inspite of the fact that some efforts, especially for sunflower, have been made in this direction by vegetable ghee industries. The main problems in the large scale adoption of sunflower seem to be attack of birds, shattering of seed on maturity, lack of assured market at reasonable price, and difficulties in harvesting of the crop at the time of its maturity. The Provincial Governments may try to find solution to these problems so that the area under this crop could be expanded. It would be desirable to supply a single hybrid seed of sunflower to obtain maximum uniform maturity.

9.20. Soyabean crop is regarded more as a protein crop than an oil bearing crop. Preliminary agronomical experiments conducted in Sind, the Punjab and N. W. F. P. areas have given encouraging results, but its cultivation has not yet been taken up by the farmers on a large scale. Here again, the absence of an assured market, a reasonable price, its place in the existing cropping pattern, comparatively high water requirements compared to the kharif pulses and coarse grains restrict its cultivation on a larger scale. The Provincial Governments may evolve suitable varieties for general cultivation and may also provide an assured market. It is necessary that a complex industrial unit for oil extraction and for utilization of the protein content in the oil cakes be established at a suitable place in the country to encourage extension of the crop.

Fertilizer

9.21. A target of fertilizer off-take of 600 thousand nutrient tons has been fixed for 1974-75 against the actual off-take of 404 thousand nutrient tons during 1973-74. The province-wise break-down of the target is estimated to be as follows :—

(000' N/tons)

Punjab	402
Sind	135
N.W.F.P.	54
Baluchistan	9
Total ..	600

9.22. The estimates of crop-wise usage of fertilizer for the years 1972-73, 1973-74 and 1974-75 are shown in the table IV.

TABLE IV

Crop-wise Usage of Fertilizer during 1972-73, 1973-74 *and* 1974-75.

Crop	1972-73 (Actual)	1973-74 (Actual)	1974-75 (Targets)
	—thousand nutrient tons—		
Wheat	209	194	288
Rice	44	40	60
Maize	8	8	12
Cotton	70	65	96
Sugarcane	61	57	84
Others	44	40	60
Total ..	436	404	600

Note.—The above crop-wise breakdown has been based on the estimates shown in the report entitled " Fertilizer Consumption and Market Development in West Pakistan ", by ESSO Pakistan Fertilizer Company Limited (Undated).

9.23. On April 20, 1974 the Government announced increase in the sale prices of fertilizer as in TableV.

TABLE V

Sale Prices of Fertilizer before and after April 20, 1974.

Type of Fertilizer	Unit (in lbs)	Sale price (Rs.) before April 20, 1974	Sale price (Rs.) after April 20, 1974	Percentage increase
Urea	110	55.00	75.00	36
Ammonium Sulphate	112	25.00	34.00	36
Ammonium Nitrate	87.50	25.00	34.00	36
Ammonium Sulphate Nitrate	110	31.00	43.00	39
Dia Ammonium Phosphate	110	57.00	75.00	32
Nitrophos	110	55.00	65.00	18
Tripple Superphosphate	110	34.00	55.00	62
Single Superphosphate	112	15.00	22.00	47

9.24. The increase in fertilizer prices was necessitated by a steep increase in world prices of chemical fertilizers. The Government attempted to moderate the impact of world price increase and has provided a sum of Rs. 324.934 million for fertilizer subsidy during 1974-75. However, the increase in fertilizer price for the farmers by 36 per cent would affect fertilizer off-take, unless measures are taken to further improve the organization for the distribution of fertilizer and to provide larger volume of agricultural credits. The prices of agricultural output are being kept under continuous review to ensure profitability in relation to fertilizer prices and prices of other inputs.

Plant Protection.

9.25. The area proposed to be covered by curative measures during 1974-75 both by the aerial and the ground operations is estimated to be 13.55 million spray acres (4.08 million spray acres by the aerial operations and 9.47 million spray acres by the ground operations) as against the estimated coverage of 6.39 million spray acres (3.08 million spray acres by the aerial operations and 3.31 million spray acres by the ground operations) during 1973-74. The province-wise details of the area to be covered by the plant protection measures during 1974-75 are given in the Table VI.

TABLE VI

Province-wise Area to be covered with Plant Protection Measures during 1974-75.

Province	Aerial Operations	Ground Operations	Total
	—in million spray acres—		
Punjab	1.80	5.93	7.73
Sind	1.34	3.15	4.49
N.W.F.P.	0.76	0.30	1.06
Baluchistan	0.18	0.09	0.27
Total ..	4.08	9.47	13.55

9.26. The crope-wise break-down of the area covered during 1972-73, 1973-74 and the targets for 1974-75 is shown in Table VII.

TABLE VII

Crop-wise Coverage of Area by Aerial and Ground Operations during 1972-73 *through* 1974-75

(000 Spray acres)

Crop	1972-73 (Actual)			1973-74 (Estimated)			1974-75 (Targets)		
	Aerial Operation	Ground Operation	Total	Aerial Operation	Ground Operation	Total	Aerial Operation	Ground Operation	Total
Rice (Nursery)	—	70	70	—	90	90	—	100	100
Rice	702	150	852	1,514	394	1,908	1,820	1,746	3,566
Cotton	578	1,084	1,662	798	1,485	2,283	1,000	3,982	4,982
Sugarcane	695	195	890	638	286	924	800	967	1,7 67
Maize	—	89	89	—	132	132	100	448	548
Oil-seeds	—	21	21	22	9	31	190	524	714
Fruits and Vegetables ..	53	310	363	53	625	678	120	824	944
Tobacco	40	62	102	41	56	97	50	66	116
Others	—	196	196	17	237	254	—	811	811
Total ..	2,068	2,177	4,245	3,083	3,314	6,397	4,080	9,468	13,548

9.27. The achievement of the above targets for 1974-75 would be possible if the required quantities of pesticides become available in time, for which adequate funds will be needed and the arrangement would have to be made to procure the pesticides well ahead of time.

Distribution of Improved Seeds

9.28. The requirements for improved seeds for the various major crops during 1974-75 are estimated at about 2,965 thousand maunds (about 110 thousand tons), of which wheat seed would be 1,290 thousand maunds, rice 50 thousand maunds, maize 35 thousand maunds, cotton 1,300 thousand maunds and potato 290 thousand maunds. The bases for these estimates are shown in Table VIII.

TABLE VIII

Seed Requirements for 1974-75.

Crop	Estimated Area (000 acres)	Seed rate (seers/acre)	Total gross seed requirements (000 mds)	Seed renewal rate (%)	Total seed requirements after renewal (000 mds)	Percentage of farmers retaining their own seeds	Estimated total seed demand (000 mds)
Wheat	15,500	40	15,500	33	5,166	75	1,290
Rice	4,000	8	800	25	200	75	50
Maize	1,660	10	415	33	138	75	35
Cotton	5,200	10	1,300	100	1,300	—	1,300
Potato	58	600 (15 maunds)	870	33	290	—	290
Total			18,885		7,094		2,965

For estimating the requirements of seed for wheat, maize and potato, it is assumed that farmers renew their seeds, on an average, about once in three years. It is further assumed that about 75% of farmers retain their seeds of wheat, rice and maize produced on their own farms. The total cotton seed required has to be replaced every year to maintain the quality and yield characteristics.

9.29. The target for improved seed distribution for 1974-75, is placed at about 1,189 thousand maunds as against the estimated requirement of 2,965 thousand maunds indicated above. Seed distribution in 1973-74 is estimated at 731 thousand maunds against the actual achievements of 533 thousand maunds in 1972-73. The implementation of the proposed programme on improved seed distribution during 1974-75 would meet about 40 per cent of the total seed requirements. This implies that the rest of the seed requirement would be met either from the crop produced by the farmers at their own farms or from other farmers or from the market. It is feared that the uncertified seed obtained from these sources would result in lowering the national acre-yields. The province-wise quantities of seed distributed during 1972-73, the expected achievements during 1973-74 and the targets for 1974-75 are shown in Table IX.

TABLE IX

Province-wise Improved Seed Distribution Programme during 1972-73, 1973-74 and Targets for 1974-75.

(Thousand maunds)

	1972-73 (Actual)	1973-74 (Target)	1973-74 (Expected Achievement)	1974-75 (Target)
Punjab				
Wheat	236	482	270	600
Rice	23	30	50	50
Maize	7	25	7	20
Cotton	139	150	120	450
Others	3	12	20	40
Sub-total	408	699	467	860

The Punjab Government have prepared a project report for supply of the required quantities of pesticides become available in time. For which adequate funds will be made to procure the pesticides well ahead of time.

N.W.F.P.				
Wheat	40	73	50	60
Rice	1	2	—	—
Maize	12	10	—	20
Gram	39	15	—	5
Cotton	—	1	—	—
Potato	6	3	—	6
Sub-total ..	57	133	74	92
Sind				
Wheat	23	70	65	90
Cotton	17	78	60	80
Rice	8	20	15	20
Potato	—	3	2	2
Sub-total ..	48	171	142	192
Baluchistan				
Wheat	20	—	68	45
Sub-total ..	20	—	68	45
Total ..	533	1,003	751	1,189

9.30 The acreage under high yielding varieties of wheat and rice has been increasing gradually. The area under dwarf wheat varieties has increased from 7.73 million acres (52 per cent of the total area) in 1970-71 to 8.25 million acres (56 per cent) in 1972-73. According to the wheat production data for the years 1970-71 to 1972-73, the dwarf varieties yielded on an overall basis, about 10 maunds per acre higher than the other varieties. Similarly, the area under the rice varieties has increased from 1.36 million acres (37 per cent of the total) in 1970-71 to 1.80 million acres (50 per cent) in 1971-72. A decrease of about 6 per cent in area under the rice was reported in 1972-73 over 1971-72.

9.31 The use of seeds of high yielding varieties of wheat and rice which were introduced in the middle of the Third Plan period has continued at an accelerated rate. This acceleration has been achieved mainly by use of improved seeds multiplied by the farmers themselves. The quantities of improved seed distributed by the Government declined after achieving a peak of 1,524 thousand maunds in 1967-68 to 762 thousand maunds in 1969-70. The distribution of improved seeds during 1972-73 and 1973-74 has been roughly estimated at 533 thousand maunds and 751 thousand maunds, respectively. The main reasons for the distribution of less quantities were that the seeds of certain crops could not be procured in reasonable quantities and there was lack of confidence among the farmers in the quality of seeds supplied by the Government agencies.

9.32 The Government of Pakistan invited an FAO/IBRD Mission to study and recommend measures to establish a modern seed industry in the country. The Mission visited Pakistan in March/April 1973, and submitted its report in November, 1973. The Mission has proposed that the private sector may be involved in the procurement, processing, storage and marketing, annually, of about 70,000 tons (1925 thousand maunds) of seeds of different crops ; of which 18,000 tons will be cotton seed. The total cost of the project has been estimated at Rs. 261 million with the foreign exchange component of Rs. 180 million. The overall coordination, policy formulation, planning and legislation is proposed to be entrusted to the Ministry of Agriculture while the Provincial Governments are to be made responsible for breeding and multiplication of nucleus seeds. The report of the seed mission was discussed by the High Powered Agricultural Committee in April, 1974. It was decided, *inter alia*, that the project should be undertaken by the public sector and that it should be implemented by the Federal Ministry of Agriculture by using the facilities available with the Provincial Governments, viz., Agricultural Supplies Organisations, Seeds Production Farms etc. The matter was again discussed by the HPAC in July, 1974, and it was decided that the Provincial Governments should implement the programme while the Ministry of Agriculture should coordinate the activities with regard to seed legislation etc.

Price Support Policy

9.33 Great reliance has been placed by the Government on price mechanism for increasing farm production and income. The provision of support or guaranteed minimum prices of several crops has served as

an incentive to increase area under these crops and to adopt better farm practices and new technologies resulting in higher acre-yields and total production. The support or guaranteed minimum prices are revised periodically to maintain the necessary incentives for increased production.

9.34 The procurement price of wheat was raised from Rs. 17.00 per maund to Rs. 22.50 per maund for the 1972-73 crop and to Rs. 25.50 per maund for 1973-74 crop. It is expected that the procurement price of wheat for the 1974-75 crop will be announced well before its sowing time. Similarly, the procurement prices of different varieties of rice have been raised from time to time as indicated in Table X.

TABLE X

Procurement Prices of Various Varieties of Rice, 1971-72 *to* 1974-75

(Rs. per maund)

year	Basmati	Permal/Begmi	Kangni	Joshi	Irri Varieties
1971-72	38.00	20.00	19.00	19.50	19.00 to 21.00
1972-73	46.00	21.00	20.00	20.50	19.00 to 21.25
1973-74	62.00	27.00	26.00	26.00	25.00 to 27.00
1974-75	90.00	40.00	39.00	39.00	38.00 to 40.00

9.35 With a view to ensuring increased sugarcane supply to the mills, the prices of cane at the mill-gate have been increased from time to time as shown in table XI.

TABLE XI

Minimum Guaranteed Prices of Sugarcane, 1971-72 *to* 1974-75.

(Rs. per maund)

Date/Year	N.W.F.P.	Punjab	Sind
1971-72	2.25	2.50	2.65
1972-73 :			
(*i*) Sowing time	2.50	2.75	3.00
(*ii*) October, 1972	3.10	3.35	3.50
(*iii*) December, 1972	4.00	4.25	4.40
1973-74	4.00	4.25	4.40
1974-75	4.50	4.75	4.90

9.36 Cotton is not only our most important foreign exchange earner but it is also needed to feed local textile industry. Its production, therefore, needs to be increased. The Government has made a study of the long term trends of the international cotton market. The international economic situation has decisive impact on world cotton prices as well as cotton price in Pakistan. The international situation is uncertain. However, the Government estimates that the price of seed cotton *Phuti* for the next crop should be above Rs. 100 per maund for quality produce which will provide adequate return and incentive for the grower. Policies in future will be formulated with a view to ensuring this price for growers. The Government hopes that the cotton grower will concentrate his efforts to produce this fibre so vital to the economy of Pakistan.

Mechanization

9.37 Under the mechanization programme, it is envisaged that the existing fleet of heavy earth moving machinery available with the Provincial Agriculture Departments would be strengthened through purchase of

new bulldozers. It is envisaged to develop 217 thousand acres during 1974-75 against 165 thousand acres developed during 1973-74. The Province-wise breakdown of the area to be developed during 1973-74 and 1974-75 is shown below :

Province	Area to be developed	
	1973-74 Estimated	1974-75 Targeted
	—000 acres—	
Punjab	75	75
Sind	68	70
N.W.F.P.	10	26
Baluchistan	12	46
Total ..	165	217

Furthermore, facilities in the form of boring rigs, pumps and equipment for wells/tubewells installation would be further expanded. To provide relief to the *barani* farmers along the riverain areas in the Punjab, lift irrigation would be provided to bring 800 acres under flow irrigation.

Soil Conservation and Watershed Management

(a) *Soil conservation*

9.38. Work on stabilization of sand dunes at Pasni and Gwadar in Baluchistan was continued during the year 1973-74 and 160 acres were covered during the year. It is proposed to cover another 7,080 acres during 1974-75. In addition, 29,500 acres were covered with soil conseravation measures which consisted of construstion of check dams/velocity breakers, contour ridges percolation trenches, dug outs and digging of test wells during 1973-74. It is proposed to cover another 20,000 acres during 1974-75 with similar measures.

9.39. In NWFP, the work on soil and water conservation in Haripur *Tehsil* of Hazara district was continued and an area of 12,260 acres was covered with various soil conservation measures during 1973-74. This work would be continued and 9,470 acres are proposed to be covered during 1974-75. The soil conservation programme will also be extended to other areas of the Province during the year.

9.40. Soil and water conservation work in Azad Kashmir was continued during the year 1973-74. This work would be stepped up during 1974-75.

(b) *Watershed Management*

9.41. Watershed Management Project for Kaghan and Daur area of NWFP was continued during the year 1973-74. This project would be merged with a bigger project for watershed management and forest extension in Hazara and Kohat districts to be launched during 1974-75. It is proposed to afforest an area of 5,000 acres under this project during the year.

9.42. In Azad Kashmir, about 4,000 acres of privately owned land was covered with various soil conservation and watershed management measures in the Chenab Basin during 1973-74. It is propsosed to cover further another 4,000 acres during 1974-75. In addition, a Watershed Management Project, in cooperation with FAO under world Food Programme, is also proposed to be launched during the year.

9.43. In pursuance of decision of the High Powered Agricultural Committee, a sub-committee of experts has been charged to study in depth the problems of soil conservation and watershed management in the country. The sub-committee would assess the actual achievements under the various programmes in these fields launched since the commencement of the planned development of the country, go into the casuses of slow progress of work in these fields in the past and would suggest programme of action for the coming years. The report of the sub-committee would be available early in 1974-75 and some useful spade work is expected to be done during the year.

Animal Husbandry

9.44. With a view to arresting soaring prices of meat and milk, special attention is being given to increase the output of livestock products. Longterm measures such as improvement of breeds for milk, meat and wool production will be continued on the exisiting state farms, new farms will be set up in the public and private sectors. In addition, quality bulls and rams and expanded facilities for artificial insemination will be provided to the private sector. Due attention will also be given to such measures as may increase production in the short run. These measures include improvement and expansion of facilities for prevention and control of diseases; opening of new veterinary hospitals, dispensaries and setting up of diagnostic laboratories at strategic places.

9.45. Feasibility of export of eggs and poultry meat during the summer months will be considered with a view to creating incentive for larger production by the poultry producers. For the benefit of the poultry producers in the rural areas hatching eggs and cockerels will be distributed at subsidised rates in preference to distribution of poultry feeds at subsidized rates.

9.46. The details of the programmes of the Animal Husbandry sub-sector for the various provinces are discussed below :

(a) *Milk, meat, wool production*

9.47. A comprehensive programme for large scale production of milk, meat, poultry, butter, by -products and forage was taken up in 1973-74 in the Punjab. Under this programme, improvement of breeds for milk, meat and wool production was continued on the existing state farms and 5 new farms were opened in the public sector. The Annual Plan for 1974-75 provides for improvement of the existing livestock farms and opening of 6 new commercial farms in the public sector. In addition, artificial insemination coverage will be provided to about 100 thousand cows/she-buffaloes during 1974-75 against the estimated insemination of about 25 thousand cases during 1973-74.

9.48. Rs. 1.00 million will be spent in Punjab to salvage and fatten male buffalo calves which do not get proper care at farmers doors. In addition, for improving the lot of milk producers of far flung areas and for increasing milk supplies in the urban areas, collection, chilling and processing of milk from the untapped pockets will be streamlined.

9.49. The cows and buffaloes in Karachi are brought for milk production from upper Sind and the Punjab. After they dry, most of these cattle are sold to the butchers by the milkmen. Under a scheme for conservation of superior dry buffaloes, loan advances to private breeders of the upcountry for purchase of buffaloes from the Landhi Cattle/buffalo colony were arranged during 1973-74. About 80 buffaloes have been saved by June 30, 1974 against the target of 166 for the year.

9.50. The Annual Plan for 1974-75 provides a block allocation of Rs. 3.00 million for opening of 3 new livestockfarms in the various districts of Sind. Artificial insemination work will also be revitalised in Sind to provide improved breeding facilities.

9.51. In Baluchistan, the existing sheep breeding and research station of Loralai district will be improved further during 1974-75 to produce more meat and finer wool producing strains. The work on improvement of Bhagnari cattle in Sibi and Kachhi districts, started during 1973-74, will be continued and a beef production centre will be started at Sibi during 1974-75. A lamb fattening and marketing scheme proposed late in 1973-74 will be continued during 1974-75. In addition, scheme for provision of breeding bulls at veterinary hospitals in all the districts included in the revised budget estimates for 1973-74 will also be continued during 1974-75.

9.52. In order to increase production potential of milk, meat and wool in the N.W.F.P., the breeding facilities will be continued during 1974-75. About 50 breeding bulls will be purchased while another 220 will be maintained on subsidy during 1974-75 against 50 bulls purchased and 165 maintained during 1973-74. Similarly, about 200 rams will be purchased and distributed for improved breeding during 1974-75, agains the estimated purchase of 200 rams during 1973-74. In addition, artificial insemination techniques will also be introduced for improved breeding during 1974-75.

(b) *Poultry Production*

9.53 To increase supply of more hatching eggs and breeding birds to private breeders, the existing Government poultry farms and demonstration units in the Punjab were further developed during 1973-74. The scheme for increased broiler production in the punjab also contributed towards increasing production of broilers and layers. The Annuaul Plan for 1974-75 proposes to establish 2 layer and 2 broiler farms each at Lahore and Rawalpindi. The production targets for layers, breeding stock and broilers for 1974-75 in the Punjab are 1.10 million, 0.15 million and 2.50 million birds, respectively, against the production of about 1.00 million layers, 0.14 million breeding stock and 2.25 million broilers during 1973-74.

9.54. The production of broilers and layers in Sind during 1974-75 are estimated at about 3.50 million and 1.50 million respectively against the estimated production of 2.79 million broilers and 1.00 million layers during 1973-74.

9.55. In Baluchistan, the existing poultry farm at Quetta will be improved to at least double the maitenance capacity for layers and to increase production of quality eggs and chicks. The work initiated during 1973-74 on the scheme for expanded poultry farms at Zhob, Loralai, Sibi, Chagai, Mekran and Khuzdar districts would be continued during 1974-75. In addition, work for the establishment of a poultry farm at Kalat and a poultry complex under the Bulgarian Credit, will be started during 1974-75 at Uthal in the Lasbela district.

9.56. About 1.01 million eggs and 0.06 million chicks and birds will be produced at the Government farms in N.W.F.P. during 1974-75, against the estimated production of 0.90 million eggs and 0.02 million chicks and birds during 1973-74. Furthermore, a new programme for production of broilers will be initiated in the province during 1974-75.

(c) *Animal Health (disease control)*

9.57. Proper emphasis on disease control will continue to be placed on measures to increase production in the short run. During 1974-75, about 40.00 million doses of sera and vaccine will be produced in the Punjab against 60.00 million doses during 1973-74. The production of sera and vaccine during 1973-74 had to be accelerated due to increased demand caused by the flood. The targets for vaccination and treatment of animals during 1974-75 in the Punjab are 20.00 million and 8.00 million respectively. The estimated figures of vaccination and treatment of animals in Punjab for 1973-74 is 18.00 million and 4.00 million, respectively. In order to ensure quality progeny, the field staff will castrate about 1.00 million during 1974-75, against about 0.80 million scrub bulls, rams etc., during 1973-74.

9.58. The existing veterinary hospitals and dispensaries in Sind will be provided with improved facilities for prevention of livestock and poultry from epidemics and for cure of diseases.

9.59. In Baluchistan, production of sera and vaccines will be initiated in 1974-75 for prevention of livestock and poultry epidemics . The existing facilities for treatment of animals and poultry diseases will be further improved by constructing 7 new veterinary hospitals during 1974-75.

9.60. In order to conserve the existing livestock population of the N. W. F. P., through prevention and control of diseases work on expansion and improvement of the Veterinary Research Institute, Peshawar, taken up during 1972-73 will be continued during 1974-75. Production of sera and vaccines will be increased at the Institute for the purpose. In addition, facilities for treatment of animals and birds will be improved by opening new veterinary dispensaries/centres, providing new buildings for the existing and new veterinary dispensaries and centres and also by providing sufficient medicines etc.

(d)*Milk Schemes*

9.61. The Karachi Milk Supply scheme was started in 1960-61. Up to June 30, 1974, a sum of about Rs. 10.35 million has been utilized on this project, against the approved cost of Rs. 6.651 million. For various reasons, the project has been able to achieve less than 50 per cent of the physical target, as the plant has produced, on an average about 25,000 lbs of toned milk per day against the target of 55,000 lbs of toned milk per day, and will continue its production during 1974-75.

9.62. The Islamabad Milk Plant proposes to utilise the milk produced at the Islamabad Dairy Farm as well as milk purchased from the private dairy farmers. The plant proposes to produce 52,000 maunds of standardised milk during 1974-75 for use of the local consumers.

(e) *Education*

9.63. In N.W.F.P., funds have been provided for award of 26 scholarships including 3 scholarships for post graduate course in Animal Husbandry/Veterinary Science, during 1974-75, against 23 scholarships (including one for post graduate course) provided during 1973-74.

Range Management

9.64. Range management work in the Thal and Cholistan areas of the Punjab, consisting of development and maintenance of *tobas* and wells, collection and sowing of grass seeds, demarcation of boundary and fixing of boundary pillars and construction and maintenance of range trails was continued during 1973-74. Two new water ponds would be constructed in Cholistan to provide drinking water for the livestock in addition to maintaining the existing water ponds. Besides, 1600 acres of area will be ploughed and sown with 600 maunds of grass seed. Range management work in the Potwar area would also be initiated for which a feasibility report was expected to be completed by June, 1974.

9.65. In N.W.F.P., range management work over 50,000 acres in Kohat District was continued and 11,460 acres were covered with various range management practices during 1973-74. These works will be stepped up during 1974-75 and 21,904 acres are proposed to be covered during the year. In addition, range management-cum-afforestation of the resumed land in the province would be initiated during the year and 2,000 acres brought under afforestation.

9.66. Range management works consisting of : (i) installation of one tube-well, (ii) collection of 450 maunds of grass seed and 2,000 maunds of hay seed, (iii) construction of 50 miles of range trails, (iv) construction of 8 water ponds and raising of grass nursery were carried out during 1973-74 in Sind. It is proposed to cover an area of 92,000 acres with various range management practices consisting of (i) construction of 10 miles, of range trails (ii) construction of 10 water ponds, (iii) installation of one wind mill, (iv) reseeding of 2,000 acres, (v) collection of 150 maunds of grass seed and 2,000 maunds of hay seed, (vi) raising of grass nursery over 40 acres, (vii) construction of 50 miles of range trails and special repairs of 7 buildings, during 1974-75.

9.67. A new project for survey of range resources and development of range land covering an area of 100,000 acres would be launched in Baluchistan during 1973-74. The work will consist of (i) range resources survey and classification of range lands in accordance with their potential capacity, (ii) improvement of range vegetation through water spreading (construction of earthen dykes and water spreading bunds), (iii) water and soil conservation measures, (iv) raising of supplemental feed on favourable sites within the project areas, (v) stock water development and (vi) provision of disease cover to the local livestock.

9.68. In Azad Kashmir, an area of 2,000 acres is expected to be covered with range management practices in the Neelam Valley during 1973-74. It is proposed to cover an additional area of 2,000 acres during 1974-75.

Forestry

9.69. Out of the total land area of about 198.6 million acres the forest land constitutes only about 7.2 million acres or about 3.6 per cent. Furthermore only 4.7 million acres or 2.4 per cent of the total land area has been classed as commercial or productive forests. The bulk of the forest area is state owned, except some communally owned forests called ' Guzara '.

9.70. The production of industrial-wood and fuelwood from the Government forests during the last five years averaged 11.3 million cft. and 19.4 million cft. per annum, respectively, as detailed below in Table XII.

TABLE XII

Industrial and Fuelwood Production 1968-69 *to* 1972-73.

(Million cft)

Year	Quantities extracted		Total
	Industrial-wood	Fuel-wood	
1968-69	8.7	13.6	22.3
1969-70	9.3	21.4	30.7
1970-71	10.4	20.0	30.4
1971-72	12.8	24.0	36.8
1972-73	15.5	18.0	33.5
Average per annum	11.3	19.4	31.1

9.71. The demand for industrial-wood and fuelwood for 1970-71 was estimated at 20 million cft. and 425 million cft., respectively. Even after allowing for the unrecorded fuel wood production from private lands and use of various substitutes for fuel purpose, the total deficit for fuelwood is likely to remain very high.

9.72. It has been estimated that with an increase of 50,000 acres per year in the future afforestation programmes, the forest area will not increase by even about 0.025 per cent per year. In other words, it will require 100 years to raise the present meagre forest area by another 2.5 per cent and even then it will remain much below the desirable level.

9.73. It is, therefore, necessary that every effort should be made to preserve the existing forest wealth of the country. The situation, in this regard is, however, not very encouraging. On the one hand, our natural forests are rather poorly stocked which give four to five cft. of timber per acre, compared to 40 to 50 cft. obtained in the developed countries. This is largely due to low stocking of our natural stands and their inadequate utilization due to constraints of poor communications etc. On the other hand, our hill forests have suffered very serious damage through the neglect and poor management. The magnitude of the damage has recenltly acquired alarming proportion on account of scarcity of wood and their high prices. The situation has been aggrevated by increased illicit cutting from the forests of N. W. F. P. The situation is even worse in the Federally Administered Tribal Areas, where some forests have been completely destroyed. To make the situation still worse, the regeneration efforts have yielded very poor results and if the present situation continues, a time may come when many of our forest hills would be without trees.

9.74. The estimates of the forest area cut-over and that regenerated during the Fourth Plan period are shown in the Table XIII.

TABLE XIII

Forest area Cut-over and Regenerated during 1970-71 to 1974-75

Year	Area cut-over		Area Regenerated		Area regenerated as percentage of the cut-over Area	
	Compact Area 000 acres	Linear Plantation Miles	Compact Area 000 acres	Linear plantation Miles	Compact Area	Linear Plantation
Actuals						
1970-71	74.3	196	78.2	—	105	—
Punjab	14.2	51	8.1	—	57	—
Sind	15.2	145	65.3	—	430	—
NWFP	44.9	—	4.8	—	11	—
1971-72	73.2	348	75.3	150	106	43
Punjab	9.8	266	6.8	150	69	64
Sind	17.8	82	65.9	—	370	—
NWFP	45.6	—	2.6	—	6	—
1972-73	64.4	225	68.4	146	106	65
Punjab	10.6	225	6.8	146	64	56
Sind	18.6	—	56.2	—	302	—
NWFP	35.2	—	5.4	—	15	—
Estimates						
1973-74	64.4	206	80.3	—	125	—
Punjab	11.4	206	5.8	—	51	—
Sind	21.0	—	71.0	—	338	—
NWFP	32.0	—	3.5	—	11	—
1974-75	66.5	—	85.9	—	129	—
Punjab	12.0	—	8.0	—	67	—
Sind	19.2	—	74.3	—	387	—
NWFP	35.3	—	36	—	10	—
Total for 5 years	342.8	975	388.1	296	113	30
Punjab	58.0	748	35.5	296	61	30
Sind	91.8	227	332.7	—	361	—
NWFP	193.0	—	19.9	—	10	—
Average per annum	68.6	195	77.6	59	113	30
Punjab	11.6	150	7.1	59	61	39
Sind	18.4	45	66.5	—	361	—
NWFP	38.6	—	4.0	—	10	—

N.B. No regular cutting and regeneration of Government forests is reported to having been done in Baluchistan.

9.75. It may be seen from table XIII that, on an average, the annual area regenerated has exceeded by 13 per cent the area cut-over during the period 1970-71 to 1974-75. However, the picture does not reflect the true state of affairs, as the area regenerated in N.W.F.P. has been only about 10 per cent of the area cut-over in the province during Fourth Plan period. Similarly, in the Punjab also there is a shortfall of about 39 per cent in the case of compact area and about 61 per cent in case of the linear plantations. Against such a situation in N.W.F.P. and the Punjab, the area regenerated in Sind on an overall annual average, exceeds the area cut-over by about 261 per cent. It needs to be pointed out that regeneration of the cut-over areas in Sind presents no problem as it involves mostly the riverain areas for which mostly the *babul* seed is collected and broadcast. It is the regeneration of the cut-over area of coniferous forests in N.W.F.P. and the Punjab which is problematic and has lagged considerably behind in relation to the cut-over area. Urgent and effective measures need to be taken to regenerate the coniferous cut-over area in N.W.F.P. and the Punjab so that its regeneration at least matches the harvesting in terms of area.

9.76. The Inter-Provincial meeting held in April 1974 considered a summary entitled " Measures for the conservation of forests, planting of trees and development of rang lands" and made *inter-alia*, the following policy decisions :—

(*i*) "The main problem is that of resource constraint. The Provincial Governments are finding it increasingly difficult to finance their ongoing projects and in view of other compulsions, it has not been possible for them to give the priority that the forest activity warrants. The provincial governments may be asked to allocate more resources for these works of great national importance and utility. In order to supplement the resource position, the Federal Government may set apart a sum of Rs. 50 million in 1974-75 for such schemes as the Federal Government may indicate or approve but which are executed by each provincial government. This will demonstrate in unmistakable terms the earnestness of the Federal Government in promoting these programmes.

(*ii*) Since the contractor system has not only outlived its utility but has become an instrument of destruction and corruption, it should be abolished forthwith. In future, forests should be exploited by the Forest Department till corporations are set up by each Province to exploit these forests in a scientific manner."

Implementation of these decisions, in particular, and various other decisions taken on the summary in the inter-Provincial meeting, in general, will go a long way to improve the position with respect to regeneration of the cut-over hilly areas in N.W.F.P. and the Punjab.

9.77. In view of the wide gap between the demand and supply of forest products, the Government has laid special emphasis on measures for increasing area under forests. A Forestry Committee was constituted in January, 1972, and its recommendations were forwarded to the provinces for implementation. The President/Prime Minister in his directives on the subject in 1973 observed, *inter-alia*, that efforts should be made to plant trees along the roads and canals, on village waste lands and in and around public buildings during 1973. It was further directed that massive efforts should be made to complete this work and the provincial governments should also do every thing possible to make this campaign successful. The matter was also discussed in the Governors' Conference and necessary policy directives were approved for the guidance of the **Provinces.**

9.78. Campaigns for mass scale growing of trees have been launched in all the provinces. Efforts are also being made to utilize the services of various public and private organizations to make this compaign a success. In Baluchistan, a pilot project for raising plantation with salt water was initiated during 1973-74 and about 500 acres were afforested during the year. If this pilot phase is completed successfully, it will lead to large-scale afforestation in the coastal areas of Baluchsitan and Sind. The emphasis during 1973-74 has been on raising compact plantation on Government waste land and linear planting along canal-sides, road-sides, rail road-sides, water courses and streams. In addition, introduction of various exotic species of commercial importance, provision of irrigated water with the help of tube-wells and introduction of farm forestry was given added emphasis during the year. These emphasis on afforestation and regeneration with introduction of suitable exotic species will be continued during 1974-75. The expected achievements for the year 1973-74 and the targets proposed for 1974-75 are shown in table XIV.

TABLE XIV

Province-wise Achievements and Targets of Afforestation 1973-74 *and* 1974-75.

Name of the Province	Compact Plantation		Linear Plantation	
	Estimated achievements 1973-74	Targets 1974-75	Estimated achievements 1973-74	Targets 1974-75
	—000 acres—		—Avenue miles—	
Baluchistan	0.46	0.48	48	62
Sind	4.90	4.00	8	11
NWFP	6.96	11.14	144	285
Punjab	1.68	1.79	2154	3000
Total ..	11.00	17.41	2354	3358

9.79. In addition, an aerial survey of the riverain forests growing along the Indus in Sind Province wasr initiated during 1973-74. The objective of this survey is to prepare a plan for aerial broadcasting of forest tree seed during the forthcoming rainy season. It is proposed to construct temporary landing strips and seed stores at vaious places near forest areas. It is expected that 40,000 acres of blank forest areas would be regenerated with new forests during 1974-75. In Azad Kashmir, 12,000 acres of forests blanks were reforested during the year 1973-74 and another area of 12,000 acres is expected to be reforested druing 1974-75.

9.80. The grow-more-tree campaign was continued during 1973-74. This campaign is proposed to be stepped up during 1974-75. The estimated achievement for 1973-74 and target for 1974-75 in respect of planting of new trees are given below :

Province	Estimated achievement during 1973-74	Target for 1974-75
	—million number of plants—	
Punjab	15.50	13.50
Sind	5.30	6.00
NWFP	2.40	2.60
Baluchistan	0.07	0.10

9.81. To improve communications for proper management of the forest areas, 9 miles and 6 miles of new forest roads were constructed in the Punjab and N.W.F.P. respectively, during 1973-74. This work would be stepped up during 1974-75 and about 20 miles and 16 miles of new forest roads would be constructed, respectively, during the year.

9.82. With the raising of more trees the emphasis should be on looking after the growing stock. This area is proposed to be given added attention during the next year. Stringent measures also need to be taken to protect the existing forest wealth of the country. The question of eliminating the rights of private people in the Government forests and provision of alternate sources of livli-hood to them needs immediate attention. If this is not possible, possibilities of supplying liquified petroleum gas for cooking needs and CT sheets at subsidized rates for roofing to hill people may be examined to dissuade them from cutting trees for cooking and for roofing purposes. In addition, the question of establishing large scale commercial plantations for production of soft wood with suitable incentives and subsidies by the Government to meet the needs of paper and pulp, plywood and chipboard and packing material industries should be considered to provide alternate sources of employment for the people.

Fisheries

9.83. Protein deficiency in our diet is a serious problem. In view of the high prices of meat and poultry efforts need to be made to increase fish production from the inland and marine waters.

9.84. The total fish production from the marine and inland waters was estimated at 214 thousand metric tons which was expected to increase to 224 thousand metric tons in 1974. The development programmes in the fisheries sub-sector aim at increasing fish production and providing modern marketing facilities. During 1973-74, repairs and restoration of fisheries installations, damaged by the floods during August-September 1973, were undertaken in the Punjab and Sind provinces.

9.85. In Sind, the programme for development of inland fisheries is being intensified during 1974-75. The programmes of fisheries research and of fish production in village ponds, dams, reservoirs, lakes and roadside depressions will be continued during 1974-75 in the Punjab. Besides, fisheries training centres for fisheries personnel and for mass motivation of public for fish production will be initiated. Riverine fisheries will also be developed for promoting sport fishing while fish culture will be developed in lakes and in some water-logged areas of the Punjab.

9.86. In N.W.F.P., the programme of development of trout in Kaghan, Swat, Dir and Chitral will be continued during 1974-75. The programme of fish production in lakes, dams and reservoirs will also be continued. A fish demonstration farm will be started in the Province and the propagation of commercial ornamental fisheries at Warsak will also be taken up during the year.

9.87. In Baluchistan, work on the establishment of Gwadar fish harbour will be continued druing 1974-75. Also, work on construction of landing jetties at Pasni and Soamiani will be continued alongwith the project for the manufacture of salt at Pasni. Work on the construction of fish marketing halls at Pasni and Jiwani, which was started in 1973-74, will be continued. The Federal Government will continue the work on construction of research vessels for exploratory fishing and oceanographic research in the off-shore waters.

Agricutural Extension

9.88. The extension organization of the Agriculture Departments in the provinces were strengthened through the appointment of new staff and imparting in-service training during 1973-74. This will be pursued further during 1974-75.

9.89. In Sind, a new programme for precision land levelling will be launched in 1974-75. It is hoped that the successful completion of this programme will enable the farmers to conserve scarce water supplies and, thereby bring more areas under crops or to apply more intensive irrigation to the already cropped areas.

9.90. In the Punjab, the water management project and the project for precision land levelling in the project areas of IRDP will be continued during 1974-75. A new project for investigations in the Soan River area will also be started during the year.

9.91. In Baluchistan, residential and office accommodation will be provided to the staff of the Agriculture Department at Usta and Uthal. Construction of stores for Agriculture Departments in Quetta will also be taken in hand during 1974-75.

Research on crop production

9.92. Research on improvement of crops such as wheat, rice, maize, millets oilseeds, gram, pulses, potatoes, and fruits continued during 1973-74 and will be strengthened further during 1974-75. A Cotton Research Institute at Nawabshah will be established during the current financial year. Work on the establishment of Arid Zone Research Institute was initiated last year and construction of buildings for the Institute will be started during 1974-75. Research work on special crops *i.e.* Tea, Jute, started during 1973-74 will be continued during 1974-75.

9.93. The work which has been started on the production of various oilseeds and pulses in some of the provinces needs to be vigorously pursued. What is needed in this regard is the evolution of high yielding varieties, resistant to pests and diseases. Varieties of such new crops as Soyabean are needed which can easily fit in the cropping patterns in the various provinces.

9.94. In order to enhance agricultural research capabilities, the Agricultural Research Council has been re-organised. Under the new charter and the re-organized set up, the Council, contemplates to develop national cooperative research programmes for major commodities like wheat, rice, sugarcane etc. Emphasis will also be placed on improvement of dry and *forage* grasses and legumes for livestock feeds. The Council

will strengthen research capabilities of the provincial institutions by supplying funds, equipment and imparting training to the staff. The Agricultural Research Council's project for this purpose has recently been approved and an agreement for foreign asssistance has been signed for it.

9.95. At present, there is no coordination of research work being done in the provincial institutions. This, however, is necessary and it is hoped that the Agricultural Research Council will be able to evolve some mechanism for coordination of agricultural research.

Agricultural Education

9.96. Education facilities were expanded in 1973-74 at the university of Agriculture, Lyallpur while facilities were provided for the establishment of a faculty of Animal Husbandry at the Agricultural College, Tandojam. Facilities were also provided for the diploma course for the Agricultural Field Assistants at the Agricultural Training Institute, Sakrand. Scholarships were awarded to the students from the Malakand and Peshawar Divisions for studies and training in agriculture. Also, in-service training was given to Field Assistants and the staff of the Agriculture Departments.

9.97. As many as 342 students were admitted to the first year of the degree course of the University of Agriculture, Lyallpur during 1973-74. It is proposed to admit 400 more students for the same course during 1974-75. Results of various examinations of the University of Agriculture, Lyallpur in 1973-74 are shown in Table XV.

TABLE XV

Number of Students who Appeared and Passed in various Examinations of University of Agriculture, Lyallpur 1973-74.

Nos.

Class	Appeared in 1973-74	Passed in 1973-74
F. Sc. (Final)	324	225
B. Sc. (Hons) Agri. (Final)	177	165
B. Sc. Agri. Eng. (Final)	26	25
D.V.M. (Final)	30	30
B. Sc. (Hons) in Agri. Education and Extension	22	22
M. Sc. & M. Sc. (Hons) all fields of Agriculture	192	192

9.98. It is proposed to further expand the education facilities at the University of Agriculture, Lyallpur while the Agricultural College at Tandojam will be raised to University level during 1974-75. In-service training of Agricultural Field Assistants at the Agricultural Training Institute, Sakrand will be continued.

9.99. In N.W.F.P., scholarships will be awarded to the deserving students from Dir, Swat and Chitral at various institutions for agicultural courses. Additional scholarships will be awarded to the students from Peshawar Region for studies in agriculture. The diploma course in Food Technology will be continued at Peshawar during 1974-75.

Agricultural Statistics

9.100. The field enumeration operations started in 1972 for the Second Census of Agriculture have since been completed and the data are being processed and tabulated. The final census reports are expected to be available by December, 1974. In addition, the Ministry of Food and Agriculture will start work on the National Livestock Census from July, 1974. Field operations for this Census will be undertaken during 1975 with the help of the staff of the Provincial Departments of Animal Husbandry.

9.101. In N.W.F.P. the programme relating to preparation of production estimates of wheat, sugarcane and maize by crop cutting techniques would be strengthened by employing additional staff in 1974-75.

Agricultural Marketing

9.102. The Government set up the Pakistan Agricultural Storage and Services Corporation Ltd. in May, 1973 with a paid up capital of Rs. 30 million for purchase of agricultural produce from the growers largely to eliminate the middle-man. The Corporation procured a small quantity of wheat last year and a larger quantity of wheat is expected to be procured during 1974-75.

9.103. The Agricultural Marketing Adviser, Ministry of Food and Agriculture prepared grading and marking rules for bones and fish meal during 1973-74. During 1974-75, buildings would be constructed to house the fruit grading plants being installed at Peshawar for mechanical grading and polishing of fruits meant for export. Grading of fish and preserved items of food involving micro-biological tests and market surveys for certain agricultural products will continue.

9.104. The Punjab Government will establish fruit grading plants for mango and citrus during 1974-75.

9.105. The prices of vegetables increased sharply during 1973. A study on marketing of vegetables will hence be conducted by the Board of Economic Enquiry, Peshawar for N.W.F.P. and Baluchistan, and by the Board of Economic Enquiry, Lahore for the Punjab. A similar study for Sind has also been proposed. These studies are to find out the faults in the vegetable marketing and to suggest remedial measures.

9.106. The prices of pulses also increased sharply last year mainly due to short supply. A price support programme intended to raise their production level may be desirable.

Government Foodgrain Staorge

9.107. The total foodgrain storage capacity available with the Government on June 30, 1974 was about 1,641 thousand tons. The agency-wise break-down of this capacity is shown in Table XVI.

TABLE XVI

Government Foodgrain Storage Capacity Available on June 30, 1974.

Government/Agency	Capacity (tons)
Punjab	546,785*
Sind	235,620
NWFP	86,000
Baluchistan	57,600
Total (Provinces)	926,005
Federal Government	715,000
Total (All Pakistan)	1,641,005

9.108. Construction of storage for 15,000 tons of foodgrain was almost completed in the various provinces during 1973-74. Repairs of the flood-damaged storages were also under-taken in the Punjab and Sind. n addition, minor works were compieted at the Federal Government's storages at Pipri and Landhi.

9.109. In view of the increased requirements for storage, the Procinxial Governmentswill construct an additional storage capacity of 30,000 tons during 1974-75. The Federal Government will initiate a project

*includes 18,785 ton capactiy owned by the Cooperative Banks and the Market Committees but hired by the Government.

for construction of storage for 620 thousand tons in the Punjab and Sind during the year. An allocation of Rs. 60 milion has been made for this purpose in the ADP 1974-75. The break-down of the capacity to be constructed during 1974-75 will be as follows :—

		Capacity 000 tons
Punjab		100
Sind		29
Federal Government		95
Landhi/Pipri	50	
Islamabad	30	
Defence	15	
Total		224

With the completion of the construction programme envisaged during 1974-75, the total foodgrain storage capacity available with the Government would be about 1.89 million tons.

Rural Credit and Cooperatives

9.110. In view of substantial increases in the prices of agricultural inputs, it is necessary to expand the agricultural credit programme considerably. The Government, therefore, launched a vigorous programme of agricultural credit during 1973-74. The details regarding disbursements of loans to farmers through various institutional credit agencies during 1972-73 and 1973-74 and those to be disbursed during 1974-75 are given in the Table XVII.

TABLE XVII

Loan Disbursed/Proposed to be Disbursed to Farmers Through Various Institutional Credit Agencies from 1972-73 *to* 1974-75.

Year	Credit advanced/to be advanced by				Total
	ADBP	Agri. Coop.	Taccavi	Commercial Banks	
	—million rupees—				
1972-73	169.094	64.715	10.860	85.200	329.869
1973-74 (a)	380.000	161.733	16.155	300.000	857.888
1974-75 (b)	600.000	165.265	12.621	Not available	

9.111. Table 17 shows that the programme of disbursement of agricultural credit made a good start. It is necessary not only to sustain this programme but also to accelerate it during the coming years.

9.112. Of Rs. 380 million disbursed by the Agricultural Development Bank of Pakistan during 1973-74, Rs. 171.1 million were for seasonal inputs, Rs. 95.0 million for tractors and implements, Rs. 26.60 million for tubewells, Rs. 22.80 million for marine fisheries and Rs. 64.5 million were for others (dairy, poultry and draught animals). The total number of branches of the Bank as on March, 1974 stood at 166 against 118 on June 30, 1973. The Agri. Development Bank proposed to open 40 additional branches during 1974-75.

(a) Estimates.
(b) Targets.

9.113. Construction of two workshops/godowns for farm service centres and 40 godowns for storage of agricultural inputs by farm service societies at union council/village level was envisaged during 1973-74 in the Punjab. Against this target, construction of only he workshops was completed during the year 1973-74. Four more workshops for farm service centres are envisaged for 1974-75. Work on the scheme called " Poultry Farming on Cooperative basis in Murree Hills " started during 1973-74, will be further consolidated during 1974-75. It is expected that two thousand birds will be maintained at this farm duringthe year.

9.114. Under the scheme " Reconstruction of Rural Credit and Agricultural Marketing in N.W.F.P.," 8 Cooperative Farm Service Societies and 2 Farm Service Centres will be organised during 1974-75. In addition, 15 godowns/offices will be constructed by the Societies/Centres during the same period. Under another scheme 25 tubewells and 23 centrifugal pumps will be installed during 1974-75.

Consolidation of Agricultural Holdings

9.115. A programme of land consolidation was initiated in the Punjab and N.W.F.P. in 1960-61 and upto 1972-73 about 14.4 million acres were consolidated. During 1973-74, about 0.5 million acres of small holdings were consolidated in N. W.F.P. and the Punjab. About 0.5 million more acres of small holdings are expected to be consolidated during 1974-75 in the two provinces.

Integrated Rural Development Programme

9.116. Under this programme, about 117 markazes have been established in the four provinces and in Azad Kashmir. Almost all the agricultural inputs are being provided through these markazes. About 60 markazes are proposed to be established during 1974-75, where all the departments concerned with the rural development *e.g.* Agriculture, Animal Husbandry, Fisheries, Cooperatives, ADBP etc., will start functioning in a coordinated manner. Emphasis will be placed on provision of electricity, postal and communication facilities in the project areas. Establishment of agro-based and agro-allied industries at Markaz level will be encouraged. A province-wise breakdown of the Markazes is given in Table XVIII.

TABLE XVIII

Number of Markazes Opened/to be Opened

	Opened upto 1973-74	To be opened during 1974-75	Total
Punjab	38	—	38
Sind	30	30	60
NWFP	30	30	60
Baluchistan	14	—	14
Azad Kashmir	5	5	10
Total ..	117	65	182

Food and Nutrition Planning

9.117. Nutrition survey conducted by the Directorate of Nutrition Survey and Research, Government of Pakistan in 1965-66 and also the work done in the Planning Commission indicated the seriousness of our nutritional problems. Planning Commission has already initiated work on food and nutrition planning. A Nutrition Syndicate within the Planning Commission has been created to study and assess the nutrition problem in all its ramification and a Nutrition Cell/Unit is being created for providing documentation work to the Nutrition Syndicate.

9.118. The Planning Commission recently sponsored a two year project on Nutrition Planning and Research at an estimated cost of Rs. 3.7 million. The project envisaged study and analysis of all the existing data, arranging of nutrition surveys and feasibility studies, appraisal of the existing nutrition system and key sub-systems and evaluation of the on-going nutrition programmes. Findings of the proposed surveys and studies will enable us to relate nutrition deficiency patterns to regional, ecological, socio-economic and demograghic charachteristics of the population and will also provide basic information for the guidance of social policies and for the identification of relevant short and long term measures for specific population groups.

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—ALL PAKISTAN

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP allocation	Utilization	On-going	New	Total
I. Crop Production Sub-sectors					
1. Fertilizers	249.60	278.40	324.97	—	324.97
2. Plant Protection	106.00	138.80	254.64	0.38	255.02
3. Improved Seeds	5.10	6.20	7.76	0.60	8.36
4. Mechanization	71.40	54.50 (d)	19.72	15.76	35.48 (e)
5. Soil Surveys	2.90	3.00	2.85	2.50	5.35
6. Soil Conservation & Watershed Management	3.10	3.80	3.79	2.27	6.06
II. Other Sub-sectors					
7. Animal Husbandry	32.00 (a-i, ii)	33.10	34.77	17.31	52.08 (f)
8. Range Management	5.40	1.20	2.38	1.12	3.50
9. Forestry	24.50	19.60	25.95	6.67	32.62
10. Fisheries	10.10 (a-i)	12.80	19.61	5.73	25.34
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extension	2.50	5.50	3.64	1.99	5.63
12. Research on Crop Production	10.80 (a-i)	13.60	50.39	1.51	51.90
13. Agricultural Education	9.30 (b)	9.40	10.61	2.52	13.13 (g)
14. Agricultural Economics and Statistics	2.70	2.70	0.61	0.10	0.71
15. Agricultural Marketing	1.60	0.60	0.80	1.20	2.00
16. Government Food-grain Storage	8.20	9.30	19.69	62.25	81.94
17. Cooperatives	4.60	4.20	4.59	0.31	4.90 (h)
18. Consolidation of Agri. Holdings	5.80	5.90	6.30	—	6.30
19. Integrated Rural Development Programme	23.80 (c)	12.60	48.83	—	48.83 (h)
20. Contribution to share capital of ADBP	12.50	2.50	2.50	—	2.50
21. Special Projects	—	—	—	3.15	3.15
Total (Agriculture & Food programme)	591.90	617.70	844.40	125.37	969.77
Kashmir Affairs Division	12.60	17.90	N.A.	N.A.	20.86*
Federally Admn. Tribal Areas	3.60	3.60	N.A.	N.A.	7.27*
GRAND TOTAL	608.10	639.20	N.A.	N.A.	997.90

(*a-i*) The Sind Government has suggested an allocation of Rs. 4.70 million for animal husbandry, fisheries and research on crop production.

(*a-ii*) This includes an allocation of Rs. 0.32 million for the schemes pertaining to College of Animal Husbandry, Lahore

(*b*) This includes an allocation of Rs. 7.70 million made for the schemes pertaining to West Pakistan Agricultural University, Layallpur provided under Education Sector.

(*c*) This includes an allocation of Rs. 2.10 million for I.R.D.P. shown under the Rural Development Sector in N.W.F.P.

(*d*) This excludes a programme of Rs. 15.10 million of subsidy on sinking of Diesel Tubewells in the Punjab province as this has been transferred to Water Resources Sector.

(*e*) This does not include Rs. 15.000 million allocated for subsidy on sinking of diesel tubewell programme in the Punjab shown under Mechanization sub-sector in the Punjab Government A.D.P. 1974-75, as this programme has been transferred to the Water Resources Sector.

(*f*) This includes Rs. 0.230 million allocated for the Animals Husbandry Schemes of the Agricultural University, Lyallpur and College of Animal Husbandry, Lahore shown under the Education Sector in the Punjab A.D.P. 1974-75.

(*g*) This includes Rs. 2.400 million allocated for upgrading of the Sind Agricultural College, Tandojam to University level shown under the Education Sector in the Sind Government A.D.P., 1974-75.

(*h*) These include allocations for schemes of the Cooperatives and IRDP sub-sectors shown under the Urban and Rural Development Sector in the N.W.F.P. Government's A.D.P. 1974-75.

*The sub-sectoral details are not yet available.

Appendix II

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—ALL PROVINCIAL PROGRAMMES

(million rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Production Sub-sectors					
1. Fertilizers	249.60	278.40	0.04	—	0.04
2. Plant Protection	66.60	68.00	125.46	0.18	125.64
3. Improved Seed	5.10	6.20	7.76	0.60	8.36
4. Mechanization	71.40	54.50 (d)	19.66	15.76	35.42 (e)
5. Soil Surveys	1.50	1.60	1.85	2.50	4.35
6. Soil Conservation & Watershed Management ..	3.10	3.80	3.79	2.27	6.06
II. Other Sub-sectots					
7. Animal Husbandry	29.50 (a-i, ii)	24.50	31.71	17.31	49.02 (f)
8. Range Management	5.40	1.20	2.38	1.12	3.50
9. Forestry	24.50	19.60	25.95	6.67	32.62
10. Fisheries	7.10 (a-i)	10.30	15.86	5.73	21.59
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extenstion	2.50	5.50	3.64	1.99	5.63
12. Research on Crop Production	9.50 (a-i)	12.70	19.59	1.01	20.60
13. Agricultural Education	9.30 (b)	9.40	10.61	2.52 (c)	13.13(g)
14. Agricultural Economics and Statistics ..	0.10	0.10	0.11	—	0.11
15. Agricultural Marketing	1.00	—	—	1.20	1.20
16. Government Foodgrain Storage	6.20	7.30	18.69	2.25	20.94
17. Cooperatives	4.60	4.20	4.59	0.31	4.90 (h)
18. Consolidation of Agricultural Holdings ..	5.80	5.90	6.30	—	6.30
19. Integrated Rural Development Programme ..	23.80 (c)	12.60	48.83	—	48.83 (h)
20. Special Projects	—	—	—	3.15	3.15
TOTAL ..	528.60	525.80	346.82	64.57	411.39

(*a-i*) The Sind Government has suggested an allocation of Rs. 4.70 million for animal husbandry, fisheries and research on crop production.

(*a-ii*) This includes an allocation of Rs. 0.32 million for the schemes pertaining to College of Animal Hushandry, Lahore.

(*b*) This includes an allocation of Rs. 7.70 million made for the schemes pertaining to West Pakistan Agricultural University, Lyallpur provided under Education Sector.

(*c*) This includes an allocation of Rs. 2.10 million for I.R.D.P. shown under the Rural Development Sector in N.W.F.P.

(*d*) This excludes a programme of Rs. 15.00 million of subsidy on sinking of Diesel Tubewells in the Punjab province as this has been transferred to Water Resources Sector.

(*e*) This does not include Rs. 15.000 million allocated for subsidy on sinking of diesel tubewell programme in the Punjab shown under the Mechanization Sub-sector in the Punjab Government's A.D.P. 1974-75 as this programme has been transferred to the Water Resources Sector.

(*f*) This includes Rs. 0.230 million allocated for the Animal Husbandry schemes of the Agri. University. Lyallpur and College of Animal Husbandry, Lahore, shown under the Education Sector in the Punjab A.D.P. 1974-75.

(*g*) This includes Rs. 2.400 million allocated for upgrading of Sind Agr. College, Tandojam to University level shown under the Education Sector in the Sind A.D.P. 1974-75.

(*h*) These include allocations for schemes of the Cooperatives and IRDP sub-sectors shown under the Urban and Rural Development Sector in the N.W.F.P. Government's A.D.P. 1974-75.

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—BALUCHISTAN

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Producion Sub-sectors					
1. Fertilizers	—	1.10	—	—	—
2. Plant Prntection	1.50	1.60	1.17	0.18	1.35
3. Improved Seed	0.50	0.60	2.00	0.60	2.60
4. Mechanization	3.00	3.00	—	5.00	5.00
5. Soil Surveys	—	—	—	—	—
6. Soil Conservation and Watershed Management ..	0.50	2.10	1.66	0.45	2.11
II. Other Sub-sectors					
7. Animal Husbandry	5.10	3.80	4.37	3.24	7.61
8. Range Management	4.00	—	—	0.50	0.50
9. Forestry	3.40	1.50	1.52	0.09	1.61
10. Fisheries	5.00	8.10	13.10	—	13.10
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extention	0.50	1.00	0.41	1.17	1.58
12. Research on Crop Production	1.80	2.40	1.37	0.76	2.13
13. Agricultural Education	—	—	—	—	—
14. Agricultural Economics and Statistics	—	—	—	—	—
15. Agricultural Marketing	1.00	—	—	—	—
16. Government Foodgrain Storage	0.30	0.30	—	1.80	1.80
17. Cooperatives	—	—	—	—	—
18. Consolidation of Agricultural Holdings ..	—	—	—	—	—
19. Integrated Rural Development Programme ..	2.00	2.00	1.50	—	1.50
TOTAL ..	28.60	27.50	27.10	13.79	40.89

Appendix IV

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—SIND

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Production Sub-sector					
1. Fertilizer	17.30	45.00	—	—	—
2. Plant Protection	9.00	9.10	10.55	—	10.55
3. Improved Seed	—	—	—	—	—
4. Mechanization	12.40	23.00	5.00	5.00	10.00
5. Soil Surveys	0.50	0.60	0.77	—	0.77
6. Soil Conservation and Watershed Management ..	—	—	—	—	—
II. Other Sub-sectors					
7. Animal Husbandry	4.70(a)	1.60	1.84	3.50	5.34
8. Range Management	0.50	0.30	1.31	—	1.31
9. Forestry	4.80	3.00	4.67	0.42	5.09
10. Fisheries	(a)	0.10	—	0.05	0.05
III. Infra Structure & Institutional Arrangements					
11. Agricultural Extension	—	—	—	0.40	0.40
12. Research on Crop Production	(a)	2.10	4.54	0.10	4.64
13. Agricultural Education	1.30	1.40	0.20	2.40(b)	2.60(b)
14. Agri. Economics & Statistics	—	—	—	—	—
15. Agricultural Marketing	—	—	—	—	—
16. Government Foodgrain Storage	0.40	1.50	2.85	0.10	2.95
17. Cooperative	—	—	—	—	—
18. Consolidation of Agricultural Holdings	—	—	—	—	—
19. Integrated Rural Development Programme ...	12.60	4.10	15.00	—	15.00
20. Special Projects	—	—	—	3.15	3.15
Total ..	63.50	91.80	46.73	15.12	61.85

(b) This includes Rs. 2.40 million allocated for upgrading of the Sind Agricultural College, Tandojam, to University level shown under the Education Sector in the Sind Govt., ADP, 1974-75.

(a) The Sind Government has suggested an allocation of Rs. 4.70 million for animal husbandry, fisheries and research on crop production.

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—PUNJAB

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Production Sub-sectors					
1. Fertilizers	200.00	200.00	—	—	—
2. Plant Protection	52.70	53.00	104.49	—	104.49
3. Improved Seed	3.00	4.30	4.71	—	4.71
4. Mechanization	50.10	24.90 (c)	10.50	5.76	16.26(d)
5. Soil Surveys	0.50	0.50	0.54	2.50	3.04
6. Soil Conservation and Watershed Management ..	—	—	—	0.82	0.82
II. Other Sub-sectors					
7. Animal Husbandry	16.70 (a)	16.00	20.96	9.27	30.23(e)
8. Range Management	0.80	0.80	1.00	0.12	1.12
9. Forestry	8.60	6.80	8.24	4.81	13.05
10. Fisheries	2.00	2.00	2.68	5.32	8.00
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extension	1.00	1.80	1.41	0.42	1.83
12. Research on Crop Production	4.70	4.80	7.63	0.15	7.78
13. Agricultural Education	7.70 (b)	7.70	10.05	0.12	10.17(f)
14. Agricultural Economics and Statistics	—	—	—	—	—
15. Agricultural Marketing	—	—	—	1.20	1.20
16. Government Foodgrain Storage	5.00	5.00	15.00	—	15.00
17. Cooperatives	2.50	2.10	2.99	0.31	3.30
18. Consolidation of Agricultural Holdings ..	5.20	5.20	5.70	—	5.70
19. Integrated Rural Development Programme ..	7.10	4.40	5.70	—	5.70
Total ..	367.60	339.30	201.60	30.80	232.40

(a) A sum of Rs. 0.32 million included under Education Sector.

(b) Included under Education Sector.

(c) This excludes a Programme of Rs. 15.00 million of subsidy on sinking of diesel tubewells in the Punjab Province as this has been transferred to Water Resources Sector.

(d) This does not include Rs. 15.00 million allocated for subsidy on sinking of diesel tubewells programme shown under the Mechanization Sub-sector in the Punjab Government's ADP, 1974-75, as this programme has been transferred to the Water Resources Sector.

(e) This includes Rs. 0.230 million for the Animal Husbandry Schemes of Agricultural University, Lyallpur and College of Animal Husbandry, Lahore, shown under the Education Sector in the Punjab Government's ADP, 1974-75.

(f) This provision relates to Agricultural Education Sub-Sector Schemes shown under the Education Sector in the Punjab Government's ADP, 1974-75.

Appendix VI

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY—N.W.F.P.

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Production Sub-Sectors					
1. Fertilizers	32.30	32.30	0.04	—	0.04
2. Plant Protection	5.40	4.30	9.25	—	9.25
3. Improved Seed	1.60	1.30	1.05	—	1.05
4. Mechanization	5.90	3.60	4.16	—	4.16
5. Soil Surveys	0.50	0.50	0.54	—	0.54
6. Soil Conservation and Watershed Management ..	2.60	1.70	2.13	1.00	3.13
II. Other Sub-sectors					
7. Animal Husbandry	3.00	3.10	4.54	1.30	5.84
8. Range Management	0.10	0.10	0.07	0.50	0.57
9. Forestry	7.70	8.30	11.52	1.35	12.87
10. Fisheries	0.10	0.10	0.08	0.36	0.44
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extension	1.00	2.70	1.82	—	1.82
12. Research on Crop Production	3.00	3.40	6.05	—	6.05
13. Agricultural Education	0.30	0.30	0.36	—	0.36
14. Agricultural Economics and Statistics	0.10	0.10	0.11	—	0.11
15. Agricultural Marketing	—	—	—	—	—
16. Government Foodgrain Storage	0.50	0.50	0.84	0.35	1.19
17. Cooperatives	2.10	2.10	1.60	—	1.60(b)
18. Consolidation of Agricultural Holdings	0.60	0.70	0.60	—	0.60
19. Integrated Rural Development Programme ..	2.10(a)	2.10	26.63	—	26.63(b)
Total ...	68.90	67.20	71.39	4.86	76.25

(a) This includes an allocation of Rs. 2.10 million for Integrated Rural Development Programme which are shown under the Rural Development Sector by the Province.

(b) These include allocations for schemes of the Cooperatives and IRDP Sub-Sectors shown under the Urban and Rural Development Sector of the NWFP'S ADP, 1974-75.

ANNUAL DEVELOPMENT PROGRAMME, 1974-75, AGRICULTURE

SUMMARY— FEDERAL PROGRAMMES

(Million Rupees)

Sub-sector/Category	1973-74		1974-75		
	ADP Allocation	Utilization	On-going	New	Total
I. Crop Production Sub-Sectors					
1. Fertilizer	—	—	324.93	—	324.93
2. Plant Protection	37.40	70.80	129.18	0.20	129.38
3. Improved Seed	—	—	—	—	—
4. Mechanization	—	—	0.06	—	0.06
5. Soil Surveys	1.40	1.40	1.00	—	1.00
6. Soil Conservation and Watershed Management ..	—	—	—	—	—
II. Other Sub-Sectors					
7. Animal Husbandry	2.50	8.60	3.06	—	3.06
8. Range Management	—	—	—	—	—
9. Forestry	—	—	—	—	—
10. Fisheries	3.00	2.50	3.75	—	3.75
III. Infra Structure and Institutional Arrangements					
11. Agricultural Extension	—	—	—	—	—
12. Research on Crop Production	1.30	0.90	30.80	0.50	31.30
13. Agricultural Education	—	—	—	—	—
14. Agricultural Economics and Statistics	2.60	2.60	0.50	0.10	0.60
15. Agricultural Marketing	0.60	0.60	0.80	—	0.80
16. Government Foodgrain Storage	2.00	2.00	1.00	60.00	61.00
17. Contribution to share capital of ADBP	12.50	2.50	2.50	—	2.50
Sub totals: Agriculture & Food Division	63.30(a)	91.90	497.58	60.80	558.38
Kashmir Affairs Division	12.60	17.90	N.A.	N.A.	20.86(b)
Federally Administered Tribal Areas	3.60	3.60	N.A.	N.A.	7.27(b)
GRAND TOTAL	79.50	113.40	N.A.	N.A.	586.51

(a) This includes an allocation of Rs. 0.15 million for the scheme entitled National Natural Histo-Museum. Islamabad which relates to the Education Sector.

(b) The sub-sectoral details are not yet available.

AREA, PRODUCTION AND ACRE-YIELD OF MAJOR AGRICULTURAL CO PPS DURING 1972-73 ACTUAL AND 1974-75 (TARGETS)

Crop	1972-73 (Actual)			1974-75 (Target)		
	Area	Production	Acre-yield	Area	Production	Acre-yield
	000 acres	000 tons	mds/acre	000 acres	000 tons	mds/acre
Wheat	14754	7325	13.5	15,500	8,500	14.9
Rice	3656	2293	17.1	4,000	2,800	19.0
Maize	1594	695	11.9	1,660	840	13.8
Other foodgrains	3153	703	6.1	3,320	820	6.7
Sugarcane	1318	19632	405.2	1,520	23,500	420.5
Oil seeds						
Seed cotton	4967	1381	7.6	5,200	1,575	8.2
Rape & Mustard	1319	282	5.8	1,356	310	6.2
Groundnut	77	44	15.4	92	55	16.3
Sesamum	73	10	3.8	85	12	3.7
		–000 bales–			–000 bales–	
Cotton (Lint)	4967	3947	3.8	5,200	4,500	4.1

ESTIMATED ACREAGE, PRODUCTION AND ACRE-YIELD OF LOCAL AND DWARF WHEAT VARIETIES DURING 1974-75

Item	Unit	Irrigated			Unirrigated			Total		
		Local varieties	Dwarf varieties	Total varieties	Local varieties	Dwarf varieties	Total varieties	Local varieties	Dwarf varieties	Total varieties
Acreage	000 acres	3500	8170	11670	3675	155	3830	7175	8325	15500
Acre-yield	–mds –	11.1	19.2	16.8	5.0	6.3	5.0	8.0	19.0	13.9
Production (Base)	000 tons	1425	5775	7200	675	35	710	2100	5810	7910
Inputs										
I. *Fertilizer.*—Additional Quantity of Fertilizer usage	000 N/tons	6	40	46	—	2	2	6	42	48
Nutrient : grain ratio		1:7	1:7			1:7				
Additional production ..	000 tons	42	280	322	..	14	14	42	294	336
II. Plant Protection	negligible									
III. Additional production from improved soil and cultural practices.	000 tons	33	180	213	10	31	41	43	211	254
Sub-total	000 tons	75	460	535	10	45	55	85	505	590
Grand-total ..	000 tons	1500	6235	7735	685	80	765	2185	6315	8500
Acre-yield ..	–mds–	11.6	20.8	18.0	5.1	14.0	5.4	8.3	20.6	14.9

CHAPTER 10

WATER RESOURCES DEVELOPMENT

The gross geographical area of Pakistan is about 200 million acres out of which nearly 131 million acres lie in the Indus Basin. The arable land within and outside the Indus Basin is approximately 75 million acres and 10 million acres, respectively. Of this, roughly 20 million acres are commanded by the canals in the Punjab, 13 million acres in Sind and about 0.70 million acres in N.W.F.P. A samll fraction of the total culturable command area (CCA) lies in Baluchistan under the Pat. Feeder off Guddu Barrage. The average designed irrigation intensity of the entire canal system is about 68 per cent. Depending upon the availability of water in the rivers, nearly 24 million acres are irrigated through canals. In addition, about 6.0 million acres are irrigated by tubewells, about 1.7 million acres by open wells and 2.2 million acres through tanks and other means in an average year. Though the irrigated lands are fertile, yet the crop yields per acre are among the lowest in the world. Besides other factors, low crop yields may be attributed to insufficient water for irrigation and inadequate drainage.

10.2 To meet the above requirement, an amount of Rs. 1140.90 million was allocated for this sector in the ADP 1973-74. The ADP 1973-74 was, however, increased after the occurrence of the devastating floods of 1973 to Rs. 1269.40 million. The estimated expenditure is Rs. 1324.00 million which is 116 per cent of the original and 104 per cent of the revised allocation. Agency-wise details of allocation/utilization are given in Appendix I. During 1974-75, an amount of Rs. 1574.70 million has been allocated which is higher by 38 per cent compared to the original allocation of 1973-74. The development programme for 1974-75 is given in Appendix II.

Priorities

10.3 Before considering the progress of irrigation and drainage projects in 1973-74 and the programme for 1974-75, it would, however, be relevant to describe some of the priorities fixed by the Government in the water sector :—

(*i*) The highest priority has been given to combating water-logging and salinity. The integrated programme, which would be executed on an accelerated basis, provides for vertical and horizontal drainage, development of water resources and land reclamation.

(*ii*) For the first time, a concerted effort is being made to develop groundwater resources in under-developed areas outside the Indus Basin. Work on groundwater exploration and drilling has commenced in Baluchistan and in the Tribal Areas of N.W.F.P. The work will be considerably accelerated in the course of 1974-75.

(*iii*) The development of groundwater resources, for irrigation purposes, is also being stepped up. Special attention is being given to riverain areas, land outside the canal boundaries and barani areas.

(*iv*) Attention will also be given to improvement in water management practices. Further research and experimental work would be intensified.

(*v*) The damage to the irrigation system caused by the floods was repaired on an emergency basis. Priority is now being given to a further strengthening of the protective arrangements and the preparation of a long-term programme for control and regulation of floods.

Water Availability

10.4 The total availability of water for irrigation at water courses increased from 95.7 MAF in 1972-73 to 96.2 MAF in 1973-74. The higher availability was due to improved flow in the canals and additional output from tubewells. The position regarding the overall water availability and the river flows respectively is given in Appendix III & IV.

10.5 The total average annual inflow of water into the country from the Indus System after diversion of three eastern rivers is 142 MAF. Of this, an average of 23 MAF is received in *Rabi* and 119 MAF in *Kharif*. The Rabi supplies are being utilized in full. Whereas, in *Kharif*, the utilization is less than the flow (Particularly during mid-summer, July – September) and an average of 40 MAF flows out into the sea. The mid-Kharif flows cannot be utilized without storage. With the completion of Tarbela, the storage capacity would increase by 9.3 MAF and, therefore, the outflow to the sea during *Kharif* would be reduced accordingly. The programmes and prospects for additional storage projects are discussed later in the Plan dealing with general investigations.

10.6 It is important to note that flows in the Indus system fluctuate from year to year. As against an average annual flow of 142 MAF, the actual recorded flows have been as high as 176.12 MAF in 1972-73 and as

low as 120.32 in 1969-70. The development in groundwater resources and construction of storage projects provide some protection but do not constitute a complete safeguard against the natural hazard of a serious shortfall in river supplies.

Drainage and Anti-Water Logging & salinity Control Programme

10.7 Of the total area of 33.6 million acres commanded by the canals nearly 17.41 million acres or 52 per cent are affected by water-logging and 7.80 million acres or 23.6 per cent are severely salinized. The extent of the Problem in each of the province is given in Table-I.

TABLE I

Extent of water-Logging and Salinity

Name of Province	Gross Commanded Aera (GCA)	Total Culturable Area (CCA)	Area Serverely affected by salts	Area with watertable within 10 ft.
Punjab[1]	23.6	19.7	2.9*	9.4
Sind[2]	14.9	13.2	4.8*	8.0
N.W.F.P.[3]	1 0	0.7	0.1	0.01
	39.5	33.6	7.8	17.41

10.8 Realising the nature, extent and severity of the problems the Government has decided to treat it as a national calamity and combat it on a top priority basis. As a result, a long-term programme for the eradication of this problem has been drawn up and is being implemented from 1974-75.

Performance 1973-74

10.9 The programme provided for the completion and electrification of tubewells in fresh water zones of SCARP II, SCARP III and SCARP IV areas and initiation of work on 560 saline zone tubewells in the Punjab. Project planning of SCARP V and VI, according to the new strategy was undertaken.

10.10 In Sind the ADP provided for the electrification of the remaining 461 tubewells and for continuation of work on SCARP Larkana Shikarpur. Work on the energisation of these tubewells is in progress and it is expected that the first phase of the project will be completed by the end of December, 1974, to benefit an area of 300 thousand acres. The progress on Larkana—Shikarpur remained satisfactory and it is expected that 60 percent of the work comprising sub-drains and installation of additional pumping units will be completed. The pilot tubewells projects around Shikarpur and Larkana, providing for 50 and 35 tubewells, respectively, made good progress. All but 16 tubewells would be installed and energised during 1974-75.

10.11 Mobilization of manpower and machinery has been done on the first phase of Left Bank Outfall Drain envisaging to benefit an area of 1.7 million acres. Project planning on other projects like SCARP Sukkur Right Bank, Rohri South, etc. was taken in hand.

10.12 In NWFP, the Kafur Dehri project, envisaging construction of 70 tubewells and 13 miles of drain, work continued druring 1973-74. In addition, some isolated groundwater development schemes at Khandwand, Bannu, Barabanda, Pabbi Pilot, Anti-waterlogging Peshawar, and SCARP Peshawar remained in progress. Most of the work on these projects is likely to be completed during 1974-75.

10.13 The overall physical progress of the schemes included in this sub-sector upto June 1973 is given in Appendix V.

*In addition to these areas, 8.3 million acres in Sind and 6.7 million acres in the Punjab are moderrately salt-affected according to the same sources.

Sources :—1 Regional Plant for Northern Zone M/s. Tipton and Kalmbach Consultants.

2 Hunting's LIP Survey.

3 Directorate of Land Reclamation.

Programme 1974-75

10.14 A total sum of over Rs. 367 million has been provided for undertaking this programme on an accelerated scale. Out of this Rs. 144 million has been provided for the projects in the Punjab, Rs. 129 million in Sind, Rs. 20 million in N.W.F.P. and Rs. 2 million in Baluchistan. In addition, a sum of Rs. 72 million has been provided for the investigation, planning and preparation of the projects.

10.15 The financial allocation to the different projects in each of the province is given in Appendix VI. Many projects are now and will be prepared and reviewed during the course of the year. The execution of these projects would, however, be undertaken during the last three or four months of 1974-75 and about 720 tubewells will be installed while 230 million cft. of earth-work will be done on surface drainage schemes. The real jump in the programme will be noticed in subsequent years.

10.16 The province-wise benefits of the programme are as follows :—

10.17 In Punjab, the ongoing projects included in the Accelerated Programme for the Control of Water-logging and Salinity envisage to ultimately instal 1,020 tubewells in the saline zones of SCARP II and III covering an area of about 745 thouasand acres. The new projects, which are yet in the planning stage, are likely to benefit a gross area of 12.63 million acres after their completion. During the year 1974-75 about 200 tubewells will be installed under different projects.

10.18 The programme also includes four surface and tile drainage schemes which envisage excavation of 630 miles of open drains. Approximately, 110 million cft. of earthwork will be done under these schemes during 1974-75

10.19. In Sind, the programme provides for initiating work on 413 tubewells under different projects and completion of Larkana-Shikarpur Project to benefit an area of 1.03 million acres. The project for providing surface drainage to an area of 2.3 million acres under the command of Kotri Surface Drainage Scheme which was being executed by the Irrigation Department so far, has now been transferred to WAPDA. It is expected that 10 million cft. of new drains will be excavated under this project.

10.20 In N.W.F.P., an area of 30 thousand acres is likely to benefit with the completion of installation of about 70 tubewells during 1974-75 . Other projects which will be initiated during the year, will ultimately benefit an area of 1.046 million acres. About 80 tubewells out of an overall target of 1437 tubewells will be completed during 1974-75.

10.21. In Baluchistan one surface drainage schemes has been included in the programme for 1974-75. At present this scheme is in the planning stage.

SURFACE IRRIGATION

10.22. Against an average annual river inflow of about 142 MAF the average water availability at canal heads during the Third Five Year Plan and the first four years of the Fourth Five Year Plan had been of the order of 95.55 MAF and 98.55 MAF, respectively. As has been stated earlier, the river flows during the *Rabi* season are almost entirely utilized while nearly 40 MAF are allowed to flow into the sea during the months of July to September. All efforts are, therefore, being made to improve the existing channels through resectioning, rehabilitating, dredging, construction of bye-pass structures, etc. to enable larger withdrawals from the rivers during the Kharif Season.

Performance 1973-74

10.23. In Punjab the main effort was directed towards completion of the ongoing projects and the development projects in comparatively underdeveloped districts of the province. About 21 miles of new channels, 27 miles of new drains, 216 masonary works for the new channels and drains and 210 masonary structures on the existing channels and drains were constructed.

10.24. In Sind, about 95 miles of existing channels have been reconditioned and 48 miles of new channels in Kotri and Gudu Barrage command have been completed. Also 51 miles of open drains have been excavated and 242 structures, including 191 inlets, have been constructed to benefit 38,000 acres of new area and 10,000 acres of old area.

10.25. In N.W.F.P., almost 8 miles or 60 per cent of the channel on Badwan Kharif Irrigation Channel Project, 5 miles of channel on Nipki Khel, about 3 miles of channel on Gagra Flow and 5 miles of Channal on Shadi Khel Irrigation Scheme have been completed. Many of these schemes are expected to be completed during 1974-75. Installation of 5 new tubewells in Peshawar district are in progress. Construction on other schemes

like Kaldam Irrigation, Upper Siran Canal and Daneen Irrigation Schemes have made good progress during the year. Almost 50 per cent of work on two small dams in Kohat District and one pick-up weir in D. I. Khan district have been completed during the year.

10.26. In Baluchistan, work on the Pat Feeder, Gurak Dat, Peshin Irrigation and Gudurza Flood Irrigation Projects continued during the year and an average of 50 percent progress has been reported.

Programme 1974-75

10.27. Rs. 172 million have been allocated for various schemes in the Punjab, Rs. 155 million for the schemes sponsored by the Irrigation Department and Rs. 17 million for the schemes under implementation by the WAPDA on behalf of the Government . Some of the important schemes included in the programme of the Irrigation Department are : Providing Canal Supplies to areas on the left of Bombanwala-Ravi-Badian-Depalpur (B.R.B.D.) Link; Lift Irrigation Scheme for former Grey Canal; Reopening of Abandoned Areas on Abbasia Canal and Bahawal Canals; Increasing capacity of Thal Canal from 6,000 to 7,500 cusecs; Remodelling of existing channels; Remodelliug of Hudiara; Remodelling Rechana Outfall Drainage System; Constructing Satiana-Samundari System; Constructing Pandoki Drainage System; Construction of 6 Small Dams; work relating to flood repairs/improvements, Survey and Investigation Schemes, etc.

10.28. This programme provides for collection of discharge and sediment data from the rivers and channels, monitoring and research on the lining of water courses and channels, basic research studies in irrigation engineering problems; construction of 9 miles of new channels and 183 masonary structures; remodelling of 6 miles of new drains and 44 masonary works; remodelling of 43 existing masonary structures on the drains; completion of one out of six all dams and execution of over 600 million cft. of earthwork out of which 180 million cft. will be done through manual labour and 420 million cft. will be done through machines. The new area likely to be brought under irrigation during the year is about 60 thousand acres.

10.29. The schemes under implementation by WAPDA are General Investigations, Khanpur Dam, Tarbela Left Bank Canal and Chashma Right Bank Canal. Only token provisions of Rs. 0.1 and 0.2 million respectively, have been made for the last two schemes.

10.30. In Sind, an amount of Rs. 84.08 million has been provided for various schemes. Of this, Rs. 62.61 million are for schemes included in the Irrigation Department's programme and Rs. 21.47 million for Hub Dam which is under implementation by WAPDA. Progress on some of the major schemes under implementation by the Irrigation Department is as follows :—

Saifullah Magsi Branch.—The target for 1974-75 is 50 million cft. Work on three group regulators and one head regulator will be completed during the year.

Kotri Surface Drainage Schemes.—About 40 million cft. of earthwork will be done and 67 bridges/cross drainage works will be copleted.

Kotri and Gudu Project Irrigation Schemes.—About 60 million cft. of earthwork will be done and 51 bridges/regulators will be completed.

10.31. An area of 57 thousand acres will be brought under cultivation and improved irrigation will be provided to 10 thousand acres of existing area during 1974-75. Nearly one hundred miles of existing channels will be reconditioned and 90 miles of new channels will be constructed. Also one hundred miles of open surface drains will be excavated and 67 structures and 280 inlets will be constructed.

10.32. In N.W.F.P., this Programme has been allocated Rs. 47.73 million. Of this, Rs. 30.33 million have been provided for the schemes under implementation by the Irrigation Department and Rs. 17.40 m llion are provided for the schemes under implementation by the WAPDA. The programme provides for continuation of work on the following ongoing schemes. Badwan Irrigation Scheme in District Swat; Attari Irrigation Scheme in Chitral and reboring and installation of tubewells in D. I. Khan, and a number of small irrigation schemes in the various parts of the province. It is expected that a total of 15 miles of new channels for the irrigation of about 10 thousand acres will be completed during 1974-75.

10.33. In Baluchistan, an amount of Rs. 51.92 million has been allocated for continuing work on Detailed Groundwater Investigations and Planning, Pat Feeder Project and serveral small schemes in the various basins of the province. The Hub Dam project and Groundwater Project are being implemented by WAPDA. The UNDP is providing technical assistance for the Groundwater Investigation Project.

PROJECTS UNDERTAKEN BY WAPDA

10.34. The progress of work in 1973-74 and the programme for 1974-75 on the projects undertaken by WAPDA is given as follows :—

Performance 1973-74

Hub Dam

10.35. The expenditure on this project during 1973-74 is expected to be Rs. 19.2 million, thus bringing the physical progress from 40 to 50 per cent. Work on earthfill on saddle embankment continued and excavation of foundation of spillway was entrusted to MPO who made very little progress.

Khanpur Dam

10.36. The project was provided Rs. 39.2 million against which an amount of Rs. 47.6 million is expected to be spent during 1973-74. Work on earthfill on saddle embankment and spillway continued at a slow rate due to price hike and lack of adequate machinery with the contractors. The overall progress on the project has, however, been reported to be 50 per cent.

Pehur/Gandaf Tunnel

10.37. The pressure tunnel part of the project, being undertaken by TJV, remained in progress. A sum of Rs. 10.33 million is expected to be spent during the year.

Chashma Right Bank Canal

10.38. Detailed project planning of the scheme was done during 1973-74. Some strip surveys of gravity main canal and the work involving land acquisition remained in progress.

Programme during 1974-75

(*i*) *Hub & Kharpur Dams*

10.39. During 1974-75, an amount of Rs. 45.00 million has been allocated to Hub Dam and Rs. 44.70 million to Khanpur Dam. The sharing of these allocations by the different beneficieries would be determined by the Cost Apportionment Committee.

Tarbela & Indus Basin Project Works

10.40 An amount of Rs., 682.09 million for the Tarbela Dam, Left Bank Tunnel, and for miscellaneous works has been allocated during 1974-75.

GROUND WATER DEVELOPMENT OTHER THAN SCARPS

10.41 The Government decided in 1973-74 to provide subsidy amounting to Rs. 6,000/- per tubewell in Sailaba Areas, which have been deprived of water supplies due to diversion of three eastern rivers and construction of dams and headworks in the upper reaches of the rivers. This facility has been extended to the *barani* areas and the areas commanded by the canals by providing subsidy of Rs. 8,000/- and Rs. 4,000/- per tubewell, respectively. The formulation and implementation of the schemes by the Provincial Governments is in progress.

10.42 A scheme for providing subsidy for the tubewells in the commands of non-perennial canals is under consideration by the Government. It is expected that a total of nearly 10,000 tubewells with subsidy will be installed in the private sector. About 1.5 MAF would be added to the existing pupmpage of 18 MAF from the tubewells in the private sector.

Baluchistan

10.43 In accordance with the declared policy of the Government, higher priority is being assigned to the development of water resources for irrigation as well as drinking water in the less-developed areas of the country. As a result, a scheme for the detailed investigations of groundwater in the areas has been sanctioned

at a cost of Rs. 122.0 million and spread over a period of five years. This scheme is being implemented by WAPDA with the technical assistance of UNDP and has been provided Rs. 23.0 million for 1974-75. In addition, there are various other small schemes envisaging utilization of the flood flows and groundwater which will be undertaken during the year. These schemes have been allocated a sum of Rs. 28.92 million, making the total allocation of Rs. 51.92 million of the province.

Federally Administered Tribal Areas

10.44 A provision of Rs. 30.0 million has been made for the programme in this region. The tragets for 1974-75 consist of completion of Bara River Canal Project, Zeran Irrigation Channel and Spin P ain Irrigation Scheme in Khyber, Kurram and South Waziristan Regions. With the completion of these schemes, an area of 17 thousand acres will be provided irrigation facilities while another 50 thousand acres will be brought under irrigation in due course of time. In addition, there are several new schemes of surface and groundwater development which will be under-taken during the year.

FLOODS

10.45 The country was hit in 1973 by severe floods of unprecedented nature after about 14 years which caused heavy damage to the kharif crops and resulted in as loss of human and animal life and private and public property worth million of rupees. Almost all the friendly countries, international organizations and the world community, in general, extended prompt assistance to alleviate the distress caused by the floods. The damage caused to the physical infra structure however required concerted national effort to bring everything back to normalcy. The Annual Development Programme for 1973-74 was so modified to repair, on an emergency basis, the damaged 10 barrages, 6 link canals and a number of irrigation systems in the Punjab and Sind.

10.46 The ADP 1973-74 for Water Resources Development as originally framed and that modified after the floods is indicated in Appendix I. The resources were supplemented by a generous assistance of Rs. 35.0 million from the World Bank. The irrigation systems, barrages and bunds were so quickly repaired that the irrigation supplies for the *Rabi* crop were hadly affected. The objectives of the past flood programme were firstly, to restore the entire system to the original standards and secondly, to adopt long-term measures to avoid recurrence of such a disaster. The efforts and accomplishments to achieve the short-term objective during 1973-74 and the programme for 1974-75 is given in the following paragraphs.

Performance 1973-74

10.47 In the Punjab, about 600 million cft. of earthwork and 3.7 million cft. of stone-work has been done to bring back the damaged irrigation systems to their original standards. In addition, about 200 million cft. of earth-work has been done on the consutruction of some flood improvement and regulation projects. 299 tubewells damaged badly during the floods have been repaired.

10.48 In Sind about 200 million cft. of earthwork to repair the damaged irrigation system and the bunds has been done. Bund from Jatoi to Qazi Ahmad is being repaired by TJV.

10.49 In N. W. F. P., reboring of 15 tubewells in the D. I. Khan district, is in progress.

Programme 1974-75

10.50 A sum of Rs. 5.7 million has been provided for the restoration of flood damges and flood improvement schemes in the ADP for the Punjab. The schemes are mainly repaired and reconstruction of flood embankments and construction of certain new bunds.

10.51 The Government of Sind have provided in their ADP a token amount of Rs. 10.00 million for raising and strengthening bunds and loop bunds, stone-pitching, reconditioning and re-sectioning of the existing bunds and raising a few new bunds.

10.52 The IDA aid of Rs. 35 million and similar aid from other sources like UNDP is mainly utilized in the import of heavy earth-moving machinery, spare-parts for the machines which have been out of order, payment of the consultants fee etc.

SURVEY AND INVESTIGATION

10.53 In order to utilize the *Kharif* flows of the rivers, WAPDA is carrying out detailed investigations for Kalbagh dam project to provide a gross storage of 9 MAF and an off-river storage of an ultimate of 1.0 MAF. The WAPDA were provided a sum of Rs. 52.2 million in the ADP 1973-74 against which Rs. 49.2 million are expected to be spent for maintenance and operation of stream gauges and climattological stations, project planning for Jhelum River, Sailaba Area, Tarbela Left Bank Canal, etc., in the Punjtab, the

project planning for the development of riverain area in Sind ; the project planning of Chashma and other schemes in N. W. F. P., and the Groundwater exploration and planning in Baluchistan.

10.54 Work remained in progress on Mona and Central Monitoring Organisation to provide a sound basis for the planning of future SCARP Programmes. Against an allocation of Rs. 2.36 million a sum of about Rs. 5.59 million is expected to be spent during 1973-74.

FEDERAL AGENCIES REVIEW FOR 1973-74 AND PROGRAMME 1974-75

Pakistan Meteorological Department

10.55 Against an allocation of Rs. 3.75 million in ADP 1973-74 the actual expenditure on the various ongoing schemes such as Meteorological & Telecommunication Upper Wind Observatories, provision of Remote Recording Instruments at the various Airports and various other schemes is reported to be Rs. 3.5 million.

10.56 The total allocation for ongoing and the new projects during 1974-75 is Rs. 6.0 million. The programme comprises the following approved schemes Meteorological Telecommunication sub-regional research centres ; First class observatories ; Upper Wind Observatories ; Aeromet stations ; Institute of Meteorology and Geographysics, Remote recording equipment at Lahore. Establishment of wind finding radar station at Peshawar Estabishment of aeromet station at D. I Khan ; Establishment of aeromet station at Pishin ; Installation of Remote Recording equipment at Islamabad Aerodrome, Establishment of Aeromet station at Mohnjodaro, and provision of additional meteorological facilities in Northern Region. The new schemes included in the progamme are repairs of war damaged buildings at Sargodha. provision of remote recording meteorological instruments at Karachi Airport and other nine airports.

Survey of Pakistan

10.57 Hardly any progress could be made during 1973-74 on the projects sponsored by the Department. There is a need to complete the projects which are lingering on since the Third Plan.

10.58 A provision of Rs. 0.41 million has been made during 1974-75 to this agency for these ongoing approved schemes. (i) Survey of Pakistan Length Standardization Laboratory and (ii) Multipurpose Geodetic Survey Marks. The first scheme aims at establishing a length standardization laboratory at Quetta. This will provide facilities for standardization of 24 meter invar wires and tapes which are used for base measurement of very high accuracy. The second scheme aims at establishing combined-trignometrical station and bench marks at every 10 miles all over the country. The physical implementation is reported to be 40% in respect of this Scheme.

Irrigation Drainage & Flood Control Research Council

10.59 Against the provision of Rs. 1.7 million during 1973-74 for carrying out various small research schemes like Lysimeter studies, basic studies on hydraulic problems, basic studies on groundwater exploitation etc., the revised estimated expenditure is reported at Rs. 1.55 million.

10.60 A block provision of Rs. 4.5 million has been made for 1974-75 for various schemes sponsored by the Council. The ongoing schemes are. Basic studies on hydraulic problems , Lysimeter studies, basic studies on Ground-water exploitation, etc. The physical progress of all these schemes is rather slow mainly because of slow speed of work and in adequacy of research staff. The new schemes included in the programme are lysimeter studies in Sind, and Institute of Hydrology Drainage and Reclamation Institute of Pakistnan.

Azad Kashmir and Northern Area

10.61 Under the directives of the Prime Minister and the Finance Minister the programme in these areas was given an extra boost during 1973-74. Almost Rs. 6.0 million are estimated to have been spent during the year as against the allocation of Rs. 2.65 million.

10.62 The allocation made for schemes in Azad Kashmir and Northern Areas for 1974-75 is Rs. 4.40 million (Rs. 1.9 million for Azad Kashmir and Rs. 2.50 million for Northern Areas). The development programme comprises excavation of irrigation channels, construction of small dams and reclamation of land for agriculture.

Miscellaneous Schemes

10.63 A sum of Rs. 24.30 million has been provided in 1974-75 to undertake investigation projects of inter-provincial nature. This is in addition to Rs. 72.36 million provided for the investigation, project planning and project preparation of schemes under the Waterlogging and Salinity Control Programme. The research project like Alluvial Channel Observation, Mona Reclamation and Central Monitoring Organisation have been provided an amount of Rs. 9.16 million for continuing their work.

Appendix I

WATER RESOURCES DEVELOPMENT

ADP Allocation and Utilization 1973-74

(Million Rupees)

Regions	Original Allocation	Revised Allocation	Utilization
(a) **Provinces :**			
(*i*) Punjab	139.20	199.20	237.50
(*ii*) Sind	101.90	158.40	190.20
(*iii*) NWFP	50.40	55.40	31.00
(*iv*) Baluchistan	60.20	57.00	56.80
(b) **Centre :**			
Central Government Agencies/Divisions	56.80	67.00	67.14
(c) Tarbela/I.B.P.	732.40	732.40	741.36
	1140.90	1269.40	1324.00

ANNUAL DEVELOPMENT PROGRAMME 1974-75

ABSTRACT

(Million Rupees)

Sponsoring Agency	Allocation
1. Federal Government Programmes :	
WAPDA..	400.00
Other Divisions of the Federal Government	118.38
Sub-Total	518.38
Indus Basin Project including Tarbela	682.09
Total	1200.47
2. Provincial Governments Programmes :	
(*i*) *Punjab*	
(a) Irrigation & Power Department	170.00
(b) WAPDA..	17.00
Total (Punjab)	187.00
(*ii*) *Sind*	
(a) Irrigation & Power Department	65.11
(b) WAPDA..	21.47
Total (Sind)	86.58
(*iii*) *NWFP*	
(a) Irrigation & Power Department	31.53
(b) WAPDA..	17.40
Total (NWFP)	48.73
(*iv*) *Baluchistan*	
(a) Irrigation & Power Department	21.42
(b) WAPDA..	30.50
Total (Baluchistan)	51.92
Total (Provincial Governments Programmes)	374.23
GRAND TOTAL	1574.70

Appendix II

FEDERAL GOVERNMENT

ADP 1974-75

(Million Rupees)

Sponsoring Agency/Department	ADP 1973-74	Revised Estimate 1973-74	Allocation for 1974-75
1. **Aviation Division :**			
Meteorological Department	3.75	3.53	6.00
2. Science and Technology Division	1.00	1.66	4.91
3. **Natural Resources Division :**			
(*i*) WAPDA	36.56	34.51	400.00
(*ii*) Mechanized Construction Corporation	—	3.00	39.00
(*iii*) Tubewell Construction Corporation	—		29.00
4. **Kashmir Affairs Division :**			
(*i*) Azad Kashmir	0.50	0.25	1.90
(*ii*) Northern Areas	2.15	5.80	2.50
5. FATA Development Corporation	14.40	18.39	30.05
TOTAL ..	59.16	67.14	518.38

* Includes allocation for Khanpur and Hub-Dams o fRs. 15.00 and Rs .8.55 million respectively.

OVERALL WATER AVAILABILITY AT FARM GATES

Year	Surface Water	Ground Water		Total
		Public Tubewells	Private Tubewells	
1962-63 ...	56.20	2.76	3.37	62.33
1963-64 ...	62.30	2.67	4.69	69.66
1964-65 ...	62.07	2.64	6.30	71.01
1965-66 ...	63.49	3.00	8.33	74.82
1966-67 ...	65.07	1.84	10.38	77.29
1967-68 ...	66.82	2.26	12.31	81.39
1968-69 ...	69.06	3.07	13.90	86.03
1969-70	69.97	4.04	15.13	89.14
1970-71 ...	62.83	5.07	16.24	84.14
1971-72 ...	68.08	4.86	16.98	89.92
1972-73 ...	71.40	6.80	17.50	95.70

RIM STATION INFLOWS

(Million Acre Feet)

	Indus above Kalabagh		Jhelum-Chenab Combination		Ravi-Sutlej Combination		Total	
	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif
1962-63 -- --	11.09	76.41	8.74	36.99	4.71	14.78	24.54	128.18
1963-64 -- --	12.89	75.15	8.66	40.97	2.37	8.85	23.92	124.97
1964-65 -- --	13.60	76.83	8.74	41.07	2.82	18.00	25.16	135.90
1965-66 -- --	12.91	79.00	8.18	39.09	1.37	17.19	22.46	135.28
1966-67 -- --	14.03	81.77	9.90	38.51	2.16	13.16	20.09	133.44
1967-68 -- --	14.98	73.69	10.61	36.80	3.68	11.04	29.27	126.53
1968-69 -- --	14.43	74.31	8.78	40.03	1.60	10.61	24.81	124.95
1969-70 -- --	13.00	61.24	6.75	29.08	1.11	9.14	20.86	99.46
1970-71 -- --	10.16	62.38	5.74	35.89	6.77	15.25	22.67	113.52
1971-72 -- --	9.36	67.01	6.36	34.62	1.30	5.65	17.02	107.28
1972-73 -- --	12.66	95.27	12.01	49.93	0.92	15.99	28.73	157.39

UPTODATE PROGRESS OF SCARP PROJECTS

Name of Project	No. of Tubewells installed by 30th June, 1973		Miles of Drains		Area Benefitted				Estimated Annual Pumpage
					Total Scope		Achievements upto 30-6-1973		
	F.G.W.	S.G.W.	Total Scope	Achievement Upto 30-6-73	G.C.A.	C.C.A.	G.C.A.	C.C.A.	MAF
No. I Central Rechna ...	2058	—	—	—	1.22	1.14	1.22	1.14	2.00
No. II Chaj Doab ...	2205	—	375	162	2.42	2.10	1.70	1.42	2.90
No. III Lower Thal ...	1635	—	150	103	1.28	1.05	1.06	0.88	2.04
No. IV Upper Rechna ...	935	—	—	—	0.63	0.56	0.62	0.56	1.26
Sub-Total Punjab ...	6833	—	525	265	5.55	4.85	4.60	4.00	8.20
Larkana-Shikarpur ...	—	—	541	227	0.58	0.51	0.58	0.51	—
Khairpur	163	377	352	352	0.35	0.32	0.35	0.32	0.46
North Rohri	566	—	—	—	0.79	0.69	0.37	0.32	0.50
Sub-Total Sind ...	729	377	893	579	1.72	1.52	1.30	1.15	0.96
Total ...	7562	377	1418	844	7.27	6.37	5.90	5.15	9.16

Appendix VI.

ACCELERATED PROGRAMME OF WATERLOGGING AND SALINITY CONTROL ALLOCATION 1974-75

(Million Rupees)

Projects	Allocation
1	2
Punjab :	
Ongoing Projects :	
SCARP II	41.8
SCARP III	19.0
SCARP IV	2.1
Sub-Total	62.9
New Projects	
(a) *Vertical Drainage :*	
SCARP V (Shorkot-Kamalia)	10.0
SCARP VI (Panjand-Abbasia)	10.0
SCARP Shujabad	10.0
SCARP Shahpur	10.0
SCARP Fordwah-Sadiqia	10.0
Pilot Project Satiana	10.0
Sub-Total	60.0
(b) *Surface and Tile Drains and Misc :*	
Paharang Drains	12.0
Pilot Drainage Haveli & LBDC	5.0
Disposal work for existing tubewells in SCARPS	2.0
Replacement and deteriorated tubewells of existing SCARPS	2.0
Investigation and Planning of the above and other schemes	31.3
Sub-total	52.3
Total	175.2
Sind Ongoing	
SCARP Rohri North	46.00
SCARP Larkana-Shikarpur II	19.00
Pilot Tubewells around Larkana	0.20
Pilot tubewells around Shikarpur	0.60
Left Bank Outfall Drain	40.00
Kotri Surface Drainage	10.00
Sub-total	115.80

1	2
New	
Khairpur Tile Drain	3.00
Sukkur Right Bank	7.50
Remodelling Khairpur Feeders East & West	3.00
Scheme for investigation	9.35
Sub-Total ...	22.85
Total ...	138.65
N.W.F.P.	
Ongoing	
Anti-waterlogging, Peshawar	0.20
Kafur Dehri Unit	9.00
Sub-total ...	9.20
New	
Pabbi Pilot Unit	3.50
Joi Sheikh Unit	3.00
Bannu SCARPs	2.00
Mardan SCARPs	2.00
General Investigation	5.84
Sub-Total ...	16.34
Total ..	25.54
Baluchistan :	
New	
Pat Feeder Drainage	2.00
General Investigation	1.55
Sub-Total ...	3.55
Total ..	3.55
Planning and Investigation ..	24.30
GRAND TOTAL ..	367.24

CHAPTER 11

MANUFACTURING INDUSTRIES

11.1 From the point of view of investment and production, the performance of the industruial sector during 1973-74 was rather mixed. In the case of industrial investment, the actual level achieved during the year remained lower than the plan targets. However, the increase in new project sanctions in the private sector and progress on some major public sector undertakings promised a better outlook for 1974-75. Industrial production on the other hand grew at a reasonable pace during 1973-74 but the lack of investment in previous years could have a decelerating effect on industrial production in future.

INDUSTRIAL PERFORMANCE

Private Sector

11.2. It is estimated that private industrial investment in 1973-74 was Rs. 707.3 million in the large scale and Rs. 400 million in the small scale sector. A time series for the period 1969-70 to 1974-75 is given in table 1.

TABLE 1

(Rs. in Million)

Years	Large-Scale	Small-Scale	Total
1969-70	1208.7	187.7	1396.4
1970-71	1249.6	201.7	1451.3
1971-72	1031.6	219.1	1250.7
1972-73	788.9	300.0	1088.9
1973-74 (estimates)	307.3	400.0	707.3
1974-75 (targets)	1040.0	500.0	1540.0

11.3. It is clear from the above table that private industrial investment in 1973-74 remained at a depressed level for the third year in succession. The decline is much more serious in real terms than appears from the figures in Table 1, which are in current prices. The domestic prices of construction, steel and cement by May 1974 were 195% and 137% higher than in 1971 and the prices of imported machinery had shot up in some cases, by nearly 100%.

11.4. The low level of private undustrial investment in 1973-74 has a background history going back at least five years. During this period a numbers of socio-political changes and reforms of the overall economic system in which the private sector has to operate, has created problems of adjustment. The buoyant investment demand from the private sector in the fifties and sixties was based on an artificial claim of protection and incentives which it was obvious could not be sustained in the long run. The major factor in creating a rush for new investment was the artificial value assigned to foreign exchange. The availability of foreign exchange at a price much lower than its real worth for the imports of machinery not only induced potential investment to rush forward without a full examination of the long term vaibility of a project but also created an equity base for their investment without requiring them to bring forward their own investment.

11.5. The devaluation in May 1972, changed the entire context of the economic situation in which the private sector was to come forward. While there may still be some psychological reservations about the overall socio-political claim regarding which repeated clarifications have been made in policy statements, the basic economic factor has affected the cost of investment and the nature of industries in which new investment would be profitable, has to be regarded as the most essential element in determining the base at which further investment in the private sector can take place.

11.6. It was realised at the time of devaluation that this change would involve a shift of emphasis in favour of better utilization of capacity and would reduce the incentive for setting up new capacity. This has been happend in different industries. As the various industies reach near the level of full utilization capacity, enquiries start emerging for possibilites of expansion and setting up new capacity. This new enquiry is still in its initial stage and would take some-time before it is translated into actual physical investment.

11.7. Another important factor to realise is that under the changed circumstances, emphasis have been shifted from industries based on import substitution towards the industries where the determining factor was the export demand. As the full impact of the profitability of the export sector is observed

in various sectors, the demand for fresh investment would start exerting. Steps taken to solve the identified problems are briefly stated in the paragraphs that follow:—

11.8. While investment levels in 1973-74 were low because of inadequate investment decisions in previous years, there are indications that they will be substantially higher in 1974-75. Sanctions have increased and more letters of credit are outstanding. In financial terms, private investment in large scale industry is expected to double between 1973-74 and 1974-75. A further fillip to private industrial investment is expected to be provided by measures in favour of investment taken in the 1974-75 Budget.

11.9. A major cause of the uncertain investment claimate vize., a supposed lack of demarcation between the roles of the public and private sectors in industrial investment has been largely removed. The Government have broadly clarified their position with regard to nationalization. The demarcation of borderline cases of conflict between private and public sector roles is being looked into. As far as the labour situation is concerned, there was a definite improvement in 1973-74. Man-days lost due to industrial action were less. The main problem now is labour productibility, which has been given added emphasis by higher wages. Improvement in labour-management relations with a view to reducing absenteeism and improving low quality is critical.

11.10. An emerging problem is that of administered prices. Many industries have made high profits in the past and the need of the hour was to hold the price-line, if need be at the expense of industrial profits. Costs have now caught up with administered prices and a gradual readjustement in due course would become necessary.

11.11. There has been no change in the direction of private industrial investment. It is still concentrated overwhelming in the agro-based industries.

11.12. The figures of sanctions at Annex VII bring out a rather disquieting feature of private sector industrial investment *i.e.* the overwhelming concentration in the cotton textiles section. Thus 66% of PICIC sanctions were for cotton textiles, 9% of PICIC sanctions were for sugar industry and 9% for hotels and motels which is not really a manufacturing activity. All the other remaining industries got 16% of PICIC's sanctions, with the engineering industry receiving nil. In the case of IDBP sanctions 48% for the cotton textile sector and 13% for the woollen textile sector.

11.13. Private sector industrial investment's concentration in the cotton and woollen textiles and the sugar industry fields is offset by the direction which public sector industrial investment is taking. Thus during 1973-74, 23% of public sector industrial investment was in the modern agricultural in puts industry, 16% in the agro-processing industry and 37% in the iron and steel and engineering Industry. During 1974-75, 50% of the Federal public sector investment will be in the iron and steel and engineering sector, 44% will be in agro-related industries, mainly fertilizers, and only 6% in other industries.

11.14. Some indication of indusirial investment during 1973-74 can be obtained from the figuers for PICIC and IDBP sanctions and disbrusements contained in the table II.

TABLE II

Year	Sanctions		Disbursements	
	Million Rs.	Index	Million Rs.	Index
1967-68 ..	302.9	—	193.6	—
1968-69 ..	324.7	—	187.8	—
1969-70 ..	454.0	100.0	249.4	100.0
1970-71 ..	313.6	69-0	534.8	213.9
1971-72 ..	108.83	23.9	373.51	149.4
1972-73 ..	331.14	72.9	107.9*	43.2
1973-74 ..	861.25	190.0	94.1	37.6

11.15 Table 2 brings out that the 1973-74 was a year in which the future of private industrial investment was delicately balanced between a declining trend and an incipient upsurge. There was increased interest in sanctions but actual investment continued to be deferred. This is supported by figures for non-PICIC aud IDBP sanctions in Table 3 below :—

Table 3

Sanctions

(Rs. in Million)

		1972-73	1973-74 (July-March)
i	PAYE	7.76	80.19
ii	Repatriable Investment	9.41	248.70
iii	Non-repatriable Investment	27.08	68.06
	Total..	44.25	364.95

Federal Public Sector

11.16. The level of total public sector industrial investment has expanded considerably as shown in Table 4 below :—

TABLE 4

Public Sector Investment

(Rs. in million)

Years	Amount
1969-70	179.2
1970-71	68.2
1971-72	78.5
1972-73	249.5
1973-74 (Revised estimates)	470.0
1974-75 (ADP Allocations)	1096.3

11.17. The sharp increase in allocations for public sector industry shown in Table 4 above is a reflection of the change in socio-economic policies initiated after December 1971. The actual level of industrial investment in the public sector has however, not yet accelerated sufficiently to fully offset the decrease in real term in private industrial investment.

11.18 From the time of the take over of a number of industrial units by the State in early 1972, (later nationalised) planning had been underway for the reorganisation of the state-controlled industrial sector. This sector comprised the stimulized under the Board of Industrial Management and the public sector industries run by the WPIDC. During 1973-74 it was decided to re-organize all these industrial units into functional groups and the following corporations were, therefore, set up to run all the State-owned and State-controlled industrial units :—

(*i*) State Heavy Engineering and Machine Tools Corporation Ltd.
(*ii*) Federal Chemical and Ceramics Corporation Ltd.
(*iii*) State Cement Corporation of Pakistan Ltd.
(*iv*) State Electrical Corporation of Pakistan Ltd.
(*v*) National Fertilizer Corporation of Pakistan Ltd.
(*vi*) National Design and Industrial Services Corporation.
(*vii*) State Petroleum, Refining and Petro-chemical Corporation.
(*viii*) Pakistan Automobile Corporation.
(*ix*) Federal Light Engineering Corporation.
(*x*) Mineral Development Corporation.
(*xi*) Pakistan Industrial Development Corporation

11.19. The percentage return on investment in the WPIDC units fell from 6.8% in 1972 to 4.5% in 1972-73 and to 3.8% in July-December 1973. This was attributable *inter* alia, to a continuing low level of capacity utilization in the engineering sector and rising costs combined with controlled product prices in the cement, coal mining and salt mining industries.

11.20. The performance of the nationalised industries controlled by the Board of Industrial Management was satisfactory. Comparing 1972-73 to 1971-72 sales increased 49 per cent and profits before taxes rose to Rs. 77.6 million from a net loss of Rs. 23.3 million in previous year. Similarly in the first 9 months of 1973-74 sales rose 50 per cent over the same period of 1972-73 and profits before tax by 61 per cent. Within the BIM Companies the performance of the automobile group, in which there is a substantial element of trading and assembly, was far better than that of the basic manufacturing activity which is concentrated in the cement, chemicals and engineering industries. Thus in 1973-74 56 per cent of the increase in sales over the previous year was caused by the automobile group, which increased its share in the total BIM sales from 34 per cent in 1972-73 to 42 per cent in 1973-74. Similarly of the total net profit before tax of Rs. 64.7 million in the July—March 1974 period Rs. 38.0 million or 59 per cent came from the automobile group. The most encouraging aspect of BIM's performance was the increasingly high capacity utilization rates of the chemical industries controlled by it. Thus capacity utilization rates in items such as caustic soda, sulphuric acid and rayon were well over 100 per cent. It is clear that the contribution of basic manufacturing units to gross sales and profitability will increase in future years.

11.21. The nationalised sector controlled by the Board of Industrial Management is still in the process of being consolidated and re-organized. It has not, therefore, been able to contribute substantially to the development strategy of the Government. The year 1974-75 would be the third year since nationalisation and yet the BIM group has not so far been able to generate any resources for the self-financing of fresh investment. The BIM has only now reached the stage of making additional investments. The group has not, therefor, so far contributed to any of the main objectives of Govt's industrial policy such as the decentralization of industry and the introduction of more appropriate technology. 1974-75 will see the beginning of an upsurge in the investment activities of the BIM. It is to be hoped that the result would be increasingly higher levels of self-generated resources, implementation of Government's industrial decentralization policies by locating new-investments in the under-developed regions of the country and a continuing search for "appropriate" technology suited to the socio-economic conditions which obtain in Pakistan.

Federal ADP and Industrial Priorities

11.22 The size of 1974-75 ADP has increased dramatically from an estimated actual 1973-74 expenditure of Rs. 470 million to Rs. 1096 million planned for 1974-75. The major portion of this investment is limited to just three projects—Rs. 410 million for the Karachi Steel Mill, Rs. 380 million for the Pak-Arab Fertilizers project and Rs. 100 million for the Heavy Foundry and Forge Project. The acceleration in 1974-75 over 1973-74 is indeed, almost entirely due to the inescapable demands of the former two projects.

11.23 Priorities in the industrial sector are not determined within the framework of a general package based on inter-industrial linkage. However, agriculture industries head the list of priority industries and the iron and steel and engineering industries follow close behind. The investments proposed in the 1974-75 ADP are as follows :—

(i) Agriculture-related Industries	44	percentage
(ii) Iron and steel and engineering Industries	50	,,
(iii) Others	6	,,

11.24 The priorities reflected in the public sector programme for 1974-75 are as follows :—

(i) The expansion of agro-industries, which provide inputs and process the output of agriculture. The investments proposed are mainly in (a) chemical fertilizers which are a basic public sector responsibility and (b) textiles, sugar, and rice milling, where public sector presence is being enlarged.

(ii) Development of basic heavy industries. The principal investment is the commencement of work on Karachi Steel Mill.

(iii) Establishment of industry in backward areas. A large number of projects have been provided for in Baluchistan, Tribal Areas of N. W. F. P., and Azad Kashmir the units mostly, fall in the Agro-industrial group.

(iv) Decentralisation of industry away from the indeveloped areas. The new units are being located in the districts where industrial progress had been slow.

Development Programme of the Provincial Government 1974/75

11.25. The development programme of the four Provincial Govts in the manufacturing sector during 1974/75 amounts to Rs. 180.08 million which constitutes 14% of the total public sector expenditure on Industries of Rs. 1276.00 million. Most of the Provincial schemes comprise infrastructure projects meant to create social over-head capital in the large and small scale industries sector. The NWFP, Baluchistan and Punjab have agencies *viz.*, Sarhad Development Authority, Baluchistan Development Authority, and Punjab Industrial Development Board to directly implement industrial projects and their 1974/75 ADP's contain provision for a number of agro-based industrial units. These industries reflect the concern of the Federal and the Provincial Governments to ensure the easy availability of essential consumer items and to keep their prices stable.

Punjab

11.26 The Government of the Punjab Programme for the development of industries during 1974-75 is estimated at Rs. 79.91 million. Out of this allocation, about Rs. 20 million are proposed to be spent on various promotional, training and research schemes sponsored by the Directorate of Industries, the Punjab Small Industries Corporation and on some schemes of the Printing and Stationery Department and Jail Department. The main feature of the ADP is a block provision of Rs. 60 million for setting up 3 cotton textile mills, 4 sugar mills and 5 modern rice mills.

Sind

11.27 The industries development programme of the Government of Sind for 1974-75 amounts to Rs. 13.15 million. This allocation will be spent on the implementation of various projects of the Sind Small Industries and Handicrafts Development Corporation and for 2 sugar mills at Piyaro Goth and Thatta. The implementation of these projects has been entrusted to the PIDC who would be working as an agent to the Provincial Government. Over Rs. 11 million have been allocated to these sugar mills of which Rs. 10 million are for the sugar mill, Piyaro Goth.

N. W. F. P.

11.28 The industrial development programme of the Government of N. W. F. P. for 1974-75 is estimated at Rs. 67.53 million. Part of this allocation will be spent on the implementation of different promotional services and training and other schemes sponsored by the Small Industries Devolopment Board Directorate of Industries and the Printing and Stationery Department. The main feature of the ADP is a block provision of Rs. 55.50 million for the Sarhad Development Authority for implementing the ongoing and new projects. The SDA schem include (i) Khazana Sugar Mills (ii) Industrial Estate, Jamrud (iii) Leather Tannery (iv) Corn Complex (v) 4 Cold Storages (vi) 2 Vanaspati ghee factories (vii) Sarhad Sheet Glass Factory and (viii) Sarhad Cement Works.

Baluchistan

11.29 The provision made in the ADP 1974-75 for the development of the industrial sector in Baluchistan is Rs. 19.50 million. The major portion of this allocation is proposed to be invested on the development of promotional, research and traning schemes sponsored by the Provincial Small Industries Board. The actual industrial projects included in the ADP 1974-75 are (i) Vegetable Ghee Factory at Quetta, (ii) Rice Mill unit at Usta Mohammad ; (iii) Ferro Chrome Project and (iv) Industrial Estate in Balan at Uthal.

PRODUCTION AND GROWTH

1973-74 Estimates

11.30. Production in large-scale industry has shown a fairly high rate of growth during 1973-74. The exceptions are yarn and mill made cloth, this may be seen in the table below :—

TABLE 5

Industrial Production

S. No.	Commodity	Units	1972-73	Estimated 1973-74 Production on the basis of July-March figures
1.	Cotton yarn	Mill Kg	377	378
2.	Cotton cloth	Mill metre	640	642
3.	Vegetable Ghee	000 Tons	188	234
4.	Cigarettes	000 mill Nos	29	26
5.	Sugar	000 tonne	439	490
6.	Cement	000 tonne	2875	2907
7.	M.S. Products	000 tonne	184	217
8.	Fertilizers	000 tonne	704	792
9.	Cotton Ginning and Pressing	000 tonne	4000	3759
10.	Art Silk Cloth	000 metre	5331	8388
		Growth Rate 11%		

Source :

(*i*) Fertilizers, cotton yarn, cloth and vegetable ghee—Industries Division.

(*ii*) Sugar, and Cotton—Sugar Board and Ministry of Agriculture.

(*iii*) All others—CSO/CBR.

11.31. During the first nine months of the year production grew at 11 per cent per annum, mainly due to a 35 per cent increase in sugar production from the extremely depressed level achieved in 1972-73, a 65% increase in the production of artificial silk cloth due to a more liberal import policy, 19% increase in the production of vegetable ghee because all the production was brought on to the books and a 14% increase in fertilizer production due to extremely high capacity utilization factors in the private sector units.

1974-75 Targets

11.32. Targetted production in 1974-75 is shown in Table below :

TABLE 6

Industrial production Targets 1974-75

S. No.	Industry	Units	1973-74 Estimates	1974-75 Targets	% Growth over 1973-74
1.	White Sugar	000 tonne 000 tons	594 585	660 650	10.16
2.	Vegetable Ghee	000 tonne 000 tons	234 230	279 275	19.56
3.	Cigarettes	000 Mil nos	26	32	23.0
4.	Cotton Yarn	Million Kg. Million Lbs.	400 883	431 950	14.04
5.	Cotton cloth	Million Metre Million Yds.	643 703	685 750	6.68
6.	Board	000 tonne 000 tons	38 37	38 37	— —
7.	Writing & Printing Paper	000 tonne 000 tons	26 26	40 39	50.00
8.	Soda Ash	000 tonne 000 tons	81 80	81 80	— —
9.	Caustic Soda	000 tonne 000 tons	34 33	36 35	6.06 —
10.	Sulphuric Acid	000 tonne 000 tons	38 37	39 38	2.70
11.	Urea	000 tonne 000 tons	603 593	610 600	1.18
12.	Super Phosphate	000 tonne 000 tons	31 30	46 45	50.00 —
13.	Ammonium Nitrate	000 tonne 000 tons	84 83	86 85	2.40
14.	M.S. Products	000 tonne 000 tons	217 214	239 215	10.32
15.	Cement	000 tonne 000 tons	2907 2861	3150 3100	8.35

Policies for 1974-75

11.33. In the industries sector lack of capacity is expected to be an important problem. The extremely low levels of industrial investment which have characterised the proceeding years means that, no new substantial capacity will come into operation in any major industry except cotton textiles and sugar. Production level in several key industries will not rise, with consequent pressure on availabilities and prices.

11.34. In this situation it is essential that the highest possible level of capacity utilization be achieved in the industrial sector. The most important requirement is maintanence and improvement of productivity levels in the cotton textiles spinning sector, productivity fell from the past average of 130 kg. of yarn per spindle year to 126 kg. in 1973-74 and 119 kg in 1973-74. The decline in productivity whether due to obsolescence of machinery or labour management problems, has to be amended.

11.35. Full capacity utilization is contingent on a timely supply of imported inputs such as iron and steel, non-ferrous metals, pulp, and chemicals. The import policy for 1974-75 aims at liberalizing supply of other raw-materials for engineering industries. Adequate supply of other raw-materials will also be maintained. The problem of small units which cannot deal directly with TCP will be attended to by providing facilities far of the shelf purchases. An important factor would, however be the availability of key inputs in view of current world commodity shortage.

11.36. A Problem which could arise during the course of the year is that of an energy shortage in the North caused by gas shedding by Sui Northern Gas pipe line Ltd. The demand for gas in the Punjab and the N.W.F.P. has out stripped transmission capacity. The Cement Industry in the north could be especially hard hit at a time when Budgetary incentives have been given for house building activities.

INDUSTRIAL CAPACITIES AND TARGETS, 1974-75

Cotton Textiles

11.37. The number of working spindles in the middle of 1972-73, *i.e.* on 31st December, 1972 was 2.98 million and production in that year was 376 million Kg or 126 Kg per spindle. By 31st December, 1973 the working spindlage has risen to 3.185 million production to 378 million Kg and per spindle output to 261.53 Kg. If productivity remains at the 1973-74 level production in 1974-75 should be 396 million Kg. Productivity in 1974-75 is, however, expected to be better than in 1973-74 or 1972-73. It should approach the historical level of 285 per spindle to give a production of 431 million Kg.

11.38. It needs to be pointed out that a production of 431 million Kg of yarn in 1974-75 might cause problems. This is so because the year 1973-74 looks like ending up with yarn stocks of anywhere between 46-48 million Kg. A production of 431 million Kg on top of this would give 476—498 million Kg of which only about 91 million Kg could be consumed by the static mill loomage, thus leaving 386—408 million Kg for exports and non-mill consumption.

11.39. The prduction oof cloth targetted for 1974-75 is 685 million metre in the mill sector and about 713 million meter in the non-mill sector to give a total of 1398 million meter.

The position is summed up in the table below :—

(*a*) Yarn production	431 million Kg.
(*b*) *Plus* stocks brought forward	57 million Kg.
Total ..	488 million Kg.
(*c*) Yarn consumption by mill sector	90 million Kg.
(*d*) Expected maximum exports	226 million Kg.
Total (C+D) ..	316 million Kg.
(*e*) Surpluse for domestic consumption	170 million Kg.
(*f*) Expected consumption by Ancillary Industry	41 million Kg.
(*g*) Yarn available for power loom sector	129 million Kg.
(*h*) Targets for non-mill sector	712 million Metre.
Yarn for "H"	88 million Kg.
Surplus stock	41 million Kg.
Cloth Production Targets	
Mill Sector Production	685 million Metre
Power Loom Sector Production	712 million Metre.
Cloth Production Targets.	
Mill Sector Production	685 ,, Metre
Power Loom Sector Production	712 ,, Metre

Sugar

11.40. There are currently 24 sugar factories capable of producing, in a normal crushing season of 150 day and at an average recovery of 8.5 per cent of cane, 6,18,000 tonne of sugar. Two mills are scheduled to go in production in the 1974-75 season : the Khazana Sugar Mills capable of producing 40640 tonne of sugar per annum and the Larkana Sugar Mills of 18,288 tonne of sugar per annum. In 1974-75 about 6,60,000 tonne of Sugar will be produced.

11.41. High priority is being given to domestic production of Sugar to meet local demand, both because of the need to eusure ready domestic availability of this esstential commodity and because the setting up of sugar factories is a means of modernizing and raising technological and income levels in the rural agricultural sector, in underdeveloped area. In addition to the Khazana and Larkana Sugar Mills, there are plans to set up 4 mills in the Sind (Dadu, Shikarpur and Thatta in the public sector and Khairpur in the private sector) and 4 public sector mills in the Punjab (Kot Adu, Kamalia, Pasrur and Patoki). More mills would be set up later. This expansion programme of sugar manufacturing sector is expected to give the following demand-supply situation upto the end of the Fifth Five Year Plan.

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Demand (000 tonnes)	660	711	802	853	914	975
Installed cane crushing capacity (tonne daily)	49,174[1]	54,864[2]	62,484[3]	69,596[4]	71,120[5]	72,644[6]
Potential installed sugar manufacturing capacity (000 tonne)	628	698	796	938	1,011	1,044

1. Beet converted to cane crushing capacity.
2. Plus Khazanz and Larkana.
3. Plus Kot Adu, Kamalia, Shikarpur, Dadu.
4. Plus Pasrur, Patoiki, Thatta, Khairpur.
5. Plus one mill in Sind.
6. Plus one mill in Punjab.
7. Assuming
   8.5% overall recovery in 1974-75, 1975-76, 1976-77
   9.0% overall recovery in 1977-78.
   9.5% overall recovery in 1978-79
   9.6% overall recovery in 1979-80

Vegetable Ghee

11.42. It is expected that installed capacity by the beginning of 1974-75 would be 0.3 million tonne of vegetable ghee per annum. It is the intention of Government to keep this capacity fully supplied with imported and domestic edible oil and the vegetable ghee production target for 1974-75 is 0-3 million tonne. The demand for vegetable ghee is growing at about 15 per cent per annum and could reach 0.6 milion tonnes by 1979-80 The industry has been nationalised and there are a number of public sector schemes underway for creating additional capacity. These schemes are :—

Capacity	*Agency & location*
(*i*) 6,000 and 9000 tonne per annum ..	.. Baluchistan Development Authority factory at Quetta and Jhatpat, respectively.
(*ii*) 18,288 tonne per annum ..	.. SDA factories at Dargai and Havelian, with 9144 tpa each.
(*iii*) 9144 tonne per annum ..	.. Federally administered Tribal Areas Development Corporation factory at Torkham.
(*iv*) 6096 tonne per annum ..	.. Azad Kashmir Minerals and Industrial Development Corporation Factory in Azad Kashmir.
(*v*) 6096 tonne per annum ..	.. Factery in the Northern Areas.

Cigarettes

11.43. There are 18 cigarette factories in the country with and approximate single shift capacity of 20,000 million cigarettes per annum. Demand in 1974-75 is expected to be about 32,000 million cigarettes and this is the production target for the year.

Paper Board

11.44. The installed capacity for duplex board is between 36,576 and 37,592 tonne per annum and production in the three units which manufacture it has been around 37,592 tonne in 1972-73 and 1973-74. Production in 1974-75 is expected to remain at about 37,592 tonne.

11.45. Installed capacity for other types of paper board is about 20,320 tonne per annum and it is expected to operate at full capacity. Paper board demand is growing fairly rapidly at about 8 to 10 per cent per annum and the development banks are sanctioning paper manufacturing units of all types. The public sector is also becoming interested in this industry because this can help develop backward areas where fibrous raw materials are often available and unutilised.

Paper

11.46. Currently, the installed paper manufacturing capacity is about 54,864 tonne per annum of which 30,480 tonne is in P.P.C. Charsadda. Due to technical problems and shortage of bagasse in the latter mill, paper production has fallen short of capacity in the past. Production in 1972-73 was 24,384 tonne and that in 1973-74 it is expected at 26.416 tons, a capacity utilization rate of 48 per cent. This low level of efficiency was caused largely by the inefficient operation of the Charsadda mill which operated at about 27 per cent capacity. In 1974-75 it is expected that the efficiency of the Charsadda mill would, improve to at least 50 per cent and that the remaining 6 mills would produce at full capacity to give a total output of about 40,640 tonne of paper.

11.47. The demand for paper is growing at a rapid rate of about 10-11 per cent per annum. To ensure that too large a gap does not open up between domestic demand and domestic production, the Federal Government plan to create an addtional 60960 toune per aunum paper manufacturing capacity in two bagasse-based units, to be located in Sind and the Punjab.

Single Superphosphate

11.48. The installed capacity in the Lyallpur Fertilizers and Chemical Company Ltd. is 9,700 N/ton which is under expansion to reach 19.400 N/tons. The expansion is expected to be operational in 1975-76 The production expected in 1974-75 is 46,000 tonne of SSP which the present plant appears currently capable of producing.

Ammonium Sulphate

11.49. The installed capacity is 90,000 tons of ammonium sulphate. On the basis of past performance and age of the plant it is expected that it would achieve a capacity utilisation rate of 93 per cent and would, therefore, produce 86,000 tonne of AS in 1974-75.

Ammonium Nitrate

11.50. The currently installed capacity is 105,000 tonne per annum, the plant is old and on the basis of past experience capacity utilization is not expected to be more than 75 per cent in 1974-75. Production in that year is targetted as 76,000 tonne.

Urea

11.51. Installedc apacity is 580 thousand tonne or 263 thousand N/tons. Capacity utilization is currently 107 per cent, a rate which is expected to be maintained in 1974-75. In that year, therefore, the production target for urea is about 600 thousand tonne.

Future Plans for the Fertilizers Industries

11.52. The top most priority is being given to the expansion of the fertilizer industry with a view to ensure that the domestic demand for fertilizer is met by domestic production. The policy is being followed mainly because Pakistan has the cheapest source of nitrogenous fertilizers namely natural gas, and there are indications that it may have a sizable reserve of rock phosphate, the cheapest source for phosphatic fertiliser. The demand for fertilizer in 1979-80 is expected to be 0.9 million N tons, of nitrogenous and 0.3 million N/tons of Phosphatic fertilizers. The capacity of the existing fertilizer factories is 0.3 million N tons of nitrogenous and 9,720 tons of phosphatic fertilizer. Expansion of the Multan and Lyallpur factories, construction of mammoth new urea factories by the State Fertilizer Corporation, M/s Fauji Foundation and M/s Dawood Corp., at Mirpur Mathelo, Sadiqabad and Jacobabad respectively, a Chinese aided urea factory in the N.W.F.P. and a TSP factory to be set up by the Sarhad Development Corp. at Tarbela would give an additional 0.9 million tonne of nitrogenous and 170,000 N tons of phosphatic fertilizers. Thus total capacity in 1979-80 should be around 1.2 million N tons of nitrogenous and 180,000 N tons of phosphatic fertilizers, thus giving a surplus of 0.3 million tonne of nitrogenous fertizers and a short-fall of 120,000 N tons of phosphatic fertilizers in 1979-80.

Cement

11.53. The installed capacity is about 3.5 millon tonne which is not expected to increase in 1974-75. Capacity utilization levels in this industry have usually not exceeded 85 percent and the 1973-74 level was around 81 per cent, caused partly by the closure of kilns due to floods in the early part of the year and transportation problems later on which closed the Zeal Pak Factory. In 1974-75 the newly installed kilns at Wah and Rohri are expected to operate at higher capacity utilization levels than they did in 1973-74 and the problems of the Gharibwal kiln are expected to be overcome. The capacity utilization factory in 1974-75 therefore, is expected to go up to 88 per cent to give a pduction of 3 million tonne. A problem which has emerged is that there may be shortage of gas for cement production in the northern zone, production in which may fall short of targets.

Soda Ash

11.54. Installed capacity in the two factories is about 79,248 tonne capacity utilization is currently around 100 per cent and this is expected to remain unchanged during 1974-75 to give a production of 81,000 tonne.

Caustic Soda

11.55. Installed manufacturing capacity is 37,287 tonne, most of it captive. Capacity utilization in 1972-73 was about 95 per cent which that in the first 8 months of 1973-74 was about 90 per cent. It is expected that capacity utilization in 1974-75 would again rise to 95 percent to give a production in that year of 35,560 tonne.

Sulphuric Acid

11.56. Installed capacity is around 38,608 tonne wich has been operating at 100 per cent efficiency in 1972-73 and 1973-74. No additional capacity will come into operation during 1974/75 and the production is estimated to remain static at 38,608 tonne.

Engineering goods

11.57. The engineering goods industry, which amounts to nearly 1/5th of the industrial sector is its most probamatic branch. It is also potentially the most dynamic sector. The engineering goods industry in Pakistan, however, comprises such a large number of small medium and large units, most of them using universal machine tools that it is extremely difficult to obtain data on production or investment. According to the available data, apart from public sector investment in the Heavy Foundry and Forge, Textile and Private sector investment in steel melting furnances, there was not much investment in this branch during 1973/74. This may not be quite true because by for the major portion of investment in the engineering goods industry is in the small and medium sector through the self generation of resources by existing units and entreprenours already in the business.

11.58. The largest component of this branch is the re-rolling industry, which includes steel melting furnaces. Installed capacity in it during 1973/74 was 883,920 tonne on a one shift basis, while production in that year is expected to be about 216,408 tonne only, a capacity-utilization factor of 25 per cent. Various studies conducted in the past have indicated that capacity-utilizaiion in the engineering sector as a whole has always been around 40 per cent, a figure which is borne out by a study conducted in 1973. This is, for most part, an under-capitalized industry in which the depreciation of fixed asserts is a very low proportion of sales and the numerous small and medium scale engineering units do not expect to be able to operate at 2-1/2 shifts per 24 hours, in order to be able to make profits. Finally, limited availability of basic limports and absence of adequate demand have also contributed to low utilization.

11.59. The charge levelled against this industry is that of low quality and numerous are the schemes and suggestions to improve it. Of the most important aspects to be kept in mind is that, by and large, this industry caters to a poor market which is not capable of paying the high prices which better quality would demand. The engineering goods industry, therefore, tailors its output to the pockets and needs of its consumers. There is no doubt that improved quality is a must if the engineering industry is to achieve the potential which it has for the industrialization of Pakistan. It is not necessary, however, to enforce better qulity on the output of every engineering units. Expansion of selected private and public sector engineeting units in selected fields would appear to be a much more appropriate strategy to follow. A UNDP-financed and UNIDC-aided project is currently under formulation to identify the direction in which the engineering industry should be encouraged to grow.

11.60. For 1974/75, major schemes are contempleted in import policy to private adequate supply of components and basic materials for this industry. With revival of industry and with schemes for improved technical assistance the industry should begin to move forward more quickly.

WRITE-UP OF MAJOR PROJECTS DURING 1974-75

Modernisation and Expansion of Pak-Arab Fertilizer Factory Multan

11.61. The scheme envisages the expansion of the existing NGFF, Multan by the installation of three new plants for the manufacture of 914 tonne per day ammonia, 955 tonne per day nitrophosphate and 1,005 tonne per

day calcium ammonium nitrate, respectively. These new plants are to be built around some of the existing facilities of the NGFF Multan and the existing urea and ammonia nitrate plants will continue to be used. The capital cost of the scheme is estimated at Rs. 990.00 million with a foreign exchange component of Rs. 762.20 million

11.62. Agreements have been signed with engineering contractors. Orders for machinery will he placed in early 1974/75. Civil works will have to be coordinated with schedule of deliveries of machinery. Tenders for civil works will be issued in early 1974/75. Foreign currency loan bas been firmed up with World Bank, Asian Development Bank and Abu-Dhabi. A provision of Rs. 38.3 crore has been made for it in the 1974/75 ADP as against a provision of Rs. 3 crore in 1973/74 ADP. A sum of Rs. 20.5 million has been spent upto January, 1974. The project is expected to go into commercial production in 1977.

Ceramic Complex Shaidu

11.63. The Sanitary Ware and Wall Tiles project is estimated to cost Rs. 54.5 million. Approval of the N.W.F.P. Government to the site selected at Shaidu had been given. Letter of credit for machinery was established on 12th February, 1974. The machinery is to be received in 1974/75 and all the civil works to he completed during the year. Four agreements *viz.*, promoter agreements, technical know-how, supply contract engineering and licensing agreements have since been signed between WPIDC and their foreign partners. Against a provision of Rs. 10 million in 1973/74, a sum of Rs. 0.57 million, was spent during July-December, 1973. A provision of Rs. 40.3 million has been made for the project in 1974/75 ADP. The projects is expected to be completed by December, 1975.

Tarbela Cotton Textile Mills

11.64. The project aims at creating employment opportunities for persons displaced by the construction of the Tarbela Dam. This Chinese-aided scheme, estimated to cost Rs. 33 million with a foreign exchange component of Rs. 20 million is for 25,000 spindles designed to produce 2.04 million Kg of 20s count of yarn and 9.20 million pounds of 10s count of yarn, (the latter for export), with the mill working at 85 per cent efficiency on three shifts. Site for the project has been selceted in Khalabat Township. Agreement with China has been signed and their estimates of plant and machinery were expected hy June 1974. PIDC will thereupon formulate and submit a revised PC-I scheme by August-September, 1974 and by June 1975 50% of the civil works will be completed. Against an allocation of Rs. 20 million in ADP 1973-74, a sum of Rs. 0.02 million was spent during July-December, 1973. A provision of Rs. 27.3 million has been made for the scheme in the 1974-75 ADP.

Larkana Sugar Mills, Naudero

11.65. The project is estimated to cost about Rs. 110 million and is based on machinery partly to be supplied by the Heavy Mechanical Complex (HMC) Taxila and partly to be imported from China. It will have a capacity of crushing 1524 tonne of sugarcane per day to produce about 18,288 tonne of sugar in a normal year. 22 per cent of the site development and levelling work has been completed, 50% of the civil work has been completed and remaining 50% is in progress. 50 per cent of the locally fabricated machinery has been received at site. Work on the project was started in 1971-72 aud the mill is expected to go into commerical production during the 1974-75 crushing season. Against an allocation of Rs. 25 millionin ADP 1973-74 a sum of Rs. 13.31 million was incurred during July-December 1973. A provision of Rs. 25 million has been made in 1974-75 ADP.

Karachi Steel Mill Corporation

11.66. The progress of implementation of Karachi Steel Plant. being set up with USSR assistance, is as follows :—

(1) M/s Sofresid's (France) technical and economic appraisal report on detailed project report was received in July 1973, and its examinations undertaken by the Corporation.

(2) Contract for the revision of detailed project report and working drawing of the main project and detailed project report for the plate Mill was signed in October 1973. Contractors for import of construction machinery for deputation of Soviet Specialists to Pakistan and training of Pakistani personnel in USSR were signed in December, 1973. A contract has recently been signed for the import of 37 per cent of the main machinery units as well as construction materials.

(3) Foundation stone was laid in December 1973.

(4) PCI proforma based on the original detailed project Report was drawn up and submitted to Government.

(5) A site office alongwith exhibition hall and foundation structure was completed in December 1973. Site was also connected by a motorable road to the high way.

(6) Agreement for township has been signed.

(7) Negotiations for water supply, gas supply and raw materials unloading facilities are in progress.

(8) Machinery for the metallurgical training centre was expected to be imported by the end of June 1974.

(9) A team of Corporations' experts has proceeded to USSR for finalising the layout plan of the Mills.

11.67 Rs. 410 million are available for construction of the Construction Base during 1974-75.

Match Manufacturing Plant, Azad Kashmir

11.68. The scheme has been sponsored by the Azad Kashmir Industrial Development Corporation. Land has been acquired. Letter of credit was established in March, 1974 and delivery is expected to be completed by October, 1974. A provision of Rs. 0.58 million has been made in the ADP 1974-75.

Heavy Foundry and Forge

11.69. The scheme, approved in principle in March 1973, to cost Rs. 176 million with a foreign exchange component of Rs. 55 million, is presently under revision because of an increased production programme and devaluation of the Pakistan rupee. This is a major project for creating a self sufficient industrial base and is expected to be completed in 1976-77. Land has been acquired and site development and levelling work completed. Buildings are under construction and machinery has been partilally installed.

11.70. Against an allocation of Rs. 75.0 million in the ADP 1973-74 a sum of Rs. 53.22 million was spent during July-December, 1973. A provision of Rs. 98.67 million has been made in the 1974-75 ADP.

Forest Industries Complex, Sheringal

11.71. The scheme has been on-going for a number of years and has not been completed because of lack of firm decision regarding the factory site. It was originally meant to cost Rs. 62.8 million. Its estimated revised cost is Rs. 190 million with Rs. 54.90 million in foreign exchange. The project aims at extracting 3.5 million cft. of timber and converting it into sawn timber, plywood and polished chipboard. 94% of the machinery for the project has been lying at Chakdara for sometime. The site of the project has again been shifted to Sheringal and the Polish suppliers will have to redesign the project for the new location.

11.72 Against the provision of Rs. 10 million in the ADP 1973-74, Rs. 1.13 million was spent in July—December 1973, on plant and machincery received from Poland, Rs. 10 million have been provided for the project in the ADP 1974-75.

Expansion of Lyallpur Chemical and Fertilizers Ltd Jaranwalla

11.73. Even with the expansion of Pak-Arab Fertilizer Factory, Multan, the demand for phosphatic fertilizer ($P^2 O^5$) in the country will not be met fully. WPIDC therefore, proposed the doubling of the capacity of its single super phosphate fertilizer factory at Lyallpur Jaranwalla at an estimted cost of Rs. 5.67 million with a foreign exchange component of Rs 1.98 million.

11.74. Orders for imported components have been placed and were expected to be received by May 1974. part of the machinery is being manufactured at HMC Taxila and about 40% of the work has been completed. the machinery is expected to be installed by July—October, 1974 and the project is expected to go in production by November, 1974. A provision of Rs. 5.00 million has been made in the ADP 1974-75.

Fertilizer Factory, Mirpur Mathelo

11.75 The Fertilizer Corporation proposed to set up a urea manufacturing project at Mirpur Mathelo near the Mari Gas field, at an estimated cost of Rs. 972.12 million with Rs. 687.50 million as the foreign exchange component. It would have an annual production capacity of 524 million tonne of prilled urea.

11.76. Land has been acquired at Mirpur Mathelo. Tenders have been invited for topographical survey and sub-soil investigation. Consultants have been engaged for the detailed feasibility study. A provision of Rs. 5 million has been made in ADP 1974-75 for preparation of the detailed study.

BMR of Harnai Woolen Mills.

11.77. The project envisages balancing of the existing worsted section and improving the fabric finishing capacity of Harnai Woollen Mills at an estimated cost of Rs. 6.97 million with a foreign exchange component of Rs. 4.92 million. Central Development Working Party has recommended the project in principle. A provision of Rs. 3 million has been made in the ADP 1974-75 as against Rs. 2.50 million in ADP 1973-74.

Karachi Shipyard and Engineering Works

11.79. The original project was completed in July, 1964 at a cost of Rs. 78.70 million, the main facilities created being for the construction of ocean-going vessels of 10,000-13,000 DWT, ship repair work general steel construction, foundry and galvanizing work and diesel engine manufacture. Later, in 1966 a phase-II, Part-I scheme was approved by the Government at a cost of Rs. 32 million. Due to prolonged period of construction and the addition of other facilities, the cost estimates went up to Rs. 75.10 million. The revised Phase-II Part-I schdeme is now nearing completion. In order to balance and complete the facilities created by the phase II Part I scheme, a Phase II Part II schme was submitted by the Karachi Shipyard and Engineering Works in December 1972. The scheme is estimated to cost Rs. 46.4 million with a foreign exchange component of Rs. 26.5 million.

11.80. Due mainly to the under utilisation of its ship-building facilities, the Karachi Shipyard has not been an entirely profitable concern. Its management is, therefore, making efforts to ensure full utilisation of the ship-building capacity. Accordingly a 5-year production programme for shipbuilding has been prepared. With capacity developed after implementation of the Phase-II Part-I scheme, the KSEW is in a position to manufacture 5 ships per annum each of 15,000 DWT. With the capacity balancing to be carried out by the phase-II Part-II scheme the shipyard will be able to build 5 ships of upto 15,000 DWT and 3 ships of 30,000 DWT. Total expenditure incurred during 1973-74 are in the order of Rs. 15 million provided in ADP 1974-75.

SMALL SCALE INDUSTRY

11.81. An analysis of the performance of the samll-scale industry sector needs to be preceded by emphasising how important it is in the context of the socio-economic policies of the Government. Small-scale industry needs smaller amounts of capital and creates more employment than large scale incustry. It does not lead to the concerntration in a control over productive assets and sources of finance in a few hands as large-scale industry tends to do. Small-scale industry tends to broaden and strengthen the base of industrial enterprise by creating a large number of small enterpreneurs. It tends to concentrate on processing locally available raw-materials using locally manufactured equipmrnt. Finally, it can be used to effect the dispersal of industry from the major cities into the smaller towns and to create an organic link between the two which would keep the growth of the former within th. manager limits. These advantages of obtaining industrial production from small-scale industry are almost exactly in line with the policies of the present Government with stress on the creation of employment in the smal-ler, towns in order to curb the rate of growth of the major cities.

11.82. Partly because of the impact of Government's socio-economic policies on private sector industry and partly because of the boom in world trade, small -scale industry is currently experiencing a very repaid rate of growth. It is estimated that private investment in small-scale industry increased from Rs. 260 million in 1972-73 to Rs. 300 million in 1973-74, and would be Rs. 400 million in 1974-75. The wide spital dispersion of small-scale industry and the large number of individual units which comprise it makes it very difficult indeed to estimate producion or the investment being made in it. However, the evidence available suggests that both investment and production in this sector are going through a period of rapid upswing.

Growth

11.83. Since no date is compiled on production in the small-scale industry ,a number of differnet sources have to be tapped in order to estimate its rate of grouth. Nearly 30 per cent of the value added in small-Scale industry is by the textile sub-sector, 15-20 per cent is by the engineering industry and about 15-20 per cent by food industries. The growth in small-scale textitles during 1973-74 has been phenomenal. This is indicated by the fact that the availability of cotton yarn for the non-mill sector increased from approximately 142 million lbs. in 1972-73 to an estimated 442 million. lbs. in 1973-74. Allowing for an extraordinarily high rate of stock-building in the later year, the consumption of yarn by the small scale industry sector appears to have shot up in 1973-74. Similarly, the import of art silk yarn appears to have experienced a dramatic increase. The value of licences for the import of this commodity jumped from Rs. 87 million in July—March 72-73 to Rs. 453 million July—March 1973-74 an incresase of 520 per cent. Since cotton yarn and silk yarn are the two main raw materials of small scale textile industry, it is clear that the rate of growth during 1973-74 has been phenomenal The textile branches are almost one-third of the small-scale industrial sector and the growth of the small scale sector, has filled the order books of the textile machinery manufacturers who, in turn, comprise an important segment of the small scale engineering industry. The delivery periods for looms, for example, being quoted are unheard of in Pakistan. Similarly, the production of engineering goods related to the agricnlture sector appear to be experiencing an upward trend. The main constraint faced by the small scale engineering industry is a shortage of imported raw materials, a constrain which the industry lays unanimously but incorrectly, at the door of the TCP. The complaints which are genuine enough are due to light imports and the difficulty of dealing with very small units either directly or through intermediary. Continuous efforts will have to be made to seek a solution to the problem and high priority will have to be given to it in 1974-75. There has been a substantial increase in he allocation for the import of essential raw-materials. Programming of imports for 1974-75 is based on estimation of the physical quantities required. The Trading Corporation has been provided with needed funds to ensure that shortages will be avoided. However, in view of the world made shortage and extended delivery periods it would be ncessary to make entire effort, to obtain supplies in time. The T.C.P. would also required to improve its distribution system and contact with small industrial units.

Investment

11.84. As mentioned earlier, the rapaid growth in this sector has led to an equally rapid growth in the investment in it. The full capacity utilization and long delivery periods being quoted by the loom manufacturers illustrates this statement. Composition of investment made through the institutional channels of the Provincial Small Insdustries Corporations and Boards, their consortia of commercial banks and the IDBP also reflects the increase in investment in small scale industry. Some figures of this are given in Table-I.

Exports

11.85 The products of the small-scale sector continued to make an important contribution to our export earnings of manufactured commodities in 1973-74. Classifying carpets and rugs, hosiery, garments, surgical instruments, sport goods, handicrafts and cutelry as products of the small-scale industrial sector, the growth in their exports was 32 per cent p.a. between 1969-70 and 1973-74. This increase in exports is partly attributable to higher prices, but a large portion of it is, however, due to increased volumes and quality. The growth in the volume of exports of these commodities in 1973-74 was 18 per cent over 1972-73.

11.86. The main component of small industry development ploicy would continue to be preferential financing arrangement with the aid of provincial corporations and boards, the provision of developed plots in SIEs and policies and programmes for enabling small industry easy access to imported raw material and capital equipment improvment.

11.87. The current practice of treating the financing of small-scale industry in the same manner as that the large scale units should be modified. The nautre of their requirements are different. Special financing arrangements should be evolved to finance small scale industry, based on assumptions relevant only to this sector. A movement towards the creation of such a system began in December 1971 with the induction into office of the present Government. This movement needs to be carried to its logical conclusion.

11.88. The provision of developed plots and infra-structural facilities to small industrial units in industrial estates is an accepted practice the world over. The scheme has not been successful in Pakistan and studies are underway to determine the reason. Based on the results of these studies new policies may have to be evolved for small industry estates, perhapes in conjunction with town and regional planning and industrial location policies.

11.89. Finally, the most important potential of the small scale industrial sector is its role in the development of rural areas and incomes and the dispersal of economic activity away from the metropolitan areas into the small towns and villages of the countryside. The small-scale engineering sector, in particulars, can be useful in implementing these policies, and comprehensive plans need to be drawn up in this regard. These plans would have to take into account both upgrading and modernising though in part, the existing village-type metal workings skills and the use of sub-contracting by the nationalised engineering sector to disperse the engineering industry.

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

ALL PAKISTAN 1974-75

(Million Rupees)

Sector/Sub-Sector	Allocation for 1973-74	Revised Estimates during 1973-74	% implementation	Allocation for 1974-75
1. Food Manufacture	26.200	48.894	187	51.500
2. Beverages	—	1.10	—	—
3. Tobacco Manufacture	1.80	1.10	61	3.800
4. Manufacture of Textile	2.500	6.500	260	39.681
5. Foot wear and Apparels	—	—	—	2.566
6. Wood and Cork	15.000	10.000	67	10.000
7. Furniture and Fixture	—	—	—	
8. Paper and Paper Products	—	0.105	—	0.200
9. Printing and Publishing	4.70	0.510	11	1.670
10. Leather and Leather Products	2.000	0.060	—	2.017
11. Rubber Products	—	—	—	
12. Chemical Industries	33.000	145.923	388	437.376
13. Production of Petroleum, Coal and Gas	4.000	2.500	62	2.500
14. Petro-chemical Industries	—	—	—	3.000
15. Non-Metallic Mineral prod	13.600	12.900	74	3.000
16. Basic Metal Industries	30.000	70.171	233	415.000
17. Metal Product Industries	75.000	93.700	125	105.760
18. Machinery except Electrical Machinery	—	33.500	—	3.000
19. Electrical Machinery Apparatus and Appliances	—	2.297	—	2.500
20. Transport Equipment	15.000	16.000	106	10.470
21 Miscellaneous Industries	8.100	3.923	48	12.969
22. Industrial Estate	5.200	0.790	15	3.530
23. Training and Research	3.100	2.900	94	4.488
24. Small Industries Promotional Programme	19.800	25.089	127	40.876
25. Scientific and Industries Research	3.400	2.650	78	3.905
26. Survey and Investigations	—	—	—	0.144
27. Pakistan Mint. Lahore	2.500	2.500	100	0.115
28. Financial Corporation (NDFC & PFC)	90.000	7.000	8	—
29. P. I. D.B Projects	24.100	20.000	83	60.000
30. SDA Projects	—	35.080	—	55.500
TOTAL ..	412.200	544.092	132	1275.567

Annexure II

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

FEDERAL GOVERNMENT 1974-75

(Million Rupees)

Sector/Sub-sector	Allocation for 1973-74	Revised Estimates during 1973-74	% implementation	Allocations for 1974-75
1. Food Manufacture	25.200	47.894	190	38.500
2. Beverages	—	—	—	—
3. Tobacco Manufacture	1.800	1.100	61	3.800
4. Manufacture of Textile	2.500	6.500	260	37.981
5. Foot wear and Apparels	—	—	—	2.566
6. Wood and Cork	15.000	10.000	67	10.000
7. Furniture and Fixture	—	—	—	—
8. Paper and Paper Products	—	0.105	—	0.200
9. Printing and Publishing	2.000	—		0.670
10. Leather and Leather Products	2.000	0.040	2	2.000
11. Rubber Products	—	—	—	—
12. Chemical Industries.	33.000	145.923	388	437.376
13. Production of Petroleum Coal and Gas	4.000	2.500	62	2.500
14. Petro chemical Indutri es	—	—	—	3.000
15. Non-Metallic Mineral products	13.600	12.900	74	3.000
16. Basic Metal Industries	30.000	70.171	233	411.500
17. Metal Product Industries	75.000	93.700	125	105.760
18. Machinery except Electrical Machinery	—	33.000	—	3.000
19. Electrical Machinery Aappratus and Appliances	—	2.297	—	2.500
20. Transport Equipment	15.000	16.000	106	10..470
21. Miscellaneous Industries	2.800	2.493	53	2.769
22. Industrial Estate	—	—	—	—
23. Training and Research	2.900	2.900	100	4.288
24. Small Industries Promotional Programme	4.800	11.549	240	10.084
25. Scientific and Industries Research	3.100	2.650	87	3.905
26. Survey and Investigations	—	—	—	—
27. Pakistan Mint Lahore	2.500	2.500	100	0.115
28. Financial Corporation (NDFC & PFC)	90.000	7.000	8	—
TOTAL ..	358.400	470.222	131	1095.984

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

PUNJAB 1974-75

(Million Rupees)

Sector/Sub-sector	Allocation for 1973-74	Revised Estimates during 1973-74	% implementation	Allocation for 1974-75
1. Food Manufacture	—	—	—	—
2. Beverages	—	—	—	—
3. Tobacco Manufacture	—	—	—	—
4. Manufactur of Textile	—	—	—	—
5. Foot wear and Apparels	—	—	—	—
6. Wood and Cork	—	—	—	—
7. Furniture and Fixture	—	—	—	—
8. Paper and Paper Products	—	—	—	—
9. Printing and Publishing	—	0.010	—	0.020
10. Leather and Leather Products	—	—	—	—
11. Rubber Products	—	...	—	—
12. Chemical Industries	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—
14. Petro-chemical Indutries	—	—	—	—
15. Non-Metallic Mineral products	—	—	—	—
16. Basic Metal Industries	—	—	—	—
17. Metal Product Industries	—	—	—	—
18. Machinery except Electrical Machinery	—	—	—	—
19. Electrical Machinery Apparatus and Appliauces	—	—	—	—
20. Transport Equipment	—	—	—	—
21. Miscellaneous Industries	5.200	2.430	46	5.200
22. Industrial Estate	4.100	0.110	3	1.360
23. Training and Research	0.100	—	—	—
24. Small Industries Promotional Programme	6.200	4.720	76	13.145
25. Scientific and Industries Research	0.300	—	—	—
26. Survey and Investigation	—	—	—	—
27. P. I. D. B. Projects	24.100	20.000	83	60.000
TOTAL	40.000	27.270	68	79.905

Annexure IV

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

SIND 1974-75

(Million Rupees)

Sector/Sub-sector	Allocation for 1973-74	Revised estimates during 1973-74	% implementation	Allocation for 1974-75
1. Food Manufacture	1.000	1.000	100	10.000
2. Beverages	—	—	—	—
3. Tobacco Manufacture	—	—	—	—
4. Manufacture of Textile	—	—	—	—
5. Foot Wear and Apparels	—	—	—	—
6. Wood and Cork	—	—	—	—
7. Furniture and Fixture	—	—	—	—
8. Paper and Paper Products	—	—	—	—
9. Printing and Publishing	—	—	—	—
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	0.500	0.450	90	0.460
23. Training and Ressearch	—	—	—	—
24. Small Industries Promotional Programme	2.500	1.800	72	1.692
25. Scientific and Industries Research.	—	—	—	—
26. Survey and Investigations (WPIDC)	—	—	—	—
TOTAL :	4.000	3.250	81	13.152

Annexure V

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

N.W.F.P. 1974-75

(Million Rupees)

Sector/Sub-sector	Allocation for 1973-74	Revised estimates during 1973-74	% implementation	Allocation for 1974-75
1. Food Manufacture	—	—	—	—
2. Beverages	—	—	—	—
3. Tobacco Manufacture	—	—	—	—
4. Manufacture of Textile	—	—	—	1.700
5. Foot wear and Apparels	—	—	—	—
6. Wood and Cork	—	—	—	—
7. Furniture and Fixture	—	—	—	—
8. Paper and Paper Products	—	—	—	—
9. Printing and Publishing	2.200	—	—	0.500
10. Leather and Leather Products	—	0.020	—	0.017
11. Rubber Products	—	—	—	—
12. Chemical Industries	—	—	—	—
13. Productinn 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	0.100	—	—	—
22. Industrial Estate	0.600	—	—	—
23. Training and Research	0.100	—	—	0.200
24. Small Industrial Promotional Programme	4.700	4.890	104	9.465
25. Scientific and Industries Research	—	—	—	—
26. Survey and Investigations (WPIDC)	—	—	—	0.144
27. SDA Block Provision	—	35.080	—	55.500
TOTAL ...	7.700	39.990	519	67.526

Annexnre VI

FINANCIAL EXPENDITURE AND ALLOCATION

Manufacturing Industry

BALUCHISTAN

(Million Rupees)

Sector/Sub-sector	Allocation for 1973-74	Revised estimates during 1973-74	% implementation	Allocation for 1974-75
1. Food Manufacture	—	—	—	2.000
2. Beverages	—	—	—	—
3. Tobacco Manufacture	—	—	—	—
4. Manufacture of Textile	—	—	—	—
5. Foot wear and Apparels	—	—	—	—
6. Wood and Cork	—	—	—	—
7. Furniture and Fixture	—	—	—	—
8. Paper and Paper Products	—	—	—	—
9. Printing and Publishing	0.500	0.500	100	0.300
10. Leather and Leather Products	—	—	—	—
11. Ruhber Products	—	—	—	—
12. Chemical Industries	—	—	—	—
13. Production of Petroleum, Coal and Gas	—	—	—	—
14. Petro-ehemical Industries	—	—	—	—
15. Non-Metallic Mineral products	—	—	—	—
16. Basic Metal Industries	—	—	—	3.500
17. Metal Product Industries	—	—	—	—
18. Machinery except Electrical Machinery	—	0.500	—	0.500
19. Electrical Machinery Apparatus and Appliances	—	—	—	—
20. Transport Equipment	—	—	—	—
21. Miscellaneous Industries	—	—	—	5.000
22. Industrial Estate	—	0.230	—	1.710
23. Training and Research	—	—	—	—
24. Small Industries Promotional Programme	1.600	2.130	—	6.490
25 Scientific and Industries Research	—	—	—	—
26. Survey and Investigations (WPIDC)	—	—	—	—
TOTAL	2.100	3.360	160	19.500

Annexure VII

PICIC SANCTIONS

(July 1973 to March 1974)

(Million Rupees)

Sl. No.	Name of Industry	Amount sanction		
		INT.	EXT.	Total
1.	Cotton Textile (Spinning)	—	250.384	250.384
2.	Cotton Textile (Weaving)	—	0.941	0.941
3.	Cotton Textile (Blended Yarn)	—	39.600	39.600
4.	Specialised Textiles	—	17.370	17.370
5.	Woollen Textile (Spining)	2.130	1.147	3.277
6.	Sugar	9.000	32.910	41.910
7.	Hotels and Motels	—	39.600	39.600
8.	Ceramics other than sanitary wares and Tiles	—	28.090	28.090
9.	Plastic products	0.150	9.900	10.050
10.	Vegetable Ghee	7.100	—	7.100
11.	Matches	—	5.900	5.900
12.	Petroleum Refineries and Mineral Oil	2.500	—	2.500
13.	Cigarettes	—	2.190	2.190
14.	Footwear and Tanning	—	7.591	7.591
15.	Glass products	—	1.911	1.911
16.	Drugs and Pharmaceuticals	—	1.800	1.800
17.	Others	1.400	1.373	2.773
	Total	22.280	440.707	462.987

Annexure VIII

IDBP SANCTIONS

(Rs. in million)

Sl. No.	Industry	Loan sanctions		
		Local	Foreign	Total
1.	Cotton Textile	21.49	101.88	123.37
2.	Rice Milling	2.68	1.17	3.85
3.	Specialised Textile	1.24	7.13	8.37
4.	Woollen Textile	1.11	33.70	34.81
5.	Leather Tanneries	—	3.28	3.28
6.	Beverages	2.31	—	2.31
7.	Printing & Publishing	—	2.70	2.70
8.	Vegetable Ghee	5.00	—	5.00
9.	Safety Matches	—	2.93	2.93
10.	Sugar	—	0.35	0.35
11.	Others	9.80	78.49	88.29
	Total	43.63	231.63	275.26

1974-75 Industrial Production Targets

No.	Industry	Units	1971-72	1972-73	1973-74 Plan Targets	1973-74 July 73-March 74 basis	Targets 1974-75
1.	White Sugar	000 tonne 000 tons	376 370	439 432	559 550	594 585	660 650
2.	Vegetable Ghee	000 tonne 000 tons	161 159	188 185	229 223	234 230	279 275
3.	Cigarettes	000 mill.	22	29	27	26	32
4.	Cotton Yarn	000 Kg. Mill. lbs.	336 740	377 829	400 881	379 833	431 950
5.	Cotton Cloth	Mill-Metre Mill yds.	686 751	640 701	675 738	643 703	685 750
6.	Board	000 tonne 000 tons	35 34	38 37	41 40	38 37	38 37
7.	Writing and Printing Paper	000 tonne 000 tons	25 25	24 24	— —	26 26	40 39
8.	Soda Ash	000 tonne 000 tons	77 76	70 69	79 78	81 80	81 80
9.	Caustic Soda	000 tonne 000 tons	32 31	36 35	39 38	34 33	36 35
10.	Sulphuric Acid	000 tonne 000 tons	32 31	39 38	38 37	38 37	39 38
11.	Urea	000 tonne 000 tons	394 388	533 525	572 563	603 593	610 600
12.	Super Phosphate	000 tonne 000 tons	27 27	46 45	71 70	31 30	46 45
13.	Ammonium Sulphate	000 tonne 000 tons	67 66	67 66	68 67	74 73	76 75
14.	Ammonium Nitrate	000 tonne 000 tons	— —	58 57	— —	84 83	86 85
15.	M.S. Products	000 tonne 000 tons	166 163	184 181	197 194	217 214	239 235
16.	Cement	000 tonne 000 tons	2,605 2,564	2,875 2,830	2,845 2,800	2,907 2,861	3,150 3,100

CHAPTER 12

MINERAL DEVELOPMENT

Mineral Development in Pakistan has lagged behind the requirements of national economy mainly because it was not properly organized in the public sector. Mineral exploration and develpoment has been carried out by a number of independent agencies such as the Geological Survey of Pakistan (GSP), the Pakistan Atomic Energy Commission, the Pakistan Industrial Development Corporation, the Pakistan Council of Scientific and and Industrial Research (PCSIR), the Provincial Mineral Development Directorates, the Sarhad Development Authority, and by the private sector. The latest to enter this field is the Federally Administered Tribal Areas Development Corporation (FATADC), which has yet to develop an adequate capability for mineral development. There is a considerable need for interagency coordination. The activities of the Geological Survey of Pakistan are restricted to exploration only, *i.e.* discovery and assessment of mineral reserves and grade estimation of the deposit. Mineral exploitation is in the provincial domain. An important aspect of the mining industry, namely mining feasibility studies, or pre-investment studies, has been neglected. These are the responsibilities of no specialist agency. Such investigations provide the bridge between mineral exploration and exploitation. Up to now there was no single organization in Pakistan sufficiently equipped to perform this function although some work was done by PIDC, PCSIR and the Universities. Consequently, the exploration reports of GSP were either ignored or not sufficiently appreciated by the exploitation agencies and hence failed to attract the private investor. This created a gap between exploration and exploitation and large number of mineral deposits discovered by GSP have remained untapped.

12.2 In order to accelerate exploration and exploitation of minerals, the public sector mineral development agencies of the Federal Government have been re-organized. The Mineral Development Cell of PIDC, was taken away from it and converted in to a Mineral Development Corporation (MDC). In addition, the Research Development Corporation (RDC) was set up in March 1974, for the specific purposes of implementing a crash exploration and exploitation programme for the copper deposits found at Saindak in Chagai District. Both these Corporations are joint stock companies. In the provinces, the Sarhad Development Authority is active in the minerals sector and the Punjab Province has set up its own mineral development corporation. The FATADC is operating in this field in the Tribal Areas. The creation of these agencies and the continued operations of the GSP should ensure both that Mineral deposits are discovered at an increasingly rapid rate and that the time between their discovery and exploitation is the shortest possible. The strategy which has been adopted is to concentrate the efforts of the GSP into the most promising mineral bearing areas. 'Mineral Districts" have been constituted on which the GSP shall concentrate. These are : Chagai; Lasbela-Khuzdar; Zhob; Tharparker; Salt Range-Potwar; Hazara, Swat-Dir; Mohmand, Waziristan; and Chitral-Gilgit mineral districts.

Work on the Chagai Mineral District has been underway since 1970, and that on the Lasbela-Khuzdar District since 1973. While the GSP concentrates on general mapping, the specialised agencies, such as the MDC, WPIDC, SDA and FATADC apply themselves to proving the commercial feasibility of mineral deposits with a view to exploiting them. The MDC is concentrating on coal and salt, the RDC is exclusively occupied with Saindak copper, the WPIDC is proving the iron ore reserves of Chagai district, the SDA is seeking WPIDC collaboration in proving and exploiting the Rock Phosphate reserves of Hazara district and the FATADC is pursuing a scheme for mining soapstone in Kurram agency.

Mineral Development Corporation

12.3. The creation of the Mineral Development Corporation is important for systematic exploration, development and exploitation of minerals. The Corporation will be a joint Stock Company operating under the Company Law and will, therefore, enjoy complete freedom from bureaucratic red tape and will have flexibility in operations.

12.4. The Mineral Development Wing of the PIDC has been merged with Corporation. All projects undertaken by the PIDC on behalf of the Provinces have been transferred to the newly formed MDC. The present, financial structure of the Mineral Development Corporation is as follows :—

(*a*) Equity of Rs. 10 million has been approved for release by the Government as soon as the Corporation is registered out of authorised capital of Rs. 1000 million.

(*b*) The amounts utilised in projects which are proposed to be transferred to Corporation have received funds from Governments, partly interest bearing at the rate of 6.5% and partly interest free. Interest bearing loans amount to Rs. 73.68 million in respect of Makerwal Collieries Ltd., development

of coal deposits in Central Block, Sor Range, Sharigh Coal Mines and Degari Coal Mines with the following break-down.

(Million Rupees)

(i) Makerwal Collieries	17.48
(ii) Development of Coal Sharigh COAL mines Deposits, Central Block, Sor Range Sharigh Coal Mines ..	24.37
(iii) Sharigh Coal Mines	15.13
(iv) Degari Coal Mines	16.70
	73.68

(*c*) These projects also have foreign loans and the amounts are repayable together with interest every year. The amount of the foreign loan which remains outstanding is Rs. 5.054 million and annual instalment, including interest is Rs. 1.372 million.

12.5. There are other projects which are exploratory and are under way. Funds released for these are being treated as interest-free. Underway projects are expected to have a carryover balance of Rs. 2.5 million to be utilised during 1974-75 alongwith the allocation of Rs. 3.70 million proposed for the ADP 1974-75.

Resource Development Corporation

12.6. Set up in March 1974, the Corporation operates under the supervision of the Ministry of Fuel, Powe and Natural Resources. It has been registered as a joint stock company to explore and exploit natural resources of the country.

Major Minerals

12.7. Brief notes on the major minerals which are currently being explored or exploited appear below :

Coal

12.8. The total recoverable coal reserves of Pakistan are estimated at 469 million tones, capable of yielding 8.911 million BTUs of energy which is about 10 per cent more than the energy yield from the entire gas reserves at Sui. The current production of coal is about 1.3 million tons, 95 per cent of which is used for brick-making, 4 per cent for power generation and 1 per cent for domestic purposes. Coal and coke for railways, foundries and engineering works is imported. Imports average about 44,430 tons per annum and consumption of coal by railways has substantially declined since after Independence. At present only 11 per cent of the locomotives are coal-based.

Iron Ore

12.9. Total reserves of iron ore in the country are estimated over 400 million tons of which about 375 million tons are sedimentary, about 9 million tons are metamorphic/hydrothermal and about 16 million tons are lateritic. The largest reserves of over 300 million tons are in the Kalabagh-Makerwal region in Mianwali District (Punjab). The ore contains complex carbonate, silicate and oxide minerals with an average of 32 per cent iron. The Langrial deposits of Hazara District in NWFP contain about 30 million tons of complex ore with iron content varying from 34 to 47 per cent. About 10 million tons of carbonate ore reserves with an average of 30 per cent iron ore estimated to be available in Khuzdar District, Baluchistan. The remotely ocated Chitral deposits of 3.7 million tons are of magnetite type with a high iron content of 45 to 65 per cent. Iron ore deposits are also found near Ziarat Baluchistan and at Chilghazi near Dalbandin in Balucistan. PIDC is currently seized of detailed exploratory-*cum*-development work on the Chagai deposits in Baluchistan with a view to establishing a small big iron plant of 100 tons per day capacity.

Chromite

12.10. Chromite is the only metallic mineral that Pakistan produces mainly for export. The main deposits of Chromite are located near Muslimbagh in Baluchistan. These deposits contains ore with a chromium/iron ratio of about 3.1. Small deposits of chromite have also been found in Chagai and Kharan Districts of Baluchistan and in Malakand Mohmand and North Waziristan Agencies in NWFP. The production of chromite has not increased to any appreciable extent over last several years due to the tough international competition from the producers of this ore and has been around 25 lakh tons annually. In line with adding the maximum possible domestic value-added to exports of domestic natural resources, plans are under implementation for the conversion of Baluchistan chromite to Ferrochrome.

Copper Ore

12.11. Encouraging indications of the presence of copper deposits have been found at Saindak near Pakistan-Iran border in Chagai district of Baluchistan.

12.12. The preliminary tests so far carried out indicate the potential presence of 250 million tons of copper ore with an average metal grade of 0.5 per cent. This is very encouraging. The price of refined copper on London Metal Exchange in April 1974, rose to £ 1200 per ton from £ 640 per ton in April 1973. Although in June, 1974 prices fell to around £ 990 the steep rise in copper prices has improved the economic & even lower grade ores such as these at Saindak.

12.13. In view of the importance of copper and its likely impact on the economy of the country, it has been decided to carry out this work with the requisite priority at an accelerated speed through the newly set up Resource Development Corporation. A scheme costing Rs. 51 million has been sanctioned which include new drilling machines and setting up Saindak mechanical and Chemical laboratories. The aim is to reach "proving stage" and for that purpose the Corporation need to drill approximately 60,000 feet.

12.14. According to the expert opinion, there are indications that good copper deposits would be available in four to five areas besides Saindak in the "Sulphide Valley". Test drilling has been done on 15 per cent of the Sulphide Valley area. These preliminary tests indicate potential presence of 250 million tons of ore body with approximate average Copper of Grade of 0.5 per cent plus Molybdenum from 0.01 to 0.09 per cent. In other words, indication of Copper metal, in 15 per cent of the ore tested, amounts to 1.25 million tons. The June's 1974 price work on London Metal Exchange was about £ 1,000 per ton. Tests drilling work has commenced on the balance of the area.

Rock Phosphate

12.15. The Hazara Phosphate area, in the opinion of the local and foreign geologists, has good chance of becoming a potential producer of phosphate rock, needed for fertilizer manufacture in the country. In 1971 the Geological Survey of Pakistan started exploration of phosphate in the area and came out with promising results. So far four promising deposits at Kakul, Lagarban, Dolao and Sirban Hill have been located and partly explored.

12.16. Out of about 60 square miles of potential phosphate rock bearing area, only 5 to 6 square miles have been explored so far. Within this small area, indicated reserve of the phosphate rock has been estimated at 6 million tons. The area has been termed by the CENTO Phosphate Working Group experts as promising to become potential commercial source of phosphate rock. The experts have strongly recommended that further exploration should be carried out in the area of mineralization, and also to carry out detailed exploration of the known deposits by trenching, drilling, tunnelling and systematic sampling.

12.17. There are indications of phosphate rock in the entire area from a point south of Abbottabad to within Azad Kashmir. The main areas are between Kakul and Lagarban. In the Abbottabad area alone, 28 leases have been given covering an area of about 1.9 lakh acres of which only about 5 thousand acres have been examined to prove volume and quality of reserves. The results of this examination are as follows:

(Million tons)

Area	Proven	Probable inferred	Potential possible
Lagarban			
(*i*) High grade	0.8—	2.0	—
(*ii*) Low medium grade	1.7—	—	—
Kakul-Mirpur :			
High grade	0.92	0.6	—
	0.50		
Other area Abbottabad	—	—	12.0
Other area Tarbela :	—	—	5.0
	3.9	2.6	17.0
Total ..	7.82	5.2	34.0

12.18. Work so far done has established that indicated reserves of 6 million tons may be found in the Kakul and Lagarban deposits. In order to prove the indicated reserves and to find out new deposits in the area. the following determinations are to be made :-

(*a*) Extensions of the deposits along the out crops of host rock formation.

(*b*) Extensions of the deposits in depth.

(*c*) How the grade of the phosphate rock changes in depth.

(*d*) Average grade of the phosphate in each deposit.

(*e*) Total minerable reserve in each deposit.

(*f*) To get the necessary beneficiation tests carried out for upgrading the medium and poor grade phosphate found in the deposits.

(*g*) To prepare evaluation report.

(*h*) To carry out further phosphate search in other areas of HAZARA.

12.19. SDA and PIDC and GSP are currently engaged in intensive and extensive surveys, investigations and exploration activities in Hazara area in order to determine the quality and quantities of rock phosphate reserves on a top priority basis. Government has already sanctioned in principle the setting up of a phosphatic fertilizer plant for that area. Current imports of rock phosphate made by the NFCP will be replaced from the domestic phosphate as expeditiously as practicable and it would result in saving mounting recurring foreign exchange expenditure.

Review of 1973–74

12.20. About Rs. 25.28 million had been allocated for public sector mineral schemes during 1973-74. Of this Rs. 24.28 million were to be spent by Federal Government Organizations and the balance of about Rs. 1.00 million by the Mineral Directorates of the Provinces. The revised expenditure during 1973-74 is estimated about Rs. 62.65 million which is an increase of about Rs. 37.37 million. This is largely due to the higher expenditure on the following projects : Saindak Copper project, RDC (Rs. 29.3 million); Mineral projects undertaken in provinces by the PIDC/MDC (Rs. 7.00 million); Mineral projects undertaken by the Government of Baluchistan (Rs. 1.15 million).

12.21. The actual expenditure incurred gives an overall utilization of about 250 per cent. The index of mineral porduction (base 1964/65—100) rose from 115.9 in 1969/70 to 121.9 in 1972/73 and is estimated at 122.3 in 1973/74. The growth is slow, and the reasons for it have been outlined earlier in this chapter.

1974-75 Allocation

12.22. The 1974-75 Plan makes an allocation of about Rs. 2.743 crores for surveys, investigations, exploitation and development of mineral projects in the public sector, as given in Table I :

TABLE-I

Financial Allocations

Federal Government :

(Million Rupees)

1. Ministry of FP&NR	
(*a*) G.S.P. ...	9.00
(*b*) Mineral Development Corporation	3.70
(*c*) Resource Development Corporation	10.00
2. Azad Kashmir projects	0.90
3. Northern Areas Projects	1.40
4. Federal Administered Tribal Areas Development Corporation	1.06
Total	26.06

Provincial Governments :	
(*a*) Punjab ..	0.60
(*b*) Baluchistan	0.50
(*c*) N.W.F.P.	0.27
Sub-total ..	1.37
Federal and Provincial Total Programme	27.43

12.23. A brief description of certain majqr and important projects is given in the following paragraphs :

FEDERAL PROGRAMME

Geological Survey of Pakistan

12.24. The Geological Survey of Pakistan is primarily responsible for collecting and providing geological information through systematic geological mapping. It also carried out exploration and appraisal of mineral resources through surveys and test drilling. In view of the increasing importance which the present regime attaches to the development of mineral resources, the Federal Government, in 1973-74, provided Rs. 16 million for the regular activities of the Department. In addition, Rs. 10.34 million were provided as ADP allocation for 3 special projects, *i.e.* the Chagai Mineral District Exploration Project, the Saindak Copper Exploration Project and the Lasbela-Khuzdar Mineral Exploration Project. During 1972-73, the allocation for exploration work was only Rs. 3.4 million. During the period July 1973—December 1973, GSP mapped about 4,500 sq. miles on 1 : 50,000 scale in different parts of the country. Regional geophysical surveys, including gravity and magnetic measurements, were carried out in different parts of the Punjab and Baluchistan so that a more reliable interpretation of the sub-surface geological conditions may be made. These surveys covered an area of about 4,000 square miles.

12.25. Mineral exploration projects implemented by the Geological Survey of Pakistan during the first half of 1973-74 included investigations of coopper mineralisation in Chagai and Lasbela Districts, Baluchistan; iron ore at Rakhi Munh in Dera Ghazi Khan District (Punjab) ; High Alumina Clays in Kalsa Chitta and Salt Range areas (Punjab : rock phosphate in Hazara District, NWFP), lake salts in Sind, pyrite in Azad Kashmir and study of placer gold and other heavy minerals in the sands of the Indus River and its tributaries.

12.26. The project envisages intensive investigation and exploration of the area so that the total mineral potential may be known and the development may be taken up of minerals of economic value. The salient features of the project are :—

(i) Maximum use of Pakistan personnel will be made. A group of geo-scientists would be trained whose experience plus the equipment utilised under this project will be utilised for future investigations more successfully and economically.

(ii) Minerals such as iron ore, copper and sulphides are to be located in commercial quantities.

(iii) Investigations for ground water will also be carried out.

(iv) The project's success would result in prosperity for the province, more job dpportunities for its people and the creation of a base for future industrialisation of this most backward province of Pakistan.

12.27. The activities of the project during 1974-75 are listed below :—

(*i*) Regional geological mapping and preliminary mineral exploration in an area of 2,500 sq. miles on 1 : 50,000 scale.

(*ii*) Geo-Chemical reconnaissance with the help of steam sediment sampling for an area of approximately 5,000 sq. miles. This will include geo-chemical and heavy minerals analysis of approximately 7,500 sq. miles.

(*iii*) Regional gravity and magnetic surveys in an area of about 500 sq. miles.

(*iv*) Detailed geological mapping, geo-chemical surveys and geophysical investigations in an area of about 500 sq. miles.

(*v*) Exploration of the known mineral showings in Chagai mass—if with particular emphasis on copper and iron ore occurrances.

(*vi*) Petrographic and petrogenetic study of Chagai volcanics of the associated intrusive rocks.

(*vii*) Aerial colour photography of the entire Chagai Mineral District provided foreign technical assistance for this purpose is available.

(*viii*) Shallow test drilling in parts of the main mineralised areas of Chagai District to supplement geological mapping for delineating areas for detailed mineral exploration.

(*ix*) Procurement of necessary equipment, accessories, spares and provision of other logestic support.

No production is supposed.

Aeromagnetic Survey and follow-up Ground Investigation in various Mineral Districts of Pakistan

12.28. The following physical targets are proposed for 1974-75.

(*i*) Actual aeromagnetic and aeroradiometric survey of 50,000 sq. miles in various mineral districts.

(*ii*) Limited ground checking observation to support and supplement aerial survey over an area of about 10,000 sq. miles.

(*iii*) Preliminary interpretation of broad magnetic anomalies and drawing up of proposals for their detailed exploration through ground magnetic survey, geological mapping, test drilling etc.

(*iv*) Procurement of necessary equipment, assessories, spares etc. and the finalisation of foreign assistance.

12.29. The scheme envisages undertaking detailed geological mapping of 7,000 sq. miles and geophyical survey and geochemical study in the whole region of the Lasbela-Khuzdar mineral district covering an area of about 8,000 sq. miles. This would be followed by trenching, pitting and test drilling at appropriate places. In addition, a study regarding the possibility and potential of water resources development in the region is also proposed to be made. The total cost of the scheme is estimated at Rs. 14.00 million including a foreign exchange Composed of Rs. 4.775 million spread over a period of 4 years commencing from October, 1973. There will be no recurring cost after the completion of the project as the staff would become part of the Geological Survey of Pakistan.

Mineral development Corporation Projects/Programmes

12.30. The programme of investigations of minerals in the Provinces will now be carried out by MDC during the year 1974-75. For exploring and exploiting Hazara rock phosphate deposits, it has been decided in consultation with NWFP Government a joint venture between PIDC and Sarhad Development Authority be set up. It is h ped that work on exploration and exploitaion of rock phosphate deposits in NWFP will start in right earnest during 1974-75. The other minerals being investigated in different provinces are :—

N.W.F.P. Talc, China clay and Fluorite.

PUNJAB Iron ore and Bauxite.

SIND Silica sand, Fire Clay and Salt lakes, Granite and China clay.

BALUCHISTAN Iron ore and Copper.

12.31. Most of the expenditure is on account of on-going investigations as under :—

(Million Rupees)

Province	Project	Amount
Baluchistan	Nokkundi Iron Ore and Amuri Copper	4.500
Punjab	Khushab Bauxite and D.G. Khan Iron Ore	2.00
NWFP	Fluorite, Talc; Mica and Hazara Phosphate	2.05
Sind	Laterite and China clay at Nagarparker, Gypsum at Larkana, Salt Lakes at Khairpur and Nawabshah	1.20

SIND PROJECTS

Salt Lakes in Khairpur, Nawabshah and Tharparker

12.32. A joint collaboratory survey has been completed with the help of PIDC , GSP and Karachi University. The report on salt lakes is under preparation by the Director of GSP. Two Geologists of PIDC were deputed to assist him. Chemical analysis of the samples collected has been submitted by PCSIR, which showed substantial amount of Potash. The PIDC has applied to Government of Sind for prospecting licences for eleven salt lakes in Nawabshah and Khairpur Districts. Prospecting work will be taken in hand as soon as the licences are granted by Sind Government.

Dolomite

12.33. Topogeolocial mapping of Siki area (Jungshahi) covering 1 sq. mile has been done and 84 samples collected. Two more dolomite occurrances have been found in Sodero, Sindher area from where 10 samples were collected.

12.34. **Silica Sand Dao Dam Area :** Bulk samples of 6 tons collected from various zones in Dao Dam area have been despatched to PCSIR for beneficiation tests. Recently reported laterite iron ore deposits being explored on either side of the Karachi-Hyderabad Super-High Way between Milestones 84 and 88. Prospecting of china clay and laterite in Nagar Parkar has also been started.

Baluchistan Projects

12.35. **Copper Deposits in Amuri Area:** Topogeological mapping over an area of 20 sq. miles have been completed. On the basis of surface investigations, 0.5 million tons of copper ore reserves have been estimated in four copper bearing localities. In Zargan "A" area, tunnel No. 1 has reached a length of 120 ft. Prospecting tunnelling in tunnel No. 2 is in progress. A cross cut at 115 ft. has attained a total drivage of 22 ft. A 6 ft. thick disseminated zone of copper has been encountered.

2.36. **Iron ore Deposits, Nokkundi :** A report based on geological, minning and drilling investigations has already been submitted. Further geologica'l work is in progress. The first drilling hole in Lufto area has been sunk upto 101 ft. and thereafter stoppped. Tunnel No. 5 has reached 175 ft. Drilling of shallow hole has been completed and 2.5 million tons of ore has been proved in Pachin Koh area. As desired by the Chinese, chemical analysis of rock and iron ore samples from the outcrop in Pachin Koh area have been completed.

PUNJAB PROJECTS

12.37. **Iron ore Deposits—D.G. Khan:** A total footage of 3000 ft. had been achieved in various drifts at Rukhi Manh before the closure of mining operation of 15th Oct. 1973. Tentative revised location of 5 bore holes No. 1,2,4,5,6, in addition to drill hole No. 3 (now being drilled by GSP) have been fixed in the field plotted on the topogeological map.

12.38. **Khushab Bauxite :** Arrangements have beem made with PCSIR for conducting industrial tests fo. exkraction of Alumina from bauxite ore found in Khushab area. A pilot plant station at cost of Rs. 2 lakh will be installed. A shed to house the pilot plant on the PCSIR premises is being constructed. A sum of Rs. 1.2 lakh is being released to PCSIR. Exploratory work in 3 existing drifts of Bauxite was resumed in December 1973 and digging of additional six drifts has started.

12.39. **PIDC Metallurigical Research Station, Rawalpindi:** To conduct metallurgical tests on the various oresexplored by PIDC a Metallurgical Research Station has been established at Rawalpindi. The erection work of the Krupp-Renn has been completed and it began operations in December 1973. Low shaft furnace is nearing completion. Improvements in design have been introducedin the kiln, modification affected and the kiln is again ready for operation after apparently remaining shut.

NWFP PROJECTS

12.40. **Talc Deposits, Swat:** Exploration work of talc deposits in Swat is in an advanced stage. The deposits discovered are of medium grade and are being explored by drifts. It is intended to formulate a mining feasibility scheme and develop the deposits on a systematic and large-scale basis. This however, would invlove construction of infrastructure and necessary facilities for conducting such mining work.

12.41. **Fluorite in Chakdara :** Exploration work for fluorite has been continuing in Chakdara area for more than two years. The deposits are of irregular nature, and can be proved only by exploratory drifts which are in progress. In addition to the above work, some other mineral exploration programmes are also in hand as under :—

(*a*) Investigation of iron deposits in Cherat area.

(*b*) Re-appraisal of magnesite deposits in Hazara.

(*c*) Exploration of iron deposits in Pazu area. A number of drifts have been made to explore the iron ore deposits in depth and results are found to be encouraging.

Federally Administered Tribal Area

12.42. **Detailed Investigations for Mineral Exploration:** The information available on the geology and the mineral potential of the Federally Administered Tribal Areas is of a fragmentary nature. The aim is to explore and develop the mineral resources of this area by executing a systematic geological study of different areas. A scheme entitled "Detailed Investigation of Mineral Resources in the Federally Administered Tribal Areas" has been drawn up. Besides, the following studies are in progress :—

(*i*) Reconaissance studies of unexplored areas.

(*ii*) Detailed mapping of mineralised zones of large scale.

(*iii*) Petrological, mineralogical and geochemical studies of representative samples.

(*iv*) Drilling to evaluate the deposits and their sub-surface variations.

(*v*) Based on these information separate exploitation schemes shall be prepared which shall include mining and marketing, etc.

12.43. The scheme has been approved by the Board of Directors, while it was to be basically executed during 1972-73, it would now be carried over beyond 1974-75. Allocation for 1974-75 amounts to Rs. 2.4 lakh.

Prospecting and Mineral of Soap stone in Kurram Agency

12.44. Extensive soapstone deposits are know to exist in Peiwar, Zeran and Daradar vallies of Kurram Agency. A scheme for the exploration and prospecting of soapstone has been prepared, based on the preliminary survey carried out by the Geologists of the Tribal Development Corporation. It is proposed that simultaneously with exploration, soapstone will be extracted and marketed. The scheme costing Rs. 0.2 crore was put up to the Board and approved for inclusion in the Annual Development Programme, for 1973-74 and 1974-75, with an allocation of Rs. 1.72 million.

12.45. **Azad Kashmir Mineral and Industrial Development Corporation**

The AKMIDC has planned development of minerals the pattern outlined below :—

(*i*) Geological and geochemical survey to locate the deposit and estimate the reserves.

(*ii*) Mineral evaluation and characterisation.

(*iii*) Ore dressing and benefication.

(*iv*) Mineral processing, expection of metals, if possible with locally available know how or imported the well-established technology adapted to the local conditions.

Minerals like graphite phosphate rock, pyrites, lime stone, bauxite, mica, asbestos, copper, and clays (fire clay high alumina) have so far been located in Azad Kashmir. They need identification and characterization so that work for proving the reserves could be carried out and methods worked out for their utilization.

The deposits of iron Pyrites, graphite and phosphate rock need immediate attenation. The reserves of those deposits need to be proved and nature of the deposits established. Their economical utilization will secure for the area many of the raw materials needed for the development of industries and encourage import substitution and export opportunities. The minerals sector ADP 1974-75 of the AKMIDC is given in Table. II.

TABLE II

Azad Kashmir Mineral Development Programme 1974-75

(Million Rupees)

S. No.	Name of the Scheme	Estimated total cost	Revised Estimate 1973-74	Estimated expdt. upto 1973-74	1974-75	Remarks
1.	**Azad Kashmir :**					
	(*a*) On going schemes					
1.	Exploitation of lemonite deposits	0.160	0.055	0.160	—	
2.	Exploitation of Graphite deposits in A.K.	0.500	0.030	0.080	0.420	
3.	Geological and mineral investigation	0.753	0.400	0.650	0.103	
4.	Mineral Testing Lab.	0.629	0.300	0.300	0.300	
5.	Exploitation of Mica deposits .. ... —	0.335	0.100	0.100	0.235	
						1.058
	(*b*) New Schemes :					
6.	Exploitation of pyrite deposits	15.000	—	—	0.001	
7.	Development of fireclay deposit & Estt. of Refractory ...	20.000	—	—	0.001	
8.	Development and utilization of Feldspat deposits ...	5.00	—	—	0.001	
9.	Est. of alum & its salt extraction plant	5.000	—	—	0.001	
	Total ..	47.427	0.885	1.290	1.062	

12.48. *Exploration of Graphite Deposits*: Laboratory scale evaluation tests are in progress at PCSIR Laboratories, Lahore and abroad. Remlts were expected to be known by the end of March 1974. Funds are therefore required for pilot plant studies and an amount of Rs. 0.42 million has been provided in the ADP for this purpose.

12.49. *Geological and Mineral Investigation Schemes.*—The progress on this scheme is as follows :—

(*a*) Office field and survey equipment has been procured.

(*b*) Mining equipment has been ordered.

(*c*) Geological survey and investigation of Surgan and Saral vallies of Drawn has been completed. Survey of Bentonite deposits of Bhimber area has also completed. The amount provided in ADP is required for survey of Poonch District and Part of upper Neelum Valley.

(*d*) Essential personnel has been employed for the scheme.

12.50. *Mineral testing Laboratory.*—The Progeress is as follows :—

(*a*) Land will be acquired by April 1974.

(*b*) 50% equipment would have been procured by June, 1974.

(*c*) Partial completion of civil works was completed during 1973-74.

(*d*) The project will be completed by June, 1975.

12.51. *Exploitation of mica deposits.*—Progress is as follows :—

(*a*) Geological survey of the deposits has been completed.

(*b*) Land will be acquired during 1973-74.

(*c*) Drilling machines were being procured during 1973-74.

(*d*) The project will go in commercial production by June, 1975.

12.52. *New Schemes.*—New schemes are being undertaken :—

(*a*) Exploitation of pyrites deposits.

(*b*) Development of fireclay deposits and establishment of Refractory.

(*c*) Development and utilization of Feldspar deposits.

12.53. Studies have been entrusted to different consultants which were expected to be completed by the end of 1973-74. Funds will be made available for these schemes out of the lump sum provision of Rs. 17.00 million made in the ADP for new schemes.

Punjab

12.54. *Iron Ore Testing.*—The Minerals Directorate has submitted a scheme on " Addition of Ore Testing and Mineral Evaluation Division to the Industrial Research laboratories costing about Rs. 4.20 million, including a foreign exchange component of Rs. 3.00 million. About Rs. 1.00 million have been allocated to this project during 1974-75.

There is no dearth of minerals in the Punjab. The province has salt, gypsum, iron ore, coal and all the minerals required to provide the sinews of an industrial base. Punjab Mineral Development Corporation has been set up and a block provision of about Rs. 6 lakh has been made in the budget for schemes to be drawn up and implemented in the field of minerals.

N.W.F.P.

12.55. The Provincial Government commenced work on a Survey Scheme costing Rs. 9.5 lakh which envisaged detailed survey and investigation of mineral bearing areas. By June, 1974, an expenditure of about Rs. 1.33 lakh had been incurred on this project. The Mineral Appraisal Cell which is executing this project has published six information releases. An allocation of about Rs. 2.7 lakh has been made for this project in 1974—75 in order to enable the Mineral Appraisal Cell to undertake work on four more leases. Efforts will be made to cover as many mineral deposits as possible during 1974-75.

Baluchistan

12.56. The only programme in the Baluchistan ADP in the mining sector is a joint venture between the Provincial Government and Pakistan Petroleum Ltd. for the extraction and export of Barytes from Khuzdar area. Expenditure of about Rs. 18.5 lakh was incurred against a budget provision of Rs. 7.0 lakh during 1973-74, additional funds having been made available in order to accelerate the pace of exploitation of this mineral. An allocation of Rs. 5.0 lakh has been made for this project in the ADP 1974-75.

MINERAL PRODUCTION

('000' *tons*)

S. No.	Mineral	1970-71 Actual	1971-72 Actual	1972-73 Actual	1973-74 Estimates	1974-75 Targets
1.	Coal	1,250	1,300	1,400	1,400	1,600
2.	Iron Ore	—	—	—	—	N.A.
3.	Rock Salt	344	352	349	380	450
4.	Chromite	27	33	19	30	40
5.	Silica Sand	34	43	24	38	45
6.	Gypsum	164	22	129	77	150
7.	Lime Stone	4,500	4,200	4,600	5,000	6,300
8.	Marble	23	15	29	45	60
9.	Mica	N.A.	N.A.	N.A.	5	7
10.	Clay other than China & Fire Clay	78	70	86	107	120
11.	Fireclay	28	21	19	22	35
12.	Sulphure	2	3	3	3.5	6
13.	Antimony	0.18	0.32	0.08	0.08	0.09
14.	Barytes	3.15	1.87	1.52	2.00	4.0
15.	Bentonite	0.4	0.7	0.4	0.5	1.0
16.	Chinaclay	7.9	6.8	0.5	1.0	8.0
17.	Fullers Earth	14.1	12.3	14.4	11.6	15.0
18.	Manganese	0.012	0.02	0.06	0.17	0.20
19.	Magnesite	0.6	0.1	2.5	2.2	3.0
20.	Fluorite	3.3	3.0	0.9	1.6	3.0

Sources :

(*i*) Statistical Division

(*ii*) PIDC

(*iii*) Planning Commission

ORIGINAL AND REVISED ESTIMATES OF ADP 1973 ANNUAL DEVELOPMENT PROGRAMME 1974-75

(Rupees in million)

Pro/Agency	ADP 1973-74 Allocation	ADP 1973-74 Revised	ADP 1974-75 Total	ADP 1974-75 F.E.C.
1	2	3	4	5
MINERAL SECTOR				
I. Geological Survey of Pakistan				
1. Mineral Exploration in Chagai Mineral Distt. Baluchistan	2.00	2.00	3.50	2.60
2. Mineral Exploration in Lasbela-Khuzdar Region	5.00	5.00	5.00	2.00
3. Aeromagnetic Survey & follow up ground investigations in various Mineral District of Pakistan	0.50	—	0.50	0.10 (CIDA)
Sub-total	7.50	7.00	9.00	4.70
II. Mineral Development Corporation				
1. Mineral Development PUNJAB	0.50	—		
2. Mineral Development SIND	0.50			
3. Mineral Development NWFP, Hazara, Swat. Posu, Dir	0.50	10.00	2.50	—
4. Mineral Development Baluchistan	9.50			
5. PIDC Survey scheme transferred to MDC.	NA	8.0	1.20	—
Sub-Total	11.00	18.00	3.70	—
III. Azad Kashmir & Northern Areas				
1. Azad Kashmir	1.23	0.59	1.062	—
2. Northern Areas (Gilgit & Baltistan)	1.50	1.50	1.400	—
Sub-Total	2.73	2.09	2.462	—
IV. States & Frontier Regions Divison				
FATADC				
1. Detailed Investigations for exploitation on Mineral resources	0.35	1.44		
2. Prospecting and mining of soap stone	—	—	1.06	—
Sub-Total	0.35	1.44	1.06	—
V. Resource Development Corporation				
1. Exploration for Copper deposits of Saindak in Chagai Distt. Baluchistan	2.70	32.00	10.00	9.00 (UNDP)
Sub-Total	2.70	32.00	10.00	9.00
Total Federal Programme	24.28	60.53	26.222	13.70
Provincial Mineral Development Programme				
1. Baluchistan	0.70	1.85	0.50	—
2. Sind	—	—	—	—
3. Punjab	0.10	—	0.60	—
4. NWFP	0.20	0.27	0.27	—
Total	1.00	2.12	1.37	—
Total Federal & Provincial Mineral Development Programme	25.28	62.65	27.592	13.70

CHAPTER 13

FUEL AND POWER

Energy

The major sources of energy in Pakistan are oil, which contributes over 40 per cent, followed by natural gas hydro-electricity and local contributing about 32 per cent, 16 per cent and 8 per cent respectively. For its oil requirements Pakistan is dependent on imports. The net import bill for oil is estimated to be $ 387 million in 1974-75 which constitutes 26.7% of country's total exports. The Annual Plan therefore, places greater emphasis on search for oil and increasing use of indigenous sources of energy to reduce dependence on imported oil.

13.2. The total requirements and availabilities of energy from various sources are discussed in the subsequent paragraphs.

Review of 1973-74

13.3. During 1973-74 commercial energy supply fell short of the requirements as is evident from the fact that there was load shedding both for electric power and natural gas. Severe power shortages occurred during winter 1973-74. In the northern region on an average, load shedding to the extent of 180 MW during peak hours and 100 MW round the clock was reported. Sudden reduction in water releases from Mangla from the end of December, 1973 up to January 25, 1974, shut down of small hydel stations due to channel closures, withdrawal of unit No. 4 at Multan (65 MW) due to urgent repairs and reduction in gas supply at Shahdara were some of the factors which contributed to the shortfall in generation.

13.4. The gas supply position in the country also continued to casue concern both in northern and southern regions. In the winter of 1973-74 the northern region experienced shortages in gas supply to the extent of 28—30 MMCFD with consequent curtailment in supply to the Cement Industry. Ravi Rayon and WAPDA gas turbine station at Shahdara.

In the southern region, due to withdrawal of the Karachi Nuclear Power Station for modification maintenance purposes shortages in gas supply to the extent of 25 MMCFD occurred of which 10 MMCFD was absorbed by the Karachi Electric Supply Corporation through substitution by furnace oil and the balance was shared eqnally by Karachi Gas and Indus Gas Companies.

13.5. The revised estimates of total energy input in the economy during 1973-74 are 341 trillion B.T.U. with the breakdown given in table I.

Table 1

Energy Inputs 1973-74

	Quantity	Energy Content Trillion B. T. U.	% of Total
Natural Gas (Excl. its use as feed stock)—MMCF	117,065	111.0	32.50
Coal—tons	1,400,000	26.6	7.8
Oil (net of exports ocean bunkering) tons..	3,330,370	149.2	43.7
Hydro-Elect. wh	4,150	49.8	14.6
Nuclear Gwh	400	4.8	1.4
L. P. G. Tons	5,700	—	—
		341.4	100.0

13.6. *Per capita* consumption thus works out as 5.08 million BTU or 180 coal kg equivalent. Accurate data on the pattern of energy consumption is being compiled through a comprehensive energy survey. On the basis of present information, a rough and ready assessment of final uses is as follow :—

	percentage
Agriculture	11.0
Transport	24.0
Industry	52.0
Domestic and Commercial	13.0
	100.0

Agriculture

13.7. The energy use is mainly for operating tubewells and tractors. The source of energy is 40 percent petroleum (direct) and 60% electricity.

Transport

13.8. This sector consumed mainly petroleum products. Use of electricity and coal by railways was insignificant.

Industry

13.9. Nearly 43% of the requirement in the Industries sector was met by electricity and 41% by gas. The balance was met by oil. A small quantity of coal was also used.

Domestic and Commercial

13.10. Nearly 55% of the energy use was in the form of the kerosene and the balance requirement was met by electricity (33%) gas (11%) and coal (1%).

Requirement and Availability 1974-75

13.11. Assuming an Elasticity of growth in Gross Domestic Product and growth in commercial Energy consumption in the range of 1.6 to 2.0, it is estimated that the total requirements of energy for 1974-75 will be between 395 trillion to 406 trillion BTU—12.8 to 16 percent higher than in 1973-74. The higher elasticity coefficient of 2.0 would take into account suppressed energy consumption in the base year.

13.12. Availability of commercial energy during 1974-75 is presently estimated at 383.6 trillion B.T.U. made up from various sources as in Table II.

TABLE II

Energy Supply by Source, 1973-74 and 1974-75

	Quantity			Energy Constant Trillion BTU		
	Unit	1973-74	1974-75	1973-74	1974-75	Percentage Increase
Natural gas (Excluding its use as feed-stock)	MMCF	117,065	123,835	111.0	117.5	6
Coal	Tons	1,400,000	1,600,000	26.6	30.5	15
Oil	Tons	3,330,370	3,988,000	149.2	160.8	8
Hydro-Electricity	GWH	4,150	5,500	49.8	66.0	33
Nuclear	GWH	400	660	4.8	7.9	65
LPG	Tons	5,700	18,700	Negligible	0.9	228
				341.4	383.6	12

The *per capita* consumption of energy is targetted at 200 coal Kg in 1974-75 which implies a growth rate of 9 per cent over 1973-74. Estimates of energy in Table II are based on certain broad indications of the availability of various sources of energy and certain assumptions which are briefly discussed below :

Gas.—The 6% increase in supply takes into account completion during the course of the year of Sari-Karachi pipeline (12 MMCFD) and project 3. A of SNGP (27 MMCFD).

Coal.—About 15% increase in coal consumption is based on the assumption that a comprehensive operational plan concerning production in public and private sectors and transportation would be introduced during 1974-75.

Oil.—An optimum of 8% increase has been arrived at taking into account the constraint to further increase by the limit imposed by transport capacity for movement to northern provinces.

Hydro-electricity

At 4150 Gwh, the hydro generation during 1973-74 fell below the level reached in 1972-73. For 1974-75, an increase of 37% over 1973-74 has been provided. This is feasible given the installed capacity and average year water availability *plus* removal of transmission/transformation bottlenecks and improvement in WAPDA's load despatching procedures.

Nuclear and LPG

The contribution next year will be higher but these sources are not yet important quantitatively. However, a discussion on this, is contained in paras 13.5 to 13.58.

13.14. These estimates, however, indicate that if demand increases at the rate of twice the GDP, the supply of energy is aggregate terms may fall short of the requirements. In other words, the shortfall between requirements and availability is expected to be of the order of 23 trillion BTUs or 23616 MMCFD of natural gas equivalent. This constitutes about 20 per cent of the natural gas consumption in 1973-74. Remedial measures will be taken to avoid shortages of energy inputs, particularly in respect of natural gas. The region-wise and sector-wise position with suggestion for remedial measures is discussed below :—

Industries

13.15. The energy supply position to the Industries in the southern region will be satisfactory. It is expected the Sari-Karachi pipeline will be completed on schedule. The KANUP has been functioning smoothly and no interruptions are expected. In the north, however, gas supplies to the cement industry in the Islamabad area may have to be curtailed during winter. An effort would be made to minimise adverse impact on production.

Power

13.16. It will be possible to meet full primary energy requirements for power generation provided maximum use in made of hydro-electricity and furnace oil and demand for gas is reduced to the minimum WAPDA have been asked to maintain sufficient stocks of HSD at the Gas turbine Station and also consider partially switching over the Gas turbines at Shahdara to LPG. There will, however, continue to be some short falls in power availability due to reasons other than those relating to energy, which have been brought out subsequently in the power supply position separately.

Agriculture

13.17. There should be no serious problem in meeting the energy requiremets of this sector except what has been stated under power.

Transport

13.18. Energy supply to the transport sector will pose no serious problem.

Power Supply and demand position, 1974-75

13.19. River flows in early summer have been abnormally low. It is expected that river flow will improve as snow melting increases. A continuance of abnormally low flow would have serious repercussions on power supply. The anticipated sulpply position in the W.A.P.D.A. system and KESC during 1974-75 are given in Table III.

TABLE III

Northern Grid and Upper Sind

	Name plate rating MW	September 1974	Capability M. W. March 1975
Mangla	600	690	350 (R.L. 1075)
Warsak	160	160	160
Small hydel	108	85	75
Multan Steam	266	230	230
Lyallpur Steam	132	120	120
Shahdra Gas	85	85	85
Sukkur	50	50	50
Lyallpur G/T	200	25	200
Guddu	220	170	170*
	1821	1615	1440
Allowance for spinning reserve/maintenance		110	100
		1505	1340

*50 M.W. of former would be exported to southren area.

Demand forecast for the WAPDA system and KESC is given in Table IV.

TABLE IV

Demand Forecast (In MW)

	Actual 1973-74	Forecast 1974-75
Northern grid	1105.2	1443.0
Upper Sind	41.2	103.0
	1146.4	1546.0

13.20. Allowing for withdrawal of machines for maintenance and allowance for spinning reserve the maximum demand likely to be catered to is 1340 MW (1280 MW in the northern zone and 60 MW in Upper Sind) with indicated shortages of about 160 MW in the northern zone and about 40 MW in upper Sind.

13.21. The supply position in the rest of the systems is given in Table V.

TABLE V

Supply and Demand—Other Systems

(a) **Lower Sind :**	*Name plate rating*	*Capability M. W.*
Hyderabad Steam	44 MW	30
Kotri	30 MW	30
Import form KESE	— — — .. .. —	30
Import from Guddu.	.. — — .. .. —	50
		140
	Max. Demand ..	128
	Surplus (Deficit)	12

(b) Quetta :

		Sep.	March
Quetta Steam+G/T	31.0 MW	15.0	27.0
Quetta New G/T	25.0 MW	18.0	20.0
		33.0	47.0
Maximum demand		44.0	44.0
Surplus/(Deficit)		(11.0)	3.0

(c) **Karachi:**

Units		
C—1	66	66
C—2	66	66
C—3	125	125
B ×1	33	30
B ×2	33	30
B	30	24
A	15	9
DF	16	10
	384	360
KANUPP	137	125
	521	485
Reserve		125
Firm capability		360
Maximum demand (e) including import to Hyderabad)		350
Surplus (Deficit)		10
Total (Surplus Deficit—Other system)		

13.22. During 1973-74 the maximum demand in the northern zone was 1105.2 MW, in lower Sind 71.1 MW, in upper Sind 41.2 MW and in Quetta 17.9 MW. The maximum demand on KESC system including export to Hyderabad, was 348 MW. The total energy generation registered an increase of 6% and is expected to reach 9438 million Kwh including 400 million Kwh captive industrial generation. Out of this WAPDA's Energy generation is 7056 mkwh excluding import from KESC and that of KESC (including purchase from KANUPP) is 1930 mkwh. The main reason for no substantial increase in WAPDA's generation was water shortages at Mangla and shortfall in hydro-electric genetation.

WAPDA (POWER)

Review of 1973-74

13.23. At the commencement of fiscal year 1973-74 the total installed capacity in Pakistan was 2,025 MW comprising the following :—

1. WAPDA

Northern Zone	1157 MW
Southrrn Zone	153 MW
Karachi..	485 MW
2. Private captive Capacity	above 230 MW

13.24. The annual plan 1973-74 envisaged commissioning of first two units of Guddu of 110 MW each and Mangla Hydero-electric Station Units 5 & 6. These schemes have been successfully implemented. Mangla Unit 5 was commissioned in March, 1974 and Unit 6 in April, 1974. Similarly Guddu unit I (110 MW) was commissioned in April, 1974 Unit 2 (110 MW) was scheduled to be commissioned by end of May, 1974. In respect of Lyallpur 200 MW Gas Turbine Station which was planned on crash basis to firm up hydel Power, steady progress is being made. Contracts have been awarded to M/S. AEG of Germany and it is hoped that the project will be completed in January, 1975. The total installed capacity by 30th June, 1974 will thus be 2,445 MW.

13.25. The progress in the construction of new 132 KV and 66 KV transmission lines is satisfactory and that the 1973-74 plan target of 54,000 miles would be acheived. WAPDA's distribution programme has suffered a set-back because of the shortage of raw materials. WAPDA has reported that by the end of May 1974, 352 villages have been electrified out of which 60 are in NWFP. 199 in Punjab and 93 in Sind. It is expected that about 500 villages will be electrified by the end of the financial year. WAPDA has been able to give 83,444 new service connections by the end of May, 1974, while KESC has extended services to 25,300 new consumers. The total number of new connections by June. 1974 will be 1.1 lakh while the total number of consumers will stand at 1.93 million at the end of 1973-74.

13.26. In financial terms against an allocation of Rs. 959.7 million WAPDA will be able to utilize Rs. 832.791 million during the year 1973-74, showing 81% financial achievement.

Annual Plan 1974-75

13.27. *Strategy.*—The strategy and objections in respect of Power Sector for the Annual Plan 1974-75 are :—

(i) Augmenting generating capacity from 2445 MW to 2720 MW by completing Lyallpur Gas turbine station (200 MW), Quetta extension 25 MW, Kotri and Karachi gas turbines stations of 50 MW and 100 MW respectively.

(ii) Use of alternate fuels at the thermal power stations, besides natural gas.

(iii) Synchronising completion of Lyallpur Gas turbine station with SNGPL Project (3-A) to augment gas supply by 26 MMCFD.

(iv) Installation of diesel stations at Tiesil headquarters in Azad Kashmir.

(v) Augmenting Grid station capacity by 1400 MVA.

(vi) Extension of high voltage transmission lines 66KV and above by 1200 miles.

(vii) Removal of transmission line bottlenecks for optimum utilization of hydel power from Mangla and absorption of full output from Guddu.

(viii) Accelerating the progress of 220 KV Tarbela-Wah Transmission lines to synchronise with Tarbela Development.

(ix) Procurement of distribution equipment from abroad has become necessary due to world wide shortage of raw materials, which places a constraint on domestic production.

(x) Improvement in efficiency of transmission and distribution and reduction in losses.

(xi) Re-organization of WAPDA with decentralisation and creation of Area Boards.

(xii) Providing 1.4 lakhs additional service connections (1.0 lakhs by WAPDA, 0.4 lakhs by KESC and REPCO).

(xiii) Electrification of 1000 villages.

(xiv) To meet the fuel shortage at Shahdara power station, it is planned to switch over two of its turbines on LPG, which are presently burning HSD, already a deficit product. LPG is much cheaper and cleaner fuel. The turbines could be easily transformed to burn this fuel with slight modifications. This will result in considerable saving in foreign exchange through lesser import of HSD.

(xv) The second 220 KV transmission line from Mangla to Kalashah Kaku for Mangla units 5 to 8 is scheduled for commissioning in January, 1975, WAPDA has therefore, no alternative but to make use of the existing 220 KV lines from Mangla during the summer of 1974-75 with six units in operation at Mangla. Ways and means should be found to make optimum utilisation of Mangla power without over loading the transformers on the 220 KV line.

(xvi) According to the recent schedules of commissioning, the first double circuit of 220 KV Trabela-Wah Transmission line is expected in December, 1975 *i.e.*, one month behind the scheduled commissioning of Tarbela Units 1 and 2 The situation therefore demands serious effort to accelerate progress of this project during 1974-75.

(xvii) Constant watch is required on the progress of SNGPL's project 3-A and Lyallpur gas turbines stations project. At present both are scheduled for completion in January, 1975.

Programme for 1974-75

13.28. The annual development programme for 1974-75 has an allocation of Rs. 1,204.973 million for WAPDAwith an estimated foreign exchange component of Rs. 6967.17 million. This investment is Rs. 372.182 million higher than in 1973-74 and provides an acceleration of 44.87 per cent over the previous year. Allocations by sub-sectors are given in Table VI.

TABLE VI

WAPDA allocation by sub-sector

(Million Rupees)

	1973-74	1974-75
Generation	361.75	461.47
Transmission	320.34	483.50
Distribution and Rural Electrification	150.20	252.50
Other Programme (Power Development in Azad Kashmir)	1.00	7.50
	832.79	1204.97

Generation

13.29. The generation programme envisages completion of Lyallpur Gas Station in January 1975 which will add 200 MW in the Northern Zone. The total installed capacity of the Northern Zone will become 1,557 MW. In the south WAPDA proposes to install two gas turbines of 25 MW each at Kotri (Sind) and one 25 MW gas turbine at Quetta. The total installed capacity is expected to rise from 2,445 MW to 2,720 MW at the end of the plan period.

13.30. The civil works for Tarbela 1 to 4 are in progress. The provision of Rs. 125.0 million made for this project is intended to meet the cost of plant and machinery and erection charges. During the year 1974-75, 100% plant and machinery in respect of units 1 and 2 will be received. Similarly most of the plant and machinery for the units 3 and 4 will be procured.

13.31. As regards Tarbela Units 5 to 8, during the current plan period the work on switch yard extension and left stilling basin wall will be completed alongwith preliminary works relating to site development.

13.32. The plan also provides 7.5 million for Power Development in Azad Kashmir. It is hoped that installation of diesel sets at Six places will be completed during the period 1974-75.

13.33. The total allocation in A.D.P. for generation stands at Rs. 461.473 million with a foreign exchange component of Rs. 340.678 million which is 38.3% of the entire programme. The generation for WAPDA has been set at 8,500 million KWh and for the country at 10,500 million Kwh.

Transmission and Distribution

13.34. During the annual plan 1974-75 the Project of 220 KV Northern Zone Transmission Line extension for Mangla Units 5-6 is scheduled to be completed by January 1975. Besides this the other project which will get high priority is 220 KV Four Circuits from Tarbela to Wah. ADP 1974-75 provides Rs. 60.00 million for this project. A.D.P. 1974-75 also provides Rs. 120.0 million for 500 KV Tarbela Lyallpur interlink. It is planned to complete the fabrication of conductors and manufacture of 60% of towers. About 20% of the tower foundations will be completed and the river crossing tower design will be also completed.

13.35. The A.D.P. provides Rs. 28.5 million for Guddu-Sibbi-Queta transmission line. Complete material for Guddu-Sibbi section and 50% for Sibbi-Quetta Section will be received besides 50 % erection of the Guddu-Sibbi section of the transmission line.

13.36. Besides these important projects, the Plan provides Rs. 210.0 million for secondary transmission lines and grid station projects. The total length of 66 KV and above Transmission lines to be added in 1974-75 is 1,238 miles. Details of the transmission lines likely to be completed during 1974-75, are contained in Appendix. The total length of the transmission and distribution lines estimated at the end of 1973-74 to be 54,000 miles will increase to 56,546 miles by June 1975.

13.37. The total allocation to the transmission programme for A.D.P. 1974-75 stands at Rs. 483.5 million which is about 40.21 per cent of the A.D.P. for WAPDA. For secondary transmission and distribution Rs. 250.0 million have been provided in the A.D.P. 1974-75.

13.38. The total number of new consumers is expected to become 1.7 lakh during the year 1974-75 and the total number of consumers in Pakistan will become 2.07 million. A Province-wise and category-wise break up of the new consumers to be connected in 1974-75 is given in Table VII.

TABLE VII

New consumers by Provinces 1974-75

Type of Load	Punjab	Sind	Baluchistan	NWFP	Total
1. WAPDA System					
General	53,000	18,000	4,500	13,500	89,000
Industrial	3,000	800	50	600	4,450
Agricultual (Tubewells)	4,000	1,200	450	900	6,550
Sub-Total ..	60,000	20,000	5,000	15,000	1,00,000
2. Kesc System					
Residential		24,500			24,500
Commercial		8,100			8,100
Industrial		800			800
Others		1,600			1,600
Sub-total ..		35,000			35,000
TOTAL ..	60,000	55,000	5,000	15,000	1,35,000

Village Electrification

13.39. WAPDA proposes to electrify 1000 villages during 1974-75 according to the Prime Minister directive. The Province-wise break up of the villages to be electrified is given below :—

Praince	No. of Villages
Punjab	600
Sind	300
Baluchistan	30
N. W. F. P.	70
TOTAL ..	1,000

Energy Resources Survey

13.40. The project of energy resources survey of Pakistan was started during 1973-74 with the assistance of United Nations. The importance of this exercise was high-lighted by the recent energy crises. The plan for 1974-75 provides Rs. 3.7 million for this project. This project is expected to be completed during 1975-76.

FUELS

I. OIL AND GAS DEVELOPMENT CORPORATION

Review of 1973-74

13.41. The financial allocation for 1973-74 for OGDC was Rs. 124.28 million of which Rs. 110 million was earmarked for the Development of oil and gas resources, with the objective of drilling 10 wells. The performance however, fell for short of the target and only one well was drilled during the year. The programme envisaged employment of nine parties for survey and exploration, but only 5 parties were employed. Out of the six rigs only four were utilized. The overall performance was highly unsatisfactory.

Annual Plan, 1974-75

13.42. It is planned to gear up OGDC's activities and remove operational bottlenecks affecting the Corporation's efficiency. The main emphasis will be on the drilling programme and optimum utilization of the rigs.

Drilling Programme

13.43. In physical terms it is planned to drill about 48,410 feet during 1974-75 as against 5,000 feet in 1973-74. OGDC plans to drill 6 new wells out of which 3 will be completed, utilizing the entire drilling equipment (6 rigs) in hand. The OGDC has been authorized to make arrangements for 3 new deep drilling rigs to intensify the drilling effort. Drilling at Toot-6 will be completed in March 1975 and production testing will be carried out during April and May, 1975. Drilling at Toot-7 will also continue after rig building in July and August 1974. It is hoped that about 7,500 ft. will be drilled by the end of the plan period. Rig building will also start during June 1975 for Toot-8. Work on Shahdadpur-I. Dhodhak-I and Pirkoh-I will start simultaneously, and after building of rigs by the end of September 1974 drilling on all these three wells will start with a target of 9,000 ft., 7,800 ft. and 8,000 ft. respectively. Production testing of Pirkoh-I is also expected to be completed during this period. Surjan I will be drilled to its target depth of 6,000 ft. Rig building Work on Rodho-3, Shahdadpur-2 and Surjan-2 will start during June, 1975.

Exploration Programme

13.44. Exploration programme will be accelerated in respect of Geological Survey, Gravity Survey and Seismic Survey. Three parties will be engaged for data processing, interpretation and finalization of results of the Geological Survey, two parties for Gravity survey and five parties for siesmic survey. It is also planned to initiate work for the establishment of a laboratory of applied stratigraphic palynology. This laboratory will be completed in four years and will be helpful in examining exploration and survey results. This will also help in training local manpower.

13.45. In financial terms the A.D.P. provides Rs. 168.0 million for OGDC which is 26.2% higher than the revised estimates for 1973-74.

II. GAS TRANSMISSION

(a) Sui Northern Gas Pipelines Ltd.

13.46. SNGPL is in a tight position as the demand has outstripped its supply capacity. The present capacity of the system is 258 MMCFD. To meet the requirement of Lyallpur Gas turbine Station, Project 3-A was initiated on crash basis in 1973-74. This project will remain in full swing and is expected to be completed in January 1975. This will then bring SNGPL's capacity to 297 MMCFD. The other project taken up on top priority basis is project 4-A which will meet the requirements of the new fertilizer plant proposed at Multan. Project 4-A envisages supply of 38 MMCFD of gas by June 1976. The A.D.P. 1974-75 provides Rs. 60.0 million for project 4 while the balance capital cost will be met by Company's own resources. The situation will not be rectified even after the completion of SNGP's Project 4-A and can only be redeemed when facilities planned under project 4-B are implemented. The severity of the situation will be felt during the winter peak periods and the situation for the winter 1975-76 is expected to be even more difficult than in 1974-75. The possibility of placing more thermal power stations and cement plants in the north of alternate fuel for the next two years warrants serious consideration . It may, however, be aimed at completing project 4-A earlier, before Multan Fartilizer Factory comes on steam in order to provide relief to the extent of 36 MMCFD to the northern areas by winter 1975-76.

(b) Sui Gas Transmission Co.

13.47. The Sui Gas Transmission Co. is, at the moment supplying 147 MMCFD to the southern Zone. Out of 147 MMCFD, it is supplying 81 MMCFD to Karachi Gas Co. and 66 MMCFD to Indus Gas Co. To cater for the increased demand of the southern zone a duplicate gas pipe line is being laid on the right bank of Indus. Phase I of this project will be completed during 1974-75, providing a relief of about 12 MMCFD from Sari Hundi gas fields. The gas supply position, however, will remain precarious. In case of sudden failure of Karachi nuclear power station, shortages to the extent of 10—15 MMCFD may occure which will have to be absorbed by the conventional thermal power station through partial substitution by furnace oil.

III. DIRECTORATE OF PETROLEUM CONCESSIONS

13.48. The plan provides Rs. 25.527 crores for implementation of projects Oil and Gas exploration and prospecting in the private sector. The companies involved are Amoco Pakistan Exploration Company. (Amoco), Wintershall A. G. (Wintershall), Marathon Petroleum Pakistan Limited (PPL) Pak-Stanvac petroleum projects, Pakistan Oilfields Limited (POL), Pak Hunt pertoleum project and Pakistan trend Corporation. It is expected that agreements with Pakistan trend Corporation and Texasgulf both of USA will be signed. Wintershall have planned to drill two offshore wells ; Amoco there wells ; Marathon one well ; POL onewell and PPL two wells. If agreements are signed with. Pakistan trend Corporation and Texasgulf they may undertake geological/seismic surveys.

VI. DIRECTORATE OF OIL OPERATIONS

13.49. The ADP 1974-75 provides Rs. 30.3 million for the schemes of the directorate of oil operations. This includes Rs. 200 million for the up-country refinery and an equal provision for petroleum storage Development Corporation.

V. OIL SUPPLY POSITION

13.50. Due to anticipated shortages in the supply of natural gas, the annual plan provides for import of 11.41 lakh tons of petroleum products during 1974-75 as against 9.04 lakh tons in 1973-74 in addition to indigenous production of 32.96 lakh tons. The break down of export and bunkering and anticipated imports during 1973-74 and 1974-75 are given in Appendix II. The net availabilitie of petroleum products during 1973-74 and 1974-75 are presented in Appendix III and IV, respectively, with indicative changes in stock position.

13.51. On the internal consumption side, the annual programme envisages aggregated increase from 33.30 lakh tons in 1973-74 to 35.88 lakh tons in 1974-75. The internal consumption of furnace oil will register an increase of 77.000 tons or 11.7% over 1973-74 to make up partially the short falls in gas supplies. HSD and LDO will also register 12.7% and 11.6% increases, respectively, to cater for increased requirement in the transport and agriculture sectors. Slight decline (6,000 tons) in kerosene consumption is estimates due to its partial replacement by LPG/natural gas. The internal consumption, product-wise for 1973-74 and 1974-75 is given in Table VIII.

TABLE VIII

(Growth in internal consumption)

	1973-74	1974-75	% change
AV Spirits	5,600	7,100	26.8
JP—1	87,770	1,04,000	18.5
JP—4	90,000	76,000	—15.55
MS-HOBC	3,60,000	3,46,000	—3.89
SK	5,20,000	5,14,000	—1.15
HSD	10,42,000	11,74,000	12.7
LDO	3,96,000	4,42,000	11.6
Fuel Oil	6,60,000	7,37,000	11.7
Lubes and Greases	80,000	88,500	10.62
Asphalt	73,000	80,000	9.6
Naphta	—	—	—
Others	16,000	20,000	25
	33,30,370	35,88,100	7.72

Nuclear Programme

13.52. The programme of the Pakistan Atomic Energy Commission has been drawn up for the peaceful uses of nuclear energy in all spheres of life. In broad terms the programme relates to :

(*a*) Nuclear Power Development.

(*b*) Research and application of nuclaer technology in the field of medical, physical and bio-sciences.

(*c*) Exploration of radio active minerals.

(*d*) Manpower training.

13.53. Nuclear energy is destined to play an important role in the future power development programmes of Pakistan. The limited natural resources, high cost of imported fuel and the ambitious targets for economic development emphasises the role nuclear energy can play in Pakistan. In this context the Pakistan Atomic Energy Commission proposes to install a Nuclear Power Reactor of 500—600 MW by 1981 at Kundian, Near Chashma in Mianwali District. The Annual plan 1974-75 provides Rs. 25.0 million for the initial investigations/ and for carrying out site studies.

13.54. The Karachi Nuclear Power Plant (KANUPP) is already functioning and is supplying about 100 MW to the Karachi Grid. It is expected to generate 660 MKWH during 1974-75.

13.55. The programme also embraces advanced research in reactor technology, radiation chemistry, analytic chemistry, nuclear engineering and solid state physics at the Pakistan Institute of Nuclear Science and Technology. In the sphere of bio-sciences, problems on evolution of improved varieties of grain and cash crops, eradiction of pests, evaluation of fertilizer and fungicides and soil fertility are being investigated. In medical centers of PAEC, radio isotopes and radiation sources are being advantageously used in the diagnosis and treatment of many malignant diseases. The PAEC has it's medical centres at Karachi, Lahore, Multan and Jamshoro The ADP 1974-75 provides Rs. 1.0 million for the setting up of a new medical centre at Quetta and Rs. 75.0 million for the fish irradition laboratory in Karachi. Amongst other new schemes, Rs. 1.0 million have been provided for the establishment of institute of radio-therapy and nuclear medicines at Larkana, Rs. 0.7 million for the establishment of agricultural centres in N.W.F.P. (Turnab).

13.56. The Atomic Energy Commission is paying greater attention to the training of manpower which will be required to carry the expanding role of PAEC. Rs. 15.0 million have been provided for a separate scheme " Nuclear Power Generation Training Project " towards this end.

13.57. In the financial terms Rs. 28.55 million have been provided for the on-going schemes of PAEC and Rs. 51.45 million have been provided for the new shcemes to be embarked upon during 1974-75. The total allocation of PAEC stands at Rs. 65.0 million * as against last year's provision of Rs. 47.84 million.

Miscellaneous Projects

13.58. Till recently LPG was a waste product of oil refineries in Pakistan and not much attention was paid for its utilization. LPG could be used as fuel in far flung areas and it has the potential of replacing HSD in transport sector and power utilities. During 1973-74 two porjects of Air-Mix LPG distribution were initiated for Larkana and Quetta. Foreign exchange has been arranged for these projects and the projects are expected to be completed during 1974-75.

13.59. It is also planned to switch over two of the turbines at Shahdara Station on LPG to economise on the use HSD in winter months. A project for this purpose is under preparation.

13.60. Fauji Foundation is also distributing LPG. At present it is supplying 700 tons of LPG to Northern areas.

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* This includes foreign crdit of Rs. 15 million which is treated as private sector loan.

TRANSMISSION LINES TO BE COMPLETED DURING 1974-75

1	Approx Length (Miles) 2	Date of commissioning 3
Punjab :		
220 KV lines		
1. Mangla Kalashah Kaku Transmission Line	104	Jan. 1974
2. Kalashah Kaku New Kot Lakhpat 220KV (stringing only) double circuit	26	Dec. 1974
3. Mangla Wah 220 KV-double circuit	84	Jan. 1975
	214	
132 KV Lines :		
1. Lyallpur-ring	20	Oct. 1974
2. Sammandri Road Gojra Line	25	Oct. 1974
3. Wan Radha Ram Okara	34	Aug. 1974
4. In & Out Mianwali	5	Aug. 1974
5. Gakhar-Kila Didarsingh	20	Nov. 1974
6. Ravi-Lahore fort	3	Dec. 1974
7. Burewala Vehari Line	30	May. 1975
8. In and Out from Kot Addu to D. I. Khan 132 KV single circuit	1	Sept. 1974
9. Lodhran in and out from Multan-Bhawalpur	2	Dec. 1974
10. In and Out Lawrencepur 132 KV single circuit line	2	Dec. 1974
11. In and Out Sambrial single circuit	3	Dec. 1974
12. Noor Ahmed Wali substation In and Out from Kot Addu to D. I. Khan (Single circuit)	2	Oct. 1974
13. Kalashah Kaku to Attabad (Single circuit)	13	Dec. 1974
14. In and Out Taxila (Single circuit)	2	Nov. 1974
	162	
66 KV Lines :		
1. Re-routing Marala-Sialkot (old) to Sialkot New (Single circuit)	2	Dec. 1974
2. Re-routing New Kot Lakhpat-Kasur for Raiwind Single circuit	15	Dec. 1974
3. Tee off for Luliani	5	Oct. 1974
4. Jehanian Karor Pucca	30	Dec. 1974
5. In and Out Samundari	5	Dec. 1974
6. Q. D. Singh-Fatehpur	30	Mar. 1975
7. Q. D. Singh-Gahri	30	June 1975
TOTAL (Punjab)	117	
N. W. F. P.		
66 KV Lines :		
1. Kohat-Baradrinwal	50	Dec. 1974
2. In and Out of Pabbi (Single circuit)	4	Dec. 1974
3. Hassai Swabi	20	June 1975
4. Tee off for Shabqadar	5	Nov. 1974
5. Chakdra Tamergarh-Dir	65	June 1975
6. Abbotabad Mansehra	15	June 1975
TOTAL (N.W.F.P.)	159	
BALUCHISTAN		
220 KV Line :		
1. 220 KV Guddu-Sibbi Single circuit	175	Mar. 1975
	175	

1	2	3
132 KV Line :		
Sibbi-Mach	60	June 1975
	60	
66 KV Line :		
1. Yaru-Alizai Abdullah	30	Nov. 1974
2. Karak-Mastung	15	June 1975
TOTAL (Baluchistan) ...	45	
SIND		
132 KV Line :...		
1. Jamshoro-Lakhara coal mines single circuit	30	Dec. 1974
2. T. M. Khan Sujjawal-Thatta (single circuit)	30	Dec. 1974
3. Nawabshah-Sanghar single circuit.	35	Dec. 1974
4. Guddu-Kandkot Shikarpur	40	Mar. 1975
5. Sakrand-Nawabshah-Sanghar	30	Dec. 1974
6. Hala Road-Tando-Allayar-Mirpur Khas	35	Oct. 1974
7. Hyderabad T. M. Khan	40	Mar. 1975
	240	
66 KV Line:		
1. T. M. Khan Matiali Talhar-Badin single circuit	66	Dec. 1974
2. Digri-Naokot single circuit	25	Dec. 1974
3. Dadu-Sehwan Sharif (Single circuit)	35	Dec. 1974
TOTAL (Sind)	126	
KARACHI ELECTRIC SUPPLY CORPORATION.		
11 KV lines	75	
66 KV lines 8	1.7	
132 KV lines	6	
TOTAL (KESC) ...	82.7	
GRAND TOTAL		

Appendix II

IMPORT AND EXPORT OF PETROLEUM PRODUCTS

(All Figures in Tons)

Products	Imports		External use (Bunkering)		Exports	
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
Crude Oil	3,220,000	3,220,000	—	—	—	—
AV Spirit	4,000	10,000	400	400	—	—
J. P. I.	—	—	187,230	218,000	—	—
J. P. 4	—	—	—	—	—	—
M. S.	—	—	—	—	—	—
H. O. B. C.	50,000	40,000	—	—	—	—
S. K.	174,000	230,000	—	—	—	—
H. S. D. Oil	514,000	610,000	8,000	8,000	—	—
L. D. O.	152,000	240,000	4,000	4,000	—	—
F. O.	—	—	100,000	160,000	383,000	350,000
Lubes/Grease	10,000	11,000	—	—	—	—
Asphalt	—	—	—	—	21,200	30,000
Naphtha	—	—	—	—	59,500	71,000
Others	—	—	—	—	—	—
Total ..	904,000	1,141,000	299,630	390,400	463,700	451,000

POL AVAILABILITY 1973-74

(All Figures in tons)

Products	Local Production	Import	Gross Availability	Export	Bunker	Total External	Net Availability
Av. Spirits	—	4,000	4,000	—	400	400	3,600
J. P-1	332,017	—	322,017	—	187,230	187,230	134,787
J. P-4	67,756	—	67,756	—	—	—	67,756
M. S.	270,263	—	270,263	—	—	—	270,263
H. O. B. C.	52,011	50,000	102,011	—	—	—	102,011
S. K.	294,797	174,000	468,797	—	—	—	468797
H. S. D. Oil	599,702	514,000	1,113,702	—	8,000	8,000	1,105,702
L. D. O.	200,927	152,000	352,927	—	4,000	4,000	348,927
F. O.	1,238,184	—	1,238,184	383,000	100,000	483,000	755,184
Lubes/Grease	80,886	10,000	90,886	—	—	—	90,886
Asphalt	102,889	—	102,889	21,200	—	21,200	81,689
Naphtha	76,636	—	76,636	59,500	—	59,500	17,136
Others	18,871	—	18,871	—	—	—	18,871
Total ..	3,324,939	904,000	4,228,939	463,700	299,630	763,330	3,465,609
					Internal consumption		3,330,370
					Change in Stocks ..		135,239

POL AVAILABILITY 1974-75

(All Figures in tons)

Products	Local Product	Import	Gross Availability	Export	Bunker	Total External	Net Availability
Av Spirits	—	10,000	10,000	400	—	400	9,600
J. P-I	332.000	—	332,000	218,000	—	218 000	114,000
J. P-4	76.000	—	76,000	—	—	—	76,000
M. S.	252,00	—	25,000	—	—	—	252,000
H. O. B. C.	52,100	40,000	92,100	—	—	—	92,100
S. K.	286,600	230,000	516,500	—	—	—	516,600
H. S. D. Oil	572,800	610,000	1,182,800	8,000	—	8,000	1,174,800
L. D. O.	199,600	240,000	439,600	4,000	—	4,000	435,600
F. O.	1,249,600	—	1,249,600	160,000	350,000	510,000	739,600
Lubes/Grease	86,000	11,000	97,000	—	—	—	97,000
Asphalt	92,500	—	92,500	—	30,000	30,000	62,500
Naphtha	72,000	—	72,000	—	71,000	71,000	1,000
Others	25.560	—	25,560	—	—	—	25,560
Total ..	3,296,760	1,141,000	4,437,760	390,400	451,000	841,400	3,596,360
					Internal consumption ..		3,588,100
					Change in stock ..		8,260

CHAPTER 14

TRANSPORT AND COMMUNICATIONS

The development of transport sector has for a considerable period lagged behind the general development in the country. Particularly the growth in output and incomes in the last two years has resulted in a rapid rise in volume of traffic which the transportation system has been unable to cope with efficiently. In the case of railways and ports, due to low investments prior to 1971, capacity failed to expand adequately. As a result, severe bottlenecks have arisen with adverse effects on production, exports ad internal availability of goods. The rapid expansion of road transport has relieved the bottlenecks to some extent but this has been done at a higher cost. The shortage of transport capacity has mainly affected the movement of goods. Facilities for passengers, though unsatisfactory, have not been critically short, except in major urban centres. The floods of August 1973 had a severe temporary setback to the transportation and communication network but normalcy was restored as a result of strenuous efforts, within a relatively short time.

Rail and Road traffic

14.2. An estimate of intercity goods and passenger traffic in 1973-74 and forecast for 1974-75 is given in Table I :—

TABLE I

INTERCITY TRAFFIC

Mode	Goods Traffic				Passenger Traffic			
	Million Ton-miles		Percent Total		Million Passenger-miles		Percent Total	
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
Rail	5,310	5,682	50.57	50.73	7,097	7,381	32.56	31.81
Road	5,100	5,518	49.43	49.27	14,703	15,819	67.44	68.19
Total ...	10,411	11,200	100.00	100.00	21,800	23,300	100.00	100.00

14.3. As would be noticed, the share of passenger road transport has been increasing and the trend is expected to continue.

Port Traffic

14.4. An estimate of port traffic in 1973-74 and forecast for 1974-75 is given in Table II :—

TABLE II

Port Traffic

(Million Tons)

	1973-74	1974-75	Capacity at end of 1973-74
Oil	4.662	5.031	5.5
Dry Bulk Carge	3.252	3.425	4.5
General Cargo	3.217	3.460	
Total ..	11.131	11.916	

Review of 1973-74

14.5. During 1973-74 an amount of Rs. 1108.30 million was allocated for the transport and communication programmes in the public sector. However, due to floods of August, 1973, the allocation had to be revised to take into account the post-flood repair and restoration requirements. The revised allocation for 1973-74 was raised to Rs. 1122.20 million (including N.W.F.P. Road Transport Corporation in the public Sector). The original allocation was about 52 percent higher than 1972-73.

14.6. The actual public sector expenditure in the Centre during 1973-74 amounted to Rs. 824.53 million against an allocation of Rs. 716.00 million. The expenditure on the provincial projects, which mainly consisted of roads and road transport, was Rs. 420.10 million against an allocation of Rs. 406.20 million (including NWFP RTC in the Semi-Public Sector the allocation would be Rs. 394.60 million.)

14.7. In the Semi-public Sector (PIA and NSC etc.,) the Federal expenditure stood at Rs. 931.90 million against a provision of Rs. 1875.30 million. The single largest investment made in Semi-public sector was the purchase of two wide-bodied aircrafts at an estimated cost of Rs. 573.77 million. The expenditure in Semi-Public Sector (mainly Road Transport Corporations) in the provinces was limited to procurement of buses and amounted to Rs. 224.50 million against an allocation of Rs. 292.90 million (including NWFP RTC in the Semi-Public Sector, the allocation would be Rs. 304.50 million).

Strategy for 1974-75

14.8. The strategy for the tranport sector for 1974-75 is briefly outlined below :—

(*i*) To alleviate the situation with short-term measures, and to ensure that growth in transport capacity in the long-run is consistent with growing requirements. Government have decided to make a substantial increase in investment in the transport sector. The investment has been increased both in absolute terms and as a proportion of the total outlay.

(*ii*) The four-fold increase in investments in railways during 1974-75 aims at enhancement of railways goods carrying capacity by 16% in a year's time and 30% by 1976. To ensure that the investment programmes are not adversely affected by shortfalls or delays in aid, a substantial allocation of cash foreign exchange has been made.

(*iii*) A basic weakness in the existing transport net-work is the absence of a proper transport link on the right bank of the Indus. The floods of August 1973 exposed the difficulties arising out of the lack of an alternate link. Also, the absence of transport infra-strucutre has impeded development of areas on right bank. Action is being taken to provide for both rail and road links to rectify this imbalance.

(*iv*) The development of roads is being given equal priority . An effort would be made to coordinate rural link road schemes with a view to getting proper road network in the country. Road building in backward areas is being stepped up as an essential spearhead for the economic develo-ment of these areas.

(*v*) In the short-run, road transport would have to meet the increased demands arising out of economic growth. Import of trucks is being stepped up to 8,000 in 1974-75 representing an approximately 100% increase compared to 1973-74.

(*vi*) A massive increase in import of buses for urban areas is planned. The 3199 buses to be acquired by Road Transport Corporations are mainly intended to alleviate the acute shortage currently being experienced in some major cities.

(*vii*) Expansion of port capacity will proceed at the maximum physically feasible rate. The future role of the Qasim and Karachi Ports would be coordinated to avoid any duplication.

Financial Allocations for 1974-75

14.9. The financial allocations for 1974-75 are of the order of Rs. 2088.79 million in the Public Sector out of which Rs. 1516.7 million is for the Centre and Rs. 572.08 million for the provinces. The Semi-Public Sector has been allocated Rs. 563.0 million for the Centre and Rs. 466.5 million for the provinces. Total Semi-Public Sector allocation amount to Rs. 1029.50 million

14.10. The public Sector allocation for 1974-75 is about 68 percent more than the actual expenditure during 1973-74. This is mainly due to the sizeable allocation of Rs. 770.0 million for the Pakistan Railways compared to Rs. 193.6 million during 1973-74.

14.11. In the Semi-Public Sector, the allocation is about 11 per cent less than the actual expenditure during 1973-74. This is mainly due to the reduced allocation to PIAC (Rs. 400 million as compared to Rs. 1348 million in 1973-74 for purchase of wide-bodied aircrafts and NSC (Rs. 100 million against Rs. 476.60 million during 1973-74). These allocations are not provided in the ADP.

14.12. The total allocation, both for the Federal and Provincial programmes in the Public and the Semi-public Sector, is of the order of Rs. 3117.24 million which exceeds the estimated expenditure of Rs. 2401.03 million during 1973-74 by about 30 percent.

Federal Programmes

14.13. Allocation for 1974-75 for Federal agencies along with their respective allocation and expenditure for 1973-74 are given in Table III :—

TABLE III.—Allocation Utilization 1973-74 and Allocation 1974-75

(Million Rupees)

Sub-Sector	Allocation 1973-74	Utilization 1973-74	Allocation 1974-75
A. *Public Sector :*			
1. Pakistan Railways..	193.60	145.93	770.00
2. Ports and Shipping :			
(*a*) D.G. P.&S.	3.80	3.77	4.05
(*b*) Bunder Qasim	50.00	63.53	100.00
3. Civil Aviation	15.40	36.71	23.50
4. I.W.T.	—	0.05	1.00
5. Roads in Azad Kashmir, Northern Areas & federally Administered Tribal Areas	25.10	83.06	73.79
6. Other Roads	86.00	145.00	132.50
7. E.A.D. (Indus Highway and Bridges over Indus at Moro & D.I. Khan & Darya Khan)	—	—	17.50
8. N.T.R.C.	0.20	0.50	1.10
9. Telegraphs & Telephones	275.00	273.50	300.00
10. Post Offices	7.00	9.46	6.85
11. Television	38.20	38.20	30.00
12. Broadcasting	21.70	21.69	56.45
Total (A)	716.00	824.53	1516.71.
B. *Semi-Public Sector :*			
1. Karachi Port	59.70	43.00	63.00
2. National Shipping Corporation*	567.60	—	100.00
3. PIAC	1348.00	888.90	400.00
Total (B)	1875.30	931.90	563.00

14.14. A brief description of the development programme in various sub-sectors/executing agencies is given below :—

A. TRANSPORT

I. Railways :

14.15. Against an allocation of Rs. 193.60 million, the actual expenditure during 1973-74 stands at Rs. 145.93 million. The main reason for the lapse of funds has been the slow pro urement of diesel electric locomotives and scarcity of foreign exchange. Work was commenced on Pipri Yard and detailed designing of the bridge at Kotri. Some capacity improvement works on the main line were started. The dry port at Lahore was commissioned. The physical targets achieved by the Railways are given in Appendix II.

*Not provided in the ADP.

14.16. For 1974-75, the Railways have been given an allocation of Rs. 770.00 million backed by an adequate allocation of cash foreign exchange. Immediate objectives of the Railways programme are a 16% increase in goods carrying capacity in one year and 30% by 1976. The increase of 16% is expected mainly from augmentation of diesel-electric fleet by 68 locomotives. The 30% increase will come from an integrated programme for expansion of main line capacity, and consisting of the Pipri marshalling yard, the doubling of track between Gudu and Hyderabad (including bridge over Indus) and other associa ed investments.

14.17. Funds have also been allocated for manufacture of 150 passenger coaches which, apart from relieving congestion on passenger trains, will help to utilize the capacity of the carriage factory at Islamabad to a reasonable extent.

14.18. Other principal targets for the Railways programme are briefly :-

(*a*) Manufacture of 300 tank wagons and modernisation of 800 wagons.

(*b*) Complete renewal of 50 miles of tracks, 60 miles of sleeper renewal and 40 miles of rail renewal.

(*c*) Gradual improvement in speed, rolling stock utilisation and wagons turn around.

(*d*) Improvement in signalling and telecommunications.

(*e*) Improving D.G. Khan-Kot Adu link with a view to raising its capacity to 1,100 wagons per day.

14.19. The Railways expect to carry 7.381 billion passenger miles and 5.682 billion ton miles of cargo in 1974-75.

II. Roads :

14.20. During 1973-74, an amount of Rs. 228.06 million was spent on the development of roads in Baluchistan, Azad Kashmir, Northern Areas and the Federally Administered Tribal Areas. The allocation for 1974-75 for the development of roads in these areas stand at Rs. 206.29 million. Besides, an amount of Rs. 17.50 million has been earmarked for Indus Highway and Bridges on Indus River at Morro and D.I. Khan.

14.21. In view of the experience during floods of August, 1973, the need for a dependable alternate road between north and south of the country has been badly felt. The Federal Government has createda cell o supervise planning, designing and construction of a super highway, approximately 800 miles long, linking Peshawar with Karachi *via* D.I. Khan—D.G. Khan—Larkana and Kotri. The cost of the project is estimated at Rs. 5,000 million with a foreign exchange component of Rs. 1600 million. The highway is expected to be completed in Five years beginning in January 1974. M/S National Engineering Services (Pakistan) Limited, an autonomous body sponsored by the Government, have been appointed as Consultants.

III. Ports :

14.22. The port capacity, at commencement of 1973-74 was 4.5 million tons of dry cargo and 5.5 million ons of oil. This was totally inadequate to meet the traffic of dry cargo estimated at 6.5 million tons As a result of inadequate capacity and labour problems, there was a serious congestion at the port during the first half of 1973-74. In December, 1973, four more berths were commenced in KPT raising total capacity to 5.8 million tons. The traffic congestion has since been reduced to some extent.

14.23. Against a provision of Rs. 53.80 million during 1973-74 the total expenditure incurred was Rs. 67.30 million. During 1973-74, a provision of Rs. 3.90 million was made for study at Sonmiani, Seamen Training Centre and completion of Navigation Aid work. The work progressed satisfactorily according to the allocation made Prefeasibility study of six sites at Mekran coast was also completed.

14.24 The port development programme for 1974-75 involves an allocation of Rs. 104.05 million from Government in addition to some investment from KPT's own resources. The programme in hand in KPT (4 berths in Juna Bunder and new oil terminal) and in Port Qasim will, on completion, raise total port capacity to 6.60 million tons by .977-78. In 1974-75, a final selection of site for Port in Baluchistan, from among 7 sites investigated, would be made.

(a) Port Qasim :

14.25. The expenditure on Port Qasim amounted to Rs. 63.58 million against an allocation of Rs. 50.00 million. The in rease was mainly due to the rapid pace of trial dredging at the entrance channel. Detailed design of the lighterage and ancillary works also made good progress. The provision of Rs. 100.00 million made for Port Qasim during 1974-75, includes finalising detailed designing, consturction of lighterage jetty, dredging, acquisition of marine crafts and provision of services.

(b) **Karachi Port**

14.26. Against a provision of Rs. 59.70 million actual expenditure has been estimated at Rs. 43.00 million. Work on 4 berths of the Second Karachi Port project was completed increasing the dry cargo capacity to about 5.00 million tons. Preliminaries for the Third Port project covering 4 berths at Juna Bunder, remodelling of M.I. Yard, procurement of 2 twin harbour and salvage tugs was undertaken.

14.27. Better pace of development is expected during 1974-75, for which an allocation of Rs. 63 million has been made. Besides improvements proposed during 1974-75, the main programme includes the construction of 4 berths at Juna Bunder, addition of 4th oil pier with 5.0 million ton capacity, reconstruction of Napier Mole bridge and remodelling of M.I. Yard. KPT is expected to handle 6.885 million tons of dry cargo and 5.031 million tons of oil during 1974-75.

IV. Civil Aviation

14.28. Against a provision of Rs. 15.40 million in 1973-74, actual expenditure of Rs. 36.71 million was incurred to complete the first phase of land-scape development of major airports and expansion of existing runway at Lahore. Sufficient progress has been made for expansion of runways for large jet aircraft at Mohenjodaro and Islamabad. Initial studies on the establishment of international airports at Karachi and Islamabad have been undertaken.

14.29. In 1974-75, a provision of Rs. 23.50 million has been made. Apart from other proposals, the programme also envisages the establishment of Lahore Cantt. International Airport(Rs. 4.45 million), Islaabad International Airport (Rs. 1.00 million), improvement and re-carpetting of existing runway of civil aerodrome at Gilgit (Rs. 1.0 million), and procurement of equipment for aerodrome and communications services.

V. National Shipping Corporation

14.30. Against a provision of Rs. 467.60 million in 1973-74 for the procurement of 8 ships no progress could be made because of non-availability of finances. The immediate requirement is to consolidate rather than expand the merchant fleet. During 1974-75 the National Shipping Corporation intends to acquire 2 coasters and one oil tanker at a total cost of Rs. 100.00 million. In additionk 2 cargo ships are also proposed to be acquired.

VI. Pakistan International Airlines

14.31. Against an allocation of Rs. 1348.00 million, actual expenditure stands at Rs. 888.90 million. Major accomplishments have been the acquisition of two wide-bodied aircrafts and initial works on Hangar and supporting facilities. Initial studies for new airport terminal buildings at Karachi and Islamabad were initiated.

14.32. An allocation of Rs. 400.00 million has been made for 1974-75 for the third DC-10-30 aircraft, three short to medium haul twin jets, re-designing interior of existing fleet of Boeing 707 to have wide-bodied look automation of passenger reservation and check-out system, flight simulator for Wide-bodied aircraft, procurement of classroom equipment, new cargo terminal building at Karachi and Hangar and supporting facilities for widebodied aircrafts. The total traffic expected to be carried by P.I.A during 1974-75 would amount to 1.625 million passenger k.m. and 89 million ton k.m. as compared with 1.450 million passenger k.m. and 71.5 million ton k.m. during 1973-74.

VII. Inland Water Transport

14.33. Preliminary studies were started during 1973-74 and an allocation of Rs. 1.00 million has been made in 1974-75 for conducting detailed studies soon after the completion of the preliminary studies.

VIII. National Transport Research Centre

14.34. The Centre was established during 1973-74 for basic coordinated studies for national transport planning with a token provision of Rs. 0.02 million.

14.35. An allocation of Rs. 1.10 million has been made for 1974-75. Research studies will be under taken for preparation of the Fifth Five Year Plan ad the Perspective laPn for transport sector.

B. Telecommunications

14.39 The principal objectives of the telecommunications programme are to :—

(*a*) instal about 30,000 telephones a year to clear backlog of demand and avoid shortages in future ;

(*b*) expand telecommunications net work to small towns and rural areas ;

(*c*) provide adequate facilities for remote and underdeveloped areas such as the Northern areas ;—

(*d*) modernise the system in order to improve efficiency ;

(*e*) develop alternate cross-country links to avoid interruption due to floods etc ;—

(*f*) improve external communciations ;

(*g*) provide for adequate utilization of domestic manufacturing capacity for telecommunications equipment ;

(*h*) maintain profitability at around 10% of investment.

I. Telegraphs & Telephones

14.37. The total estimated cost of all on-going schemes pertaining to telecommunications (telegraph & telephone) facilities included in the Second, Third and Fourth Plans amounts to Rs. 2207.90 million (F.E.C 957.6 million). These schemes have been progressing satisfactorily and nearly two-thirds of the estimated cost would have been invested by the end of the Fourth Plan period.

14.38. In 1973-74, an allocation of Rs. 275.00 million was made for progressing the expansion of telecommunications systems including the following targets :—

(*i*) Installation of 25,000 telephone lines alongwith ancilliary works ;

(*ii*) Provision of telecommunications facilities in the Northern regions ;

(*iii*) Improvement of telephone exchange and long-distance facilities ; and

(*iv*) Expansion of the Tele communciations Research Centre.

14.39. The actual performance has been satifactory as both financial and physical targets have been achieved substantially. Work on 6 telephone exchanges (expansion), 3 new automatic exchanges and 47 small telephone exchanges and 24 trunk positions was completed. Against the target of 25,000 telephone lines, 19,000 lines were installed, bringing the total number of telephones to about 1,95,000.

14.40. Besides this, a satellite earth station at Dehmandro has been commissioned for international telecommunication. On the long distance dialling system, 12 stations have been brought on STD and the number of trunk channels has been increased from 920 to 1332. Work on nation-wide dialling system to connect 42 stations has been commenced. In the coaxial cable system Rawalpindi-Peshawar and Taxila-Haripur-Abbottabad, Gujranwala-Sialkot, Noweshera-Mardan is in progress. Micro-wave system between Lahore-Rawalpindi and Rawalpindi-Peshawar has been completed and work on Rawalpindi-Karachi system is proceeding according to schedule.

14.41. In the less developed areas of Baluchistan, Gilgit, Azad Kashmir, Dir, Swat and Chitral, work has been taken in hand to provide Public Call Offices (PCOs) and high frequency links for telephone and telegraph services.

14.42. An allocation of Rs. 300.00 million has been made in 1974-75, with the following major targets in view :—

(*i*) Installation of 30,000 telephone lines.

(*ii*) Completion of carrier on coaxial cable system Rawalpindi-Peshawar, Gujranwala-Sialkot Nowshera-Mardan routes.

(*iii*) Completion of Microwave links between Lahore-Rawalpindi and Karachi to Sukkur and Rawalpindi.

14.43. Although it is difficult to allocate the investment on T&T facilities between different provinces on the basis of physical location of facilities or benefits derived by the various provinces, the T&T Department has attemped to show approximate province-wise distribution of the funds allocated in 1974-75. Certain projects which cannot be ascribed to one or more provinces have been put in 'common' category. The approximate distribution would be as given in Table IV.

TABLE IV

PROVINCE-WISE DISTRIBUTION OF ALLOCATION FOR 1974-75

(Million Rupees)

Punjab	134.4
Sind	106.6
Baluchistan	8·6
Frontier	32.8
Common	17.6
Total	300.0

14.44. Emphasis will be laid on the early completion of on-going schemes.

II. Post Offices

14.45. A provision of Rs. 6.96 million was made during 1973-74 to continue with the on-going schemes of 75 postal buildings, 358 residential quarters, Directorate-General Headquarters Office, residential quarters at Islamabad and new schemes for 28 residential quarters and purchase of mail motors.

14.46. The actual expenditure would be Rs. 9.46 million, including Rs. 4.30 million spent on the reconstruction and restoration of 58 flood-damaged buildings. The work on the projects has proceeded satisfactorily. The most important project completed was the Karachi G.P.O. building.

14.47. A provision of Rs. 6.85 million has been made for 1974-75-Rs. 5.00 million for on-going schemes and Rs. 1.85 million for new schemes. The programme covers the construction of Post Office Buildings, residential quarters and the Office building for the Directorate-General at Islamabad, purchase of mail motors and some minor works. The province-wise distribution of the proposed expenditure is shown in the Table V :-

TABLE V

PROVINCE-WISE DISTRIBUTION OF ALLOCATION FOR 1974-75

(Million Rupees)

Province	Ongoing Schemes	New schemes	Total	Percentage
Baluchistan	0.36	0.36	0.72	10.5
N.W.F.P.	0.38	0.33	0.71	10.3
Sind	0.85	0.57	1.42	20.5
Punjab	1.30	0.54	1.84	26.9
Islamabad	2.11	0.05	2.16	31.8
Total ..	5.00	1.85	6.85	100.0

III. Television

14.48. An allocation of Rs. 38.20 million was made in 1973-74 for the development of television facilities, against which the utilization is estimated at Rs. 61.58 million. The expenditure has been incurred largely on the main TV centres at Lahore, Karachi and Rebroadcasting Centres at Thano Bullah Khan, Sakesar, Cherat and Multan.

14.49. For 1974-75, a provision of Rs. 30 million has been made from the Federal budget, while the Corporation proposes to raise another Rs. 60.22 million from debentures.

14.50. The Television programme is divided into two categories :—

(*i*) Commerically viable projects covering the main Television Centres at Islamabad, Karachi and Lahore and rebroadcast centres at Thanu Bullah Khan, Sakesar Cherat, Multan and Sahiwal ; and

(*ii*) Non-viable projects including the main television centres at Quetta and Peshawar, T&T microwave link, Super High Frequency link and Rebroadcast centres at Dadu, Shikarpur and Malakand.

14.51. Expenditure in 1974-75 will be incurred largely on the main and rebroadcast station projects as also on the T&T microwave link. The details of the proposed expenditure and its province-wise break up are shown in Table VI.

TABLE VI

Physical Location of TV Centres and Distribution of Allocation for 1974-75

(Million Rupees)

Name of Scheme	Province of Location	Allocation for 1974-75
Main Television Centres		
Islamabad	Federal Area	3.00
Karachi	Sind	8.00
Labore	Punjab	10.14

1	2	3
Quetta	Baluchistan	45.00
Peshawar	N.W.F.P.	
Rebroadcast Centres		
Thana Bullah Khan	Sind	0.44
Cherat	N.W.F.P.	0.745
Multan	Punjab	3.30
Malakand	N.W.F.P.	5.62
T & T Microwave		13.98
	Total	90.22*
*This includes :-		
(I) Govt. Allocation		30.00
(II) Debentures		60.22

14.52. With the implementation of the above-mentioned programme, the geographical area covered by the TV signal will increase from the present 20 percent to nearly 30 per cent ; the population coverage will rise from 47 per cent to about 60 per cent.

IV. Broadcasting

14.53. Against an allocation of Rs. 21.70 million, the total estimated utilization was Rs. 43.20 million. Work continued on 2-250 KW/SW, 2-100 KW/SW and 1000—KW/MW transmitters in Islamabad, apart from transmitters and broadcasting houses at Peshawar, Multan and Karachi. Work was completed on 150 KW/MW transmitter, Quetta and FM Transmitter Lahore.

14.54. A provision of Rs. 56.45 million has been made for 1974-75 to continue the work on these projects. (In addition, there is a foreign loan of Rs. 8.3 million treated as private sector loan). It is proposed to concentrate on the earliest possible completion of the schemes in progress rather than taking up new schemes with long gestation periods.

14.55. The completion of two major projects during the year, *viz* (i) 1000-KW/MW transmitter, Islamabad, and (ii) 300 KW/MW transmitter, Peshawar, will improve the population and area coverage considerably, as indicated in Table VII.

TABLE VII

Day—Time coverage by Area and Population

	Area (Sq. Mile)	(Population (lakh)
(*i*) **Islamabad, 1000-KW/MW :**		
Total	1,96,430	400
Less existing 10 KW Transmitter (RWP)	7,855	25
Net increase in Station coverage	1,88,575	375
(*ii*) **Peshawar, 300 KW/MW :**		
Total	25,600*	225
Less existing 10 KW Transmitter (Peshawar)	15,400	39
Net increase in Station coverage	10,200	186

*Inc. external coverage.

Provincial Programmes

14.56. The total allocation for the four provinces during 1973-74 stood at Rs. 394.60 million and Rs. 304.50 million for the public & Semi public Sectors respectively (including NWFP RTC in the public sector). Against this the utilization is estimated at Rs 420.10 million. & Rs. 224.50 million respectively. In physical terms sufficient progress coud not be maintained due to extra efforts involved in the restoration of flood damages, slow execution of projects due to stoppage of work, by the contractors, escalation of prices and inadequate road making machinery.

14.57. Another problem adversely affecting the road development programme in the past was an ever-increasing number of road projects which resulted in thinning out the resources, lengthening the gestation period, and con sequential escalation in their cost. Inclusion of new schemes aggravated the situation further and economic returns anticipated from these projects could not, there fore, be realized. To correct this situation, the following strategy is proposed :—

(*a*) Road Projects pertaining to National Highways and main provincial net work be given the first priority.

(*b*) In case of secondary roads, those projects which provide a link with the existing net work and between farm-to-market roads and the existing secondary roads be given the second priority.

(*c*) Other projects, which do not fall in any of above categories, should be given lowest priority, except for the projects which are required for startegic needs and for opening up new areas.

(*d*) More allocation should be made to those road projects which are nearing completion.

14.58. The allocation/utilization during 1973-74 and the allocation for 1974-75 for road programme are given in Table VIII.

TABLE VIII

Allocation/Utilization During 1973-74 *and Allocation for* 1974-75

(Million Rupees)

Name of Sub-Sector	Allocation 1973-74	Utilization 1973-74	Allocation 1974-75
A. Public Sector			
Punjab	235.00	231.80	280.00
Sind	80.90	111.60	163.89
N.W.F.P.	44.80	49.80	79.16
Baluchistan	33.90	26.90	49.03
Total (A)	394.60	420.10	572.08
B. Semi-Public Sector :			
1. Punjab Road Transport Board	233.80	125.00	340.00
2. Sind Road Transport Corporation	59.10	85.00	120.00
3. N.W.F.P. RTC.	11.60	14.50	6.50
Total (B)	304.50	224.50	466.50

Punjab

14.59. *Highways*.— The original ADP 1973-74 provided Rs. 215.00 million for roads and bridges. This was, however, subsequently revised to take into account the effects of unprecedented floods of August 1973. The allocation of ADP schemes was reduced to Rs. 194.50 million but a special allocation of Rs. 40.50 was made for flood repair and restoration thus raising the total allocation to Rs. 235.00 million. Against this allocation, the actual utilization is Rs. 231.80 million (175.90 million for ADP schemes and Rs. 55.90 million for flood repair and restoration).

14.60. In physical terms, 224 miles of existing roads were improved and 142 miles of new roads constructed against the targets of 280 miles and 332 miles respectively. The shortfall was mainly due to substantial cost escalation of materials and labour during 1973-74.

14.60. For 1974-75, an amount of Rs. 280.00 million, including Rs. 31.00 million for flood repairs has been allocated. This gives an increase of 19.15 per cent over 1973-74. Its break-down for various categories of work is shown in Table IX.

TABLE IX

Category-wise Allocation for 1974-75

(Million Rupees)

(*i*) Widening & Improvement	53.70
(*ii*) New consturction	111.80
(*iii*) Bridges	31.40
(*iv*) Block allocation	20.00
(*v*) Flood restoration	31.00
(*vi*) Miscellaneous	32.10
Total	280.00

14.61. The programme aims at widening/improvement of 180 miles of existing roads and construction of 200 miles of new roads. A total of 9 bridges would be completed during 1974-75, work on 3 bridges would continue and 4 other bridges would be taken in hand.

14.62. *Punjab Road Transport Board.*—The number of buses acquired by the Punjab Road Transport Board upto the end of 1973-74 stands at 1852 as detailed below with an expenditure of Rs. 125.0 million against an allocation of Rs. 233.80 million during 1973-74 ;

(*a*) Bedfords granted by Central Govenment	1,454
(*b*) Fiats under Consortium Aid	148
(*c*) Romanian Buses	250
Total	1,852

14.63. During 1974-75, the Punjab Road Transport Board plans to purchase 2504 buses (including 264 buses involving only 10 percent initial payment) at an estimated total cost of Rs. 340 million.

II. Sind

14.64. *Highways.*— The original allocation for 1973-74 stood at Rs. 72.00 million for construction of 100 miles of new roads and improvement and widening of 150 miles of existing roads and bridges and Rs. 59.10 million for procurement of 492 buses. This was, however, revised to take into consideration the requirements of post-flood reconstruction and rehabilitation of road net work. The revised allocation for roads was Rs. 80,90 million. During 1973-74 an additional allocation of Rs. 30.60 million was also made for improvement and reconstruction of roads, purchase of road construction machinery etc. Against this an expenditure of Rs. 111.60 million was expected to be incurred. In terms of physical achievement, approximately 80 miles of new roads were constructed and 240 miles of existing roads were improved.

14.65 During 1974-75, an allocation of Rs. 163.8 million has been made for construction of 230 miles of new roads and improvement of 215 miles of existing roads along with 5 new bridges. Provision has also been made for road building machinery such as road rollers and asphalt plants etc.

14.66. *Sind Road Transport Corporation.*—During 1973-74, against an allocation of Rs. 59.10 million for the procurement of 492 buses, the actual expenditure stood at Rs. 85.00 million. 736 buses were procured out of which 325 buses were commissioned and body fabrication for 411 buses was in progress. During 1974-75, the Sind Road Transport Corporation will purchase 1100 new buses at a cost of Rs. 120.00 million, out of which 700 buses will be for Karachi urban transport system and 400 will be for inter-city routes. The programme is proposed to be financed from debentures.

III. N.W.F.P.

14.67. *Highways.*—An allocation of Rs. 44.80 million was made in 1973-74 for the construction of 60 miles of new highways and improvement of 110 miles of existing highways. The actual expenditure was estimated at Rs. 49.80 million. 81 miles of new roads were constructed and 87 miles of existing roads were improved and widened.

14.68. The allocation of Rs. 79.16 million for 1974-75 envisages the construction of 80 miles of new roads and improvement and widening of about 100 miles of existing roads. Work on bridges on River Indus at Attock and on Kabul River at Nowshera will be commenced.

14.69. *N.W.F.P. Road Transport Corporation.*—An allocation of Rs. 11.60 million was made for N.W.F.P. Road Transport Corporation against which an estimated expenditure of Rs. 14.50 million was incurred for the procurement of 145 buses.

14.70. An allocation of Rs. 6.50 million has been made for 1974-75 to procure 65 buses for the Corporation.

IV. **Baluchistan**

14.71. *Highways.*—An allocation of Rs. 33.90 million was made during 1973-74 for construction of 70 miles of new roads and improvement/widening of 122 miles of existing roads. The actual physical achievements included 97 miles of black top roads, 22 miles of shingle roads and 20 miles of other roads. The physical work fell behind schedule due to shortage of road building equipment and periodic revision of the cost.

14.72. During the course of the year, the allocation for Transport and Communications sector was increased to 53.43 million on account of launching of Crash Development Programme for Mari-Bugti and Jhalawan areas. However, the implementation was expected to be only Rs. 26.90 million *i.e.* 51.3 per cent of the revised allocation.

14.73. During 1974-75, an amount of Rs. 49.03 million has been earmarked for 167 miles of black top and 101 miles of fair-weather roads and 50 per cent completion of two major bridges at Puralai and Sehan.

Financial Allocation and Physical Targets 1974-75

14.74. The overall position of financial allocation for the Federal and Provincial Programmes including the Semi-Public Sector is summarised in Appendix I. The overall position of physical targets is summarised in Appendix II.

TRANSPORT AND COMMUNICATIONS

Summary—All Pakistan and by executing Agencies

(Million Rupees)

Sector/Sub-Sector	Alocation 1973-74	Utilization 1973-74	Allocation 1974-75
1	2	3	4
PUBLIC SECTOR			
Federal Programmes :			
1. Pakistan Railway ..	193.60	145.93	770.00
2. Ports and Shipping :			
(a) D.G. Ports & Shipping ..	3.80	3.77	4.05
(b) Bunder Qasim ..	50.00	63.53	100.00
3. Civil Aviation ..	15.40	36.71	23.50
4. I.W.T. ..	—	0.05	1.00
5. Roads in Azad Kashmir, Northern areas & Federally Administered Tribal Areas ..	25.10	83.06	73.79
6. Others roads ..	86.00	145.00	132.50
7. E.A.D. (Indus Highway & Bridges over Indus at Moro and between D.I. Khan and Darya Khan). ..	—	3.58	17.50
8. N.T.R.C. ..	0.20	0.50	1.10
9. Telegraphs and Telephones ..	275.00	273.50	300.00
10. Post Offices ..	7.00	9.46	6.85
11. Television ..	38.20	38.20	30.00
12. Broadcasting ..	21.70	21.69	56.45
Sub-total ..	716.00	824.53	1516.71
Provincial Programmes :			
1. Roads in Punjab ..	235.00	231.80	280.00
2. Roads in Sind ..	80.90	111.60	162.89
3. Roads in NWFP ..	44.80	49.80	79.16
4. Roads in Baluchistan ..	33.90	26.90	49.03
Sub-total ..	394.60	420.10	571.08
Total (Public Sector) ..	1110.60	1244.63	2087.79
SEMI-PUBLIC SECTOR			
Federal :			
1. Karachi Port ..	59.70	43.00	63.00
2. National Shipping Corporation ..	467.60	—	100.00
3. P.I.A.C. ..	1348.00	888.90	400.00
Total (Federal) ..	1875.30	931.90	563.00
Provincial :			
1. Punjab Road Transport Board ..	233.80	125.00	340.00
2. Sind Road Transport Corporation ..	59.10	85.00	120.00
3. NWFP Road Transport Corporation ..	11.60	14.50	6.50
Total (Provincial) ..	304.50	224.50	466.50
Total (Semi-Public Sector) ..	2179.80	1156.40	1029.50
Grand Total ..	3290.40	2401.03	3117.29

TRANSPORT AND COMMUNICATIONS

Physical Targets

Sub-Sector/Item	Unit	1970-71	1971-72	1972-73	1973-74	Target for 1974-75
1. Pakistan Railways :						
Locomotives	Number	60	—	—	—	68
Passenger carriages & other coaching vehicles	,,	20	39	282	20	256
Wagons	,,	429	792	320	156	300
Rail Renewal	Miles	100	111	50	87	40
Sleeper Renewal	,,	250	245	55	63	60
Passenger miles	Million	6823	5915	6477	7097	7381
Freigt Ton-miles	,,	4579	4723	5142	5310	5682
2. High Type Roads : (Provincial)						
Improvement	Miles	594	622	620	551	596
New construction	,,	109	36	90	400	687
3. Traffic handled at Port :						
Karachi Port	Million-ton	9.436	9.472	10.12	10.94	11.916
4. Telephones installed	Thousand	20	10	25	19	30
5. Post Offices Opened	Number	80	140	140	200	300
6. Traffic handled by PIA :						
Pass-Kilometer	Million			1.222	1.450	1.625 @ 12% Growth rate
Ton-Kilometer	,,			61	71.5	89 @ 24% Growth rate
Aircraft acquired by PIA	Number	9		—	5	4*
7. Ships acquired by NSC.	,,	51	1	—	—	5**

*1 DC-10-30
3 720 - Boeing.

** 2 Coasters.
1 Oil Tanker.
2 Cargo ships.

CHAPTER 15

PHYSICAL PLANNING AND HOUSING

Housing and healthy living environment is a basic human necessity. It is vital for family health, labour productivity and children's capacity for learning. It plays an important part in the generation of employment and supports the building material industries.

Problems

15.2. Physical Planning and Housing problems are huge and complex and have arisen primarily from a dramatic and explosive rate of population growth and urbanization, lack of financial resources, institutional arrangements and effective implementation of plans, insufficient research and training, high cost of construction, shortages of materials, machinery, equipment and trained manpower and poverty of the people.

15.3. The problems can be seen from insanitary living conditions, slums, jhuggies settlements, and overcrowding in urban areas. There is in fact a huge backlog of deficit over the whole range of the urban system and a desperate scarcity of public resources to deal with this situation. In physical terms, the backlog of urban housing is conservatively estimated as 1.4 million. No less than a quarter of the total population of big cities (about 3 million people) belonging to the lowest income group, live in compact and congested settlements of one storey huts of temporary building materials (settlements known as katchi abadies and jhuggi areas). These settlements do not have sewer connection and drainage and water supply is inadequate. There are ponds and open drains every where and have inadequate education, health and recreational facilities. These areas are a product of urban poverty, of the high rate of population growth and of the fundamental gap between mass housing need and supply. The main difficulty in providing housing to the low income groups in the urban areas is that the government cannot allocate to housing the resources that would be required to develop a public housing programme on a scale commensurate with the need. The low income families, on the other hand, are too poor to be able without public assistance to own or rent housing of even minimum standards of habitability and sanitation.

15.4. The position of drinking water in both urban and rural areas is even more alarming; less than 10 percent of the total population has access to safe drinking water. In urban areas, not more than 28 percent and in rural areas only 3 to 4 percent of the population has access to piped water. Sewerage facilities are available to hardly 14 percent of the urban population and in rural areas sanitation facilities are virtually non-existant.

REVIEW OF 1973-74

Financial Implementation

15.5. In the Annual Plan for 1973-74, physical planning and housing sector was allocated Rs. 502.0 million as against the allocation of Rs. 233.0 million in the Annual Plan, 1972-73 which represented an increase of 115 percent. Soon after the allocations for the year 1973-74 were made, it became necessary to revise the allocation because of the havoc caused by the floods in August 1973. In order to repair the damages caused to infrastructures as well as to rehabilitate the persons affected by floods, the Provincial Governments of Sind and Punjab revised their ADPs for 1973-74. The sectoral programme of Punjab was reduced from Rs. 170.0 million to Rs. 149.5 million (Rs. 130.5 million was provided to cater for the regular development programme and the remaining amount of Rs. 19.0 million was allocated to the flood repair-*cum*-restoration works). The sectoral programme of Sind was, however, revised upward from Rs. 63.5 million to Rs. 73.9 million to cater for flood repairs works. No revision was made of the sectoral programmes of NWFP, Baluchistan and Federal Government.

15.6. The total revised allocation for the Physical Planning and Housing Sector was of the order of Rs. 491.9 million which represented an increase of 111 percent over the level of 1972-73. The total expenditure during 1973-74 is estimated to be Rs. 506.8 million as detailed in Table I which shows that the utilization was 103 percent.

TABLE I

Financial Allocations and Achievements, 1973-74

(Million Rupees)

Executing Agency	Original allocation 1973-74	Revised allocation 1973-74	Revised estimates 1973-74	% Implementation over Revised Allocation
Punjab	170.0	149.5	148.3	99
Sind	63.5	73.9	82.0	115
N.W.F.P.	31.9	31.9	16.6	52
Baluchistan	19.4	19.4	27.5	133
Federal Government	217.2	217.2	232.4	107
TOTAL ..	502.0	491.9	506.8	103

Physical Implementation

15.7. Physical Planning and Housing Sector Programme for 1973-74 was primarily designed to develop land in major urban centres for providing residential plots to the low income people and to provide water supply, sewerage and drainage facilities in urban areas and drinking water supply facilities in rural areas. The major physical targets were the development of 23,600 plots, construction of 5 thousand houses, provision/extension of water supply, sewerage and drainage system in 45 urban and 175 rural settlements.

15.8. Against the target of development of 23,600 plots for low income people it is estimated that only 14 thousand plots were developed in the provinces of Sind, Punjab and Baluchistan. The main reason for this shortfall was the increase in cost of development of plots, stoppage of work by the contractors and delay in the acquis tion of land for various schemes. The target of construction of 5 thousand houses was fully accomplished.

15.9. In order to enable the House Building Finance Corporation to increase its loaning operations, a sum of Rs. 100 million was allocated in ADP 1973-74. As a result, an all time record of loaning for house building was set. The total amount of loans disbursed during the year amounted to Rs. 201.5 million. This includes the disbursements of house building loans of about Rs. 100 million for the relief and rehabilitation of about 47 thousand families affected by the unprecedented floods in 1973.

15.10. In the field of water supply, sewerage and drainage, substantial progress was achieved by all the four provinces. In NWFP, an independent department of Public Health Engineering was established during 1973-74. It is estimated that about 30 schemes pertaining to the provision/extension of water supply, sewerage and drainage in urban areas and about 100 rural water supply schemes were completed.

15.11. As regards urban and regional planning, the most significant achievement was the completion of Master Plan for Karachi Metropolitan Region. As a result, various projects for the development of Karachi were indentified and necessary steps were taken for the preparation of feasibility studies and engineering designs so that implementation of the projects could be taken in hand as early as possible.

Strategy and Objective for the Annual Plan 1974-75.

15.12. Considering the magnitude and complexity of the physical planning and housing problems, it is necessary to adopt environmental approach for the Annual Plan 1974-75. In the field of housing, the Government with its limited resources can at best take upon itself the responsibility of meeting the cost of providing site and services whereas the cost of construction of houses will have to be the responsibility of the private sector. In order to enable the private sector to construct houses, the capital resources of H.B.F.C. are being augmented and necessary fiscal incentives have been provided to attract private capital for house construction.

15.13. The paramount need is to have safe drinkable water and disposal of sewerage and excreta from human environment because majority of our p pulation suffer from water-borne diseases and those caused by the lack of sanitation. The other most important need is to provide residential plots to the people in safe healthy environment. Not only the gap between demand and supply of satisfactory housing, water supply and sanitation is to be steadily narrowed, but also the increase in population has to be covered.

15.14. Keeping in view the above mentioned strategies, the following lines of approaches have been adopted in the Annual Plan 1974-75, in respect of Physical Planning and Housing Sector, so that maximum benefits could be provided to low income families :—

(*i*) A total number of 22,300 residential plots shall be developed and provided to low income groups at a price related appropriately to household income. In addition 3500 nucleous houses/flats shall be constructed for weaker section of the community;

(*ii*) House Bu lding Finance Corporation has been allocated Rs. 100 million in the ADP 1974-75 so as to be able to provide small loans to large number of middle and low income families and spread its activities through out the country;

(*iii*) The availability of electricity and gas to lower-income households shall be increased substantially. Gas will provide low income households with a form of f hatuel, in many cases, will be cheaper than fuel such as kerosene, they are using now;

(*iv*) The programme of providing water supply and sanitation in both urban and rural areas will be stepped up so as to narrow the gap between supply and demand of water supply and sanitation. In addition a programme of installing hand pumps in flood affected areas in Punjab and Sind will be initiated;

(*v*) Most of the local authorities are unable to collect sufficient revenue to cover the expenses for operation and maintenance of the water supplies. This is due to the fact that water charges are generally low in relation to the actual cost and collection practices are poor. Efforts will be made to revise water and sewerage cha ges so that he urban programme becomes financially viable;

(*vi*) Living conditions in the rural areas will be improved by undertaking pilot programme for village improvement and construction of model villages;

(*vii*) The programme of constructing people's waiting halls and improvement of subordinate courts will be initiated in a phased manner.

Financial Allocation.

15.15. Financial allocation to Physical Planning and Housing Sector are being increased every year since 1972-73. This trend has been maintained during 1974-75. A total allocation of Rs. 728.34 million has been made to this Sector in the Annual Plan 1974-75 as against an allocation of Rs. 491.90 million made in 1973-74. This represents an increase of 48.0 percent over 1973-74 level. The Federal Government programme is of the order of Rs. 274.65 million and the remaining amount of Rs. 453.69 million is for the four provinces. Breakdown of sectoral allocation by executing agencies is given in Table II.

TABLE II

Sectoral Allocations, 1974-75

Executing Agency	Allocation (Million Rupees)
Punjab	256.50
Sind	94.34
N.W.F.P.	62.95
Baluchistan	39.90
Federal Government	274.65
TOTAL ..	728.34

Another table showing the sectoral allocation in the Annual Plan 1974-75 by sub-sectors and executing agencies is given in Appendix I.

Physical Targets

15.16. The main physical targets in the field of housing, water supply and sanitation are given in Appendix II. The details of physical progress achieved during 1973-74 and targets for 1974-75 under various sub-sectors are described in the following paragraphs :—

Regional Planning and Basic Development

15.17. This programme essentially consists of training and research in the field of housing, building and public health engineering and preparation of urban and regional plans. Urban and Regional Planning efforts are being increased to tackle the problems of rural and urban areas in a more comprehensive manner.

15.18. Under the Federal Government Programme, the joint research project called " Urban Development and Slum Improvement " is under executi n. The objective of this project is to find out ways and means of improving slums with minimum investment of resources. The progress achieved during 1973-74 was the completion of in-depth studies on two slum areas of Karachi, namely Chanesar Goth and Usmania Mohajir Colony, and initiation of work on another research study in the Lyari Area. During 1974-75, the in-depth research study of the Lyari Area in Karachi will be completed. A comprehensive set of recommendations for improvement of slums in Karachi would be formulated by the project, during the year.

15.19. In the Punjab, 3 research studies (i) Housing needs and related problems of workers of selected factories in Kot Lakhpat, Lahore, (ii) Cooperative house building societies, and (iii) upply and demand position of building materials for Housing Programme of the Punjab Government, were undertaken and completed during 1973-74.

15.20. As regards urban and regional planning in the Punjab, the preparation of Outline Development Plans of Bahawalpur, Rahimyar Khan and Bahawalnagar and Regional Development Plan for Sargodha Region were started while Outline Development Plan of Burewala and Bahawalpur were completed during 1973-74. During 1974-75 the Regional Development Plan for Lahore and Outline Development Plans for Khanewal and Rahimyar Khan are expected to be completed and the Regional Development Plan for Sargodha Region and five Outline Development Plans will be under preparation.

15.21. In Sind, during 1973-74 the Master Plan Department of Karachi Development Authority completed the work of preparation of the Development Plan for Karachi Metropolitan Region and submitted it to the Government for approval. During 1974-75, further work will be carried out regarding the identification and preparation of development projects for Karachi for the consideration of international aid giving agencies. In addition, the mapping work of Larkana Town and Planning of areas around shrine of Shah Abdul Latif and Lal Shah Baz would be completed.

15.22. In N.W.F.P. following studies would be completed during 1974-75 in connection with the preparation of Regional Development Plan of N.W.F.P.

(*i*) Determination of development strategies and priorities

(*ii*) Identification of projects and preparation of feasibility and pre-investment studies;

(*iii*) Finalization of an outline Provincial Implementation Programme; and

(*iv*) Legislation and implementation policies.

15.23. The work on two ongoing schemes of establishing Public Health Engineering Research Laboratories at Rawalpindi and Lahore would be continued and the building construction work of Research Laboratory at Rawalpindi would be completed. In addition the construction of Building Research Station, Lahore, would be completed during 1974-75.

Agrovilles Development Programme

15.24. The pattern of urban development during the last two decades indicates rapid increase of population in few large cities and weakening of the traditional distribution of population in smaller urban settlements. In order to arrest the rapid migration of population from villages to the large cities, it is necessary to develop small towns and medium size cities through the location of new productive enterprises and the provision of educational, health, water supply, waste disposal, energy, transport and other facilities. The successful development of small towns and medium size cities will lessen the movement of population, prevent large-scale transfer of people to the metropolitan areas and underpin smaller urban settlements. For this purpose, a programme called the " Agrovilles Development Programme " was launched during 1973-74. The objective of this programme is to bring urban facilities to rural areas by establishing small towns known as " Agrovilles ". This programme is to be executed by the Provincial Governments with some technical and financial assistance from the Federal Government.

15.25. The achievements of this programme during 1973-74 were quite modest. Except for three sites in Sind, no other site could be selected for the establishment of Agrovilles and the actual work could only be initiated at one site called " Badin Agroville ".

15.26. In order to accelerate the programme during 1974-75 a total allocation of Rs. 6.6 million has been made in the Provincial ADP's (Punjab Rs. 1.50 million, Sind Rs. 3.0 million, N.W.F.P. Rs. 1.5 million and Baluchistan Rs. 0.6 million). In addition, a sum of Rs. 1.0 million has been provided in the Federal ADP, 1974-75, for providing technical and financial assistance to the provinces. It is expected that work on five agrovilles will be initiated during 1974-75 besides the completion of work on Badin Agroville, started last year.

Low Income Housing

15.27. The approach adopted for housing was that the Government should take upon itself the responsibility of meeting the cost of providing site and services whereas the cost of construction of houses should be the responsibility of the private sector. For this purpose a programme of development of residential plots in various towns and cities was initiated during 1972-73.

15.28. Against the target of development of 23,600 plots during 1973-74 for low income people, it is estimated that only 14 thousand plots were developed in the provinces of Sind, Punjab and Baluchistan. The province of the Punjab was mainly repsonsible for the development of plots, where twenty-five Area Development schemes were undertaken. It is estimated that 10 thousand plots were developed in that province. In

addition, 300 two-room flats were constructed for low income people on pilot project basis. In the " Lahore Township Scheme " construction of 1100 nucleus houses was completed and construction work on another 500 nucleus houses was undertaken. The work on the development of 1600 acres in Kutcha Multan Road Scheme, Lahore, could not make much headway due to the abondoning of work by the contractors; only 40% work on the construction of roads was completed. In Sind, 3 thousand plots were developed under the Greater Karachi Resettlement Programme and Deh Sari Low Cost Housing Scheme. In Baluchistan, two schemes relating to the construction of low cost houses and Satellite Town in Quetta were initiated where 200 houses were constructed and about one thousand plots were developed.

15.29. Realizing the fact that acute shortage of developed plots has prevented all housing groups, especially the middle and lower income groups for constructing housing on their own initiative, concerted efforts will be made during 1974-75 towards making developed plots easily available to all income groups.

15.30. In the Punjab, 32 area development schemes for low income people have been included in A.D.P. 1974-75 which will enable the development of 18 thousand plots (5 thousand at Kutcha Multan Road and Lahore Township Scheme, 2200 at Lyallpur, 2 thousand at Gujranwala, 2 thousand at Multan, 1600 at Jhelum, 1600 at Jhang, 1600 at Bahawalnagar, 960 at Muzaffargarh). In addition, 500 one-roomed quarters and 380 two roomed flats will be constructed and sites for multi-storeyed flats will be provided to accommodate 2000 families.

15.31. In Sind, only 600 residential plots will be developed in Hyderabad and Larkana. In N.W.F.P., an allocation of Rs. 1.0 million has been made for a pilot project of low cost housing colony in Peshawar. This amount will be the Government equity and it is expected that large subscriptions will be forthcoming from the public. In addition, an allocation of Rs. 10 million has been made as aid to municipal committees to enable the local bodies to initiate development projects in various towns in N.W.F.P.

15.32. In Baluchistan, two ongoing schemes for construction of low cost houses and development of a Satellite Town in Quetta have been included in A.D.P. 1974-75. These schemes will provide about 200 low cost houses and 1500 residential plots.

House Building Finance Corporation

15.33. In order to enable the House Building Finance Corporation (HBFC) to increase its operations, a sum of Rs. 100 million was allocated in ADP 1973-74. As a result of this, an all time record of loaning for house building was set. The total amount of loans disbursed during the year amounted to Rs. 201.5 million. This includes the disbursements of house building loans of about Rs. 100 million for the relief and rehabilitation of about 47,000 families affected by the unprecedented floods in 1973.

15.34. Although an allocation of Rs. 100 million has been made in ADP 1974-75 but a loan target of Rs. 250 million has been fixed by HBFC, in consultation with the Provincial Governments. In order to achieve this target, vigorous efforts will be made to encourage house building activity in various towns and cities of Pakistan. This is also necessary to spread the investment of HBFC throughout the country and to contain the over concentration of house building loans in one city i.e. Karachi.

Government Servants Housing

15.35. The overall progress of construction of Government Servants Housing was satisfactory during 1973-74 and about 2 thousand quarters/houses were constructed for the employees of the various departments of the Federal Government as well as the Provincial Government of Sind, the Punjab, N.W.F.P. and Baluchistan, at various places.

15.36. During 1974-75 it is expected that in all about one thousand residential units will be built in the Punjab for the low paid Government servants in various Divisions/Districts headquarters. In major cities such as Lahore, Lyallpur, Rawalpindi, etc., flats will be constructed for low paid government servants.

15.37. In Sind, only 180 houses for various catagories will be built throughout the province. In addition, work will be initiated on the construction of an M.P.As. Hostel at Karachi and Sind House at Islamabad. In N.W.F.P., construction of a colony for Government servants at Jamrud Road Peshawar and Guest Housein Peshawar and residential accommodation in D. I. Khan Division and Hazara District will be taken up. In Baluchistan, besides the completion of work on the ongoing schemes of providing residential accommodation at Quetta, Sibi, Loralai, Fort Sandeman, Uthal and Kakar Khorasan, work will be initiated on a new scheme in Loralai. Provision has also been made for the construction of Baluchistan House at Islamabad and carrying out renovation/improvements of official residences at Quetta. Under the Federal Government Programme schemes for the construction of residential accommodation for low income employees in Karachi, Peshawar, Quetta, Lahore and Rawalpindi will be executed and about one thousand flats/quarters will be constructed.

Urban Water supply, Sewerage and Drainage

15.38. The Programme of providing water supply and sanitation facilities is being expanded gradually every year. During 1974-75, 42 water supply and 19 sewerage and drainage schemes will be under execution in the Punjab. The major schemes are at Lyallpur, Rawalpindi, Multan, Gujranwala, D. G. Khan, Jhelum and Gujrat. Greater emphasis has been laid on the completion of ongoing schemes and as such it is expected that 12 schemes will be completed. In addition, work on Phase II of the Greater Lahore Water Supply and Sewerage Project will be initiated. Provision has also been made to intensify the health education programme in the provinces.

15.39. In Sind, work on five ongoing water supply and 5 drainage schemes will continue and 9 new schemes (3 for water supply and 6 for drainage) will be initiated. These schemes are located at Hyderabad, Tando Adam, Sukkur, Nawabshah, Khairpur, Larkana, Shikarpur, Thatta, Mirpur Khas, Dadu, and Jacobabad. It is expected that four water supply schemes at Tando Adam, Nawabshah, Khairpur, and Larkana and Drainage Scheme at Sukkur would be completed. In addition Part. I. of the Third Phase of Greater Karachi Bulk Water Supply schemes and Lyari Water Supply and Sewerage scheme will be under execution.

15.40. In the Province of N.W.F.P. there are 4 drainage and 2 water supply schemes. The drainage schemes are located in Peshawar and Nowshera Kalan while the Water Supply Schemes are in Mardan and Swabi. The water supply scheme in Mardan is expected to be completed during 1974-75.

15.41. In Baluchistan, work on the ongoing water supply schemes in Marriabad area in Quetta, Fort Sandeman, and Bela are expected to be completed and will continue at Ormara and Lehri. In addition, work on four new schemes will be initiated.

Rural Water Supply

15.42. In the Punjab, 125 rural water supply schemes (105 ongoing and 20 new) will be under execution and it is expected that 60 schemes will be completed which will serve a population of 2.2 lakh. In addition a programme of installation of hand pumps in flood affected areas of the Punjab and Sind is proposed to be undertaken under the flood rehabilitation programme. In Sind, work will be started on 15 new water supply schemes and 3 ongoing chemes will be completed. In addition, provision has been made to initiate work on seven drainage schemes.

15.43. In N.W.F.P. a little more than 1% of the total rural population of the Province is served by community water supply system. To meet the persistant demand of the people, a crash programme is being taken up. A total number of 181 rural water supply schemes will be under execution out of which 78 are expected to be completed.

15.44. In Baluchistan, a total number of 16 rural water supply schemes (6 ongoing and 10 new) will be under execution. It is expected that out of 16 schemes, work on 10 schemes will be completed at Aliabad, Rustam Khan, Khanpur, Gulushehar, Malazai, Gharibabad, Muslimbagh, Hoshangi, Dalbandin and villages near Lasbella. The remaining schemes at Temple Dera, Gandawa, Khanozai, Taftan, Khurasang, and Suntsor will be carried over to the next year for completion.

Government Offices and Buildings

15.45. As in case of Government Servants Housing, the programme of construction of Government Offices made satisfactory progress during 1973-74. A number of small schemes for the construction of office accommodation for police, judicial, communication & works, rangers, revenue, jail, income-tax and other departments of the Federal and Provincial Governments at various places were completed. In addition, the work of repairing the office buildings damaged during the floods was completed.

15.46. Work on substantial number of ongoing and new schemes relating to the construction of office accommodation for police, judicial, communication & works, revenue, income-tax and other departments of the Federal and Provincial Governments at various places will continue during 1974-75. In addition, construction of a Library in Civil Secretariat, Lahore, office block at Karachi, extension of Sind Assembly Building, Karachi, a new secretariat building at Karachi, new Assembly Building at Peshawar, buildings for divisional and sub-divisional headquarter in Swat District, and Provincial Assembly Building and Hostel in Quetta will be initiated. Provision has also been made in the development programme for the construction of People's waiting halls and improvement/construction of district court buildings in the selected district headquarters.

Islamabad

15.47. The execution of development projects of Islamabad during 1973-74 did not proceed according to schedule due to the stoppage of work by contractors and general escalation in the cost of material and labour. However, the problems of contractors were resolved and some progress was made towards the construction of Presidential Estate and roads and provision of water supply sewerage and drainage system. The progress on the construction of Simly Dam however, was quite slow due to a number of factors.

15.48. During 1974-75, work on the construction of roads including 1-J. Principal Road, laying of water supply distribution system, sewerage and drainage system and construction of mosques in 9 residential sectors will continue. In addition , considerable progress will be achieved on the construction of Presidential Estate and the construction of Simly Dam. Provision has also been made to initiate the construction of 3008 A to D type quarters for providing residential accommodation to low paid Government servants working in Islamabad.

Special Areas

15.49. In Azad Kashmir, provision of housing and drinking water facilities and construction of administrative buildings has been made. Priority is being assigned to the construction of residential quarters for the government servants and water supply schemes. In the Northern Areas, comprising Gilgit, Baltistan and Diamer Agencies, a development programme consisting of the construction of about 200 quarters, provision of drinking water supply to villages and townships and construction of administrative buildings for police force and other departments will be undertaken. Work will also be initiated on the development of a new town at Chillas. Programmes of drinking water supply and construction of residential and non-residential buildings will also be carried out in the Federally Administered Tribal Areas.

Tourism

15.50. With the opening of northern regions to foreign tourists, the tourism prospects have improved considerably. Accordingly, efforts are being made to attract foreign tourists as well as essential schemes for providing infra-structure facilities are being taken up for the development of tourism. The major activity in the field of tourism during 1974-75 will be on foreign publicity. In addition, work on the establishment of Tourism and Hotel Training Institute will be initiated and other schemes such as presentation and projection of historical monuments and archeological sites, review of Master Plan for tourism and preperation of feasibility studies for important projects will be undertaken.

Appendix I

FINANCIAL ALLOCATIONS—BY EXECUTING AGENCIES

(Million Rupees)

Sub-Sector	Punjab	Sind	N.W.F.P.	Baluchistan	Federal Govt.	Total
1. Basic Development and Regional Planning	3.00	0.90	0.40	—	0.30	4.60
2. Agrovilles .. —	1.50	3.00	1.50	0.60	1.00	7.60
3. Low Income Housing	108.50	2.30	1.00	7.85	—	119.65
4. Advances to Govt Servants	—	..	—	—	15.00	15.00
5. H.B.F.C.	—	—	—	—	100.00	100.00
6. Rural Water Supply	32.50	8.40	27.60	5.64	—	74.14
7. Urban Water Supply, Sewerage& Drainage	61.00	20.40	5.15	9.61	—	96.16
8. Govt Servants Housing — ..	22.00	7.87	8.63	5.75	18.87	63.12
9. Govt. Offices & Buildings — ..	28.00	11.47	7.17	10.45	5.90	62.99
10. Aid to Local Bodies .. — ..	—	25.50	10.00	—	—	35.50
11. Special Projects .. — ..	—	14.50	*1.50	—	—	16.00
12. Islamabad	—	—	—	—	84.80	84.80
13. Tourism	—	—	—	—	12.00	12.00
14. Special Areas (Azad Kashmir & Northern Areas)	..	—	—	—	16.11	16.11
15. Defence Division —	—	—	—	—	2.77	2.77
16. States & Frontier Region (Tribal Division)	—	—	—	—	5.65	5.65
17. F.A.T.A. Dev. Corporation	—	—	—	—	1.75	1.75
18. Baluchistan Constabulary	—	—	—	—	10.00	10.00
19. Works & Housing Research	—	—	—	—	0.50	0.50
TOTAL ..	256.50	94.34	62.95	39.90	274.65	728.34

*Provision for work of face lifting of G.T. Road from Boundary of Peshawar Cantonment to Hari Singh bridge.

MAJOR PHYSICAL TARGETS

Sub-Sector/Items	Unit	Targets for 1974-75
PUBLIC SECTOR		
1. Residential Plots	Nos.	22,300
2. Houses/Flats:	Nos.	3,500
3. Urban Water Supply, Sewerage and Drainage	Population to be served	5.80 lakh
4. Rural Water Supply and Drainage	Population to be served	7.40 lakh

CHAPTER 16

PEOPLE'S WORKS PROGRAMME

The People's Works Programme aims at reducing the mass-poverty, unemployment and underemployment by activating the urban and rural population to undertake productive jobs on self-help basis. It further aims at providing proper direction to motivate the people to pursue self-interest by pooling material, manpower, initiative, talented local leadership which remained untapped for want of adequate incentive and proper political climate. The programme gives priority to such productive projects of short duration which would build up the economy through the provision of basic capacities and amenities in as many sectors as possible. The main fields in which schemes are being implemented under this programme are housing, roads, play-grounds, adult-education, tree plantation, industrial homes for women, drinking water, etc.

Review of 1973-74

16.2. The revised financial allocation for People's Works Programme during 1973-74 amounted to Rs. 143.20 million. Rs. 65.00 million for Punjab, Rs. 35.10 million for Sind, Rs. 14.10 million for N.W.F.P. and Rs. 11.00 million for Baluchistan. The Federal Government was allocated Rs. 18.00 million for this Programme in Azad Kashmir, Northern areas and Federally Administered Tribal Areas. The whole of this amount is likely to be spent. The physical achivements made in the provinces under this programme from July 1973 to March 1974 are as follows : —

Punjab

16.3. In Punjab, 57 miles of metalled roads, 53 miles of treated roads, 228 miles of *Katcha* roads, 225 culverts, 302 new school buildings have been constructed. 300 rooms were added to the existing school buildings and more than 1,000 play-grounds have been provided. 330 Industrial Homes for women have been set up, 58 diggies for drinking water and 21 civil dispensaries have been constructed. 83 surface wells have been sunk and 14 small dams have been constructed. 34 veterinary centres have been established and 4 cottage industries have been set up.

Sind

16.4. In Sind, 21 miles of metalled roads, 70 miles of *Katcha* roads and 37 miles of other roads have been constructed, 466 hand, pumps have been installed, 60 play-grounds have been provided, 2 lakh persons have been enrolled for adult education, 91, 000 trees have been planted. Out of 80 IRD Markaz Buildings work is in progress on 8 buildings. Work on 20 major and minor Water supply schemes covering 25% of the programme in this sector is also in hand. Besides, WAPDA's own programme of village electrification, arrangement for electrification of 7 villages at a cost of Rs. 4.60 lakh was initiated.

N.W.F.P.

16.5. In N.W.F.P. and Federally Administered Tribal Areas 85 miles of metalled roads, 55 culverts and 23 bridges have been constructed. 95 miles of roads have also been improved. 48 new school buildings have been constructed and rooms have been added to 84 school buildings besides repairing and providing boundary walls and verandahs to 48 schools. 68 diggies/tanks for drinking water have been constructed, 85,310 rft. pipe line have been laid, 39 wells have been dug and 11 pumps have been installed or improved on the existing wells. 130 spurs and 23 miles of irrigation channels, 77 Karazes and 9 irrigation wells and 69 flood protection bunds have been constructed, 9 community buildings and 12 low cost houses have been constructed.

Baluchistan

16.6. In Baluchistan, 47 schemes in various sectors involving an expenditure of Rs. 4.64 million have been completed under the programme.

Targets for 1974-75

16.7. The Programme in the early stage could not make sufficient head-way in the Provinces of N.W.F.P. and Baluchistan primarily due to lack of institutional framework and proper organisation. The short-comings of the Programme have largely emerged in the sphere of mass motivation and mobilisation. The assumption that the rural and urban masses would readily participate in cooperative ventures on collective basis for local development has not proved fully valid. However, this situation can be improved through additional political work, mass motivation and education to bring forth the responses in keeping with high ideals and objectives of the programme.

Allocation for 1974-75

16.8. The agency-wise financial allocation for 1974-75 with the allocation/utilization during 1973-74 are given in Table I.

TABLE 1

Financial Allocation/Utilization 1973-74 *and Allocation* 1974-75

(Million Rupees)

Agency	1973-74 Original Allocation	1973-74 Revised Allocation	1973-74 Utilization	Allocation 1974-75
Punjab	120.00	65.00	82.14	60.00
Sind	39.00	35.10	27.10	13.14
N.W.F.P.	14.10	14.10	N.A.	11.59
Baluchistan	11.00	11.00	N.A.	5.00
Sub-Total (Provincial,)	184.10	125.10	—	89.73
Federal Capital Area	0.50	0.50	0.41	0.50
Azad Kashmir	10.00	10.00	5.10	6.00
Northern Areas	2.50	2.50	6.00	7.50
Federally Administered Tribal Areas	5.00	5.00	5.45	6.00
Sub-Total (Federal) ..	18.00	18.00	16.95	20.0
Total ..	202.10	143.20	—	190.73

PART III
HUMAN RESOURCES AND SOCIAL DEVELOPMENT

CHAPTER 17

EDUCATION AND TRAINING

The Education Policy (1972—80) formulated by the People's Government was announced by the President of Pakistan on March 15, 1972, and was taken up for implementation during 1972-73. However, since time was needed to draw up programmes in accordance with the recommendations of the Education Policy and to formulate development projects, bigger proportion of the financial provision made in the Annual Develpomennt Programme 1972-73, was earmarked to such ongoing programmes as had continued to have relevance in the light of the recommendations of the Education Policy. Provision for new programmes as envisaged in the Education Policy was made in the form of block allocation. During the year, a number of new projects were prepared and approved by the Government and some were also taken up for implementation. The Annual Development Programme 1973-74 included a large number of schemes which had been prepared in the light of the recommendations of the Education Policy.

17.2. During the two year-period 1972—74, significant developments took place in the field of education. Most of the important developments in the initial period had greater impact on the non-development budget of education. These included nationalization of about 3,448 privately managed educational institutions, introduction of Government salary-scales for teachers and other staff in the nationalized institutions, introduction of free education upto Class VIII from October, 1972 and reduction in rates of fees in the nationalized high schools and colleges to the level charged in Gorvenment institutions. Free education has also been introduced in classes IX and X in certain regions and it will be introduced all over the country from October, 1974. Other significant developments include setting up of a National Book Foundation which now makes arrangements for the import of foreign books for higher and professional education, for local printing of foreign books required in large numbers and for the preparation, production and publication of other books. Book banks have been established at the universities, colleges of general and professional education and all other educational institutions, providing post-matric education. At these book banks, provision has been made for the supply of multiple copies of important text and reference books which can be borrowed by the students on short term and long term basis. Progress has also been made with the implementation of Projects of People's Open University, Centres of Excellence at the Universities and upgradation of Engineering College, Jamshoro and Agricultural College, Tandojam, to university level. Work has also been initiated for the opening of new universities at Multan and D.I. Khan. A number of new schemes of scholarships have been started and a programme of students' interest free loans for higher education has been introduced. The revision of curricula at the primary stages and preparation of agro-technical courses for Class VI has been completed and work is in the progress for the revision of curricula for other stages of education. Extensive programmes of in-service training of teachers have been implemented and a National Bureau of Educational Planning has been set up at Islamabad. Other important programmes implemented during this period include consolidation and opening of primary, middle and high schools, intermediate and degree colleges, and introduction of science courses at intermediate and degree levels. However, the size of programmes implemented at most of these levels generally remained very limited compared to that envisaged in the Education Policy.

17.3. The Annual Development Programme, 1974-75, therefore, seeks to lay adequate emphasis on the implementation of high priority programmes and to accelerate the pace of implementation of such programmes as have lagged behind. The proposed programme also represents an effort to complete maximum number of on-going projects especially those which are in advanced stage of implementation. A sum of Rs. 485.65 million has been allocated for meeting the developmental cost of educational projects to be implemented during the year compared to Rs. 313.0 million in 1973-74. The progress report on the financial and physical performance in the education sector for 1973-74 and programmes for 1974-75, is discussed in the subsequent paragraphs.

FINANCIAL IMPLEMENTATION 1973-74, AND ALLOCATION FOR 1974-75

Financial Implementation

17.4. The Annual Development Programme for 1973-74 initially provided Rs. 313.0 million for the development programmes in this sector . Later, due to the flood disaster, certain adjustments were made in the Annual Development Programme of the Punjab and Sind, in order to find out resources for reconstruction of the damaged education facilities. Consequently, the allocation was reduced to Rs. 299.0 million. The picture which emerged after the adjustment together with the revised estimates is indicated in Table I.

TABLE I

Fiancial Allocation and Utilization, 1973-74

(Million Rupees)

Executing Agency	Original ADP allocation	Post Flood revised allocation	Revised estimated expenditure	4 as percentage of 3
1	2	3	4	5
Punjab*	117.0	107.0	103.4	97%
Sind	58.3	54.4	48.6	89%
N.W. F. P.	40.9	40.9	39.0	95%
Baluchistan	15.3	15.3	23.2	151.6%
Centre	81.5	81.5	95.3	117%
Total :	313.0	299.1	309.5	103.4%

17.5. Table I indicates that the overall rate of utilization in this sector has been satisfactory. The amount utilized in Baluchistan and the Centre in fact, exceeded substantially the A.D.P. allocation. In Baluchistan the increase is mainly due to higher expenditure on primary education, construction of hostels in secondary schools, establishment of new intermediate colleges, University of Baluchistan and construction of residences for the Director of Education and the school and college teachers. At the Centre, the higher percentage of utilization is mainly due to more than planned expenditure on Islamabad University, People's Open University and scholarships and loans. However, due to very high price escalation, the physical performance does not correspond to high percentages of the utilization of funds.

Financial Allocation 1974-75

17.6. A sum of Rs. 485.65 million has been earmarked in the ADP 1974-75 for the Education and Training sector, as shown in Table II :—

TABLE II

ADP Allocation by Agency 1974-75

Executing Agency	Allocation (Million Rupees)
Punjab	149.60*
Sind	42.22
N. W. F. P.	60.74
Baluchistan	19.54
Centre	213.55
Total ..	485.65

*Excludes expenditure on University of Agriculture, Lyallpur.

This amount is about 55% higher than the ADP allocation of 1973-74. To ensure that maximum number of ongoing projects are completed during 1974-75, about 85% of the total allocation is earmarked for ongoing projects. New projects have been included only where considered absolutely essential. Details of allocations made for various sub-sectors of education in the programmes of the provinces and Ministries/Divisions are given in Appendix I.

IMPLEMENTATION, 1973-74 AND PROGRAMMES FOR 1974-75

PUNJAB

Implementation, 1973-74

17.7. One hundred new primary schools were opened in the economically deprived areas and the consturction of buildings of primary schools, started during 1972-73, were completed. Existing 66 primary schools were provided with buildings and equipment, and teaching aids were supplied to 2,155 primary schools which also included 655 nationalised primary schools. Work was started on the introduction of industrial courses in 69 high schools, agricultural courses in 50 schools and home economics in 100 schools. Buildings were also provided for the introduction of integrated courses in the existing comprehensive high schools. Work was continued on the construction of building of 4 high schools for boys and 9 high schools for girls and on 5 hostels at high schools. Library books and equipment was supplied to 80 schools. Buildings of two comprehensive high schools were completed and of 9 schools remained under construction, and equipment was supplied for all the 11 schools. Work reached near completion stage in respect of upgradation of 250 primary schools to middle standard and 150 middle schools to high standard. Buildings of 2 new normal schools also reached near completion stage and equipment was supplied to all the 5 new training institutions.

17.8 Building of the polytechnic institute at Lyallpur and civil technology blocks at Rawalpindi were completed. Eqnipment was supplied to polytechnic institutes at Lahore, Sialkot, Rawalpindi, Bahawalpur and Lyallpur, but the work relating to construction of buildings at Lahore, Sialkot and Bahawalpur Polytechnic Institutes remained slow. Work also remained slow in respect of the construction of additional buildings of Polytechnic Institutes at Rasool, Lahore, Rawalpindi, Multan, Lyallpur and Bahawalpur but equipment was supplied to these institutes for their upgradation to technical colleges. The expansion programme of the Technical Equipment Assistance Centre was implemented at an accelerated pace. Construction work reached advanced stage in respect of library, administrative block, mosque, residences for the faculty and other staff, and hostels at the University of Engineering and Technology, Lahore. Designs of buildings for public health engineering and research institutes have been prepared. 2 teachers have been sent abroad for higher training in computer science, construction of experimental oxidation ponds has been completed and research has been initiated in these areas.

17.9 Buildings of 2 newly established science colleges were completed and construction of buildings of 9 other colleges reached advanced stage. Work was started on the upgradation of 4 intermediate colleges to degree standard and science units were added at 25 degree and intermediate colleges. Construction of 2 hostels for colleges was completed and it reached near completion stage in respect of other five. Construction of hostels was also started for the colleges located in Sargodha and Bahawalpur Divisions. At the new campus of the University of the Punjab, Lahore, work continued in respect of construction of women's hostel, mosque, and external services. Equipment was also supplied for introducing paper, fertilizer, petroleum and gas, material science, and corrosion technologies, for the development of high polymer and plastic technology, and for the introduction of advanced level programme in solid state physics. Funds were also provided for acquiring land for the new university at Multan.

17.10 Scholarships amounting to Rs. 17.00 million were awarded to the students, studying at various levels of education, on the basis of the talent and economic background of the students. Work was also started on the repairs of the educational institutions damaged by floods.

Programme for 1974-75

17.11 Fifty new primary schools will be opened and buildings will be constructed for another 600 existing primary schools which will also be provided with necessary equipment. To improve the facilities of instructions at the primary level library books, charts and toys will be supplied to 4,000 existing primary schools while 20,000 primary schools will be provided with radio sets for educational purposes. Sixty-four primary schools will be upgraded to middle standard and 11 middle schools raised to high school standard. Construction work will be completed in respect of bnildings of the schools upgraded from primary to middle standard and from middle level to high standard in 1973-74. Hostel buildings for Government High Schools Multan and Shakargarh will also be completed and construction of buildings of comprehensive high schools will be continued. Industrial courses will be introduced in 120 high schools, home economics courses in 500 girls high schools and agriculture courses in class VI of 500 middle and high schools. Work will continue on the buildings for the elementary teachers training colleges at Sargodha, Multan, Bahawalpur, Kotlakhpat, Kot Addu and Mianwali and in respect of expansion of teachers training colleges at Lyallpur and Multan.

17.12 In the sub-sector of technical education, work will be continued on the expansion programme of 4 existing polytechnics and construction of buildings for the polytechnic institutes at Sahiwal and Lyallpur.

The programme of conversion of 7 existing polytechnics into technical colleges will be continued.i Re-organisation of existing industrial schools for boys and vocational schools for girls into vocational insttutes will be continued. Ten existing vocational institutes for women and commercial institutes for men will be improved. A few new technologies will be introduced in two polytechnics. Construction work will be taken up on production workshops at the polytechnic institutes Lahore, Multan, Rawalpindi and the Pak-Swedish Institute of Technology at Gujrat. Work will also be started on the establishment of design centres for women at Lahore, Bahawalpur and Sargodha. At the University of Engineering and Technology, construction of library building, administration block, mosque, and 36 residences for low paid staff will be completed. Work will also be completed on expansion programme of the Department of Architecture and Town Planning. Construction of buildings of Public Health Engineering and Research Institute at this University will also be started.

17.13 Work will be continued on the implementation of ongoing programmes of establishment of 8 intermediate science colleges, construction of hostels for 6 intermediate and degree colleges, upgradation of 4 intermediate colleges to degree level and introduction of science and biology courses in 23 intermediate and 7 degree colleges. Implementation will also be started in respect of establishment of 11 new intermediate colleges, development of Government College, Lahore, and introduction of science courses in 41 intermediate and 6 degree colleges. Scientific equipment and furniture will be also supplied to these institutions.

17.14 The development programme for the construction of new campus of the Punjab University will be continued while work on the swimming pool and mosque will be completed. Construction of students' hostel, new building for the Law College, and for the Institute of Chemical Engineering and Technology will be taken in hand. Over Rs. 5 lakh have also been provided for purchase of land for the proposed university of Multan.

17.15 An amount of Rs. 20.00 million will be utilized on the award of scholarships to talented students to enable them to continue their studies at the various levels of education.

SIND

Implementation, 1973-74

17.16 In Sind, fifty-five new primary schools were opened, 23 existing primary schools were improved and 24 primary schools were upgraded to elementary level. Work was started on the improvement of 40 middle schools for which some buildings were constructed and furniture was provided to most of these schools. The programme of upgradation of 13 middle schools to high standard was taken in hand and 23 Government high schools were improved in respect of equipment and furniture. Five new intermediate colleges were set up with teaching facilities in arts and science, of which 3 are in the rural areas. Three existing intermediate colleges were raised to degree level for teaching science. Nine vocational schools for girls, of which 7 are in the rural areas, have been set up which will start functioning from the next academic year. The shifting of the Engineering College, Jamshoro to Nawabshah for its upgradation to the university level has started and the first batch of post-graduate students is being admitted from the next session. The construction of the new campus of the N. E. D. Engineering College, Karachi continued at an accelerated pace and 11 members of the teaching faculty of the college joined various foreign universities for advanced training.

17.17 Work was started for upgrading 3 existing polytechnic institutes to the level of colleges of technology to teach B. Tech. courses from the next academic year. The Department of Pharmacy at the University of Karachi was raised to the status of Faculty of Pharmacy. Construction of the buildings of the Department of Statistics at Karachi University was started and funds were provided for the purchase of books for the libraries of the universities of Karachi and Sind. Financial assistance to 12,000 talented students at a cost of Rs. 4.5 million was provided under the programme of scholarships.

Programme for 1974-75

17.18 Fifty-five new primary schools will be provided with buildings and equipment, while construction of buildings for other 25 new primary schools will be started. Ten primary schools will be upgraded to elementary level and 5 middle schools will be upgraded to high standard. Buildings and equipment facilities will be improved in 5 Government and nationalised high schools. Twenty primary and middle schools for girls will be provided with compound walls, water rooms and lavatories. Equipment will be supplied to 30 middle schools for introduction of agro-technical courses and workshops will he consturcted for three of them. A new girls high school will be established at Naushero Feroze.

17.19 Construction work on 4 Government commercial training institutes will be continued and 3 nationalised polytechnic institutes will be improved. The development of N. E. D. Engineering College, Karachi, will be continued to complete about 60 per cent of the work and the ongoing work on the project unit of this institute will be completed. Work on upgradation of Sind University Engineering College to the level of engineering university will be continued. Six vocational institutes for women will be established at *Taluka* level and 10 private vocational institutes will be given developmental grants-in-aid.

17.20 Construction work of 3 new intermediate colleges will be continued and one intermediate college will be upgraded to degree level. At Karachi University the work of construction of canteen, establishment of Faculty of Pharmacy (Part-I) and construction of additional residential accommodation for about 120 students will be completed. Scientific equipment and library books will also be provided to various departments of the university. Construction of the buildings of the Departments of Physiology and Statistics will continue.

17.21 At Sind University, development of the institute of chemistry will be completed and Ph. D. courses will be introduced in analytical chemistry and mathematics. Work on the establishment of the research centre of natural products in chemistry and the establishment of the section of nuclear chemistry will be completed. Books and furniture worth Rs. 1.24 lakh will be purchased for the University library. Other development programmes, to be continued at Sind University, include the establishment of school of fresh water biology, introduction of new disciplines in physics and development of institute of education. Construction of students' hostels and residential accommodation for the University staff will be continued.

17.22 During 1974-75, Rs. 3.5 million have been earmarked for award of scholarships to about 7,500 students and the research fellowship programme at Sind University will be continued. About 150 technical teachers and 2,000 primary school teachers will be trained in the new syllabi. Work on the establishment of curriculum bureau in Sind will be continued.

17.23 Under the ongoing programme of social and cultural activities, Rs. 15 lakh will be spent on developments of Bhit-Shah Cultural Centre, Sindhi Adabi Board, Hyderabad Museum, Institute of Sindiology and the Art Councils. Under the new programme, another Rs. 20 lakh will be spent on establishment of 5 cultural centres at various places in the province. In addition, a college of Fine Art will be established at Karachi

17.24 Seventeen units of Federal Hostels for students will be constructed and the college of Physical Education at Karachi will be improved. The reconstruction of about 244 educational institutions damaged by floods will also be taken in hand during the year.

N. W. F. P.

Implementation 1973-74

17.25 Over 120 new primary schools were established, 15 primary schools were upgraded to middle standard and equipment was supplied to existing 92 middle schools in N.W.F.P. Two new high schools were opened, 19 middle schools were raised to high standard and 70 high schools were supplied equipment. Hostel was constructed at one high school and arts and drawing rooms were constructed at another high school. For teaching wood work, metal work and electricity, workshops were provided at 2 high schools and 9 girls schools were provided with facilities to teach home economics. Agriculture and commerce classes were introduced in 67 Government high schools. During the year, 2,000 teachers were given inservice training to teach the new syllabi. Work was continued on the establishment of polytechnic Institutes at D. I. Khan and Haripur, while radio electronics and chemical technologies were introduced at the Government Polytechnic Institute, Peshawar. Buildings of the Government Vocational Institutes, Kohat and Nowshera were completed, construction of buildings of Government Vocational Institutes, Peshawar (Women) and Chakdarra was continued and work was started on construction of buildings of Vocational Institutes, Bannu, Abbottabad and D. I. Khan. Land was acquired for the construction of buildings of the Government Commercial Institutes at Chitral, D. I. Khan Kohat and Abbottabad and the construction work was started.

17.26 One new Intermediate and one new degree college was established. Scientific equipment was supplied to 34 intermediate colleges and two intermediate sections of degree colleges. Libraries and reading rooms of 20 existing intermediate and degree colleges were improved. Degree classes were introduced in 5 intermediate colleges and post-graduate classes were started in 2 degree colleges.

17.27 At the University of Peshawar, Ph. D. programme in physical chemistry was started. On-going construction programme of residential accommodation for students and teachers was completed and facilities for Students' Union were improved. Facilities of under-graduate education at Islamia College were improved and development programme of Pushto Academy was taken in hand. The programme of scholarships providing financial assistance to 3,975 talented students at various levels of education was continued at a cost of Rs. 4.0 million and 50 students were provided loans to continue studies.

Programme for 1974-75

17.28 In the education sector, Rs. 40.74 million have been provided for the local programmes (programmes benefiting the individual districts/agencies) and Rs. 20.00 million have been allocated for N. W. F. P. provincial Programmes (the programmes benefitting the entire province).

17.29 The local programmes mostly provide for completion and continuation of work on schemes of primary and secondary schools and colleges. Under the new programmes of school education, 131 new primary schools will be opened, 40 primary schools will be upgraded to middle standard, and additional buildings and equipment will be provided to 15 high schools.

17.30 The establishment of Government comprehensive high schools at Peshawar, Mardan, Abbottabad (Girls), Kohat and Bannu will be continued. About 20 class rooms will be added to the existing middle and high schools and equipment will be supplied to about 110 high schools upgraded during 1971-72 and 1972-73. Four high schools will be provided with laboratories and equipment for introducing science teachers. Workshops will be constructed in 2 high schools to introduce courses in electricity and wood-work. Two boarding houses for students and 9 residential units for headmasters and headmistresses of high schools will be completed in various districts. Work will be sta ted on construction of high school building at Pirpai and on construction of a students hostel at Ghazni-Khail.

17.31 The college buildings at Daggar and Matta would be completed during the year, and work will be started on construction of 3 intermediate college buildings at Ghori, Topi and Ghazni-Khail. The construction work at Government Colleges, in Mardan, D. I. Khan, Gharsadda and Nowshe a will be continued. Science equipment will be supplied to 21 colleges while library facilities will be improved at 15 intermediate and degree co leges in the province. Work on the construction of intermediate colleges at Kalachi, Chitral, Hangu, Timar-Garah and Karak will be continued while the construction of an intermediate college at Balakot will he taken in hand. The schemes for improvement of Cadet College (Kohat), Superior Science College (Peshawar) Government College for Women Haripur and the Science and Agriculture College at (D. I. Khan) will be completed.

17.32 Under the programme of technical education, work on establishment of polytechnic institutes at Haripur and D. I. Khan will be completed. Scientific equipment will be procured for the three existing polytechnic institutes in the province and for the vocational institutes at Kohat, Peshawar (Women) and Abbottabad. Construction work will be continued on the buildings of Governmet commercial training institutes at Kohat, D. I. Khan and Chitral.

17.33 The Provincial programme in the education sector provides for completion of maximum of the on-going schemes at Peshawar University and Rs. 3.5 million for setting up the new Gomal University at D.I. Khan. At Peshawar University, no new scheme has been proposed. Under the on-going programmes of this University, the dentistry department block will be constructed and equipment purchased for it. Work will be continued on development of Pushto Academy, University Model School and improvement of the Students Union House. Scientific equipment will be procured for the Engineering College. About 23 quarters will be constructed for ministerial staff and low paid employees of the University.

17.34 At Gomal University, work will he taken up on construction of Science Block, Administrative Block, Convocation Hall, Library and a Hostel for 100 students.

17.35 Rs. 4.0 million has been earmarked for award of scholarships to students on merit-*cum*-income basis and Rs. 0.1 million provided for organizing in-service training courses for the school and college teachers. A building will be constructed for the Museum at Ghakdara and the construction of two halls for the Peshawar Museum will be completed during the year. Many regional and feasibility studies will be conducted by the Planning and Development department.

BALUCHISTAN

Implementation, 1973-74

17.36 Work was started on all programmes included in the A. D. P. but due to increase in the cost of construction, most of the proposed buildings could not be completed during 1973-74. However, equipment was provided to most of the institutions as proposed. In specific terms, the development during the year included setting up of 200 new primary schools, improvement of 200 existing primary schools in respect of additional class-rooms, upgradation of 30 primary schools to middle standard, and eight middle schools to high standard, and improvement of 20 middle schools in respect of buildings and equipment. In addition, work was started on the construction of hostels at 9 high schools and of flats for lady teachers and headmistresses. Land was acquired for the expansion of the building of the Government High School, Quetta and 15 additional rooms were consturcted for its primary section. Additional accommodation was also provided at a number of overcrowded primary schools located in Quetta town. Construction of laboratories and drawing rooms was started at 41 existing high schools and these schools were supplied with science equipment. Audio-visual aids were also provided to various high schools. Grants-in-aid were given for the development of non-Government high schools and madrassas.

17.37 The construction of additional buildings of Teacher's Training School for Men (Quetta) and its hostel was continued and necessary equipment was supplied. Development of Regional Education Extension Centre in respect of laboratory and library facilities was continued and construction work relating to the Teachers' Training Unit at Panjgur made progress. Improvement programme of the Polytechnic Institute, Quetta was also continued.

17.38 A new intermediate college was established at Usta Mohammad and the existing intermediate colleges at Loralai, Turbat, Fort Sandeman and Sibi were provided with additional equipment required for upgrading them to degree level. Buildings of all these colleges were completed partially. Work was also started on the construction of buildings for the Intermediate colleges at Bela and Nushki and equipment was supplied to these colleges. Improved library facilities and epuipment were provided to two other colleges.

Development of the University of Baluchistan was continued at a cost of Rs. 4 million. Scholarships costing approximately Rs. 1 million were awarded to students of various categories and Rs. 1.5 lakh was given as additional grant for the improvement of existing libraries. Construction of the youth Hostels was continued and orders were placed for the purchase of 12 vehicles for the inspection staff of the Provincial Department of Education.

Programme for 1974-75

17.39 The on-going work in Baluchistan, in respect of construction of buildings of the newly established intermediate colleges at Turbat, Loralai, Fort Sandeman and Sibi will be completed during 1974-75. More rooms will be added to primary section of special High School, Quetta. Construction of a hostel of girls high school, Loralai and a science block at government college Mastung will be completed. The Provincial Education Extension Centre, Quetta will be developed in respect of the building facilities. The building of the Teachers Training School for Men, Quetta will be improved and construction of its hostel will be completed.

17.40 Under the new programmes, 65 new primary schools will be opened, 10 primary schools will be upgraded to middle standard and 4 middle schools will be raised to high school level. About 100 existing primary middle and high schools in the Province, will be improved in respect of buildings, equipments, audio-visual aids, drinking water facilities, playgrounds and boundary walls (in girls schools). Residential accommodation for the working lady teachers and hostels for the teacher trainees will be construced at various places. Existing middle and high schools will be supplied equipment for teaching technical subjects. To impart religious education at the school level, Mualims of Quran will be added to the existing staff of 448 primary schools, 34 middle schools and 26 high schools. The existing college libraries will be improved in respect of buildings and books. Work on construction of new building of the Divisional Library at Quetta will be started. Work will also be undertaken for the establishment of two new teachers' training schools at Uthal and Panjgar. Adult and Continuing Education Centres will be established at Mastung and Pishin, and the existing Deaf and Dumb school will be provided with teaching aids, furniture and equipment. Further improvement will be undertaken in the buildings of Pakistan Girls High School, Quetta and Women's Degree College, Quetta and a bus will be purchased for the former.Books will be supplied to the book banks of the existing schools, colleges, commercial institutes and the polytechnic.At the University of Baluchistan, construction of buildings of the Chemistry, Physics and Botany Blocks will be continued and equipment will be purchased for these three departments.

CENTRE

Education Division

Implementations 1973-74

17.41 At the University of Islamabad, construction work in respect of 6 science blocks, one mathematics block and one social science block was continued. Scientific and technical equipment, books and furniture was supplied and scholarships/fellowships were awarded to the students to enable them to carry out their studies and research at the graduate and post-graduste levels. Equipment, furniture and a van has been purchased for the People's Open University. Good progress was registered in the programme of Urdu Development Board in respect of production of Urdu-Punjabi, Urdu-Pushto, Urdu-Baluchi dictionaries, basic encyclopaedia and translation of scientific terms into Urdu.

17.42 Development programme of the Central Government College for women (Islamabad) continued according to approved scheme and work was started on the consturction of buildings of the Central Government College for Men (Islamabad). Play-grounds were developed at Islamabad Model School for Boys and boundary wall constructed. A school bus was supplied to Girls Model School (Islamabad). Existing Central Government Secondary Schools were improved in respect of library books, science equipments and audio-visual aids. The programme of merit scholarships for the students in Central Government educational institutions was continued. Development grants were also given to the National College of Arts, Lahore and the National College of Engineering and Technology, Karachi.

17.43 Work on the preparation of new curricula for the primary classes was continued and a series children's books was produced under the programme of National Book Foundation. Basic vocabulary booklets were produced for adult education in the subjects of Urdu, Punjabi, Sindhi, Pushto and Baluchi. A number of foreign books on various subjects of higher and professional education were produced locally and a number of others were imported and supplied to 576 Book Banks which have been set up at all the post-matric institutions of higher, technical and professional education.

17.44 During the year, 8 scholarships were awarded under merit scholarships scheme and another 46 scholarships under the Central Overseas Training Scheme. Foreign training of 17 scholars at Russia was subsidised with Government grants and 60 scholars were provided air travel grants to supplement foreign offers of scholarships. Nine scholars received scholarships under the Quaid-i-Azam Scholarship Scheme to continue their post-graduate education abroad and 16 other students received scholarships under the Nishan-e-Haider Scholarship Scheme to continue their higher education in Pakistan. One hundred and ninty five students from other countries also received scholarships to study at various levels of education in Pakistan. Foreign Students Centre at Karachi started functioning and another one is being established at Lahore.

17.45 In the sub-sector of archeaology, museums and archives, replicas, anitques and equipment were purchased for the Museum of Science and Technology, Lahore and for other archaeological museums. Tubewell were installed at Mohenjodaro to continue prese vation work of the prehisto ic remains and special type of repairs were undertaken at the Shalamar Garden, Lahore and Lahore Fort. Preliminary work was also undertaken for starting construction of the National Library of Pakistan at Islamabad.

17.46 The building complex for the training and coaching centre at Lahore was completed. A film was also prepared for the projection of Education Policy through communication media. The newly established Federal Bureau of Educational Planning conducted its first course for the administrators, planners and other educational leaders in the modern techniques of planning. The Federal Institute of Education also conducted courses to train teachers trainers in the recently revised curricula for the elementary stage. An amount of Rs. 0.2 million has been distributed as loans to the students repatriated from area formely known as East Pakistan.

Programme for 1974-75

17.47 Work at the University of Islamabad (Phase II) will be continued in respect of construction of Central Workshop, Senate Hall, Earth Science Block, Teacher-Student Centre and the guest house. Library books and scientific equipment will be provided to various departments of the University. Work on establishment of the Centres of Excellence, People's Open University and National Library of Pakistan will be continued. The National College of Art at Lahore and National College of Engeineering at Karachi will be further developed and Rs. 0.5 million will be spent on development of Urdu Language.

17.48 Work will be continued on the projects relating to the modernization of curricula for various levels of education, teacher preparation, training in educational planning and management. Different workshops will be organized for each of these programmes.

17.49 More books will be supplied to 576 educational institutions through the Book Banks. Efforts will be continued to import the urgently required foreign books and to reprint other foreign books within the country. The National Book Foundation would undertake projects for the printing of more books for children. Construction of the building of National Archives of Pakistan at Islamabad will be started. Land will be purchased and initial preliminaries will be completed for the building of the National Library of Pakistan at Islamabad.

17.50 Under the scholarship programmes, 2,000 students from low income gropus will be benefited under the 'President's Thousand Scholarships Scheme'. Thirty four meritorious students will be awarded Nishan-e-Haider Scholarships to continue their education at the graduate level in the country and other 20 students will be sent abroad to persue their studies at post-graduate level under Quaid-i-Azam Scholarship Programme. In addition, scholarships will be awarded to 60 students under the Central Overseas Training Schemes and to 20 student under the Merit Scholarships Scheme. About 254 scholarships will be awarded to foreign students from different friendly countries to facilitate their studies in Pakistan. Provision has also been made for the award of interest free loans to the needy students to continue their education. Training and coaching centres at Karachi aud Lahore will continue their programme of training promising young players in various sports and the construction of Training and Coaching Centre at Peshawar will be started. Land will be purchased for building a Cultural Complex at Islamabad, and the construction work started. Liaquat Memorial Hall will be renovated. Construction of Federal Students Hostels in the provinces will be continued throughout the country.

17.51 Preservation and presentation of Shalamar Garden, Lahore Fort and pre-historic remains at Mohenjodaro will be continued. Equipment will be purchased for the Museum of Science and Technology, Lahore. Equipment/antiques will also be supplied to other archaeological centres/museums.

17.52 Re-construction of educational institutions destroyed by the flood will undertaken at an extensive scale with the U. S. AID assistance. This assistance will be made available to the provinces in the form of central grants. For this purpose a sum of Rs. 90 million has been ear-marked. A block allocation of Rs. 30 million has been made for implementation of the new education policy programmes.

17.53 The existing Central Government educational institutions at Islamabad will be provided with additional facilities of library books, science equipment, and audio-visual aids. Construction of buildings for two colleges, one for boys and other for girls will be continued and buildings will be constructed for two primary and one secondary school.

Esablishment Division

15.54 Four thousand scholarships were awarded to the children of non-gazetted Central Government Employees during 1973-74 to help them continue their education in the general and professional courses. Training courses were organised at the NIPA, Karachi, Pakistan Administrative Staff College, Lahore and Secretariat Training Institute, Rawalpindi for various levels of Government employees. During 1974-75 four thousand and five hundred scholarships will be awarded to the children of non-Gazetted Federal Government employees studying at various levels of education. Training courses will be organized at NIPA, Karachi. Pakistan Administrative Staff College, Lahore and Secretariat Training Institute, Rawalpindi.

Planning Division

17.55 Research studies were initiated in the sectors of industry, fuels and minerals for the preparation of Fifth Five Year Plan, during 1973-74. The programme for 1974-75 includes research studies in various sectors of economy for the preparation of Fifth Five Year Plan.

Information and Broadcasting Division

17.56 An amount of Rs. 0.400 million was spent on the publicity of Fourth Five Year Plan, during 1973-74. For 1974-75 an amount of Rs. 0.400 million has been allocated for programmes of Plan publicity.

Federally Administered Tribal Areas

Implementation 1973-74

17.57 In the Federally administered tribal areas, fourty five new primary schools were established, 11 primary schools were upgraded to middle standard and 6 middle schools were raised to high standard. Buildings were construced for all these newly establishe dinstitutions, and equipment and teaching aids were also supplied to these institutions Equipment and teaching aids were also supplied to other 17 existing primary schools. Construction of building for new Midddle School at Riaraza (South Waziristan Agency) and new High School at Sara Rogha, upgraded degree colleges at Parachinar and Miranshah reached the advanced stage of completion. Construction of hostel building at Tank and Wana continued and the scheme of 2 hostels for the Tribal Area Students at the Peshawar University Campus was completed. Scholarships were also awarded to 3,320 students to continue their education beyond matriculation at various educational institutions.

Programme for 1974-75

17.58 In Peshawar Division, 24 new primary schools will be opened and buildings of 32 existing primary schools will be completed. Buildings will be provided to 4 middle schools and 2 high schools. Some existing high and middle schools will be provided with equipment and workshops. Work will be started on the establishment of new Intermediate Collages at Darra Adam Khel and Landikotal. Additional rooms will be provided in the Government Training School, Jamrud.

17.59 In D. I Khan Division 76 primary schools will be constructed, equipment will be provided to middle and high schools, and workshops will also be constructed. Construction will be completed in respect of buildings of 5 high schools. Work will be started on the construction of building of Inermediate College for women for Ladha. Construction of staff quarters for college and school teachers will also be taken in hand.

17.60 In Malakand Division , 5 new primary schools will be constructed. Building for 4 high schools will be completed and workshops for introduction of technical subjects will be provided. Construction of building will be started at Intermediate College, Khar.

17.61 Office accommodation for the supervisory staff of the Education Department will be constructed at Parachinar, Miranshah and Khar. Adult education programmes will be started at various places in the Tribal Area and the programmes of awarding scholarships to Tribal students will be continued.

Kashmir Affairs Division

Implementation, 1973-74

17.62 In Azad Kashmir areas some of the existing primary, middle and high schools and colleges were improved in respect of buildings, science equipment and teaching aids. Work was continued on the on-going project for the upgradation of High School at Garhi Dupatta to inermediate level, construction of buildings for 3 newly established intermediate colleges and provision of hostel facilities for students and staff. New courses in Geoghraphy, Botany and Zoology were introduced at the degree level in the Government Degree College, Muzaffarabad. Efforts were continued for the promotion of sports activities, boys scouts and girls guides movements (Mujahid movement) in the area. Land was acquired for the constructisn of playgrounds and for the extension of buildings of 60 existing secondary schools.

17.63 In Northern Areas, the buildings of 50 primary schools were completed and one high school building reached near the completion stage. Work on 2 high school buildings and 2 middle school buildings registered good progress. Staff and equipment were provided for introduction of technical courses in high schools. The hostel building for Intermediate College Gilgit was partially completed and the work of setting up a Directorate of Education for the Northern Areas reached an advanced stage. The K. G. School at Gilgit was raised to middle standard.

Programme for 1974-75

17.64 The proposed programme of educational development in Azad Kashmir includes reconstruction and expansion of the existing high school buildings, construction of new hostel buildings for girls schools and colleges, expansion of the existing hostels, and supply of furniture and equipment to most of the existing high schools in the three districts of the area. Land will be purchased for play grounds, hostels and farms for some of the institutions. The Girls Colleges at Muzaffarabad, Rawalakote and Mirpur will be provided with more library books, science equipment and furniture. Progrmmes of vocational education, as recommended in the new Education Policy, will also be introduced gradually. Scholarships will be awarded to students for higher and professional education. Work will be started on the opening of three vocational schools and a cadet college. The existing Teacher Training Institute at Afzalpur will be raised to the level of Training College. Post-graudate classes will be introduced in the existing degree college at Muzaffarabad. Training classes for primary school teachers (PTC) will be started in some of the high schools for boys ad girls to overcome the shortage of trained teachers. The office of Education Department at Muzaffarabad will be strengthened.

17.65 The programme for Northern Areas includes the schemes both for Gilgit Agency and Baltistan. The schemes for Gilgit Agency include opening of new primary schools, upgradation of 3 middle schools to high standard and providing facilities of diversified courses in the middle schools. One high school will be improved. Work will be completed on construction of 3 high schools, setting up of a vocational institution, upgradation of one Intermediate College to degree level and setting up of the Inspectorate of Schools for Diamer Districts.

17.66 The proposed programme for Baltistan includes opening of more primary schools, upgradation of middle schools to high standard, providing facilities for diversification of courses in some high schools, and completion of the work on upgradation of one high school to Intermediate College. More furniture and equipment will be supplied to high schools. Work on construction of one college hostel, a Principal's residence and educational colonies at Skardu and other places will be continued. Teachers Training Institute at Skardu will be improved and the Inspeoctorate of Education will be strengthened.

EDUCATION AND TRAINING
SUB-SECTOR A DISTRIBUTION OF ADP ALLOCATION 1974-75 OF VARIOUS EXECUTING AGENCIES

(Million Rupees)

Items	*Punjab	Sind	N.W.F.P.	Baluchistan	Centre	Total
1	2	3	4	5	6	7
Primary Education	30.00	0.90	8.79	4.60	0.80	45.09
Secondary Education	30.00	3.74	18.80	3.50	1.69	57.73
Teacher Education	10.00	0.55	0.10	2.27	0.75	13.67
Technical Education	20.60	16.42	4.78	0.05	0.89	42.74
College Education	19.80	2.80	10.23	5.30	3.60	41.73
University Education	6.50	4.58	7.03	3.00	24.50	45.61
Loans and Scholarships	20.00	4.63	4.00	—	8.06	36.69
Madrassah Education	—	—	—	—	—	—
Adult & Continuing Education	—	—	—	0.10	—	0.10
Curriculum Development and Books Production	—	.40	—	—	7.10	7.50
Instructional Technology	0.20	—	—	—	—	0.20
Archaelogy, Museufs & Archives	—	—	0.46	—	5.75	6.21
Sports, Social and Cultural activities	0.80	4.10	0.40	0.30	3.00	8.60
Re-construction of Flood Demaged Institutions	—	2.40	—	—	90.00	92.40
Research & Statistics	0.05	—	—	—	—	0.05
Establishment Division	—	—	—	—	3.15	3.15
Economic Affairs Division	—	—	—	—	—	—
Planning Division	—	—	—	—	0.20	0.20
Finance Division	—	—	—	—	—	—
Information & Broadcasting Division	—	—	—	—	0.40	0.40
Kashmir Affairs Division.						
(*a*) Azad Kashmir	—	—	—	—	7.00	7.00
(*b*) Northern Areas	—	—	—	—	5.00	5.00
States and Frontier Division (Federally Administered Tribal) Area)	—	—	—	—	11.31	11.31
Regional & Feasibility studies by P & D Department	0.87	1.60	6.00	0.25	—	8.72
New Education Policy (Block allocation)	—	—	—	—	30.00	30.00
Miscellaneous	10.78	0.10	0.15	0.17	10.35	21.55
TOTAL ..	149.60	42.22	60.74	19.54	213.55	485.65

*Excluding University of Agriculture Lyallpur.

CHAPTER 18

HEALTH AND POPULATION PLANNING

In the attainment of the social objectives of a plan, health and population planning sector is of vital importance. To meet this objective the development programme 1974-75 for this sector is an effort to bring medical treatment within easy reach of all, both in terms of distance and cost. Specifically, it is a step towards developing a comprehensive integrated health system whose major objectives are :

(*i*) construction of new health units and rural health centres etc. and improvement in utilization of existing hospital facilities ;

(*ii*) increasing educational and proper training facilities for health personnel at all levels with special reference to the less developed provinces;

(*iii*) prevention of communicable diseases and improving the health conditions in rural areas and the less developed areas ; and

(*iv*) bring about reduction in crude birth rate.

18.2. A brief description of existing health facilities, the incidence of diseases, the training of health personnel and the recently introduced Generic Names Scheme is given in the subsequent paragraphs.

Health facilities

18.3. The available data indicate that there are about 37,000 hospital beds in the country out of which about 4,000 beds are in rural areas. The number of available doctors is about 9,000 to 10,000. The number of nurses available is about 3,000 and that of lady health visitors is about 1,000. Thus there is one hospital bed for 1800 persons, one doctor for 7,000 and one nurse for 23,300. There are 130 rural health centres in the country which means one rural health centre for about 356,000 rural people. Since the majority of doctors and hospitals are located in cities and towns, the rural population has much lower standard of health facilities. Even in urban areas, the available health facilities are not organized in a manner to reach all sections of the society. When the available health facilities are so short in supply, even those who got treatment cannot get enough sustained attention or the quality of treatment required.

18.4. One of the fundamental problems in the provision of medical care is the lack of basic infrastructure like roads, communication system etc. Out of the 45,000 villages, only about 6,000 villages are situated near metalled roads. Another important factor is that 26% of the population is living in sparsely populated areas which poses problems for the reach of the static health units.

18.5. The average expenditure on health facilities in the public health sector is about Rs. 3.00 per person per year. On an average, a person requires medical advice between 2.5 to 3 times a year. On the basis of the available morbidity data, the existing health institutions are providing care to about 10—20% of the population. Rest of the population cannot get medical care from public health institutions because of shortage of staff and medicines and distances involved to reach such institutions. They get care from private practitioners, *hakims* and homeopaths and minor ailments are treated by themselves.

Incidence of Diseases

18.6. According to information given by the health institutions most prevalent group of diseases in the country relate to gastro-intestinal system which constitute nearly 20% of all ailments. Out of these, 50—75% are due to dysenteries and diarrhoeas which are mainly water-borne diseases. The incidence of tuberculosis of the lungs varies from province to province and constitutes somewhere between 1.4 to 3% of all diseases. Communicable and deficiency diseases are about 1-2% each. Out of the communicable diseases, typhoid fever accounts for nearly half of such diseases. Next in descending order of the communicable diseases are venereal diseases, measles, diphtheria, mumps, poliomyeli is, chicken-pox and smallpox. Eye, nose, ear and throat diseases range between 11 to 15%. Dental and parasitic diseases are between 3—5% each. Malaria constitutes about 5-6% of the diseases in the provinces of Punjab and Sind. The overall parasite rate of malaria in 1960 before the start of Malaria Eradication Programme was about 15% when it was estimated that as many as 20 million suffered from malaria each year. By 1967 this figure came down to only 9500 cases, implying a drop from 15% to 0.1%. In 1967, the programme experienced widespread resurgence,

artiarly in the Punjab and Sind provinces. The number of cases detected in the country from 1967 onward below :

1967	9,500
1968	15,648
1969	55,862
1970	108,650
1971	202,472
1972	642,579

18.7. Malaria is reported to be less prevalent in NWFP, Baluchistan, Northern Areas, Federally Administered Tribal Areas and Azad Kashmir.

Medical Education and Training

18.8. At present, the emphasis is mainly on the training of doctors. On the average it takes about 7 years after high school and an investment of Rs. 80,000 per doctor. A nurse on the other hand needs three year's training after high school and an investment of about Rs. 20,000. The present output of doctors is about 1000 per annum, of physiotherapists about 50, of dentists about 60, of nurses about 500, and of health visitors about 200. The output is low in relation to overall requirements of the country. The problem is, however, intensified by the migration of a good part of the trained personnel to foreign countries and loss of female personnel due to marriage. Added problems are the disproportion between the output of doctors and paramedical and auxiliary personnel as well as the geographical maldistribution of those staying in the profession in the country.

18.9. Since 1972 six new medical colleges have been commissioned and their admission capacity raised from 976 to 2504. At present, out of the 3500 posts for doctors in the public health institutions, 33% are lying vacant and these posts are mainly in the rural areas. A ban was imposed on the emigration of doctors in 1973. They are not allowed to go abroad for service except on Government-to-Government basis. This was considered necessary to keep the doctors in the country in the hope that they will go to the rural areas. Lady health visitors do not go into the rural areas because about 50% emigrate and the majority of the reminder function in the urban centres ; some are lost to the profession due to marriage and a few remain unemployed. Only a few work in the rural areas. Besides this, the available manpower is mainly employed in family planning and malaria eradication programmes. About 1,109 family planning visitors are working for family planning and about 5,000 paramedical and auxiliary persons are working in Malaria Eradication Programmes.

18.10. In the existing 22 nurses training schools, the approximate annual intake is 536. Besides the 19 nurses training schools for women and three for men, there are 37 midwifery training centres and 6 public health training centres, but their intake is very small. The training facilities for paramedical staff have not expanded as rapidly as it should have been with the development of health facilities. The doctors, paramedics and auxiliaries ratio is 1 :1 whereas it should have been 1 to 5. The paramedical training programmes need to be geared up to conform to the size of health development programmes and should be in a definite relation hip to the output of doctors. Only one category of paramedicals *i.e.* dispensers, is being produced in reasonable number whose yearly output is about 1,000 persons; the training is being imparted at nearly all the district headquarters hospitals. These persons are mainly running the rural dispensaries, especially in Baluchistan, Northern Areas, Azad Kashmir and Federally Administered Tribal Areas, where there are practically no doctors in rural areas.

18.11. To improve the reach of the static health units, a programme to provide rudimentary health cover, immunization and community education for prevention and promotion of healthy living habits has been drawn up to train volunteers, comprising young men and women, so that they could be effective health and medical agents for their own communities. A programme has already been launched successfully in the Northern Areas of Pakistan. Such programme will be specially suited in areas where population is sparsely scattered *i.e.* of 26% of the population.

Drugs (Generic Names) Scheme

18.12. An Act called the Drugs (Generic Names) Act 1972 to provide for the National Formulary of Pakistan and to adopt generic names for drugs was promulgated in September, 1972. Generic name is a scientific or official name of a drug as mentioned in the National Formulary which is the list of drugs prepared

by the Government. All medical institutions in Pakistan and abroad teach medicines by generic nomenclature which is in constant use in scientific literature and research. The Drugs (Generic Names) Scheme was introduced with the following objectives :

(*i*) to bring down the prices of drugs and medicines to a reasonable level without any price control ;

(*ii*) to improve the availability of drugs and medicines particularly to the low income groups ;

(*iii*) to reduce the variety of names for the same or identical products to rationalize their number;

(*iv*) to reduce the danger of self-medication ;

(*v*) to ensure competition in the pharmaceutical industry ;

(*vi*) to reduce expenditure of sales promotion ;

(*vii*) to reduce the cost of treatment ;

(*viii*) to rationalize the treatment.

The shift to generic name has greatly helped medical education by providing doctors with drugs and medicines with the same generic names which they have learned in their colleges.

18.13. Originally 1300 drugs were included in the National Formulary out of which 387 were exempt and could be manufactured and marketed under their respective under brand names. In June, 1973 the of number exempted drugs was reduced to 294. To make the drugs freely available to the patients and also to take advantage of research abroad, new drugs and research products are being added in the National Formulary which is kept under constant review. At present the total number of drugs in National Formulary is 1,443, out of which 391 are exempt.

Review of 1973-74

A. HEALTH

(i) **Federal Programme :**

18.14. In financial terms the Federal Annual Development Programme had an allocation of Rs. 26.5 million. The revised estimates are Rs. 30.6 million. The break-up is given in Table I :

TABLE I

Estimated Expenditure by agency 1973-74, *Federel Government*

(Million Rupees)

Agency	Provision for 1973-74	Revised Estimates for 1973-74
A. Health and Social Welfare Division (Health Division)	16.32	14.84
B. Science and Technology Division (Medical Research Council)	0.80	0.80
C. Economic Affairs Division (Health Guards Programme)	2.15	1.95
D. Kashmir Affairs Division :		
(*i*) Azad Kashmir	2.44	4.13
(*ii*) Northern Areas	2.86	3.74
E. States and Frontier Regions Division	1.92	5.15
	26.49	30.61

18.15 The higher revised estimates for Azad Kashmir, Northern Areas and Federally Administered Tribal Areas are in conformity with the Government's policy, to accord maximum priority to the backward areas. However, the targets, in physical terms would not be achieved because of the increase in cost of building material.

(i) **Provincial Programmes:**

(a) Punjab

18.16. An allocation of Rs. 84.20 million was made for this sector in A.D.P. 1973-74. In addition to this, a sum of Rs. 6.80 million were also provided for flood restoration-*cum*-repair programmes. The revised estimates indicate that a sum of Rs. 70.26 million would be incurred by the end of the year *i.e.* 78.4 percent of total allocation. The utilization is on low side becuase of the fact that some of the new schemes could not be taken up on schedule and as such the amount for those schemes had to be surrendered.

(b) Sind

18.17. An allocation of Rs. 31.41 million was made for this sector in A.D.P. for 1973-74. The revised estimates for the same year indicate that a sum of Rs. 22.01 million will be utilized by the end of the year *i.e.* 70.07 percent of total allocation. The utilization is on the low side because some of the new schemes could not be started because of the floods and construction of rural health centre was greatly slowed down. Only about 50 percent of the allocated amount for rural health centres would be utilized.

(c) N.W.F.P.

18.18. An allocation of Rs. 29.0 million was made for this sector in A.D.P. 1973-74. According to the revised estimates for 1973-74 are Rs. 33.28 million giving a utilization of 14.7 percent higher than the allocation.

(d) Baluchistan

18.19. An allocation of Rs. 9.50 million was made for this sector in the A.D.P. for 1973-74. Revised Estimates for 1973-74 are Rs. 8.12 million which gives a utilization of 85.4% of the total allocation. The utilization is on the low side considering the price increase of building materials during the year.

B. POPULATION PLANNING

18.20. According to the preliminary census figures, the population of Pakistan reached 64.9 million in September, 1972, an increase of about 50% since 1961. The current rate of increase is estimated at approximately 3% per year. If this rate of growth continues unchecked, it will tend to cancel out much of the progress being made in economic development.

18.21. Recognizing the population problem, the Government started family limitation programme since 1960 in the public sector. The 1972 census revealed that a much greater effort would be required to slow the rate of population growth. Thus, in 1973, the Government prepared a new approach to the problem featuring continuous motivation of the approximately 9 million eligible fertile couples by teams of trained male and female motivators. The new strategy was based on the abundant supplies of oral contraceptives and condoms. The allocation for 1973-74 was raised to Rs. 102 million and the revitalized programme was launched in July, 1973.

18.22. The financial utilization of the population planning programme is expected to be Rs. 90 million which is 89.8% of the allocation for 1973-74. The main reasons for the under-utilization are : (i) delays in the take off of the expanded programme from the start of 1973-74 as the country was affected by floods, and (ii) problems of recruitment, training, placement of personnel and late release of U.S. assistance. Due to these facts the programme could not be expanded till the end of January, 1974.

Physical Implementation

18.23. The Physical progress on population planning programme during 1973-74 is described below :—

(*i*) The continuous motivation system was extended operationally to 96 *tehsils* of 35 districts having population density of 300 persons or more per square mile.

(*ii*) The number of male and female front-line motivators was increased from less than 2,000 to more than 8,400, and all of these workers have been given training.

(*iii*) The services offered at a growing number of family welfare clinics were extended to include nutrition and health services, including the dispensation of medicines for common ailments.

(*iv*) Placing of lady family Planning motivators was expanded to more hospitals, clinics and health centres to educate and motivate clients and supply them with contraceptives.

(*v*) Modern contraceptives were made widely available at price which even the lowest income groups could afford. Some 21,000 outlets, mainly commercial shops, as also clinics, health centres, field workers and doctors were registered for contraceptive distribution.

(*vi*) Oral contraceptives were made freely available without medical prescription or preliminary medical examination.

(*vii*) Strategies and procedures were developed in the delivery of contraceptives, communications and publicity, training and manpower development, and vehicle maintenance and repair.

(*viii*) Seven regional training institutes were significantly up-graded.

(*ix*) A major information feedback system was established in pilot districts (Sialkot and Hazara) to provide programme administrators with fast, accurate and reliable data of field trends and performance.

(*x*) Contraceptive distribution during 1972-73 and 1973-74 was as follows :—

year	Condoms (Units distributed)	I.U.D. (Insersions)	Oral Pills Cycles distributed	Tube ligation & Vasectomies
1973-74 (July to May)	20,954.000	81,339	1,129,200	3,634
1972-73	30,000,000	106,385	118,000	3,095

Annual Plan, 1974-75

18.24. In financial terms, the Annual Plan envisages an allocation of Rs. 309.00 million for health and Rs. 145 million for population planning. This means and increase of 88% over the revised estimates of 1973-74 : for population planning the increase is of 61% over the revised estimates. Detailed break-up of financial allocations for health sector by executing agencies as well as by sub-sectors is given in TABLE VI.

18.25. The Annual Plan 1974-75 provides for specific projects and programmes. In areas where population is sparse and access to static health units is difficult, a programme for training the local people is being extended during the year. Over 34 rural helth centres, 123 dispensaries and 7 maternity child health centres will be completed whereas work on 72 rural health centres and 32 basic health units will continue. Allocations of Rs. 47.78 million, Rs. 85. 5 million and Rs. 94.66 million, respectively, have been made for strengthening and improving district and tehsil headquarter hospitals, teaching institutions and teaching hospitals, besides control of communicable diseases. Allocation of Rs. 94.66 million for communicable diseases control includes Rs. 88.50 million for malaria eradication programme. This includes Rs. 50.5 million for presticides by Federal Government to ensure that spraying is carried out properly. A policy decision has been taken by the Ministry of Health to integrate Malaria Eradication Programme with the general health services of the provincial governments. After the merger, the key issue to be resolved is whether the expenditure will be treated as developmental or non-developmental. The merger will also raise problems connected with grading, seniority, pension etc. of the staff.

18.26. Detailed programme for 1974-75 by executing agencies is discussed in subsequent paragraphs :

A. HEALTH

(i) Federal Programme

18.27. In the Annual Development Plan for 1974-75 a sum of Rs. 96.55 million has been provided for this sector. The emphasis is on improving the health facilities in less developed areas, namely Federally Administered Tribal Areas, Azad Kashmir and Northern Areas. Effort is being made to develop in these areas more rural health centres, basic health units and rural dispensaries on the pattern as laid down in the proposed Peoples Health Scheme. The Plan will increase the outreach of static health units by providing training of health workers (health guards) on a larger scale than it was undertaken in the last year. It is expected that 1,000 health guards will be trained for the Northern Areas in 1974-75.

18.28. The allocation for Federal Programme for 1974-75 has been raised from Rs. 26.5 million Rs. 96.55 million. This includes Rs. 50 million for insecticides for Malaria Eradication Programme, Rs. 10 million for Islamabad Hospital, Rs. 1.5 million for training of health guards and Rs. 6.24 million for Azad Kashmir, Rs. 2.00 million for Northern Areas and Rs. 6.31 million for Federally Administered Tribal Areas.

18.29. Rs. 3.69 million have been provided for medical research to be conducted by various agencies. Of this, Rs. 0.69 million have been allocated to the Pakistan Medical Research Council and Rs. 1.5 million each for Pakistan Science Foundation and Nutrition Planning and Research Cell of the Planning Division. Pakistan Medical Research Council will establish a research cell at the National Health Laboratories at a cost of Rs. 0.4 million and Rs. 0.29 million have been provided for study on urolithiasis.

(ii) **Provincial Programmes:**

(a) **Punjab**

18.30. In A.D.P. 1974-75 a sum of Rs. 112.00 million has been provided which are 59.4 percent higher over the revised estimates for 1973-74 and 24.4. percent higher over the allocations for 1973-74. The sub-sector-wise financial allocation is given in Table II.

TABLE II

Sub-sector-wise Allocation 1974-75, Punjab Government

(Million Rupees)

Sub-sector	On-going	New	Total
Malaria Eradication	25.00	—	25.00
General Hospitals	28.46	8.54	37.00
(a) Teaching Hospitals	10.75	6.95	17.70
(b) D.H.Q. Hospitals	9.60	—	9.60
(c) T.H.Q. Hospitals	8.11	1.59	9.70
Medical Education and Training	15.37	2.17	17.54
Rural Health Centres	20.00	—	20.00
Scholarships	3.94	0.72	4.66
T.B. Control	3.00	—	3.00
Smallpox	0.30	—	0.30
Misc.	2.21	2.00	2.50
Block allocation	—	2.00	2.00
Total ..	98.28	13.72	112.00

18.31. While allocating funds, priority has been given to improve the general health services and to provide medical facilities in rural areas and under-developed regions of the Punjab. Accordingly 44.6 percent of the allocation has been made for the general hospitals and rural health centres. Emphasis has been laid on the development of the tehsil headquarter hospitals which are located in under developed area. The sub-sector-wise physical targets are given in the subsequent paragraphs.

18.32. Under the Malaria Eradication Programme surveillance activities would continue with increased efforts on active and passive case detection.

18.33. One million vaccinations, will be carried out under the B.C.G. programme and work will be completed on construction of 36 bedded T.B. ward at D.G. Khan, Bahawalnagar and Gujranwala while that at Jhelum and Muzaffargarh construction work will continue.

18.34. Under the Smallpox Programme intensive surveillance activities will continue to control the disease and bring the incidence of disease to zero.

18.35. Under the ongoing programme, the remaining 12 rural health centres out of 39 R.H.Cs would be completed during 1974-75. Work will continue at 38 Rural Health Centres *i.e.* 2 in each district.

Hospital Beds

18.36 The work on the upgradation of district headquaters hospital, Bahawalnagar and improvement of 3 D. H. Q. hospitals would be completed while the other major hospital programmes are as under :—

	Nos.
(a) Improvement of D.H.Q. hospitals	3
(b) Expansion of D.H.Q. hospitals	2
(c) Completion of T.H.Q. hospitals	5
(d) Construction of 60 bedded THQ hospitals in backward areas.	9
(e) Construction of 60 bedded THQ hospitals in other areas	6

18.37. Besides, the work on the improvement of hospitals attached with the medical colleges would continue.

Medical Education and Training

18.38. The major programmes in this sub-sector is Quaid-e-Azam Medical College, Bahawalpur wherein hostel No. 2 will be completed and work will continue on anatomy block, administrative and library blocks and out-patients department, Work will also be taken up on forensic medicine and histology block. The ongoing scheme of Nishter Medical College, Multan and King Edward Medical College, Lahore will continue. Similarly, provisions have also been made for medical college, Lyallpur and Rawalpindi.

Stipends and Scholarships

18.39. Ongoing programmes of stipends/scholarships to nurses, midwives, lady health visitors, nurse dies and students of medical colleges will continue for which a provision of Rs. 3.94 million has been made in A.D.P. 1974-75. Rs. 0.75 million have been allocated for new stipends and scholarships.

(b) *Sind*

18.40. In A.D.P. for 1974-75 a sum of Rs. 40 million has been provided which are 81.8 percent above the revised estimates for 1973-74 and 29% percent above the allocation of 1973-74. The sub-scetor-wise financial allocation is given in Table III :

TABLE III

Sub-sector-wise Allocation 1974-75, Sind Government

(Million Rupees)

Sub-sector	On-going	New	Total
Hospital Beds			
(a) Teaching Hospitals	2.85	1.71	4.56
(b) District & Taluka Hospitals	2.94	2.03	4.97
Rural Health Centres	5.78	5.60	11.38
Mobile Dispensaies	—	0.15	0.15
Medical Education	10.26	3.79	14.05
Communicable Diseases	3.00	0.54	3.54
Medicines	1.50	—	1.50
	26.33	13.82	40.15

18.41. Priority has been given to the development of rural health centres and communicable diseases control. While allocating funds for the development programme, emphasis has also been laid on the construction of taluka headquarters hospitals and on the health equipment maintenance organisation. The Malaria Eradication Programme has been made a part of the communicable diseases control programme which also includes tuberculosis control and smallpox eradication programmes. This step is meant for integration of these vertical programmes which has been accorded its due priority.

Hospital Beds

18.42. The work on the improvement of District Hospital, Larkana, Liaquat Medical College Hospital, Jamshoro, Civil Hospital Karachi and Sheikh Zaid's Hospital for women and paediatrics hospitals, Larkana will be continued. Work on 5 *taluka* headquarters hospitals will be continued during the year. There will be improvement of operation sterilization facilities alongwith residential accommodation for lady doctors at Liaquat Medical theatre, College Hospital, Jamshoro. A 100 bed wing will be added to the Civil Hospital, Karachi and the existing wards and departments in the civil hospital will be provided new equipment. Restoration of the health facilities in flood affected areas will also be carried out during the year.

Rural Health Centres

18.43. Rs. 5.78 million have been allocated during the year for the 19 rural health centres already under construction. Out of these 8 are expected to be complete during the year. Work will be started on 17 new rural health centres, 5 in Nawabshah District, 3 in Sukkur, 2 in Khairpur, 2 in Sanghar, and one each in Jacobabad, Hyderabad, Dadu, Tharparkar and Thatta. Over 33 percent of the building portion of these rural health centres is expected to be completed during the year.

Medical Education

18.44. Rs. 0.98 million have been provided for the training of lady health visitors, nurses, rural health workers and Rs. 0.15 million have been provided for scholarship for students of various medical colleges of Sind. Rs. 40 thousand have been allocated for books for students for medical colleges of Sind. Rs. 0.45

million have been allocated for Chanka Medical College, Larkana and Rs. 3.6 million for Sind Medical College, Karachi. Hostel facilities in the public health school Hyderabad and Liaquat Medical College will be increased. Under the new schemes hostel facilities for 150 girls students at Liaquat Medical College, Jam horo, will be started. Besides, the expansion and improvement of Liaquat Medical College, Jamshoro, which will include a Pharmacology Department and Hygiene and Preventive Medicine Department, a Dental College, equipment for basic laboratories and books and journals, diploma course in Tuberculosis and Chest diseases will be started at Ojha Institute of Chest Diseases, Karachi. Rs. 2.5 million have been allocated for the peoples Girls Medical College, Nawabshah and Rs. 0.5 million for the Atomic Energy Medical Centre for Chandka Medical College.

Communicable Diseases Control

18.45. Construction of additional 72 bed wards in Tuberculosis Sanitorium, Kotri, will be completed during the year. Rs. 20 million have been allocated for Malaria Eradication Programme, Rs 0.6 million for smallpox eradication programme and Rs. 9.35 million for B.C.G. Campaign and Tuberculosis Control. Out of the new scheme under Communicable Diseases Control, the construction of 50 bed skin diseases hospital will be started at Karachi. Rs. 0.25 million have been provided for ambulances and vehicles for Ojha Institute of Chest Diseases, Karachi. Government Sanitorium, Kotri will have Sui Gas facilities during the year.

18.46. A separate provision for medicines for hospitals and dispensaries of Rs. 1.5 million have been provided during the year.

(c) **N.W.F.P.**

18.47. In A.D.P. 1974-75 a sum of Rs. 49.78 million have been provided which are 71.72 percent over the allocation for 1973-74 and 49.6 percent over the revised estimates for 1973-74. The sub-sector-wise allocation is given in Table IV

TABLE IV

Sub-sector-wise Allocation, 1974-75, N.W.F.P. Government

(Million Rupees)

Sub-sector	On-going	New	Total
Hospitals			
(i) Teaching hospitals	12.33	—	12.33
(ii) D.H.Q. and T.H.Q. hospitals	9.03	1.05	10.08
Medical education and training	0.45	—	0.45
Rural Health Programme	5.40	10.60	16.00
Malaria Eradication Programme	10.00	—	10.00
Smallpox Eradication Programme	0.17	—	0.17
Tuberculosis Control Programme	0.25	—	0.25
Medical Store	0.50	—	0.50
Total ..	38.13	11.65	49.78

18.48. While allocating money the emphasis have been given to the development of infrastructure of health services. Priority has been given to public health measures.

18.49. About Rs. 26.08 million have been provided for district and tehsil headquarters hospitals, dispensaries, basic health units and rural health centres. Out of this Rs. 14.43 million have been provided for ongoing schemes and Rs. 11.65 million for new schemes.

Hospitals

18.50. Rs. 12.33 million have been provided for teaching hospitals. Out of this Rs. 10.00 million is for Khyber Teaching Hospital and Rs. 1.62 million for the Institute of Radiotherapy and nuclear medicine and Rs. 0.71 million for improvement of Lady Reading Hospital Peshawar. Rs. 10 million have been provided for the district and tehsil headquarters hospitals. Work will be continued on hospitals at Mardan, Mansehra, Kohat, D.I.Khan, Tank, Batkhela, Nawazabad, Battal, Batagram, Chitral, Kulachi, Balakot, Boom and Thatti Masratti. The existing hospital facilities at Swabi, Charsadda and Tangi would be improved.

Rural Health Programme

18.51. Fourteen rural health centres will be completed during the year. Work on the 14 basic health units already under construction would also continue. The new programme envisages the construction and commissioning of 73 dispensaries and start of work on 18 basic health units and 5 Rural Health Centres. One maternity and child health centre will be opened in Swat.

18.52. Due priority has been given to malaria and Rs. 10 million have been provided for controlling this crippling disease. The development of basic health units and rural health centres will improve the preventive aspect of disease and bring about integration of pgrogrammes within the health sector.

(d) **Baluchistan**

18.53. In the ADP 1974-75 a sum of Rs. 10.52 million has been provided which are 29.6 percent above revised estimates for 1973-74 and 10.7 percent above ADP allocations for 1973-74. Sub-sector-wise financial allocation is given in Table V :

TABLE V

SUB-SECTOR-WISE ALLOCATION, 1974-75, BALUCHISTAN GOVERNMENT

(Million Rupees)

Sub-sector	On-going	New	Total
Malaria Eradication	1.00	—	1.00
General Hospitals	2.80	0.82	3.62
T.B. Control	0.10	0.80	0.90
Rural Health Centres	0.40	0.80	1.20
M.C.H. Centres..	—	0.02	0.02
Rural dispensaries	—	2.70	2.70
Purchase of equipment for hospitals and dispensaries in Baluchistan	—	0.50	0.50
Medical Store Depot	—	0.43	0.43
Miscellaneous	—	0.15	0.15
Total ..	4.30	6.20	10.52

18.54. While allocating funds priority has been given to improve the health facilities in the rural areas and strengthen the existing hospitals. A scheme for construction of 50 rural dispensaries in Baluchistan has been prepared at a nominal cost of Rs. 2.7 million and it is expected that these dispenseries according to the scheme, will be completed during the year. These dispensaries are small dispensaries but will have the potential to be enlarged into better health institutions. The staggering has been done keeping in view the coverage to the population.

18.55. Rs. 1.00 million have been provided for malaria eradication programme. This amount will be just enough for pay and allowances of the malaria staff.

Hospital beds

18.56. Work on the upgradation of hospital at Sibi, Quetta and Zhob will be completed during the year. Besides, the construction of a new hospital at Nushki will also be completed.

18.57. Six T.B. control centres will be completed during the year, while work on the construction of two wards of 12 beds each will be started during the year. Work will also be initiated for providing additional residential accommodation to the T.B. Sanitorium, Quetta.

18.58. During the year, six maternity and child health centres will be completed and commissioned at various places in the province.

B. POPULATION PLANNING

18.59. The Annual Plan 1974-75 envisages an allocation of Rs. 145 million for Population Planning Programme. This allocation is 42% higher than the allocation of 1973-74. The main emphasis during the year will be to consolidate the expansion and to bring about significant improvements in the programme already launched in 1973-74, particularly (i) intensified in-service training of the staff; (ii) filling up the existing vacancies; (iii) improving supervision of female staff ; (iv) expansion of dispensation of oral contraceptives ; (v) increasing the supply of condoms ; (vi) expansion of *post-partum* programme; (vii) feed back system ; (viii) automobile maintenance and (ix) educating the population through proper channels. Research and experimentation will be conducted on the use of small family economic incentives to provide old age security and to stimulate younger married couples to space their children over long intervals.

TABLE VI

ALLOCATOINS FOR 1974-75 BY SUB-SECTORS AND EXECUTIVE AGENCIES

(Million Rupees)

Sub-sector	Centre	Punjab	Sind	N.W.F.P.	Baluchistan	Total
Hospitals	10.00	37.00	9.53	22.41	3.82	82.76
Medical education, tranining and scholarships..	13.91	22.20	14.05	0.45	—	50.61
Rural Health Programme	1.50	20.00	11.38	16.00	4.22	53.10
Mobile dispensaries	—	—	0.15	...	..	0.15
Communicable diseases programme						
(*i*) Malaria eradication	50.50	25.00	2.00	10.00	1.00	88.50
(*ii*) Tuberculosis control — ..	—	3.00	0.74	0.25	0.90	4.89
(*iii*) Smallpox eradiction — ..	—	0.30	0.60	0.17	—	1.07
(*iv*) Others	—	—	0.20	—	—	0.20
Medical Research	3.69	—	—	—	—	3.69
Special Areas						
(*i*) Azad Kashmir	6.24	—	—	—	—	6.24
(*ii*) Northern Areas	2.00	—	—	—	—	2.00
(*iii*) Federally Administered Tribal Areas	6.31	—	—	—	—	6.31
Medical Store	—	—	—	0.50	0.43	0.93
Medicines	—	—	1.50	—	—	1.50
Miscellaneous	2.40	4.50	—	—	0.15	7.05
Total ..	96.55	112.00	40.15	49.78	10.52	309.00

CHAPTER 19

LABOUR POLICY, MANPOWER AND EMPLOYMENT

The role of labour policy in the past has merely been to amend certain laws from time to time to meet the transitional contingencies. This state of affairs was not conducive to manpower development and employment promotion. The present Government has introduced several reforms, which will bring about greater employment opportunities in the long run. These measures include extension of credit facilities to small and new investors, take-over of the basic industries by the Government, agricultural reforms benefitting the landless tenents and labour reforms with a view to providing monetary gains and a number of fringe benefits to industrial workers.

Review of 1973-74

19.2. The Annual Plan 1973-74 envisaged expansion of technical training centres, besides training assistance to the educated unemployed and manpower research and planning. The programmes of technical education and vocational training also lend support to the realisation of the objectives of manpower planning. The implementation of the development in this sector is satisfactory both in financial as well as physical terms. Against an allocation of Rs. 38.695 million, the estimated expenditure would be Rs. 35.311 million which represents an achievement of about 91 percent. The financial allocation and estimated expenditure for each province and the Centre are given in Table I.

TABLE 1

Allocation and Utilization of Funds

(Million Rupees)

	1973-74	
	Allocation	Estimated Expenditure
Punjab	4.500	3.363
Sind	0.400	0.103
N.W.F.P.	1.400	0.044
Baluchistan	1.000	—
Federal Government	31.295	31.295
TOTAL	38.695	35.311

Physical Performance

19.3. The expansion of the Technical Training Centre at Gulberg, Lahore, was completed. The work on the construction of building for the Technical Training Centre, Rahimyar Khan, and the Apprenticeship Trainining Centre, Lyallpur, was also completed. Construction of building for the Technical Training Centre, Gujar Khan, made good progress, during the year.

19.4. The construction work on the building for Trade Union Institute, Lahore has been completed to the extent of about 75%.

19.5. The construction of building for the Weights and Measures Laboratory, Lahore has progressed satisfactorily. Work was started on Mines Rescue and Safety Station at Khushab.

19.6. Survey and Statistical Cell in the Manpower and Employment wing of the Labour Directorate was further strengthened and survey work in connection with the Pilot Research Project for Rural Employment Promotion was continued. Work was also continued on the programme of vocational guidance and employment counselling.

Sind

19.7. The only scheme on which expenditure was incurred related to the setting up of a Manpower Research and Planning Cell in the Manpower Wing of the Directorate of Labour.

N.W.F.P.

18.8. The Research, Planning and Statistical Cell set up in 1971-72 in the Labour Directorate was further strengthened during 1973-74.

Baluchistan

19.9. No expenditure on the on-going scheme relating to the Mines Rescue and Safety Station at Sinjidi, Kalat was incurred.

Centre

19.10. It is expected that land will be acquired in Islamabad for the proposed Institute of Manpower Studies to be set up under the Manpower Division. Under the National Development Volunteer Programme employment and training assistance was provided to various categories of the educated unemployed.

Annual Plan 1974-75

19.11. The development programme, 1974-75 is a continuation of the policies and programme for 1973-74. The projects initiated or progressed during the previous year and the programmes desinged to provide employment such as NDVP have been continued. A number of new projects have also been initiated to provide additional training facilities, vocational guidance and rural employment promotion.

Financial Outlay

19.12. The allocation being proposed for programmes in the Labour Policy and Services Sector for 1974-75 is Rs. 27.95 million ; Provincewise distribution being Rs. 6 million for the Punjab, Rs. 0.60 million for Sind, Rs. 1.15 million for NWFP, Rs. 3.20 million for Baluchistan and Rs. 17 million for the Centre (Food and Agriculture Division : Rs. 1 million, Manpower Division : Rs. 1 million, and Economic Affairs Division (NDVP) : Rs. 15 million).

PHYSICAL TARGETS

Punjab

19.13. The remaining work of expansion of Technical Training Centre, Gulberg, Lahore will be completed. It is expected that construction of buildings for the Technical Training Centre, Gujar Khan will reach the completion stage and that of Apprenticeship Training Centre, Lyallpur will be completed.

19.14. The building for the Trade Unions Institute, Lahore is expected to be completed and the Institute is expected to start functioning in its new premises by the end of the year.

19.15. One new scheme relating to construction of office building for Labour Directorate will be initiated work will be continued on the setting up of Mines Rescue and Safety Station, Khushab.

19.16. Work will continue on the Research scheme relating to (i) Pilot Research Project for Rural Employment Promotion, (ii) Vocational Guidance and Employment Counselling, and (iii) Expansion of Survey and Statistical Cell of the Manpower and Employment Wing of the Labour Directorate.

Sind

19.17. Besides continuing expansion of the existing Research and Planning Cell in the Manpower Wing of Labour Directorate, the following new schemes will be taken in hand for implementation:

(*i*) Providing additional training facilities at the existing Technical Training Centre, Karachi.
(*ii*) Establishment of a Technical Basic Training Centre at Sukkur for imparting training to skilled workers.
(*iii*) Setting up of an Institute for Industrial Safety, Health and Factory Inspection.

N.W.F.P.

19.18. In addition to strengthening of the existing Research, Planning and Statistical Cell at the Headquarters of Labour Directorate, the following new schemes are proposed to be taken up for implementation:

(*i*) Vocational Guidance Unit, Peshawar.
(*ii*) Rural Employment Promotion Project.
(*iii*) Strengthening of Factory Inspection service in the Labour Directorate.

Baluchistan

19.19. Work will be completed on the on-going scheme pertaining to the Mines Research and Safety Station at Sinjidi, Kalat. A new scheme for setting up of an Artisan Training School, Quetta will also be taken in hand.

Centre

19.20. The Federal Programme will include three schemes. One will be the initiation of work for the setting up of an Institute of Manpower Studies at Islamabad under the Manpower Division. The second will be a survey programme known as FAO/ILO Pak Joint Rural Employment Project and will be organized by the Food and Agriculture Division with technical assistance of FAO/ILO. The Project is designed to measure and evaluate the present and projected demand for labour and resultant income distribution in agriculture and such related activities as high-yielding variety of seeds. It is expected that major portion of survey work of this project will be completed in 1974-75. The third scheme is the National Development Volunteer Programme, (NDVP).

19.21. The NDVP programme is designed to adopt measures aimed at promoting employment among the educated youth. The programme has completed one year of its working during which period categories of the educated unemployed were registered with the NDVP offices located at Karachi, Lahore, Islamabad and Peshawar. About 90 per cent of the registrants are science or engineering graduates. Although the number of persons placed in employment or seconded to industrial, commercial or Government organisations as apprentices is not significant, it has mitigated the problem of the educated unemployed.

19.22. The new labour policy implemented since February, 1972 lays emphasis on (a) effective trade union movement, (b) assurance of the security of employment (c) participation of the workers in the management, and (d) greater monetary benefits. During 1974-75, efforts will continue on a more effective implementation of the labour policy, particulary in the light of the recommendations of the Tripartite Conference, held in November, 1973. The conference had emphasised the need for increased production, greater industrial harmony, and launching of compreshensive workers education schemes through-out the country. The labour laws will be reviewed and improved with a view to ensuring the achievement of this objective.

Manpower and Employment

19.23. Reliable statistics on manpower and employment are completely lacking, and conceptual problems regarding measurement of unemployment or underemployment remain to be resolved. While the previous governments recognized the problems of growing labour force, there were hardly any concrete measures that were introduced with a view to ameliorating the situation. In fact, the various economic policies of the past, particularly in the field of investment, encourage the application of labour-saving techniques which only aggravated the problem. According to rough estimates, the magnitude of unemployment including underemployment was placed around 2.5 million man years in 1969-70 (about 1.5 million in agriculture and the remaining 1 million in the non-agriculture sectors). There is hardly any evidence to prove that the situation could have improved since then. On the other hand, indications are that labour force increased rapidly in recent years as is implicit in the results of the 1972 Census of population. The addition to labour force would not be absorbed by the new job opportunities. According to Labour Force surveys carried out by the Statistical Division, the labour force participation rates are given out as 27.02 percent for the urban population and 31.45 per cent for the rural population in 1970-71. The average participation rate for the country as a whole thus works out at 30.41 per cent which is among the lowest in the world. This implies a heavy dependence on the economically active population and hence a considerable under-utilization of the country's manpower resource.

19.24. The problem of the educated unemployed manpower is no less serious. Available information indicates that the supply of educated manpower at the second and third levels of education has increased faster than the demand for them during the past many years causing increasing unemployment among these groups.

19.25. A long term strategy towards an orientation of the supply of manpower and education institutions, in line with the needs of the economy, will be developed within the framework of a logner-term, Fifth Five-Year Plan due to be launched shortly. The major goal of the present government's overall economic and social policies has, however, been to swieth the emphasis in favour of those sectors of the economy which employ larger sections of the labour force and are comparatively more lahour intensive, *viz.*, agriculture, small and medium industries and construction. During the last two years, a number of employment oriented programmes have been initiated. These included the Integrated Rural Development Programme, construction of houses, aggrovilles, the Peoples Works Programme and the National Development Volunteer Programme, which are discussed in the relevant chapters.

CHAPTER 20

SOCIAL WELFARE

There is a consensus of opinion that economic development which essentially involves a process of change in social and economic relations is accompanied by growing tensions in the society. Such tensions, though inevitable to a certain extent, are exacerbated if the development process is not accompanied by deliberate changes in the structure of a society. Without structural changes in a society, development entails more social problems than it solves. Social structure, however, resists change because it is basically power structure. Pakistan, which launched a number of social policies, reforms and programmes from 1972 onwards is in the midst of such a change.

Review of 1973-74

20.2. The ADP 1973-74 allocated Rs. 10.11 million for social welfare which mainly included remedial and preventive services through introduction of social work education at school, college and university levels, through pilot projects in community development, through projects for children and women, the handicapped, the youth and the delinquents and through projects for medical social work.

20.3. The overall utilization of funds was more than satisfactory with an estimated expenditure of Rs. 11.2 million during the year (Rs. 3.1 million for the Federal Programme, Rs. 5.5 million for the Punjab, Rs. 1.8 million for Sind and Rs. 0.8 million for NWFP). In Baluchistan, no new schemes were formulated after transferring the 16 completed schemes from development to revenue side. The Government of Baluchistan had, therefore, no provision for development in 1973-74.

Programme for 1974-75

20.4. The ADP 1974-75 makes an allocation of Rs. 14.65 million for this sector. The share of Federal Programme is Rs. 5.45 million while that of provincial programmes are for Rs. 9.20 million. Of the provincial allocations, the share of the Punjab is Rs. 6.00 million, Sind Rs. 2.17 million and NWFP 1.03 million. Details of ADP allocation 1974-75 (alongwith the allocations for 1973-74 and estimated expenditure in that year) may be seen in Appendix.

Federal Programme

20.5. The Federal Programme for this sector for 1974-75, includes social welfare schemes for Health and Social Welfare Division, the welfare scheme for *ex*-service men sponsored by the Pakistan Armed Services Board under the Ministry of Defence, staff welfare schemes of the Establishment Division, and social welfare schemes of the Azad Kashmir Government. Physical targets as envisaged under the programme are as under :—

(*i*) Grant-in-aid will be provided to deserving voluntary social welfare agencies to improve their services, ensure a minimum standard of their functioning by employment of professional staff and generating private investment, initiative and effort for voluntary social work. It is estimated that 260 agencies will be assisted with financial grants—100 in the Punjab, 100 in Sind, 30 in the NWFP and 30 in Baluchistan.

(*ii*) Grants-in-aid will be provided to 4 universities and 22 colleges in the Punjab, Sind, NWFP and Baluchistan to train professional social workers.

(*iii*) The staff welfare facilities for the Federal Government employees particulary for the low paid staff will continue at Islamabad, Karachi, Lahore, Peshawar and Quetta.

(*iv*) A welfare home for the the *ex*-service men will be started at Rawalpindi.

(*v*) The Azad Kashmir Government will initiate social welfare projects.

20.6. The Social Welfare Schemes of the Federal Government which will benefit the entire country are as follows :—

(*i*) Financial and professional assistance to the voluntary social welfare agencies.

(*ii*) Social work education (grants-in-aid to universities).

(*iii*) Social work education (grants-in-aid to colleges).

The physical targets by provinces included in the Federal ADP are as follows :—

Punjab	100 social welfare agencies and 12 colleges will be provided financial assistance.
Sind	100 social welfare agencies, 2 universities and 6 colleges will be provided financial assistance.
NWFP	30 social welfare agencies, 1 college and one University will be provided financial assistance.
Baluchistan	25 social welfare agencies, and one University will be provided financial assistance.

Provincial Programmes

Punjab

20.7. The development programme for 1974-75 for Rs. 6.00 million includes projects relating to community development social services for children and families, social services for destitute and under-privileged women, financial and professional assistance to voluntary social welfare agencies, planning, research and training, and socio-economic programme for women. About 7 schemes have been transferred to non-development side thereby creating enough scope for initiating new development schemes. During 1974-75, 15 new community development projects would be opened, one mothers and children home will be established at each D.H.Q. A rescue home at Lahore and a socio-economic centre for women at Multan will also be established during the year.

Sind

20.8. The ADP 1974-75 with an allocation of Rs. 2.20 million envisages continuance of on-going projects like one day care centre of working mothers, 2 model orphanages, 1 socio-economic centre for women, 1 home for destitute and under-privileged women, 1 child and family welfare cell, 1 child welfare and in-service training institute, 26 urban community development projects, 8 pilot rural community development projects, 5 medical social work projects, 1 evaluation and research unit in the Sind directorate of social welfare, and 6 school social work projects. The new projects consist of construction of a building for the home of destitute and underprivileged women and provision of supervisory services for community development.

N.W.F.P

20.9. The NWFP development programme (Rs. 1 million) provides for continuance and expansion of on-going projects such as 12 community development projects in urban and rural areas. There are also provisions for development of voluntary social work and supervisory services for voluntary community development projects.

Baluchistan

20.10. As during 1973-74, in Baluchistan, the emphasis appears to be on the schemes that have been transferred to the revenue side, and as such no projects relating to social welfare services have been included in the ADP, 1974-75.

FINANCIAL ALLOCATION 1973-74 AND 1974-75

Appendix

(Million Rupees)

	Allocation 1973-74	Estimated Expenditure 1973-74	Allocation 1974-75
Federal Government	**2.500**	**3.056**	**5.450**
Health and Social Welfare Division	2.100	2.100	2.200
Establishment Division	0.400	0.400	1.000
Defence Division	—	—	2.000
Azad Kashmir*	—	0.556	0.250
Provincial Governments	**7.613**	**8.144**	**9.200**
Punjab	5.000	5.500	6.000
Sind	1.550	1.800	2.170
N.W.F.P.	1.063	0.844	1.030
Baluchistan	—	—	—
TOTAL ..	10.113	11.200	14.650

*Subsequently an amount of Rs. 0.310 million was provided for 1973-74.

PCPPI—I 1246 (74-75) Pl. Div—11-8-74—1,500