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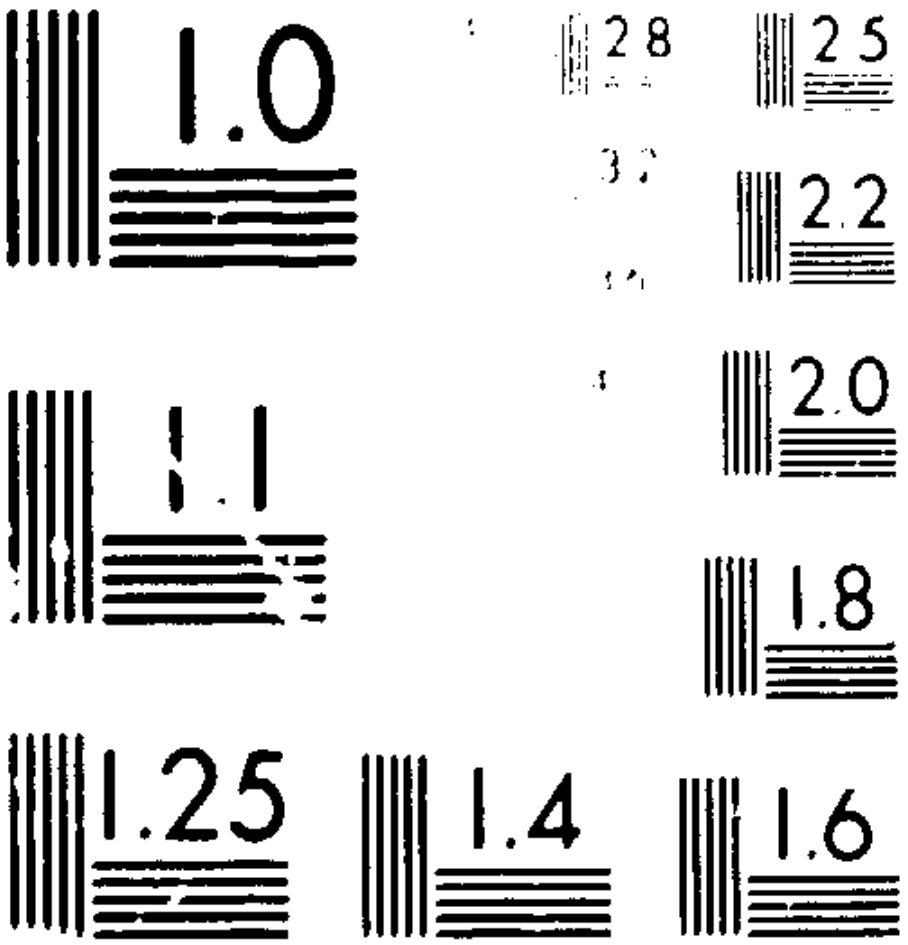
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UNITED NATIONS INDUSTRIAL
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COUNTRY INDUSTRIAL DEVELOPMENT PROFILE OF

PAKISTAN */

Prepared by the

International Centre for Industrial Studies

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PREFACE

The International Centre for Industrial Studies, Regional and Country Studies Section, has undertaken, under its 1978-1979 work programme, the preparation of a series of Country Industrial Development Profiles. These profiles are desk studies, providing statistical and economic analyses of the industry sector, its growth, present status and future prospects. It is hoped that the profiles will provide analyses of use to programming technical assistance, industrial redeployment and investment co-operation activities.

This profile on Pakistan is based on documents, reports and studies available at UNIDO Headquarters. No field survey has been undertaken and some of the data on industry are not up-to-date.

The views or comments contained in this document do not reflect those of the Government of Pakistan nor do they officially commit the United Nations Industrial Development Organization to any particular course of action.

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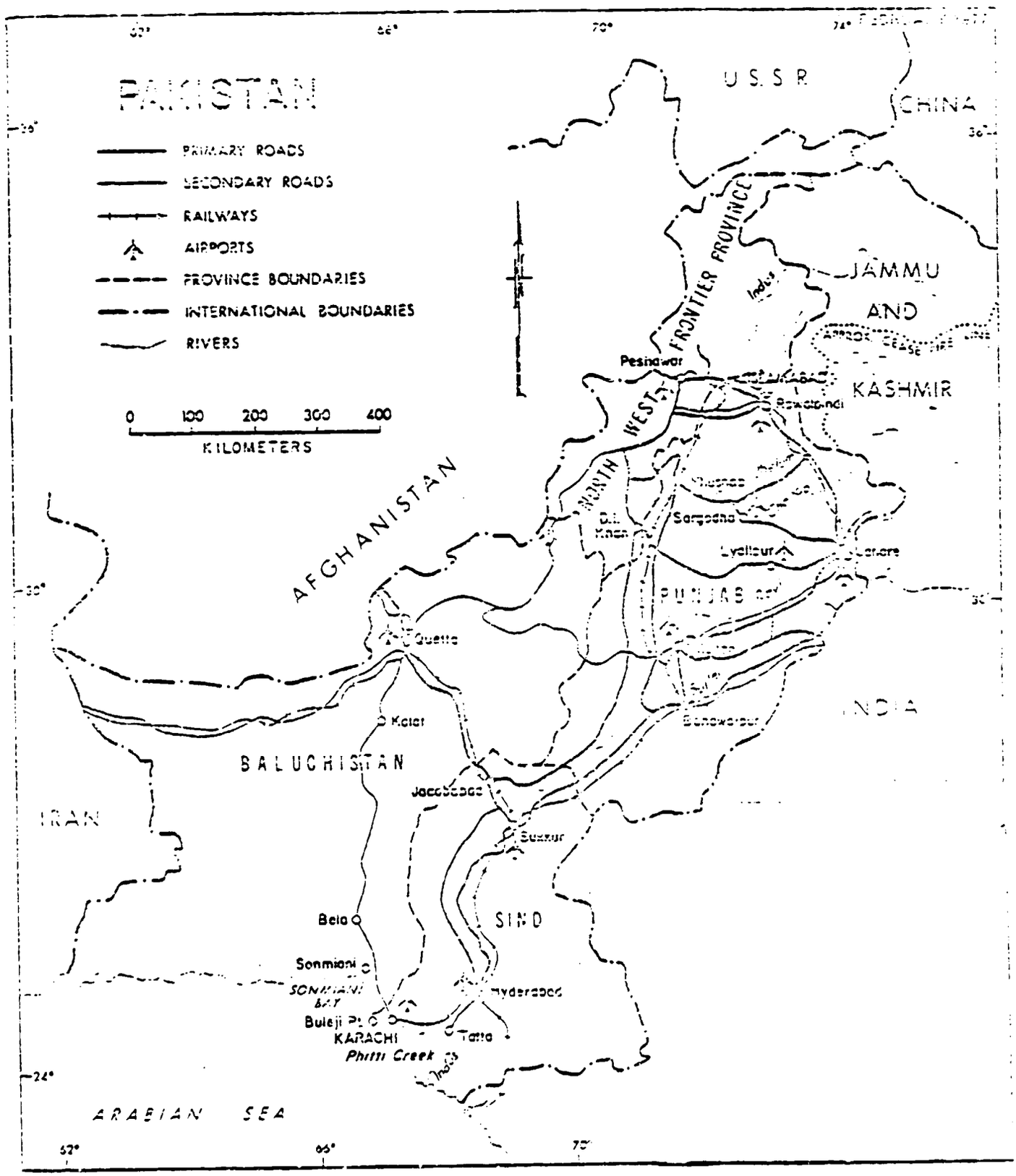
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ARABIAN SEA

Summary and Conclusions

The broad objectives for the development of Pakistan's industry according to the current Fifth Five-Year Plan, 1978-83, include a substantial increase in the rate of industrial growth; an adequate role for the private sector; increased emphasis on export-oriented industries, on small- and medium-size labour intensive industries and on agro-based industries; and restriction of public industrial investment with emphasis on the completion of ongoing investment. Once completed these projects will involve the public sector in a continuing and substantial direct industrial role, of particular significance in the longer term as most of the public sector projects are based on import substitution in capital and intermediate goods. At the same time, the Plan recognizes that the heavy public sector commitment to capital intensive projects has to certain extent pre-empted flexibility. It may have diverted resources away from other industries which could, on basis of comparative advantages, be expected to make a more important contribution in the near term to employment, exports and output.

The Plan postulates a growth target for manufacturing value added of 10 per cent annually, including a 12 per cent growth rate for large-scale industry and 7 per cent rate for other industries. (By way of comparison, production in large-scale industry grew at an annual rate of 2 per cent between 1969/70 and 1977/78.) The Plan envisages an increase in the manufacturing share of GDP from about 16 per cent to 18.5 per cent over the five years ending 1982/83. The planned increases in production would alter significantly the structure of production; thus the share of fertilizer, steel and steel products would increase from about 8 per cent to 20 per cent of total output within the Plan period.

To attain these growth objectives, a large increase in investment in industry is planned - industrial investment would amount to Rs 40 billion over the five years, more than in any other sector, and would account for 20 per cent of total investment. Public investment in industry would account for Rs 21 billion, or slightly over half the total. This is a much smaller portion than in 1971-78, and reflects the reliance

which is placed on a strong recovery of private investor interest.

Of the planned public sector investment in industry, 77 per cent is earmarked for the completion of ongoing projects (mainly the Karachi steel complex, cement and fertilizer projects) and 6 per cent for a new tractor plant. The remaining 17 per cent is primarily to be used for balancing and modernizing investment in existing plants.

Basic industries - steel, cement, heavy chemicals, fertilizer and agricultural machinery - are assigned first priority in the industrial strategy, with the aim at creating a sizeable base of manufacturing units for producing basic industrial and agricultural inputs.

The Plan, however, seems to have given perhaps too little attention to, in particular, the engineering industry sub-sector for which the planned investment is rather low, as the sub-sector would seem capable of an important contribution to industrial development. It is recognized, on the other hand, that there is considerable excess capacity, although much of this capacity may be obsolete or imbalanced. It has been suggested that there may be a need to revise the investment program for this sub-sector with view to rehabilitating equipment in areas where export potential exists. The demand for metal products has been estimated as high and the sub-sector is able to supply a large variety of production machinery, including textile machinery (power looms, cotton baling presses, etc) rubber machinery, wood working machinery and sport goods machinery.

Other sub-sectors with growth potential are fertilizer, cement and petroleum products. In the small-scale industry sector carpets, light engineering, leather and garments have been noted as having particularly good prospects. Sport goods and surgical instruments should also be able to expand through appropriate upgrading.

The textile industry is the most important sub-sector in the present industrial structure. The Plan is giving emphasis to the need for balancing and modernization in the industry. Attention should in particular be given to factors such as quality control, cost reduction

and diversification of the product mix. The long-term recovery of the industry to its former predominant role in manufactured exports may, however, require that the Government establishes a comprehensive action program for the rehabilitation and further development of the industry.

The current UNDP Country Programme for Pakistan, for the period 1977-81, was formulated at a time when the Fifth Five-Year Plan, 1978-83, was under preparation. The drafting of the Plan was, however, sufficiently advanced in identifying the main aims and policy objectives of the Government to permit the Country Programme to be based on these aims and objectives. The main theme of the Plan, of central importance to the industrial sector component of the Country Programme, is the placing of the economy on a self-sustaining growth path leading to the improvements in the living standards of the population at large and in all regions.

To combat the under-utilization of installed production capacity and less efficient use of invested capital, major attention is given to assistance aimed at the improvement of management practices in certain key industrial sectors - textiles, leather and metal-working industries. Assistance is also provided towards the development of the capital goods industry and the chemical industry. Preparations of large-scale assistance to the Investment Promotion Bureau for the development of a portfolio of investment proposals are under way. Similarly, a phase II project of the Small-Scale Industries Survey which was carried out in 1979, aiming at identifying remedies and operational procedures of small-scale industries in the five specific areas, is being prepared.

In support of the country's planning and long-term programming activities, assistance is envisaged for (i) the strengthening of the performance of the planning cell within the Ministry of Industries and (ii) the preparation - at the Ministry of Production - of a master plan for the country's requirements of iron and steel during the coming 20 years and for the most suitable and economic production processes.

Chapter I

THE GENERAL ECONOMIC BACKGROUND AND THE ROLE OF MANUFACTURING IN PAKISTAN'S ECONOMY

Pakistan came into being in August 1947 as a result of the partition of British India into the sovereign states of India and Pakistan. The eastern wing of Pakistan, now Bangladesh, seceded in December 1971. The Islamic Republic of Pakistan, now occupying the former western wing of the country, comprises four provinces: the Punjab, the North West Frontier, Sind and Baluchistan and the Federally-administered Tribal Areas. Three distinct features mark the geography of Pakistan:

(i) The north to north-western mountainous belt;

(ii) The arid Baluchistan to the west; and

(iii) The fertile plain of the Indus River Basin spreading from north-east into the Arabian Sea.

The mountainous belt and the sand-strewn stone plateau of Baluchistan are largely barren regions with little rainfall. Known mineral resources, mainly copper, are significant. Agricultural activity is limited to scattered subsistance farming and cattle grazing. The vast plain of Indus spreads across the regions of Sind, Punjab and the North West Frontier. It is heavily populated, extensively farmed and has the country's main urban-industrial complexes. To the east of the Indus Plain lies the desert of Thar, to the east of the Indus Delta lies the marshy Rann of Kutch.

Out of a total of 197 million acres, 132 million acres have been surveyed and classified into various potential agricultural use categories. Of this 75 million acres are available for cultivation (about 65 per cent of which is cultivated at present) while 7 million acres are forests. About 43 per cent of total cultivated acreage is assigned to wheat, 15 per cent to cotton, 12 per cent to rice. Other major crops are sugarcane, corn, sorghum, oil seeds and barley.

The population of Pakistan is presently about 76 million and is expected to have increased to about 87 million by the end of the Fifth Five-Year Plan period 1978 - 1983.

Table 1. Pakistan: Population estimates 1977 - 1983
(in million)

	1977-78		1982-83	
Total	75.52	100%	86.90	100%
Urban	20.70	27%	25.66	30%
Rural	54.92	73%	61.24	70%

Source: Fifth Five-Year Plan.

According to the Fifth Plan the total labour force is expected to increase by about 3.8 million during the Plan period, from nearly 22 million in 1977-78 to about 26 million in 1982-83. As it is expected that a net emigration of about 0.4 million labourers will take place, an increase in employment opportunities of 3.4 million will be required, assuming constant level of unemployment. A high incidence of under-employment is also a continuous problem and affects a large portion of the labour force. The employment in major sectors of the economy is shown in Table 2. The manufacturing sector employs about 13 per cent of the total employed work force.

Table 2. Pakistan: Employment by major sectors of economy 1971-83 (million persons)

	1971-72		1977-78		1982-83 (projected)	
Agriculture	10.31	56%	12.36	57%	13.98	55%
Manufacturing	2.32	13%	2.92	13%	3.47	14%
Construction	0.63	3%	0.90	4%	1.06	4%
Trade	1.86	10%	2.30	11%	2.78	11%
Transport, communications	0.90	5%	1.02	5%	1.21	5%
Services, unspecified	2.97	16%	2.34	10%	2.72	10%
Total	18.26	100%	21.84	100%	25.22	100%

Source: Fifth Five-Year Plan.

The participation of the manufacturing sector in the country's economy can also be illustrated by its relative share of the GDP which during the last several years has been declining slightly, from 15.5 per cent in 1967/68 to 13.4 per cent in 1977/78 (see Table 3).

Table 3. Pakistan: Gross National Product at constant factor cost (at 1959-60 prices)

	1959/60		1967/68		1977/78 (prov.)	
	Rs million	% of GDP	Rs million	% of GDP	Rs million	% of GDP
Agriculture	7,711	45.8	10,982	39.7	14,552	32.2
Mining and quarrying	70	0.4	137	0.5	211	0.5
Manufacturing	2,018	12.0	4,289	15.5	6,065	13.4
of which						
large-scale	1,159	6.9	3,209	11.6	4,617	10.2
small-scale	859	5.1	1,080	3.9	1,448	3.2
Construction services	427	2.5	1,037	3.8	2.252	5.0
Other services	6,600	39.2	11,114	40.5	19,579	43.4
GDP	16,826	100	27,659	100	42,659	100
Net factor income from abroad	—23		-23		2,486	
GNP	16,803		27,636		45,145	

Source: Pakistan Economic Survey, 1977-78.

Concerning the overall growth of the economy it can be noted that during the period 1950 to 1970, the average growth rate of the GNP was roughly 4.9 per cent per annum (in the 1960s: 6.3 per cent per annum).

The disturbed political situation in the early seventies, leading to the separation of East Pakistan in December 1971, caused, however, a major setback to the economy. Problems of management were severely affecting the performance of the large-scale public sector industry. Later, the impact of the severe international economic crisis, with subsequent emergence of recession affecting the demand for Pakistan's exports, was heavily felt. At the same time

investment commitments were made for major new projects which pre-empted flexibility in investment programming. The Fourth Five-Year Plan prepared for the period 1970-75 became irrelevant after the separation of the east wing of the country. However, no other plan was adopted in its place which could provide a framework for investment decisions. [1/] By 1977 the cumulative impact of persistent stagnation in the economy combined with enlarged commitments for development projects and other factors had created an economic impasse.

Table 4. Pakistan: Overall and sectoral growth rates 1965/66 - 1975/76 (at constant 1959-60 factor cost)

	Annual average 1965/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Agriculture	6.35	-3.07	3.47	1.45	4.18	-2.23	4.79	2.10	4.30
Manufacturing	8.11	1.58	-4.59	9.71	6.47	0.63	0.17	-1.00	4.70
GDP	6.75	0.10	0.95	7.03	5.83	1.68	4.38	1.40	6.50

Source: Pakistan: Current Developments and Issues, World Bank, 15 March 1977
Quarterly Economic Review, 4th Quarter 1978 (EIU)

The GDP annual growth rate from 1970 to 1977 was on average 3.1 per cent which was barely above the population growth. The agricultural and industrial production growth rates were less than 2 per cent per annum, significantly below the rate of population increase. The low levels of output combined with a sharp increase in public sector outlays without a corresponding increase in revenues and foreign assistance and a stagnation in exports combined with rising imports had by 1977 led to serious balance of payments and budgetary problems. As is indicated in further detail in Chapter VI below, a number of measures were taken in 1977-78 aiming at reviving output and exports and restoring private sector investment confidence combined with a containment of public sector development outlay.

The effects of the limited growth of the economy during the 1970s on income distribution and on mass consumption levels seem to have been small, although

1/ The Fifth Five-Year Plan, 1978-83, was launched in mid-1978.

according to a study of the Planning Division, 1/ real wages in the organized sector have increased a little for unskilled labour, mostly through the extension of fringe benefits. It also appears, according to the study, that minimum wage legislation and uniform cost of living allowances have reduced regional and sectoral wage disparities. Some change in the scarcities have raised the relative earnings of skilled labour, and also of construction workers (previously a depressed group).

1/ Referred to in "Towards an Employment Strategy in Pakistan", draft report of the ILO/UNDP Exploratory Employment Mission, 1975.

Chapter II

STRUCTURE OF THE MANUFACTURING SECTOR

Sources of manufacturing growth and structural changes

Pakistan's early history of industrialization is well known. Cut off at the time of partition from India, its traditional source of basic industrial commodities, Pakistan developed in a very short period of time a substantial industrial sector of its own, initially as the result of import substitution, aided by a high wall of tariff and quantitative restrictions on imports, but later through growth of domestic and foreign demand.

Table 5. Pakistan: Sources of manufacturing growth: Percentage of increased output, 1951-70

	West and East Pakistan						West Pakistan		
	1951-54			1959-63			1963-70		
	Domestic demand	Export expansion	Import substitution	Domestic demand	Export expansion	Import substitution	Domestic demand	Export expansion	Import substitution
Consumer goods	3	1	96	110	-1	-9	59	26	15
Intermediate goods	7	5	87	48	22	30	77	23	0
Investment goods	-7	1	106	109	1	-10	71	3	26

Source: Stephen E. Guisinger, Patterns of Industrial Growth in Pakistan, The Pakistan Development Review, Vol. XV, No. 1, Spring 1976.

The cumulative effects of Pakistan's particular pattern of industrialization can be seen in data on sector growth and trade shares in Tables 5 and 6. It is to be noted that still in 1970 the consumer goods sector accounted for four-fifths of manufacturing value added. In this sector Pakistan's largest industry - textiles - was included. This dominance of consumer goods is of particular interest in analysing the future rate and pattern of growth in the manufacturing sector. Another interesting fact is the different impact which past import substitution has had on the shares of imports in the total supplies of the three sectors. Import substitution was in 1970 almost exhausted in consumer goods, where only 6 per cent of the total supplies of these goods was obtained from abroad. In the intermediate and investment goods

sectors, however, imports accounted for 58 and 63 per cent of the goods supplied. It may be assumed that there is significant scope for economically sound import replacement in these sectors. On the export side, the consumer goods sector, led by textiles, had the highest export share, 29 per cent, with the intermediate goods and investment goods sectors substantially lower with 15 and 4 per cent respectively.

Table 6. Pakistan: Structure of Pakistan's manufacturing sector 1970

	Share in value added (%)	Imports as shares of total supplies (%)	Exports as shares of total supplies (%)
Consumer goods	80	6	29
Intermediate goods	7	58	15
Investment goods	13	63	4

Source: Stephen E. Guisinger, Ibid.

Manufacturing by branches of industry

A breakdown of manufacturing in Pakistan in 1971 (the latest year in respect of which statistics is available) into individual sectors is given in Table 7 below.

Table 7. Pakistan: Structure of the manufacturing sector, 1970 - 1971

ISIC		Number of establishments (with 10 or more workers)	Number of employees (thousands)	Value added, in producers' values (mill. rupees)	Gross fixed capital formation (mill. rupees)
311/2	Food products	489	42.10	855	854
313	Beverages	19	1.57	40	24
314	Tobacco	39	12.06	572	78
321	Textiles	719	204.87	1595	1550
321/1	Spinning, weaving, etc.	86	96.89	820	539
322	Wearing apparel	25	0.74	7	8
323	Leather and products	64	3.62	62	20
324	Footwear	30	2.80	17	11
331	Wood products	23	1.35	6	16
332	Furniture and fixtures (incl. metal furniture and fixtures)	38	2.17	12	9
341	Paper and products	25	6.40	66	288
341/1	Pulp, paper, etc.	3	0.82	14	51
342	Printing, publishing	184	8.26	87	83
351	Industrial chemicals	48	9.04	246	593
351/1	Basic chemicals (excl. fertilizers)	15	1.81	52	90
352	Other chemical products	241	16.56	530	178
352/2	Drugs and medicines	105	9.30	228	98
355	Rubber products	56	6.81	69	38
356	Plastic products	30	1.02	8	22
361	Pottery, china, etc.	12	1.84	10	17
362	Glass and products	24	5.19	27	43
369	Non-metal products	69	10.10	178	431
371	Iron and steel	145	10.63	124	110
372	Non-ferrous metals	8	0.21	3	2
381	Metal products	396	14.79	92	106
382	Machinery n.e.c.	296	10.46	51	58
383	Electrical machinery	136	13.62	190	150
383/2	Radio, television, etc	9	1.59	15	16
384	Transport equipment	120	15.65	130	178
384/3	Motor vehicles (incl.	21	4.37	35	26
385	Professional goods	62	5.97	22	18
390	Other industries	251	10.58	434	291
3	Manufacturing	3519	427.11	5[illegible]	5172

Source: Yearbook of Industrial Statistics 1975, Volume 1, United Nations.

Agro-based industries, such as textiles, sugar, vegetable oil, paper, leather and tobacco, account for some 60 per cent of manufacturing value added; the textile sector alone accounting for about half thereof. [The textile sector employs: over 35 per cent of the industrial labour force and contributes over 50 per cent of manufactured exports].

As a result of the efforts made both by the private and public sectors the country's industrial base has successively broadened over the years. A great number of large-scale industrial units are operating in different (mainly consumer goods) sectors as shown in Table 8.

Table 8. Pakistan: Number of large-scale industrial units in selected industries, as of June 1975

Vegetable ghee	28
Sugar	25
Cigarettes	19
Cotton textiles	155
Art silk and rayon cloth	68
Chemicals	10
Chemical fertilizers	5
Cement	9
Mild steel products	203
Tyres and tubes (motor vehicle, cycle)	22
Sewing machines	5
Electric fans	147

Source: Pakistan Basic Facts 1974-75, Economic Adviser's Wing Finance Division.

Much progress has also been made in the development of a nucleus of heavy and basic industries. The Karachi Steel Mill is scheduled to commence partial production in 1980-81. The Heavy Mechanical Complex at Taxila has started manufacturing sugar and cement plants, road rollers, etc. The Karachi Shipyard and Engineering Works has a capacity of making five ships per year, each of 15,000 DWT.

A large number of private and government-owned re-rolling mills, foundries, machine building, metal products and other engineering industries have been established. 1/ The engineering industry in Pakistan is highly decentralized; it is estimated that there are altogether 1,700 production units (containing about 21,000 machine tools) of which 800 units employ less than 10 workers each. Eleven large plants provide employment for 45,000. There are two public enterprises involved in the production of machine tools in the country, namely, the Pakistan Machine Tool Factory (PMTF), at Landhi near Karachi, and the Machine Tool Division of Pakistan Engineering Company (PECO), at Lahore, which are both part of the State Engineering Corporation. PMTF employs 3,500 persons and works on a double shift system. In addition to manufacturing combined gear and transfer boxes for jeeps and rear axles and brake drums for trucks, it manufactures milling machines and lathes under licence from Swiss and British concerns. The machine tool division of PECO is manufacturing centre lathes, small hand-operated turret lathes and shaping machines, and has the capacity to build 670 machines a year. The private sector, most of which is located at Lahore, also produces machine tools, but their quality requires improvement. The total number of machine tool plants in the country, both publicly and privately owned, exceeds 70. The total annual capacity of the industry was in 1974: centre lathes, 2,400; turret lathes, 100; milling machines, 250; drilling machines, 1,435; shapers and planers, 100; grinding machines, 10; power presses, 30; and hacksaw machines, 55.

1/ In 1971, a team of three UNIDO experts provided assistance and advice to the country on the co-ordination and efficient utilization of its steel, iron and engineering industries. It was noted that in many factories the installed capacity, 55 - 65 per cent, was being underutilized.

A recent World Bank report notes that, in addition to various engineering machine tools, the Pakistani engineering industries is at present able to supply the following production machinery:

Textile machinery	- power looms (non-automatic), shuttles, cotton baling presses, carding machines;
Rubber machinery	- mixing mills, extruders, hydraulic presses, dies for cycle tyres;
Woodworking machinery	- planers;
Confectionery machinery	- automatic dies for toffee manufacture;
Sports goods machinery	- bending machines for hockey sticks, spherifying machines for footballs, stretching frames for hides.

The progress of actual production of the country's major manufacturing industries during the last decade, as shown in Table 9, has been rather uneven with major gains in respect of only a few products such as sugar, vegetable ghee, and fertilizers.

TABLE 7: PAKISTAN, PRODUCTION OF SELECTED HEAVY ACTIVITIES (PRODUCTS), 1958-78

Item	Unit	1958-59	1968-69	1970-71	1972-73	1974-75	1975-76	1976-77	1977-78
Food Manufactures									
(i) Sugar	000 tonnes	124	408	519	429	502	630	736	860
(ii) Vegetable Ghee	000 tonnes	22	99	136	187	272	277	326	354
(iii) Soda Salt	000 tonnes	161	324	219	161	139	151	138	215
Cigarettes	Million Nos.	6938	20636	24166	27623	26804	27454	28379	31300
Textile Manufactures									
(i) Cotton Yarn	Million K.G.	148.8	238.8	303.8	376.1	351.2	349.7	282.6	291[a]
(ii) Cotton Cloth	Million Sq.Mts.	451.0	593.9	658.3	588.6	555.9	520.3	408.3	394[a]
(iii) Art Silk + Rayon Cloth	Million Mts.	9.2	80.0	61.5	5.3	8.1	9.9	17.5	15.6[a]
(iv) Jute textiles	000 tonnes	-	9.6	37.6	34.5	45.4	42.0	33.9	....
Motor tyres	000 Nos.	-	12	115	168	240	166	148	132[b]
Motor tubes	000 Nos.	-	28	126	162	214	143	137	114[b]
Cycle tyres	000 Nos.	2531	2920	2745	2542	3033	3180	3461	2518[b]
Cycle tubes	000 Nos.		3704	3798	3283	4161	4219	4131	3290[b]
Safety matches	Million boxes (40-60 sticks)	129.0	351.4	170.2	338.6	466.8	589.6	769.0	1136.9
Cement	000 tonnes	1036	2551	2, :	2876	3320	3196	3090	3200
Fertilizers									
(i) Urea	000 tonnes	-	106.5	204.8	533.1	599.5	605.3	593.6	594.9
(ii) Single Superphosphate	000 tonnes	2.0	14.4	25.4	45.7	31.7	50.6	66.1	75.0
(iii) Ammonium Nitrate	000 tonnes	-	73.3	85.0	65.6	58.8	70.8	64.5	47.1
(iv) Ammonium Sulphate	000 tonnes	36.1	42.6	59.6	58.2	95.1	98.3	100.0	95.6
Industrials									
(i) Soda Ash	000 tonnes	27.3	62.8	78.0	74.2	77.1	78.6	55.1	68.8
(ii) Sulphuric Acid	000 tonnes	9.6	24.0	33.6	42.5	37.0	46.2	48.2	50.9[a]
(iii) Caustic Soda	000 tonnes	3.7	22.0	31.2	35.4	36.8	38.3	23.6	31.1[a]
Bicycles	000 Nos.	N.A.	169.8	159.7	211.7	210.4	217.8	211.5	244.7
Sewing machines	000 Nos.	N.A.	80.5	84.6	66.4	55.5	64.0	58.4	61.9[a]
Electric fans									
(i) Pedestal	000 Nos.	N.A.	19.2	28.4	34.1	37.6	30.9	30.7	19.3[b]
(ii) Ceiling	000 Nos.	N.A.	112.4	146.2	152.7	140.7	107.2	126.0	84.9[b]
(iii) Table	000 Nos.	N.A.	34.7	41.1	36.2	14.9	10.1	8.1	4.8[b]
Electric bulbs	000 Nos.	N.A.	9.0	10.5	10.7	15.0	17.4	14.9	11.3[b]
Paints + Varnishes	000 litres	-	6523	7360	5665	6184	7128	7193	7600
Metal Sheet Products	000 tonnes	-	227.7	196.1	183.9	224.0	230.7	269.6	202.5[b]
Boards:									
(i) Paper Board	000 tonnes	7.3	22.9	25.1	20.2	13.9	9.7	9.9	7.9[b]
(ii) Chip Board	000 tonnes	0.5	7.1	14.9	17.7	13.2	11.4	11.6	7.9[b]
(iii) Straw Board	000 tonnes	4.6	4.6	-	-	0.1	-	-	-
Paper:									
(i) Printing Paper	000 tonnes	N.A.	N.A.	5.8	6.3	4.0	2.4	3.2	2.5[b]
(ii) Writing Paper	000 tonnes	N.A.	N.A.	7.7	16.9	15.4	16.1	15.7	11.8[b]
(iii) Packing and other Paper	000 tonnes	N.A.	N.A.	2.7	4.0	3.7	2.7	4.1	1.0[b]

a/ Estimate
b/ July - March only Source: Ministry of Finance and Economic Affairs

Imported inputs for manufacturing

As noted earlier a large portion of the inputs for the intermediate and investment goods manufacturing are imported. The composition of the imports to Pakistan, as shown in Table 10, further illustrates this fact.

Table 10. Pakistan: Composition of imports, 1972-76

(million rupees)

	1972/73	1975/76
Consumer goods	2,485	4,337
Crude petroleum (incl. partly refined oil)	463	2,526
Raw materials for consumer goods	2,122	4,726
Thereof		
animal and vegetable oils	330	1,214
fertilizers	390	101
Raw materials for capital goods	830	1,261
Thereof		
wood	27	50
coal and coke	34	43
billets and ingots	166	134
Capital goods	2,499	7,159
Thereof		
machinery and transport equipment	1,681	5,338
Total imports	8,398	20,007

Source: Statistics Division, Ministry of Finance, Planning and Economic Affairs.

Manufactured exports

The growth of Pakistan's manufactured exports was up to the early 1970s relatively slow, if production capacity and potential are taken into account, because of the orientation of the economy of the then West Pakistan to meet the domestic demand including that of former East Pakistan. Since 1972 manufactured exports from Pakistan have, however, increased most considerably in relative as well as in absolute terms (see Table 11).

Table 11. Pakistani major manufactured exports, 1965-78
(million rupees)

Items	Unit	1965 - 66		1969 - 70		1973 - 74		1975 - 76		1976 - 77		1977 - 78 (July - March)	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Hides & skins	000 KG	1564	14.1	314	17.6	139	23.5	502	30.4	29	2.3	-	0.2
Leather	Million KG	11.8	74.9	13.7	109.3	13.1	416.5	4.3	595.9	8.5	647.4	-	420.3
Cotton yarn	Million KG	24.1	102.2	72.8	254.0	98.2	1810.6	110.4	1422.3	66.6	1171.7	36.0	640.3
Cotton thread	Million KG	-	-	-	-	2.4	52.5	1.7	39.5	1.5	43.4	1.5	47.9
Cotton fabrics	Million Sq.M	162.5	147.9	297.7	257.6	347.7	1416.8	463.8	1359.4	416.8	1603.3	328.0	1273.4
Raw wool & products	000 MT	284	19.3	1364	48.5	297	175.6	323	192.0	291	268.5	664	533.7
Synthetic textiles	Million Sq.M	2.2	5.0	10.9	17.3	16.6	65.3	11.8	34.3	9.2	35.5	28.9	135.2
Footwear	Million pairs	7.1	8.2	6.1	23.4	10.5	94.5	7.1	66.0	9.3	89.3	4.8	49.3
Carpet & products	000 KG	1	0.2	341	19.2	78	167.2	99	50.9	13	5.6	-	-
Oil cakes	Million KG	49.8	15.3	38.5	12.1	10.0	7.8	0.4	0.3	1.3	1.8	4.5	4.9
Paints & varnishes	Million KG	6.7	4.7	2.4	5.9	1.1	6.0	1.4	8.2	1.0	9.7	0.7	4.9
Tobacco raw & manufactured	-	-	0.7	-	16.5	-	107.2	-	160.2	-	163.8	-	87.4
Readymade garments and hosiery	-	-	9.1	-	18.9	-	167.4	-	328.4	-	417.7	-	274.5
Drugs & chemicals	-	-	12.6	-	12.2	-	102.8	-	133.3	-	134.3	-	48.1
Surgical instruments	-	-	7.1	-	14.7	-	85.2	-	131.4	-	133.8	-	113.3
Carpets and rugs	-	-	23.2	-	55.1	-	456.7	-	719.2	-	911.9	-	813.4
Sports goods	-	-	19.1	-	30.0	-	188.0	-	189.2	-	199.1	-	143.4

Source: Pakistan Economic Survey, 1977-78.

Pakistan is one of the biggest, if not the biggest, exporter of cotton yarn in the world. Other important manufactured exports include cotton fabrics, leather goods, tents and canvas goods, towels, ready made garments and hoisery, carpets and rugs, sports goods, cutlery, and surgical instruments.

During the last years Pakistan has begun exporting also capital goods, such as diesel engines, machine tools, textile machinery and shipping vessels.

Raw cotton and cotton manufactures continue, however, to be (together with rice) the main export items, constituting (in 1975) about 45 per cent of total exports. A breakdown of the specific exported products is given in Table 12 below.

Table 12. Pakistan: Export of cotton and cotton manufactures
(in million US$)

Items	1969-70	1972-73	1974-75
Cotton yarn	50.7	187.9	86.0
Cotton thread	2.7	3.2	5.8
Cotton fabrics	-	119.6	132.6
(a) Cotton fabrics mill trade	54.1	118.8	131.1
(b) Cotton fabrics handlooms	-	0.8	1.5
Cotton bags	0.2	4.5	7.2
Tents and canvas	1.7	2.3	22.4
Made up articles of textiles	8.5	9.2	24.9
(a) Curtains	0.04	-	-
(b) Bed sheets and covers	0.3	1.3	5.6
(c) Napkins	0.2	0.2	1.3
(d) Towels	3.4	7.0	15.6
(e) Others	4.6	0.7	2.4
Readymade garments	1.4	3.3	14.4
Hosiery	2.4	6.2	10.3
Raw cotton	44.1	110.5	155.9
Cotton linters	0.08	0.1	0.4
Cotton waste	2.9	3.0	1.9
Total cotton and cotton manufactures	168.8	449.8	461.8
Grand total	337.9	826.3	1039.0

Source: Pakistan Basic Facts 1974-75, Economic Adviser's Wing, Finance Division.

Chapter III

THE INSTITUTIONAL INFRASTRUCTURE FOR INDUSTRY

The industrial affairs come under three technical ministries, namely the Ministry of Industries, the Ministry of Production and the Ministry of Science and Technology. The responsibilities of the Ministries of Industries and Production are similar; the Ministry of Industries control the private sector while the Ministry of Production is responsible for the industries owned by the State. The main function of both ministries is to support industrialization. The Ministry of Industries operates through institutionalized bodies such as specialized development boards and organizations for industrial consultancy and quality control while the Ministry of Production controls all national enterprises. The Ministry of Science and Technology contributes to the process of industrialization mainly through the Pakistan Council of Science and Industrial Research (PCSIR) and the Appropriate Technology Development Organization (ATDO). Apart from the ATDO the Ministry of Science and Technology Organizations tend towards advanced technologies like electronics while the establishments of the Ministry of Industries are backstopping the traditional industries like cotton textiles and leather products. There are other ministries less directly concerned with the industrialization process such as the Ministries of Communications, Railways and Defence, all having their own specialised production facilities and sometimes overlapping with the activities of the Ministries of Industries and Production. Of the three ministries mainly concerned with industrialization the Ministry of Industries is the senior ministry. The Ministry also acts as the main channel of communications between the Government and UNIDO.

Major investments including those in industry are considered by the Pakistan Executive Committee of the National Economic Council (ECNEC) headed by the Prime Minister. Once approval by ECNEC has been granted, the financing of the projects can be made through the banking system. Preparation work for ECNEC is being carried out by the Central Development Working Party (CDWP).

At the time of independence in 1947 Pakistan had a very small industrial base, consisting of flour and rice mills, cotton ginneries and some cement plants, and technical skills, infrastructure and other pre-requisites for

industrialization were still to be developed. The Government in 1950 set up the Pakistan Industrial Development Corporation (PIDC) which played a pioneering role in establishing a number of industries outside the private sector in respect of which large investment commitments were required. By 1973 the PIDC had by and large accomplished the role it had been assigned by completing as many as 62 projects at a capital cost of Rs.1,243 million.

In January 1972, the Government took over the management of 32 industrial units falling under 10 categories of basic industries. These were iron and steel, basic metals, heavy engineering and heavy electrical industries, assembly and manufacture of motor vehicles and tractors, heavy and basic chemicals, petro-chemicals, cement and public utilities, i.e. electricity, gas and oil refineries. These industries were taken over partly because they were not being run on sound business lines and also because such key industries needed to be run in the best interest of the country.

In November 1973, the taken over units were nationalized with the Government taking over 100 per cent equity in the private limited companies and gaining controlling interest in public limited companies. After nationalization, the taken-over industries together with the units under PIDC were grouped together industry-wise under the overall supervision of the Board of Industrial Management (BIM)[1/] into ten holding corporations as follows for co-ordination and development:

Federal Chemical and Ceramics Corp. (FCCCL)
Federal Light Engineering Corporation (FLEC)
National Fertilizer Corp. of Pakistan (NFC)
Pakistan Automobile Corporation (PACO)
Pakistan Industrial Development Corporation (PIDC)
State Cement Corporation of Pakistan (SCCP)
State Heavy Engineering and Machine Tool Corporation (SHE & MTC)
State Petroleum Refining and Petrochemical Corp. (PERAC)
National Design and Industrial Services Corp. (NDISC)

1/ See further Abid Hussain, Public Enterprises and Industrial Development: An Analysis of the Pakistani Experience. Paper prepared for UNIDO Expert Group Meeting on the Role of the Public Sector in the Industrialization of the Developing Countries. 4.5.1979 (ID/WG.298/7).

Pakistan Steel Mills Corporation (PASMIC)
(responsible for setting up the Karachi Steel Mill)

Subsequently in 1979, BIM was aboloished and the enterprises came under direct control of the Ministry of Production. Federal Light Engineering Corporation (FLEC) was amalagamated with State Heavy Engineering and Machine Tool Corporation (SHE & MTC) under State Engineering Corporation. National Design and Industrial Services Corporation (NDISC) was abolished. Two units previously under FLEC, Nowshera Engineering and Lahore Engineering and Foundries were denationalized and returned to previous owners.

There is a large number of institutions, governmental and semi-governmental, which are playing an important role in the development of industries. A brief description of the most relevant of these institutions is given below.

The Pakistan Council of Scientific and Industrial Research (PCSIR) was established in 1953. As noted above, PCSIR is under the responsibility of the Ministry of Science and Technology. It has laboratories in Karachi, Lahore and Peshawar. It has developed a certain number of new processes for the optimum utilization of indigenous resources. It being realized that so far Pakistan industry has been developing mainly on the basis of imported production processes and product specifications, increased attention is being given to the strengthening of the capability (of the PCSIR laboratories and others) to translate the results of their research into engineering designs and original production technology. Accordingly, a reorientation of the activities of the PCSIR laboratories towards engineering development work based on the use of locally developed technologies is being endeavoured.

The Central Testing Laboratories (CTL) were set up in 1951 for rendering technical assistance and guidance to Government departments/agencies and the private industry and commerce in the assessment of the quality of raw materials and finished products. The CTL has laboratories at Karachi and Lahore. Branch level R and D work is carried out in the Cotton Textile Industrial Research and Development Centre (CTIRDC) and the Leather Industry Development Project (LIDP).

The Investment Advisory Centre of Pakistan (IACP), Karachi, a non-profit research and consultancy organization, provides information and guidance both to the private and public sectors. The IACP renders services

in a number of fields such as identification of new investment opportunities, preparation of pre-investment studies and feasibility reports and provision of management consultancy services. 1/

Technical services and training in the fields of designs and machine workshops are also provided by the Pakistan Industrial and Technical Assistance Centre (PITAC). PITAC is located in Lahore and has regional offices in Karachi, Peshawar and Quetta. Along with PITAC is Metal Advisory Services (MAS) providing shop floor assistance to metallurgical and metal working industries, and advice on the proper material and techniques to substitute imported items. MAS also conduct the needed testing services to control the composition of steel products.

The Appropriate Technology Development Organization (ATDO) was established to find out and promote simple technologies which can be cheaply and easily implemented. ATDO is running a programme related to biogas, use of wind mills, mini hydroelectric generators and food processing.

A scheme for export processing zones, to be established in Karachi and Lahore, is included in the Fifth Five-Year Plan although no concrete project details on cost estimates are given in the Plan document. It has subsequently been announced 2/ that the land has already been acquired at Karachi and Lahore and that each of the two zones would be spread in an area of 500 acres which would be under the administrative control of an expert processing zone authority.

The Government will not provide any foreign exchange to the businessmen for import of machineries and raw materials etc. The foreign exchange will be provided by the sponsors of these industrial projects.

The export processing zones will have a large number of export oriented industries which will enjoy a number of benefits like exemption of custom duty on machinery, excise duty, sales tax etc. The main purpose is to step up the country's exports. An equally important aim is to bring in new sophisticated technology and to creat additional job opportunities for skilled and semi-skilled workers.

Preference will be given to such export-oriented industries which are based on raw material available in Pakistan, or are labour-intensive. These could include:

1/ Regarding IACP's consultancy services further reference is made to Syed Saeed Jafri "Consultancy in Developing Countries with particular reference to Pakistan", Pakistan Management Review, Third Quarter 1978. (The article is based on a paper presented at a UNIDO and Yugoslavia Government sponsored meeting at Ljubljana, June 1978).

2/ Pakistan Econom[illegible]

- electronic assembly;
- electronic components manufacturing;
- light engineering assembly and components manufacturing;
- jewellery manufacture;
- marble cutting and polishing and marble handicrafts;
- furniture and building materials;
- hospital equipment;
- sport goods of international standards hitherto not produced in Pakistan;
- garments, all types of knit-wear;
- electric bulbs and tubes;
- shipbreaking and re-rolling for export;
- tyre manufacture, shoes and leather manufactures;
- lubricating, blending;
- agro-based industries (incl. food canning);
- packaging industry;
- cargo handling equipment (cranes, fork lifts, touring units, conveyor etc.);
- automobile industry;
- refrigerators, air conditioners for industrial use;
- pre-fabricated housing industry.

Established in 1951, the Pakistan Standards Institution (PSI) is primarily responsible for the preparation of National Standards for various items of trade and industry and enforcement of these standards through the Certification Marks Ordinance, 1961. As of the end of 1975, PSI had established 1,345 standards. It has so far brought 42 standards under the Compulsory Certification Mark Scheme, of which 16 have been brought under the export scheme. Another important institution is the Patent and Designs Department.

The Pakistan Institute of Management was established in 1954 as a part of the Pakistan Industrial Development Corporation. The Institute now operates under a Board of Governors set up by the Ministry of Production. It carries out programmes of management development specially in the areas of business policy, finance and control, production management, marketing and international business development. It also provides counselling services designed to improve management performance in business and industry.

To promote small-scale industries the provincial governments have set up Small Industries Corporations/Boards. A number of small industrial estates, cottage industries development centres, training, design, sales and display

centres have been established in each Province. For instance, in Baluchistan as many as 94 different training and services centres were functioning in 1977/78, including 35 carpet centres, 43 embroidery sub-centres, 4 handicraft development centres, the Small Industrial Estate in Quetta, the Woodwork Centre in Sibi, the Pottery Development Centre in Dhadar and two handloom centres. In N.W.F.P. eight industrial estates are being set up, while the Punjab Small Industries Corporation manages five industrial estates and nine service centres (in the fields of ceramics, leather, metallurgy, light engineering, cutlery, sports goods and rubber and plastics). The Punjab Small Industries Corporation also provides pre-investment counselling and guidance to prospective entrepreneurs through the Small Industry Advisory Service. The Sind Small Industries and Handicrafts Development Corporation manages two industrial estates and has established three industrial parks in the rural areas of the Province.

The principal financial institutions providing long-term finance for private industry are PICIC (Pakistan Industrial Credit and Investment Corporation) and IDBP (Industrial Development Bank of Pakistan). IDBP is now fully Government owned, and the Government controls some 45 per cent of PICIC's share capital. At the time IDBP was established (1961), the Pakistan Government decided, to ensure an adequate division of labour, that while PICIC would concentrate on financing medium and large-scale industries, IDBP would operate primarily in the small- and medium-scale sector. Hence, minimum lending limits have been set for PICIC, and maximum limits for IDBP. These lending limits are based on the size of loans. PICIC's minimum lending limit is Rs. 1.5 million equivalent for foreign exhcange (Rs. 750,000 in backward areas) and Rs. 2.5 million for rupee loans. IDBP's maximum lending limit on foreign exchange is Rs. 3.0 million for limited liability companies and Rs. 1.0 million for others. Overall IDBP's maximum limits are Rs. 4.0 million and Rs. 1.5 million respectively. These upper limits on IDBP's financing do not apply to certain sectors, including textile loans. Most of IDBP's investment is for the larger small industries (assets of $50,000 to $ 200,000). This is appropriate as commercial banks are in the best position to assist the smaller small-scale industries due to their extensive branch network and because small-scale industries need mainly working capital. A new financial institution, the National Development Finance Corporation (NDFC) was established by the Government in January 1973 with an authorized and paid-in capital of Rs. 100 million. It was created to finance new public sector industries including those recently nationalized which were previously financed by PICIC. NDFC makes both long- and short-term loans. It also makes equity investments.

To encourage and facilitate non-repatriable investment in industrial projects by Pakistanis residing abroad and foreign nationals of Pakistani origin, an investment centre jointly sponsored by PICIC, IDBP and ICP has been established in London.

Although PICIC, IDBP and NDFC can make equity investments and underwrite public issues, their main financing activity is long-term lending. Securities and capital market activities are undertaken mainly by the investment Corporation of Pakistan (ICP), a Government-owned institution established in 1966. ICP performs the following major functions: (i) it underwrites new issues of securities and debentures; (ii) it opens and maintains investor's accounts for individual investors; (iii) it floats closed-end mutual funds; and (iv) it buys and sells shares on the stock market to encourage stability in share prices. Another institution playing an important role in channelling funds from the small investor to the stock market is the National Investment Trust (NIT), established in 1962. It promotes sales of units for investment in Trust Funds.

All Pakistani banks were nationalized in January 1974 and subsequently consolidated into five banks. They are under the control of the Pakistan Banking Council. The distribution of credit is guided by a National Credit Consultative Council (NCCC), set up in 1972 under the sponsorship of the State Bank of Pakistan (SBP; the Central Bank) with representatives of the Government and the private sector. The NCCC makes recommendations to the Government on monetary and credit expansion and distribution of credit among the various sectors. It also lays down targets for banks for provision of credit to agriculture, small business, small industry and housing. Commercial banks provide mainly short-term working capital although they can also engage in term financing up to a ceiling fixed by SBP. Industry accounts for some 40 per cent of their lending activity.

Commercial banks are the main source of financing for small-scale industry. Other institutions which play a role in financing small-scale industries are the Provincial Small Industries Corporations/Boards (SICs), the People's Finance Corporation (PFC), and the Equity Participation Fund (EPF). The Provincial Small Industries Corporations/Boards are the result of the dissolution of the West Pakistan Small Industries Corporation (WPSIC), which took place in June 1972 when its functions were transferred to the Provincial Governments under the Ministry of Industries and Natural Resources. Thus, the Punjab Small Industries Corporation, the Sind Small Industry Corporation,

and the NWFP Small Industries Development Board have been created. No corporation has yet been established in Baluchistan where WPSIC's activities are now under the Industries Department, Government of Baluchistan. In the same way as WPSIC did in the past, the Provincial Small Industries Corporations provide financing to small-scale industries through arrangements with a consortium of commercial banks and with IDBP. These arrangements, requiring the small borrower to deal with two institutions, have in many cases caused delays due to disagreements between the institutions.[1/] Through it is reported that some recent improvement has taken place, it has been suggested that a more efficient system should be devised.

A new financial institution, People's Finance Corporation (PFC) was set up in October 1972 with initial paid-up capital of Rs. 50 million, to augment the availability of credit to small borrowers. PFC provides all types of small loans to customers with net assets below Rs. 50,000 to a large extent for working capital, consumer durables, and some equipment. At present PFC makes extensive use of the branch network of the commercial banks, which process the loan applications on PFC's behalf and forward them to PFC's headquarters (Islamabad) for sanction. Most of the loans have gone to shopkeepers and traders, while small-scale and cottage industries (including artisans) have since 1972 received 14 per cent of gross approvals.

Finally it should be mentioned that insurance companies participate in industrial financing as members of underwriting consortia and as investors in corporate securities. Life insurance was nationalized in 1972 and the various private companies were merged into one single corporation, the State Life Insurance Corporation. National Insurance Corporation and Pakistan Insurance Corporation are functioning in the state sector in the field of general insurance. General insurance is also done by the private sector.

1/ The Small Industry Corporations prepare the appraisal report and the commercial banks/IDBP assess the credit worthiness of the borrower, an exercise which mainly involves an analysis of the borrower's credit standing and of collateral and securities. Though the functions to be performed by the Small Industry Corporation and by the commercial banks/IDBP are clearly defined, the commercial banks/IDBP have many times questioned the proposed projects on technical financial grounds (particularly in the case of IDBP which is more experienced than the commercial banks in project appraisal). The interest spread and the credit risk are shared by the Small Industries Corporations and the commercial banks/IDBP.

Chapter IV

PLANNING

A six-year National Development Plan was initiated in 1951 (1951-57) as part of the co-operative effort under the Colombo Plan. Within the framework of this Plan a two-year Priority Programme was drawn up. The industrial production recorded a sharp increase during 1950-1955, but the agriculture sector lagged behind. The recession which started in 1952, after the Korean boom, created many difficulties and necessitated a systematically planned approach for solving the economic problems of the country. With the First Five-Year Plan, 1955-1960, a new era of scientific approach to economic development started. It prepared the ground for rapid growth in particular by building up infrastructure which was inadequate to meet the requirements of future industrial development. During the First Plan period the national income increased by 11 per cent (again 15 per cent envisaged in the Plan).

The Second Five-Year Plan, 1960-1965, was successful in fulfilling its major objectives. The actual increase in national income over the Plan period was over 30 per cent (compared with the Plan target of 24 per cent). The Third Five-Year Plan, 1965-70, however, ran into difficulties soon after it was launched. The war with India in September 1966 resulted in diversion of domestic resources from development to defence and suspension of US aid. The climatic conditions (draought in 1965/66 and floods in 1966/67) also affected the agricultural sector adversely. The GNP increased, nevertheless, during the period by 5.8 per cent per annum (Plan target 6.5 per cent); the value added in manufacturing increased by 7.8 per cent (Plan target 10 per cent).

With the background of achievements attained during the previous three Plans and the socio-economic conditions prevailing in the country, the Fourth Five-Year Plan was formulated with the main objectives of maintaining the tempo of development in the country through maximum and efficient utilization of existing resources, reduction of disparity in per capita income and making the economy increasingly self-reliant in most of the essential fields. After the secession in December 1971 of East Pakistan, to become Bangladesh, the Fourth Plan could not be implemented and Annual Development Programes (ADPs) and Annual Plans were used as instruments of economic planning.

The current Fifth Five-Year Plan, 1978-83, was launched during the second half of 1978. The Plan objectives include the maximization of social welfare by improving efficiency and productivity and focussing on rural development and basic needs. During the Plan period the public sector is to concentrate on agriculture and infrastructural development and speedy completion of on-going industrial projects. The role of the private sector in industrial development is to be enhanced. The accent on increasing productivity and higher efficiency both in public and private sectors is expected to result in a substantial step-up of export earnings and domestic savings. (See further Chapter VII below).

Chapter V

INDUSTRIAL RAW MATERIALS LOCALLY AVAILABLE

Minerals

In Pakistan significant deposits of various minerals have been identified but their exploration has been limited. Lately substantial progress ahs been made in integrating the mineral development programme with the utilization of minerals. Examples are a ceramics complex based on china clay set up in 1977 producing a wide range of sanitary wares; a marble processing plant also in production in 1977; a ferro-chrome manufacturing plant in Baluchistan, a fertilizer factory based on rock phosphate deposits of Hazara and a sulphur refining plant in Baluchistan are all under implementation.

With the setting up of the Karachi Steel Mill the mineral sector will get a bigh boost. Except for iron ore, manganese and coking coal, which will be imported, the requirements of all other raw materials such as dolomite, fire clay, limestone, flourite, bauxite etc. will be met locally.

Table 13 shows the current production of principal minerals and targets for the Fifth Five-Year Plan 1978-83. A brief description of the present status of exploration and development of important solid mineral resources is given in the following paragraphs:

Barite: Significantly large deposits of good quality barite have been found in Baluchistan and in NWFP. Total available reserves are estimated by the Geological Survey of Pakistan at over 2.2 million tonnes. A barite spinding plant has been set up at Kluzdar town in 1976 as a joint venture between the Baluchistan Government and the Pakistan Petroleum Ltd. At full capacity the plant will produce 60,000 tonnes. The project is basically export oriented with the bulk of the products being exported to the Middle East Market.

Kaolin: China clay (kaolin) which is used, inter alia, in the manufacture of ceramics, refractories and paper is found mainly in various places in the NWFP. In 1977 a ceramics complex at Nowshera started using partly the clay of the Swat District, NWFP, for the manufacture of sanitary and china wares, tiles, etc.

Table 13. Pakistan: Mineral production targets for the Fifth Five-Year Plan (1978-83)

Minerals	Unit	Benchmark 1976-77	Target 1982-83	Annual rate of growth (%)
Coal	000 tons	1,120	1,700	7.2
Rock salt	"	412	650	7.9
Chromite	"	10	40	26.0
Antimony	"	0.25	1	26.0
Barytes	"	16	50	21.0
Marble	"	51	125	17.0
Bentonite	"	1	10	47.0
Fluorite	"	0.50	5.5	49.0
Magnesite	"	3	55	60.0
Fullers earth	"	14	30	13.5
China clay	"	7	40	34.0
Silica sand	"	70	90	4.0
Gypsum	"	422	1,500	24.0
Limestone	"	4,000	10,000	17.0
Rock phosphate	"	6	820	-
Fire clay	"	40	80	13.0
Dolomite	"	21	275	-
Bauxite	"	1	25	-
Soap stone	"	20	25	4.0
Sulphur	"	2	12	35.0
Gem stones	Rs. Million	10	400	-

Source: The Fifth Five-Year Plan (1978-83)

Dolomite: Large deposits of dolomite occur in different areas of Pakistan. Present annual production is about 2,700 tonnes which is expected to rise to 250,000 tonnes by 1981 to meet the requirements of the Karachi Steel Mills.

Fluorite: Fluorite mineralization of economic significance is found in two areas of Kalab district, Baluchistan. The demand for it will increase considerably when the Karachi Steel Mill goes into production.

Silica sand (glass sand): Fairly large deposits of low to medium grade silica sand occur in different parts of the country. The present requirement for silica sand is mainly met from the local production (about 58,000 tonnes in 1976/77). The production will increase manifold with the setting up of the Karachi Steel Mills.

Gypsum and anhydrite: Extensive deposits of gypsum are found in different regions in Punjab, NWFP and Baluchistan. Production in 1976/77 was 287,000 tonnes. The demand for gypsum and anhydrite will considerably increase with the expansion of construction activity and cement and fertilizer industries.

Limestone: The country's reserves of limestone are almost inexhaustible. Present production is over 3 million tonnes per year, which is expected to increase to 10 million tonnes by 1983, with the setting up and expansion of cement factories and the commissionning of the Karachi Steel Mills.

Rock phosphate: Rock phosphate deposits of possible economic value (as basic material for the production of phosphatic fertilizers and phosphoric acid) have been found in Hazara District, NWFP.

Rock salt: There are six major salt mines and querries in the country. The present production capacity of about 400,000 tonnes per annum is planned to be raised to about 650,000 tonnes by 1983.

Sulphur: Small reserves of sulphur are found in Koh-i-Sultan, Baluchistan.

Chromite: It is the only metallic mineral that Pakistan produces and exports. The main deposits are in Baluchistan. The production is about 10,000 tonnes. The entire production is presently exported. The most important use of chromite lies in the production of ferrochrome and stainless steel. Other industrial uses include manufacture of refractory chrome bricks and furnance linings, dyes, pigments, etc.

Coal: The coal deposits may be classified as lignite to sub-bituminous showing non-coking or weakly coking properties. The total available reserves of coal are estimated at 442 million tonnes and occur in Punjab, Sind and Baluchistan. The Pakistan Mineral Development Corporation is establishing a coal washing plant at Sharigh, Baluchistan with Canadian assistance. On completion the plant will produce 75,000 tonnes of washed coal annually for use in the Karachi Steel Mills.

Copper ore: Large deposits of copper have been found at Saindak, Baluchistan, near the border to Iran. For this purpose a new public sector agency, the Resource Development Corporation has been established. A detailed pre-investment study has been carried out under UNDP by Seltrust Engineering Ltd. The study indicates that three products, namely blister copper (about 15,000 tonnes annually) mild steel billets (about 17,000 tonnes) and sulphuric acid (about 148,000 tonnes) will be obtained from Saindak ore. The project is proposed to be started in 1979 and completed in 1981.

Iron ore: Total reserves of iron ore in the country are estimated at over 500 million tonnes. However, due to poor quality and small reserves, the presently known iron ore deposits of the country are not considered suitable for use in medium or large size integrated steel mills and the Karachi Steel Mills is therefore being based on imported ore. Recently, co-ordinated efforts have been started under the auspices of UNIDO by a team of geologists, mining engineers and metallurgists to re-appraise the technical feasibility of utilizing Kalabagh (Punjab) iron ores.

PIDC is supervising an exploitation scheme of iron ore resources in Baluchistan at Chickendik and Pashenkoh known to be medium grade of igneous origin which responds easily to magnetic benefication. The scheme is driving to prove a reserve of 100 million tons, which may be suitable to set up a DR/mini steel unit. 1/

Agricultural inputs to agro-based industries

The country's agricultural crops of major importance as inputs to agro-based industries are essentially cotton and sugar cane:

Cotton: The cotton production was at its highest level, 4 million bales, in 1971/72. A declining trend since then was reversed in 1977/78 when a 30 per cent production increase over previous year was recorded and a production of about 3.2 million bales achieved.

Sugar cane and sugar beet: Pakistan's industry has made rapid progress during the last 15 years. The number of sugar mills are increased from 2 in 1947-48 to 8 in 1960-61 to 19 in 1969-70 and 28 at present. Rising demand of white sugar and ready availability of raw material (sugar cane and sugar beet) in the country are the main factors contributing towards this progress. The following table gives the production of sugar cane in the country during the past five years.

Table 14. Pakistan: Production of sugar cane 1973-78

Year	Area	Production (000 tons)	Yield (Mds/Acre)
1973-74	1595	22,708	401,6
1974-75	1663	20,000	342,2
1975-76	1729	22,500	395,8
1976-77	1947	27,708	406,2
1977-78	1986	28,972	397,1

Source: Pakistan Economist, 10.2.1979.

1/ Possible assistance (under UNIDF) to study upgradation possibilities of these iron ore resources is being discussed.

The sugarcane produced in the country is not entirely crushed by the sugar mills for manufacturing white sugar. About one-third of the quantity produced is being crushed by the mills producing refined sugar, while the rest is utilized in making of gur, shakkar and Khandsari. Sugar production has been as follows:

Table 15. Pakistan: Production of sugar 1973-1978

Year	Production (000 tons)
1973-74	590
1974-75	485
1975-76	630
1976-77	711
1977-78	856

Source: Pakistan Economist 10.2.1979.

Table 16. Pakistan: Production of sugar 1977-78 by provinces

Province	No. of factories	Aggregate production in tons
Punjab	13 (based on sugar cane)	3,50,759
Sind	10 (based on sugar cane)	3,55,724
NWFP	5 (based on sugar beet)	1,50,011
Total	28	8,56,494

Source: Pakistan Economist 10.2.1979.

Pakistan has only 3.7 per cent of its total area under forests. Programmes of scientific exploitation of the forests and introduction of industrial forest plantation is underway.

Fish industry ranks high among those areas of the national economy which have great potential, including that of exports. Pakistan is rich in marine as well as inland fisheries resources. Marine fisheries account for about 87 per cent of total production.

Chapter VI

RECENT PERFORMANCE OF THE MANUFACTURING SECTOR AND PLANNED INDUSTRIAL DEVELOPMENT TARGETS

Overall performance of manufacturing sector

The manufacturing sector, which had been under constant pressure of numerous factors and experiencing recession during the last two years, revived considerably during 1977/78. It is estimated [1] to have recorded a growth rate of 4.7 per cent against a decline of 1.0 per cent during the preceding year. As directly contributing factors to this recovery have been put forward the policy measures introduced during the period by the present Government, such as demarcation between the role of the public and private sectors, denationalization of some nationalized industries, fiscal and monetary incentives and tax holidays for less developed areas.

The large-scale manufacturing sector which accounts for nearly 76 per cent of total industrial production was estimated to have increased in output during 1977/78 by 5.3 per cent (compared with a negative growth rate of 2.3 per cent during 1976/77). Among the major items contributing to this growth were: art silk and rayon cloth (9.0 per cent), vegetable ghee (15.9 per cent), sugar (22.9 per cent), and cigarettes (12.4 per cent). Production of cotton cloth was on the other hand lower in 1977/78 than previous year. The trends of industrial production in respect of the country's major industries are further illustrated in the table below:

1/ Pakistan Economic Survey 1977/78, Government of Pakistan, Finance Division, Economic Adviser's Wing, Islamabad.

Table 17. Pakistan: Trends of industrial production

Item	Weightage in total industrial production (1969-70 = 100)*	Unit	1975-76	1976-77	1976-77 July-Maroh	1977/78 July-Maroh	% change in 19777-78 (July-Maroh over 1976-77 (July-Maroh)
Cotton yarn	13.9	Mil. Kgs.	349.7	282.6	211.5	215.2	+ 1.7
Cotton cloth (exoluding hoisery, ready-made garments)	13.0	Mil. sq.metre	520.3	408.3	309.7	289.7	- 6.5
Art silk & rayon oloth	1.7	Mil. metre	9.9	17.5	12.2	13.3	+ 9.0
Vegetable ghee	2.7	000 tonnes	277.0	322.2	242.7	281.4	+ 15.9
Sugar	7.4	000 tonnes	630.0	736.3	576.1	708.0	+ 22.9
Cigarettes	4.5	Bil. Nos.	27.5	28.4	20.9	23.5	+ 12.4
Nitrogenous fertilizer	2.8	000 N/tonnes	314.9	312.3	247.2	241.8	- 2.2
Phosphate fertilizer		000 N/tonnes	11.8	13.4	9.7	9.8	+ 1.0
Sulphuric aoid	0.2	000 tonnes	46.2	45.2	34.5	37.8	+ 9.6
Caustio soda	0.4	000 tonnes	38.3	23.6	17.5 (prov.)	22.0	+ 25.7
Soda ash	0.4	000 tonnes	78.6	55.3	36.9	49.9	+ 35.2
Cement	2.6	000 tonnes	3196.0	3090.0	2286.0	2364.0	+ 3.4
Mild steel produot	2.7	000 tonnes	230.7	269.6	197.0	202.5	+ 2.8
Cyole tyres and tubes	0.5	000 Nos.	7392.0	7592.0	5566.0	5808.0	+ 4.3
Safety matohes	0.1	Mil. boxes	589.6	769.0	512.9	846.9	+ 65.1

Source: Statistics Division and Ministry of Industries.

* The index is based on produotion data of 76 major industrial items covering 76.9% of total value added.

Progress of some large-scale industries

Cotton textiles is the premier industry of the country and accounts for over 27 per cent of the value added in manufacturing. The industry is highly export-oriented and nearly 45 per cent of its products must be exported to ensure full utilization of existing installed capacity. The installed capacity in the mill sector at the end of 1977 was 3.52 million spindles and 1,200 open-ended spinning rotors. The total number of looms at the end of 1977 had declined to 26,000 from 29,000 a year earlier. While the number of looms in the mill sector has decreased, the increase in the non-mill sector has been rapid. The number of power looms in the non-mill sector is estimated at 55,000. The existing production capacity works out to about 2,000 million metres of cloth annually - 660 million metres in the mills and 1,360 million metres in the non-mill sector. The haphazard growth of the non-mill sector has, however, created problems of quality and efficiency.[1/]

There are in all 28 sugar mills in the country with an annual total production capacity of 816,000 tonnes. The production in 1977/78 was 708,000 tonnes. Of the 28 sugar mills, 5 mills (all located in the NWFP) produce sugar from beet. The main problem in capacity utilization of the industry is the availability of quality sugar cane in adequate quantities. Plans for future investment includes 16 new sugar mills out of which 9 will be installed in Punjab, 5 in Sind and 2 in NWFP.

1/ A paper by the Chairman of All Pakistan Textile Mills Association, Shaikh Enam Ellahi, entitled "Limiting factors in quality control" and published in Pakistan Economist, 3 March 1979, refers to the difficulties for the Pakistan textile industry as a whole in the actual operation area with inadequately trained manpower in respect of quality control practices throughout the production process. It draws attention to a recent study of the cotton textile industry in Pakistan, conducted (under World Bank agreement) by the consultants Werners International, in which major bottlenecks were identified, inter alia, in connexion with the age of machinery (60% of the machinery in the spinning operations and 57 per cent in the weaving were over 15 years) and preventive maintenance. Of the parts not made in the local machine shop approximately 50 per cent were purchased from domestic manufacturers and the balance imported. Domestic parts and supplies were considerably inferior to those imported. A review of the parts and supply usage during the year 1976-1977 indicated excessive usage of all items - shuttles, pin bobbins, pickers, etc. Excessive usage can be attributed to carelessness, improper adjustment by the mechanics, poor quality of local parts and poorly designed and manufactured machinery. Similar findings were put forward by Roy Nield, UNIDO expert, on the instrumentation and quality control procedures in the cotton textile industry of Pakistan.

The installed capacity of the country's five fertilizer plants, producing nitrogenous and phosphatic fertilizers, was in 1976/77 326,000 N/tonnes per annum and the capacity utilization was 100 per cent. Four major public sector fertilizer plants are presently being set up, namely,

- Pak-Arab Fertilizer (Multan) with the participation of Abu Dhabi Nat'l Oil Comp. Capacity: 450,000 tonnes ammonium nitrate, 305,000 tonnes nitrophosphate and 72,000 tonnes urea.
- Pak-Saudi Fertilizer (Sukkur). Capacity: 557,000 tonnes urea.
- Hazara Fertilizer Complex (Haripur, NWFP). Capacity in first phase: 95,000 tonnes urea.
- Fauji Foundation Fertilizer Project (near Sadiqabad). Capacity: 250,000 N/tonnes of nitrogenous fertilizer.

Table 18. Pakistan: Fertilizer industry. Existing installed capacity

Name of factory	Product	Capacity	
		tonnes	N/tonnes
Esso Pakistan Fertilizer Company, Daharki	Urea	173,000	79,000
Dawood Hercules Chemicals Ltd., Shaikhupura	Urea	345,000	158,000
National Fertilizer Factory Daudkhel	Ammonium sulphate	90,000	19,000
National Fertilizer Factory Multan	i) Ammonium nitrate	103,000	26,780
	ii) Urea	59,000	27,232
National Fertilizer Factory (i) Faisalabad (ii) Jaranwala	Single super phosphate	90,000	16,200
Total existing capacity	Nitrogenous	770,200	310,012
	Phosphate	90,000	16,200

Source: Ministry of Industries.

The Heavy Foundry and Forge in Taxila, which has been set up with technical and financial assistance of China, is the biggest project of its kind in Pakistan providing a metallugical base to the heavy engineering sector. The factory has an annual steel melting capacity of 60,000 tonnes and a production capacity of 46,000 tonnes of heavy castings and forgings.

Recognizing the key role which steel industry plays in the overall development, the foundation of the country's first integrated steel mill was laid in 1973 at Pipri near Karachi. The mill is being set up by the public sector company Pakistan Steel (PASMIC) with financial and technical assistance of USSR. The project is expected to start partial production in 1980/81 while full cycle of product mix as follows will be achieved in 193/84:

Coke	215,000 tonnes
Pig iron	135,000 tonnes
Billets	260,000/400,000 tonnes
H.R. Sheets	445,000/305,000 tonnes
C.R. sheets	90,000 tonnes
Galvanized sheets	100,000 tonnes
Formed sections	120,000 tonnes
	1,105,000 tonnes

Provincial development programmes

Major programmes have been developed at provincial level in the four provinces - Baluchistan, NWFP, Sind and Punjab. Among the specific projects for which allocations have been made may be mentioned:

In Baluchistan:
- Industrial estate at Uthal;
- Brick plant (automatic);
- Flourite project.

In NWFP:
- Industrial estate at Jamrud;
- Brick kiln plant;
- Various agro-based industries.

In Sind:
- Three sugar mills;
- Various projects of Sind Small Industries and Handicrafts Development Corporation.

In Punjab:
- Six sugar mills
- Three textile mills

Small-scale industry

Investment in small-scale industry has been increasing in a fairly fast pace (about three per cent annually) during the last few years but its growth potential is considerably more. The large number of small units it comprises and their wide dispersal makes it difficult to estimate the production and progress of this sub-sector with any degree of certainty. Available data suggests, however, that nearly 30 per cent of the value added in small-scale industry is generated by the unorganized textile sub-sector, 15-20 per cent by the engineering industry and another 15-20 per cent by food industries. Its overall contribution to the economy is substantial: 3.4 per cent (est.) of the GDP in 1977/78. According to the 1971/72 Labour Force Survey employment in the small-scale industry sector was about 2.0 million against only 0.3 million in the large industry. Annual investments in small industry since 1970 rose from Rs. 200 million to about Rs. 400 million in 1975.

The exports of some items produced by small-scale industry, such as carpets, handicrafts and sports goods, have been increasing very fast. From Rs. 773 million in 1974/75 the export of these three items rose to Rs. 1.214 million in 1976/77. As noted earlier various measures have been taken at the provincial level to promote the small-scale industry.

Public sector industry

As far as the state enterprises are concerned, the overall production index of all these enterprises for the 9 months period July 1977 - March 1978 showed an improvement of 9.3 per cent compared with corresponding period one year earlier. The highest increase was observed in PERAC (State Petroleum Refining and Petrochemical Corporation). At the end of December 1977 the total number of employees with state enterprises was 64.643 compared with 58.725 one year earlier.

Public sector investment is made both by the Federal and the Provincial Governments. While during the recent period investment at the provincial level has also been increasing, the bulk of the increase is accounted for by the federal public sector, i.e. the enterprises under the Ministry of Production. Investment in corporations formerly controlled by BIM is estimated to have increased from Rs. 854 million in 1974/75 to a programmed level for 1977/78 of Rs. 4,410 million (in current prices).

Private sector

The Government's policy of evolving a mixed economic order in which both public and private sectors could contribute to the industrial development of the country received a set back after the take over of basic industries in 1972, and private investment remained at a low level up to 1976/77. However, the measures and incentives provided to the private sector since late 1977 have contributed to a revival of the interest of the investors.

A sizeable package of fiscal concessions, financial benefits and corrective measures have been taken to boost industrial production and meet some major requirements of the private sector. These measures include reduction in interest charged by banks on all fixed investment, reduction in margin requirements for opening of letters of credit for the import of some industrial raw materials, increase in tax credit from 10 to 15 per cent of the cost of machinery and equipment meant for balancing of production and modernization, reduction of interest rate on bank advances for financing of exports of items covered by the Export Finance Scheme. Five-year tax holidays have been announced for industries set up in D.I. Khan and Malakand divisions and in Baluchistan.

An important policy decision taken by the Government in October 1977 was the demarcation between public and private sector operations in the industrial field.

Industrial investment during last decade

Gross fixed capital formation in the industrial sector has increased sharply during the last few years. It rose from Rs. 1,130 million in 1972/73 to an estimate Rs. 7,295 million in 1977/78 (in current prices). Despite price escalation, gross fixed capital formation in real terms has also increased substantially. The following table shows the trends during the last 15 years in respect of industrial investment, both in the private and the public sectors.

Table 19. Pakistan: Gross fixed capital formation in industrial sector 1963/64 - 1977/78 (current prices)

(million rupees)

	Private industrial investment			Public industrial investment	Total industrial investment
	Large- and medium-scale	Small-scale	Total		
1963-64	1,044.1	124.4	1,168.5	39.8	1,208.3
1964-65	1,188.1	135.4	1,323.5	132.7	1,456.2
1965-66	1,084.0	146.0	1,230.0	133.5	1,363.5
1966-67	1,022.2	162.9	1,185.1	134.1	1,319.2
1967-68	1,050.8	167.1	1,217.9	148.5	1,366.4
1968-69	1,033.3	174.0	1,177.3	93.7	1,271.0
1969-70	1,208.2	187.7	1,395.9	179.2	1,575.1
1970-71	1,224.0	201.7	1,425.7	68.2	1,493.9
1971-72	1,016.3	219.1	1,235.4	98.5	1,333.9
1972-73	763.1 (a)	255.9	1,019.0	110.6	1,129.6
1973-74	697.3 (a)	325.5	1,022.8	382.3	1,405.1
1974-75	990.0 (a)	446.5	1,436.9	1,064.9	2,501.8
1975-76	1,309.0 (a)	509.5	1,818.5	3,181.6	5,000.1
1976-77	1,209.7	585.3	1,795.0	4,560.3	6,355.3
1977-78 (prel.)	1,188.9	642.3	1,831.2	5,463.9	7,295.1

Source: Statistics Division

(a) Excludes Rs. 25.8 million for the year 1972-73, Rs. 35.4 million for 1973-74, Rs. 78.6 million for 1974-75 and Rs. 100.7 million for 1975-76 as investment in BIM industries but includes investment in ghee establishments up to 1972-73 only.

Table 20. Pakistan: Industrial investment sanctions in the private sector (million Rs.)

Agency	1975/76	1976/77	(July-March) 1977/78
Pakistan Industrial Credit and Investment Corporation (PICIC)	313	393	235
Industrial Development Bank of Pakistan (IDBP)	452	140	130
Investment Promotion Bureau (IPB), Textile Commissioner	1,016	378	1,097
Total	1,781	911	1,462

Source: Pakistan Economic Survey 1977/78.

Envisaged investment in industry up to 1983

Investment in industry during the period 1978-83 is proposed in the Five-Year Plan at Rs. 40 billion, Rs. 21 billion in the public sector and Rs. 19 billion in the private sector. The salient feature of the public sector investment programme is that about 69 per cent is in basic metals (including Karachi Steel Mill), 14 per cent in fertilizers, 10 per cent in machinery (including electrical machinery and transport equipment), 9 per cent in cement and 6 per cent in chemicals and petrochemicals. The phasing of the programmes identified for the industries sector will, it is stated in the Plan document, depend upon the availability of resources, the implementing capability of the executing agencies, the dynamism of the private sector and the requirements of the economy. Most of the investment in agro-based industry, particularly in textiles, food processing and the small-scale industries, will take place in the private sector.

The public sector investment programme in the Fifth Plan 1978/83 contains following elements:

On-going Programme:	(Million Rs.)
Karachi Steel Mill	11,150
Cement (seven projects)	2,420
Fertilizer (including Hazara Phase II)	1,900
Sugar	382
Other on-going projects	317
Sub-total	16,169
New projects:	
Tractor plant	1,260
Pulp plant (Hazara)	50
Mini steel mill (Shahwali)	100
Heavy Mechanical Complex (HMC and PMTF (BMR)	300
Transport equipment	560
Others	2,561
Sub-total	4,831
Grand total (Public sector)	21,000

In the private sector the Plan document foresees that out of the programme of Rs. 19 billion, Rs. 3.9 billion will be for the fertilizer projects, Rs. 1.3 billion for the completion of 3 cement projects and Rs. 1.2 billion for 6 new sugar mills. The remaining Rs. 12.6 billion is intended for other private sector investment, including Rs. 4.8 billion for textiles. It is difficult to forecast with accuracy the flow of private investment to the various industrial sub-sectors. In implementing the Plan it is to be ensured that the potential for growth in any field is not suppressed by the lack of financial provision in the investment programme for the private sector. This is intended to be done by providing a suitable mechanism in the implementation procedures to ensure flexibility and enable periodical shifts in the investment strategy, keeping in view the trends that emerge during the coming five years.

The announcement in April 1979 of the Industrial Investment Schedule envisaging a gross investment of Rs. 39.5 billion in the industrial sector during the Fifth Five-Year Plan marks the re-introduction of a framework for industrialization for the private sector. The last Industrial Investment Schedule was announced in 1971 spelling out investment targets for industry in the

private sector for the Fourth Five-Year Plan. This schedule, although it soon became outdated and irrelevant in many respects, continued to be a source of guidance for the industrial financing agencies and the private sector as a whole for a long time.

The Industrial Investment Schedule is required in view of the limited foreign exchange resources and the pursuance of a policy of planned development. It presents a framework for investment in 16 main categories of industries which have been further divided into 129 types of specific industries. About 83 per cent of the scheduled investment of Rs. 39.5 billion will cover projects in new industries while the remaining 7 per cent will be used for balancing and modernization of existing industrial units. The scheduled investment for the 16 major groups is shown in table 21 below.

The envisaged investment spread over five years gives an average investment of Rs. 7900 million per annum. A crucial element is the fact that the proposed investment (according to the schedule) involving foreign exchange is to the extent of 55 per cent of the total.

Production targets 1978-83

The implementation of the industrial investment programme is expected to result in a 12 per cent per annum growth in large-scale manufacturing and a 10 per cent per annum growth in industry as a whole during the Fifth Plan. The target, though high in relation to the recent performance, is consistent with the investment proposed for this period. The production and capacity targets for the major commodities are summarized in the following table 22.

Table 21. Pakistan: Industrial Investment Schedule during the Fifth Five-Year Plan 1978-83, divided into 16 main categories of industries

Main category of industry	Total allocation (in million rupees)	External cost (in million rupees)
Food, tobacco and beverages	5,646	2,030
Textiles	6,211	3,792
Leather, footwear and leather goods	490	294
Rubber and rubber products	655	401
Paper and pulp	1,755	1,082
Chemicals, pharmaceuticals and fertilizers	8,573	4,363
Petroelum refining and petro-chemicals	1,000	600
Cement and other non-metallic minerals and their product	3,391	1,663
Basic metals	1,479	972
Metal products other than machinery and transport equipment	907	482
Machinery other than electrical	4,138	2,643
Electrical machinery, appliances and fittings	758	464
Electronic industry	1,055	730
Service and miscellaneous industries	1,410	793
Other industries not elsewhere specified	325	115

Source: Pakistan Economist, 28.4.1979.

Table 22. Pakistan: Production and capacity targets for the Fifth Plan (1978-83)

Item	Unit	1976/ 1977 Actuals	1977/ 1978 Estimates	1982/ 1983 Production Targets	1978/ 1983 Annual growth (%)	1982/ 1983 Capacity Targets
White sugar	000 metric tons	736	800	1000	4.6	1100
Vegetable ghee	000 metric tons	324	360	450	4.6	460
Refined vegetable oil	000 metric tons	40	52	200	31.0	200
Cigarettes	Billion numbers	28	32	42	5.6	42**
Cotton yarn	Million kgs	202	295	948	13.2	3900 (No. of spindles)
Cotton blended cloth	Million sq. metres	1400	1500	2665	10.4	100 (No. of looms)
Textile finishing	Million sq. metres	940	1035	1440	6.8	1600
Footwear	Million pairs	110	112	145	5.3	160
Paper	000 metric tons	27	25	72	23.0	80
Board	000 metric tons	38	35	72	15.5	80
Soda ash	000 metric tons	55	74	103	6.9	114
Caustic soda	000 metric tons	25	32	98	25.0	100
Sulphuric acid (non-captive)	000 metric tons	7	9	21	18.5	26
Fertilizers						
(a) Nitrogenous	000 N. tons	314	320	1196	30.2	1219
(b) Phosphatic	000 N. tons	14	14	185	65.0	194
Polyester	000 metric tons	-	-	30	..	30
B.T.X.	000 metric tons	-	-	25	-	25
Carbon black	000 metric tons	-	-	10	-	10
Tyres other than scooter/cycles (including retrading)	000 numbers	194	215	600	23.0	610
Cement	000 metric tons	3091	3150	6000	13.0	6700
Sheet glass (3 mm thickness)	Million sq.ft.	29	31	65	16.0	87
Iron and steel (excluding pig iron)	000 metric tons	-	-	800	-	1100
M.S. Products	000 metric tons	264	280	450	10.0	914
Castings	000 metric tons	86	86	*		
Special steel	000 metric tons	10	10	18	-	20
Bicycles	000 numbers	211	225	550	19.6	600
Electric fans	000 numbers	150	198	490	19.8	700

* Detailed survey of existing foundries to be undertaken before additional capacity is created.

** Two shift capacity

Source: The Fifth Five-Year Plan (1978-83).

Chapter VII

MAIN FEATURES OF PAKISTAN'S INDUSTRIAL DEVELOPMENT STRATEGY

The investment and growth policies of the Fifth Five-Year Plan, 1978-83, have been devised to remove the basic weaknesses of the economy and to impart to it the basis for sustained growth relying on domestic effort. The Plan is, furthermore, aimed at meeting the basic needs of the population and promotion of equity. Among specific principal objectives pursued, the priority attention to be given to development of rural areas and of backward regions should be noted and, consequently, the main focus of the Plan is on the rapid development of agriculture based on an efficient utilization of the country's potential and a 6 per cent growth rate in agriculture is projected.

The industrial sector strategy in the Fifth Plan seeks to achieve: (i) a large increase in the rate of industrial growth; (ii) an increased degree of import substitution in basic industrial inputs; (iii) an increase in manufactured exports; (iv) emphasis on small- and medium-sized labour-intensive industries; (v) increased emphasis on agro-based industries; (vi) restriction of public investment to ongoing projects; and (vii) a substantially increased role for the private sector in industrial development.

Basic industries — steel, cement, heavy chemicals, fertilizer and agricultural machinery — are assigned first priority in the industrial strategy; investment in these industries would amount to 65 per cent of total public and private investment. These investments are designed to implement the strategy of achieving import substitution and self-reliance in industry. As the Plan document states:

> "The first priority is being given to the creation of a sizable base of manufacturing units for producing basic industrial and agricultural inputs. Without sizable domestic production of such basic inputs as steel, cement, heavy chemicals, fertilizers and agricultural machinery, no policy to build a viable capital goods industry or to achieve self-sufficiency in agriculture can succeed. Basic commodities like steel are of no particular use unless the capability to convert them into final products also exists. Therefore, it is proposed to enhance the capability of the capital goods sector, through balancing and modernizing existing facilities and creating new capacities, to effectively utilize the envisaged output of the Karachi Steel Mill."

Although in the initial phase emphasis is being placed on the completion of the Karachi Steel Mill and the fertilizer and cement factories under implementation, public sector industrial development will generally be

confined to modernization and balancing of capacity. The only new major project in the public sector is for the manufacture of tractors in collaboration with Massey-Ferguson. Private sector investment will be encouraged to increase substantially and to play its full role in the industrial development of the country.

With the announcement in April 1979 of the Industrial Investment Schedule the Government set out the parameters for the envisaged development of the private sector industry during the next five years. As noted earlier the Schedule aims at the high growth rate of large-scale manufacturing value added of 12½ per cent. The growth of the industrial sector has, however, been passing through a phase of problems and difficulties - the growth of value added in large-scale manufacturing was negative, declining by 1 per cent, in 1976-77 and improving in 1977-78 by only 4.7 per cent - and major efforts will be required if the targets set by the Investment Schedule are to be met. It may be emphasized that the growth in the industrial sector is influenced, inter alia, by the policies pursued by the Government in various spheres namely fiscal, monetary, social aspects including labour laws, company laws, etc. Assuming that the flow of investible funds - both in foreign exchange and local currency, is well maintained during a given period, but other conditions governing the private sector investment climate and business outlook remain not fully satisfactory, then the investible funds are likely to be diverted to other profitable avenues, and not in fixed investment in industries. This has been very much the trend during the past six to seven years which is evident from the strident growth in housing industry and import and retail trade while the industrial sector remained neglected. It is, therefore, important that suitable fiscal, monetary and other inventives should be evolved to make investment in industry comparatively attractive and possessive of safe and sure return. The targets relating to levels of investment in various industries as also the projections of growth in the industrial sector may then be achieved. There seems also to be a need to simplify the procedures governing sanctions of investment.

As far as the development of the various branches of industry is concerned the first priority is, as mentioned above, being given to the creation of a sizeable base of manufacturing units for producing basic industrial and agricultural inputs.

After producer goods, priority is being accorded to industries based on indigenous raw-materials. Nearly 38 per cent of the investment in industry in the Fifth Plan is earmarked for agro-related industries. A large part of this investment will be in the private sector on small industries located in or near rural areas. These will include agricultural processing industries such as rice husking, cotton ginning, wheat milling, oil crushing and sugar making. The development of new industries based on agricultural by-products and waste products, such as molasses, bagasse, wheat and rice straw etc. will be encouraged and traditional industries like leather and footwear, textile, carpets etc. will be supported. On the mineral side, the emphasis is on mineral exploration aiming at a significant expansion of mineral-based industries in the long-term.

A notable feature of Pakistan's industrialization has been its export orientation and in the Fifth Plan period this emphasis will continue primarily directed towards industries based on local raw materials and moving towards the production of more finished items with a higher component of domestic value added. One measure in this context is the planned establishment of export processing zones in Karachi and Lahore (see p.26 above).

With a view to conserving foreign exchange and moving towards self-reliance, investment in import substitution industries will continue on a selective basis during the Fifth Plan period.

Another important objective of the Fifth Five-Year Plan is the laying down of the foundations of long-term economic growth - to invest in technology and build up infrastructure at times ahead of demand. In order to build up technological skills, the investment in basic and engineering industries will be of particular importance as will be the increased attention given to training of skilled manpower and to scientific and technological research.

Chapter VIII

EXTERNAL ASSISTANCE TO THE MANUFACTURING SECTOR

UNIDO's technical co-operation programme with Pakistan

The second UNDP Country Programme for Pakistan with an IPF of US$52.5 million for the period 1977-1981 was approved by the UNDP Governing Council in June 1977. Although the final version of the Pakistan Fifth Five-Year Plan 1978-83 was not completed at that time, the Country Programme document was drafted when preparatory work on the Plan had sufficiently advanced in identifying the main aims and policy objectives of the Government to permit the Country Programme to be based on those aims and objectives. The central theme of the Plan of particular relevance to the industrial sector component of the Country Programme is the generation of a momentum placing the economy on a self-sustaining growth path leading to the attainment of continuous and visible improvements in the living standards of the population at large and in all regions.

Bearing in mind the aims set by the Government to double the country's industrial output during the current planning period and the considerable need for various priority inputs, a selective approach was used in the UNDP programming work, based on the consideration of the quality of expertise which could be provided in the specific priority areas.

To combat the notorious underutilization of the installed production capacity and the poor use of the invested capital, assistance aimed at the improvement of the management practices was provided already during the First Country Programme and has been further developed during the Second Programme period in respect of selected key sectors or enterprises. Such assistance is aimed at introduction of modern business control and marketing practices and at effective production techniques. Fairly comprehensive assistance to textiles, leather and metal-working industries was thus provided during the First Country Programme. In all three cases UNDP involvement spread from the shop floor engineering to the raw materials base thus encouraging development of vertically integrated industries. In the case of cotton the involvement ranged from the research of cotton growing to engineering assistance in the spinning, weaving and finishing shops; in leather the activities stretched from cattle breeding through the processing of skins and hides to the production of leather goods; in metal-working

the project involved the evaluation of local minerals, the development of appropriate processing technologies and the provision of advisory services to the engineering companies. The activities in the three sectors are continuing during the Second Country Programme period:

(i) DP/PAK/71/562 Cotton Textile Industry Research and Development Centre

Assistance has been provided, 1972-1978, to the Cotton Textile Industry Research and Development Centre in improving methods of production for increasing both machine and labour productivity, applied research and product development of cotton manufactures. Total project costs: approximately US$1,260,000. Training programmes conducted by the Centre are continuing with support given under project DP/PAK/78/055, Development of Textile Training Systems.

(ii) DP/PAK/78/027 Leather Industry Development

Assistance has been and will be provided 1974-1980 to the Leather Development Board, the Gujranwala Leather Institute and specific industries in area such as improvement of hides and skins, leather preparation and design of shoes, leather garments and other leather products. Total project costs: approximately US$990,000. This project is leading to a new project to set up a Leather Products Development Centre, DP/PAK/79/022.

(iii) DP/PAK/77/018 Metal Advisory Service

Assistance has been provided during 1975-1978 to the Government in promoting better use of existing metallurgical and mineral industrial and improving testing and quality control facilities. The Service is finding increasing recognition of its leading role in supporting metal industries and organizing the efforts of the various departments associated with the ores and metal trade. 1/ Total project costs: approximately US$1,060,000 for current - Phase II - project. (DP/PAK/73/033 - the Phase I project - had a cost of US$365,000.) One spin-off of the Service is the small-scale assistance project IS/PAK/78/802, Assistance to Northern Foundries.

Similar considerations are given to the assistance to the development of the capital goods industry which started during the First Country Programme but was discontinued due to the UNDP emergency measures of 1976:

DP/PAK/76/003 Capital Goods Industries Development 1/

The immediate objectives of the assistance invisaged under this project are being formulated, the purpose of the project being to foster the development of the capital goods industry within the framework of the overall economic and industrial development of the country and to that end in particular to identify and select fields for new industries. Advice should, inter alia, be rendered in respect of policy measures and incentives and institutional measures for training, financing and investment promotion to ensure the successful development of the capital goods industry sector. Total estimated costs (up to 1981): US$266,000.

1/ A comprehensive note entitled "Development of Capital Goods Industries in Pakistan" was prepared by Mr. Askari Taqui, Director General, Investment Promotion Bureau (and Project Director for DP/PAK/76/003) for the UNIDO-sponsored Seminar on Strategies and Instruments to Promote the Development of Capital Goods Industries in Developing Countries held in December 1979 in Algiers.

Further industry sector UNDP/UNIDO assistance is programmed in the following cases:

(i) DP/PAK/75/038 Development of Federal Chemical and Ceramics Corporation

The purpose of this project is to improve present low ratio of sales to capital employed through strengthening of the management and technical capability in existing chemical and ceramics industrial units and co-ordination of production programmes among the 12 units of the Federal Chemical and Ceramics Corporation (FCCCL). UNDP resources required: Phase I: US$400,000; Phase II: US$900,000. Furthermore, a short-term expert worked with the FCCCL in 1979 under project IS/PAK/78/803, Preventive Maintenance to FCCCL.

(ii) Discussions have been held by the SIDFA with the Federal Chemical and Ceramics Corporation (FCCCL) for large-scale assistance, Plastic Advisory Services, with the aim at improving technological processes involved in plastic industry, quality control and testing of plastic material, semi-finished articles, blow moulding, extrusion, and vacuum for forming and reinforced plastics. Expected amount of resources required: US$400,000.

(iii) DP/PAK/75/071 State Engineering Corporation.

The immediate purpose of this assistance would be to identify technical requirements and propose operational procedures for two of the Corporation's units: Pakistan Engineering Company (PECO) and Pakistan Machine Tool Factory. Assistance to the Corporation in the field of production management and marketing is also to be included. Total project costs are estimated at US$270,000. (Preparatory assistance of US$62,000 has been approved).

(iv) Assistance is, furthermore, to be provided under the Country Programme to the Ministry of Production for the preparation of a master plan for iron and steel (DP/PAK/79/020) which would set out the country's detailed requirements of iron and steel for the comming 20 years along with the most suitable and economic production processes. Required resources: US$200,000. In addition, technical assistance has been discussed with Pakistan Steel and approved for a project involving the provision of highly specialized training to senior Pakistan personnel of the first integrated steel mill in the fields of sintering, coke oven and blast furnace technologies (IS/PAK/79/802).

(v) Assistance will be provided to the Ministry of Science and Technology in the establishment of a National Institute of Electronics (DP/PAK/79/801). The purpose of the project will, inter alia, be to carry out design and development work for public and private organizations; to develop Pakistan's know-how and expertise in electronics; and assist with standardization of components, equipment and systems. UNDP resources required for the initial phase (under SIS) are US$32,000. Total UNDP resource requirements are estimated at US$900,000.

(vi) As follow-up of a SIS advisory mission to the Pulp and Paper Industry (IS/PAK/78/801), carried out by a consulting firm in January 1979, when various pulp and paper plants were visited, assistance in that field is envisaged. Technical co-operation in the field of rice straw pulping with Rakhta Pulp and Paper Mill in Egypt is sponsored by UNIDO under IS/PAK/79/803.

Interest has recently also been expressed by the State Cement Corporation of Pakistan for possible UNIDO assistance to the cement industry, covering the operation of existing units as well as the long-term development of the industry in the country by the establishment of new units.

Activities concerned with the quality of products and with standardization are closely associated with the assistance mentioned above. UNIDO projects oriented towrds assurance of quality of exportable goods and towards the creation of quality awareness in the factories as well as among the users, include the following:

(i) DP/PAK/75/077 Product Adaptation and Production of Small-scale Industries Textile Products

Assistance has been provided during 1975-1977, to improve textile design and expansion of export markets in small-scale industry textile products.

(ii) DP/PAK/73/043 Standardization and Quality Control

Assistance has been provided to the Central Testing Laboratories since late 1978 and is scheduled through 1980 with a total cost of approximately US$345,000. A local consultant firm is to be used at an initial stage to assess and advise on the role which the CTL is playing and on the use of its services to industry, before the ways and means to strengthen CTL are decided upon.

(iii) UF/PAK/78/142 Low-cost Automation for PITAC

Assistance is to be provided to PITAC comprising the services of an expert and certain equipment in the field of low-cost automation. [A project to assist in Reorganization of PITAC VC/PAK/78/C01 has been suspended due to lack of financial resources to provide the needed buildings to accomodate equipment requested under the project.]

(iv) UF/PAK/78/187 Maintenance Training Workshop for PITAC

The formal request for assistance has recently been received.

In order to strengthen the planning cell of the Ministry of Industries assistance in the field of industrial planning and statistics is programmed (DP/PAK/79/002). Required resources: US$50,000.

Large-scale assistance, under IPF, to the Investment Promotion Bureau has been approved for the development of a portfolio of investment prospects for promotion of industrial investment (DP/PAK/78/054). Envisaged UNDP resource requirements are: First Phase - US$280,000; Second Phase - US$1,500,000. The target starting date is the fourth quarter of 1979.

Under project DP/PAK/75/062 assistance is to be provided to Investment Advisory Centre of Pakistan (IACP) with the objective to train its consultants level staff. IACP is a semi-autonomous non-profit organization under the Ministry of Industries. It has within its staff presently four senior consultants. IACP is currently associated with two exercises jointly with institutions in a number of other Asian Countries (Bangladesh, India, Nepal, Philippines, Sri Lanka and Thailand). The first is to assess the performance of public sector enterprises. The second is connected with the socio-economic factor affecting the assimilation and diffusion of technologies in industry as determined from the extent of consumption of imported technologies and local production with a view to suggesting policy measures to governments. IACP is in the process of establishing a management consultancy service section.

Possible large-scale assistance to the Pakistan Institute of Management (PIM) aiming at improving its performance and the setting up of a management consultancy service, is being discussed in co-operation with ILO.

Under project UF/PAK/78/179, a Small-scale Industry Survey is to be carried out to identify remedies and operational procedures of small-scale industries in five areas as a follow-up of a survey carried out in late 1978. IACP will act as counterpart agency for sport goods, textiles and leather and leather products, PITAC for light engineering and MAS (DP/PAK/77/018) for surgical goods industries. The resource requirements for the second phase (PAK/79/014) are estimated to be US$200,000.

UNDP/UNIDO assistance in the field of industrial training - DP/PAK/73/055, DP/PAK/78/056 and DP/PAK/78/055 - has consisted of individual training fellowships in various fields and - in the case of the last mentioned - the development of textile training systems in the country (which has been developing from project DP/PAK/71/562 mentioned above). Project DP/PAK/78/056 covered a training programme-cum-study tour which UNIDO organized in the field of export processing zones (EPZ) to Ireland, Republic of Korea, Philippines and Sri Lanka. (Further assistance in planning, establishment and operation of EPZs is being envisaged.)

In the field of energy conservation, a project is being formulated to explore means and methods for savings through fuel efficiency drive and standardization; compile and disseminate technical information and manuals regarding efficient use of industrial furnances oil gas; set up technical advisory services covering energy audit-energy management system and fuel efficiency engineering; promote research and development of energy devices like burners, recouperators, heat exchangers, flow masters, control devices, instrumentation; promote research and development regarding technological processes and alternatives, technoeconomic analysis and inter fuel substitution; and make recommendations regarding Government measures, monitoring schemes and incentives. UNDP resources required for the initial phase (under SIS) are $75,000. Total UNDP resources are estimated at US$1,800,000.

A request hase also recently been made for SIS assistance in the preparation of a number of prefeasibility and feasibility reports on utilization of agricultural wastes in industry.

Requirements of large-scale technical assistance are envisaged in connexion with the planned establishment of a National Institute of Agricultural Mechanization and Agricultural Machinery (NIAM) within the framework of the Pakistan Agricultural Research Council (PARC). [1/] The Pakistan Executive Committee of the National Economic Council (ECNEC) is currently considering the proposal by PARC for the establishment of NIAM which is to have the task of undertaking research and development work on a wide range of agricultural machinery for farmers in Pakistan. It will have a comprehensive programme for the promotion of the agricultural machinery industry in co-operation with the farm machinery research institutions in the various provinces of Pakistan and appropriate manufacturers.

In October/November 1976 at the request of the Government, a joint IDRC[2/] UNDP Mission undertook a detailed study of scientific and technical (S and T)

1/ See memorandum by Mr. Swamy Rao, Senior Interregional Adviser, UNIDO, of 13.12.1979, entitled "Pakistan: Possible assistance to National Institute of Agricultural Mechanization".

2/ IDRC = International Development Research Centre, Ottawa, Canada.

information needs in Pakistan and made recommendations on the future structure and development of a national S and T information network. Already in 1957 a nucleus for S and T information, known as the Pakistan National Scientific Documentation Centre (PANSDOC), had been set up (with assistance of UNESCO). In the late 1960s, a project was formulated to convert this nucleous into a fully-fledged Pakistan Scientific and Technological Information Centre (PASTIC) and work on this expanded project was started in 1974. The PASTIC project was based on the concept of a centralized service, which was consistant with what was then being attempted by most developing countries. Experience of many countries, however, indicated that such service could succeed only where highly trained manpower was available and where the investment made was considerable. Pakistan did not have these resources and the joint IDRC/UNDP Mission was arranged for to review and evaluate the role of PASTIC based on a detailed analysis of the existing situtation and anticipated future requirements. The conclusions and recommendations of the Mission Report 1/ have been incorporated in a revised plan for PASTIC which is being considered by the Government. The recommendations made by the Mission were reflecting the shift, now adopted by many industrialized as well as developing countries, away from a centralized concept of information service to one that is based on the cooperation of a network of information centres each offering national service within its area of specialization. One of the principal functions PASTIC should have would be the development of services to repackage technological information in suitable forms to make it more readily assimilated, either directly or through extension services, by small and mediumascale industries.

A Working Paper on programming perspectives for the industry sector for the Third Country Programme Cycle was prepared in draft by the SIDFA, Mr. M. K. Hussein in mid-1979. 2/ Mr. Hussein gives the following listing of areas on which the contribution of the Third Cycle programme in the industry sector might be designed to concentrate:

1/ "Scientific and Technical Information in Pakistan", report of a joint IDRC/UNDP Mission, October-November 1976. Pakistan Science Foundation, Islamabad. The Mission was organized and financed by UNDP and IDRC with experts also provided by UNESCO and UNIDO.

2/ Annex III to Quarterly Report on Pakistan PAK/QR/SIDFA/79/2 prepared by Mr. M. K. Hussein, June 1979.

(i) enhancing the capabilities of the capital goods sector through balancing and modernizing existing facilities and creating new capabities to effectively utilize the envisaged output of basic industries, mainly the Karachi Steel Mill;

(ii) supporting the production technologies and development of newly constructed basic industries;

(iii) identifying activities needed in the agro-intrudies field and promoting these activities;

(iv) supporting cottage and small-scale industries by providing the adequate technical know-how and assisting the control of product qualities through the establishment of advisory service centres;

(v) demonstrating the means and methods for economic utilization of energy and energy saving in industrial enterprises;

(vi) supporting the fields where assistance under TCDC is provided;

(vii) increased emphsis on industrial training.

Other UN system-wide technical co-operation activities in Pakistan of relevance to the industrial sector

UNDP/TTC assistance has been provided under DP/PAK/73/041 to the Export Promotion Bureau since 1974 at a total cost of approximately US$525,000. The assistance aims at expanding exports of non-traditional commodities. Among UNDP/ILO projects may be noted one on employment promotion carried out 1975-1978 at a total cost US$162,000. Purpose of the project was the strengthening of the Federal Manpower Division and the development of a strategy for rural development promotion. UNDP/UN large-scale assistance has been provided to the Resources Development Corporation in its plans to develop the Saindak copper deposits.

UNDP assistance will be provided under a project entitled Transfer of Know-how through Expatriate Nationals (DP/PAK/78/026) with the objective of organizing the scheme whereby outstanding specialists of Pakistani origin serving abroad might visit Pakistan to render short-term consultancy services with a view to supplement local knowledge and thereby making contributions in the implementation of high priority sector programmes. The visiting consultants will be expected to provide to their host agency proposals or recommendations on policy issues, technical matters or organizational or institutional arrangements. It is foreseen that, as a matter of fact, follow-up with the expatriate national on return to his country of residence will be instrumental in the development of institutional linkages between the organization employing him and the Pakistani relevant institutions. The total UNDP inputs are US$148,000 which are expected to cover, inter alia, approximately 50 consultants' assignments of 2 to 8 weeks each.

Bilateral assistance in the industrial sector

Examples of current large-scale bilateral assistance project are the following:

(i) Pak-German Wood-Working Centre, Peshawar,

Assistance was provided by FRG 1971-1979.

(ii) Small Industries Development Board, Peshawar

Assistance to help the SIDB, NWFP in the promotion of small- and medium-size industries was provided by FRG 1975-1978.

(iii) Model Training and Footwear Centre in Gujranwala

Provision was made of equipment, machinery and layout services, by FRG 1975-1977. (Advisory service were provided by UNDP/UNIDO).

(iv) Promotion of the Punjab Small Industries Corporation (PSIC)

was provided 1968-1979 by FRG:

(a) Metal Industries Development Board, Sialkot
(b) Assistance to Punjan Small Industries Corporation, Lahore

(v) Ceramics (Porcelain/Refractories)

Expert assistance was provided to PCCC for their Swat ceramic factory and to the PCSIR for their Lahore laboratories by Japan 1977-78.

(vi) Rice Bran Technology

Expert assistance was provided to the PCSIR for their Karachi laboratories by Japan 1977-78.

(vii) Harappa Textile Mills

Provision of equipment for approx. US$505,000 was provided by the Netherlands in 1977, for the modernization of Harappa Textile Mills.

(viii) Pakistan Design Institute

Assistance aiming at the enhancement of the capacity of the Pakistan Design Institute in Karachi to provide services in the areas of product, graphic and textile design, has been provided by Switzerland. The total duration of the assistance is 1971-1980.

(ix) Karachi Steel Mill

The USSR has since 1972 assisted in the establishment of the Karachi Steel Mill. The project which comprises technical assistance and capital assistance elements involves a total investment approx. US$1,400 million.

(x) Industrial Vocational Training in Punjab

Assistance has been provided to strengthen the Development Cell for Apprenticeship Training, Lahore, by FRG during 1974-1978.

(xi) Management Information System

In 1977 the services of experts were provided (total cost approx. US$390,000) by the Netherlands to assist the Ministry of Production on the introduction of management information system in Karachi.

(xii) Employment, Income and Basic Needs Project

The services of experts were provided in 1977 by the Netherlands. Total cost: US$452,000.

(xiii) Chromite, Hazara

Assistance was provided by Austria for a feasibility study for processing chromite in Hazara in 1976-1978.

(xiv) Magnesite and chromite in Baluchistan

Co-operation was undertaken in 1977 with FRG in the exploration of magnesite and chromite deposite in Baluchistan.

(xv) Hazara Phosphates

Assistance was provided since 1976 in improving the mining output and proving of phosphate reserves at Hazara.

(xvi) Pakistani Institute of Development Economics

Assistance has been provided by the Ford Foundation 1976-77 in supporting an in-country programme of training in project preparation, appraisal and evaluation to the Pakistan Institute of Development Economics in Islamabad.

A Joint Commission established under the EEC-Pakistan Commercial Co-operation Agreement signed in June 1976, is meeting regularly to examine, inter alia, the progress of the efforts being made udner EEC's trade promotion programme to develop and diversify Pakistan's exports to the EEC. The Joint Commission also discusses measures to encourage collaboration between EEC and Pakistani entrepreneurs, in fields such as training, fisheries and engineering subcontracting 1/ and more generally in strengthening the industrial development of Pakistan.

1/ These three fields were especially noted at the third session of the Joint Commission in January 1979.

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