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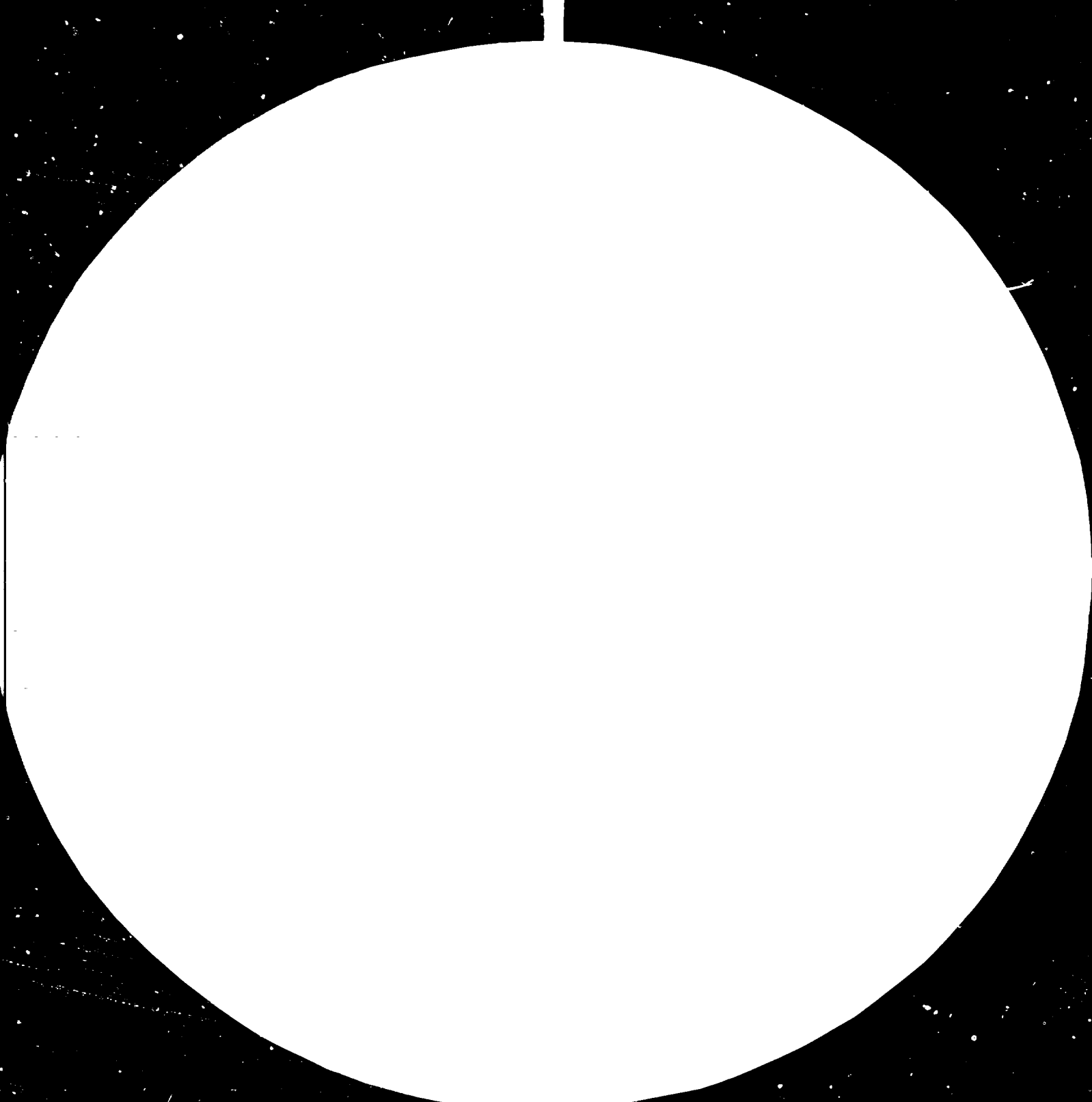
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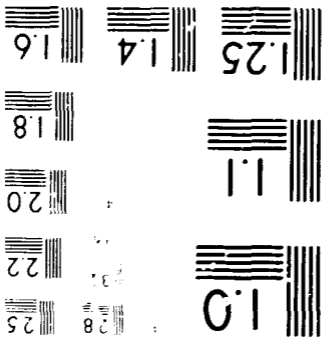
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COUNTRY INDUSTRIAL DEVELOPMENT BRIEF

THE MONGOLIAN PEOPLE'S REPUBLIC\*

Prepared by the

Division for Industrial Studies

Regional and Country Studies Branch

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PREFACE

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

The Brief on the Mongolian People's Republic is based on documents, reports and studies available at UNIDO Headquarters. No field survey was undertaken and some of the data on industry are either incomplete or not up-to-date.

The views and comments contained in this document do not reflect those of the Government of the Mongolian People's Republic, nor do they officially commit the United Nations Industrial Development Organization to any particular course of action.

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EXPLANATORY NOTE

The monetary unit of the Mongolian People's Republic is the Tugrik.

Official exchange rate November 1980:

US Dollar 1 = 2.924 Tugriks

Rouble 1 = 4.444 Tugriks

Different sources of statistical data and information have been used and as such, comparison between tables may not in all cases provide coherent and consistent information.

Some figures may not add up precisely due to rounding. In tables, three dots (...) indicate that data are not available, and a dash (-) that they are not applicable.





Chapter I

GENERAL ECONOMIC BACKGROUND

The Mongolian People's Republic is landlocked and situated in the northern part of central Asia. The country covers 1,565,000 square kilometres and borders to the USSR and the People's Republic of China.

The population of Mongolia is estimated at 1.53 million in 1977. This corresponds to 0.1 per cent of the population of developing Asia and Pacific (Table 1). By 1981 the (estimated) size of population had increased to 1.69 million.<sup>1/</sup> Growth rates of population (2.9 per cent) and labour force (2.4 per cent) in Mongolia were somewhat above the regional average for developing Asia and Pacific (2.56 and 2.14 per cent respectively) (1970-1977). Mongolia's labour force relative to population (31.8 per cent) was lower than in other developing countries of the region.

Table 2 provides data on trends in labour force engaged in agriculture, industry and services for the period 1960 and 1978. There has been a significant decline in the relative labour force engaged in agriculture from 70 per cent in 1960 to 56 per cent in 1978. During the same period the relative labour force in industry increased substantially from 13 to 21 per cent. An increase was also observed in the services sector. The proportion of population in the working age group has remained largely unchanged. There is a clear long-term trend towards higher growth rates of the labour force.

Table 3 provides information on employment in various sectors from 1975 to 1978. In 1978 around 59 per cent of the labour force or 288,900 persons were employed in the socialized sector. The industrial sector is the largest source of employment in the socialized sector with some 59,700 persons employed in 1978 (20.7 per cent of total) as compared with 53,700 persons in 1975 (21.8 per cent). Three sectors viz.: trade services and procurement; transport and communication; and state agriculture employ between 31,400 and 32,400 persons each, with a rapid expansion of employment occurring in the two latter sectors during the period 1975-1978.

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<sup>1/</sup> The Europa Year Book 1981, A World Survey, London 1981, page 964.

Table 1. General economic indicators, Mongolia; Developing Asia and Pacific

Indicator	Unit	1977			Annual growth 1970-77 <sup>c/</sup>	
		Mongolia	Developing Asia and Pacific <sup>a/</sup>	Share/ratio of Mongolia, to developing Asia and Pacific	Mongolia	Developing Asia and Pacific
				Percentage	Percentage	Percentage
Population	mill.	1.530	1,191.82	0.1	2.9	2.56
Labour force	mill.	0.487	439.80	0.1	2.4	2.14
GDP <sup>b/</sup>	US\$. mill.	1,438.0	311,347.0	0.4	4.5	6.16
Gross capital formation	US\$. mill.	297.0	77,394.0	0.3	24.2	10.49
Export of goods and services	US\$. mill.	267.0	83,722.0	0.3	...	...
Import of goods and services	US\$. mill.	430.0	84,540.0	0.5	...	...
GDP per capita	US\$.	940.0	261.0	3.6	...	...
Labour force/population	Per cent	31.83	36.90	0.86	-	-
Gross capital formation/GDP	Per cent	20.65	24.22	0.85	-	-
Exports/GDP	Per cent	18.57	25.82	0.72	-	-
Imports/GDP	Per cent	29.97	25.18	1.19	-	-

Source: UNIDO data base, Regional and Country Studies Branch, UNIDO. Statistical Yearbook for Asia and the Pacific, 1978. The Europa Yearbook 1979, A World Survey, World Development Report, 1980, World Bank.

<sup>a/</sup> Countries included in the aggregation: Afghanistan, Bangladesh, Burma, Sri Lanka, Fiji, Hong Kong, India, Iran, Indonesia, Republic of Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand.

<sup>b/</sup> GNP for Mongolia.

<sup>c/</sup> Growth rates for monetary values based on constant 1975 US dollars.

Table 2. Labour force, Mongolia, 1960 and 1978

(Percentage)

Percentage of population of working age (15-64 years)		Percentage of labour force in						Average annual growth of labour force		
		Agriculture		Industry		Services		1960-70	1970-80	1980-2000
<u>1960</u>	<u>1978</u>	<u>1960</u>	<u>1978</u>	<u>1960</u>	<u>1978</u>	<u>1960</u>	<u>1978</u>			
54	53	70	56	13	21	17	23	2.1	2.4	2.7

Source: World Development Report 1980, The World Bank,

Table 3. Employment

(In the socialized sector 1975 - 1978)

	1975	1976	1977	1978
Industry <sup>a/</sup>	53,700	55,100	57,400	59,700
Building	18,300	19,700	20,700	21,600
State Agriculture	24,900	25,800	29,300	31,400
Transport and Communications	24,900	26,700	28,500	31,900
Trade, services; procurement	28,800	30,400	31,500	32,400
TOTAL	246,300	259,200	274,200	288,900

a/ Mining, manufacturing, electricity and water.

Total labour force (1979): 495,200.

Source: The Europa Year Book 1981, A World Survey, London, 1981, page 965.

Gross national product of Mongolia grew at a slower rate (4.5 per cent) than the regional average (6.16 per cent) over the period 1970-77, but GDP per capita remained considerably higher US \$ 940 than the average for other developing countries of the region, US \$ 261. During the same period the Mongolian economy experienced significant growth in gross capital formation. The ratio of gross capital formation to GDP however remained lower (20.65 per cent) than the regional average (24.22 per cent). The external trade balance of Mongolia showed a trade deficit and the economy was more dependent upon imports and less reliant upon exports than other developing countries of the region.

Table 4 illustrates the structure of the economy in terms of the contribution of various sectors to national income for the period 1960-1978. The most important sector was "trade, material and technical supplies, services and procurements" accounting for 35.3 per cent of national income in 1978. The second largest sector, industry, expanded considerably and almost doubled its contribution to national income reaching 27.3 per cent in 1978. The contribution of the agricultural sector to national income fluctuated

substantially from 1960 to 1978 and accounted for 19.5 per cent in 1978 compared with 22.9 per cent in 1960. A slight increase occurred in the transport and communication sector while the contribution of construction and other sectors to national income remained small and largely unchanged.

Table 4. National income by sectors,

Mongolia, 1960-1978

(as percentage of total national income produced).

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
	(Percentage)						
Trade, material and technical supplies, services and procurements	44.2	35.8	36.5	36.2	34.9	37.0	35.3
Industry	14.6	19.3	22.6	24.7	25.7	27.5	27.3
Agriculture and forestry	22.9	30.2	25.3	22.4	21.1	17.1	19.5
Transport and communications	9.1	6.8	7.5	9.1	10.4	10.6	10.3
Construction	6.7	4.4	5.8	5.4	5.6	5.5	5.4
Other sectors of material production	2.5	3.5	2.3	2.2	2.4	2.3	2.2

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Source: Statistical Yearbook of Member States of the Council for Mutual Economic Assistance, 1979.

Chapter II

ENDOWMENTS FOR INDUSTRIALIZATION

Transport and communication facilities are of extreme importance to industrial development since Mongolia covers a large territory. Traffic is mainly cross country by motor vehicle and along caravan routes. Truck services operate throughout the country with a total of 46000 kilometres unsurfaced roads. There are over 1500 kilometres surfaced roads mainly in and around Ulan Batur and to Darkhan. The railway network is developing rapidly. The trans-Mongolian railway (1425 kilometres in 1973) connects Ulan Batur with Moscow and Peking. There are rail-lines to Erdenet and to the coal mines at Nalaika and Sharin Gol. A separate line connects Choybalsan in the east with Borzuya on the trans-Siberian railway. Steamer services operate on the Selenge and Orhon rivers and lake Hövsgöl. The lengths of navigable inland waterways totals 397 kilometres. Air transport operates throughout the country and to Irkutsk and Moscow.

Mongolia's energy requirements are primarily met by coal, lignite and electricity. There are major coal mines near Ulan Batur and Darkhan. Production of coal and lignite has increased considerably during the last few years from 2.9 million metric tons in 1976 to 4.4 million tons in 1980. There are four major power stations at Ulan Batur, Choybalsan, Sukhe Bator and Darkhan. Installed capacity increased more than fivefold over the the period 1960-1978 reaching 355,000 KW in 1978. Electricity production increased from 1.1 million MWh in 1977 to 1.6 million MWh in 1980.<sup>1/</sup> Oil was previously produced in the eastern Gobi Desert at Dzun Bayan (production of 45,000 tons in 1969), but is no longer extracted.

Mongolia's natural resources include a wide range of minerals such as copper, tungsten, molybdenum, tin, phosphorites, fluorite, wolfram, fluorspar, gold and lead. Uranium resources are reportedly available. Joint Soviet-Mongol enterprises commenced a large scale copper mining and concentrating in 1978 at Erdenet, and a phosphorite mine at Hobsgol. Fluorspar is a major export item of Mongolia's natural resources.

The agricultural sector serves as a basis for production of many industrial goods especially food and leather products. Animal herding is the main

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Source: The Europa Year Book 1981, A World Survey, London 1981, page 967.



economic activity and is practiced throughout the country. Table 5 provides information on the production of principal crops, livestock, wool, hides and skin, for the period 1977-1980. There was a severe decline in the production of cereals from 1977 to 1980 especially wheat. Production of animal feed is substantial. In 1979 there were more than 24 million livestock mainly sheep (14.4 million), goats, cattle, horses, and camels.

Table 5. Agricultural production - principal crops, livestock, wool, hides and skins, 1977-1980

		1977	1978	1979	1980
<u>Sown areas</u>					
Cereals	hectares	-	-	585,500	-
Vegetables (incl. potatoes)	hectares	-	-	9,700	-
Fodder	hectares	-	-	102,100	-
<u>Principal crops</u>					
Wheat	metric tons	318,000	279,300	239,600	)
Barley	metric tons	50,500	48,600	55,000	)
Os	metric tons	43,500	25,900	34,600	) 287,000
Other cereals	metric tons	2,400	1,100	1,500	)
Potatoes	metric tons	44,600	48,500	72,400	39,000
Other vegetables	metric tons	16,800	24,600	23,500	26,000
Fodder	metric tons	170,000	141,100	200,300	103,000
Hay	metric tons	999,800	1,032,600	1,067,700	n.a.
<u>Livestock<sup>a/</sup></u>					
Sheep		13,430,200	14,152,700	14,400,200	-
Goats		4,411,100	4,704,600	4,714,900	-
Horses		2,103,500	2,078,400	2,078,900	-
Cattle		2,388,300	2,481,500	2,476,900	-
Camels		609,000	608,600	613,700	-
Pigs		20,500	28,500	34,500	-
Poultry		175,300	261,900	264,900	-
<u>Livestock procurement</u>					
Cattle	metric tons	55,400	65,700	68,600	-
Sheep	metric tons	84,000	111,600	113,000	-
Goats	metric tons	15,400	22,700	22,000	-
Horses	head	146,800	160,700	105,000	-
Milk	million litres	83.6	96	96.8	-
<u>Procurement of wool, hides and skins</u>					
Sheep's wool	metric tons	18,700	19,800	20,500	-
Camels' wool	metric tons	3,000	3,100	3,000	-
Goats' wool	metric tons	1,000	1,000	1,000	-
Goats' hair	metric tons	1,200	1,200	1,300	-
Cattle hides	units	367,000	400,000	405,600	-
Horse hides	units	130,400	154,600	114,500	-
Camel skins	units	25,400	25,600	26,000	-
Sheep skins	units	2,962,800	3,382,500	3,595,300	-
Goat skins	units	928,300	1,118,800	1,119,500	-
Marmot pelts	units	944,700	933,300	837,100	-
Squirrel skins	units	30,400	30,700	15,100	-
Wolf skins	units	4,400	4,700	3,900	-
Fox skins <sup>b/</sup>	units	4,000	-	-	-

Source: The Europa Year Book 1981, A World Survey, London 1981, page 966.

a/ Livestock raised from birth in 1979 totalled 8.6 million, against a target of over 9 million. In April 1980 about 500,000 animals died in blizzards in eastern Mongolia. Livestock raised from birth in 1980 totalled 8,507,700, against a target of 9.2 million.

b/ Fox protected in 1978 and 1979.

Chapter III

PLANS, POLICIES AND STRATEGIES FOR INDUSTRIALIZATION

The Mongolian government initiated national planning in 1948 to transform a nomadic economy into a centrally planned industrial country. Since then six Five-year Plans have been implemented; the seventh Five-Year plan is under preparation. Table 6 provides information related to the implementation of the Fifth Plan (1971-1975), the Sixth Plan (1976-1980) and major guidelines for the Seventh Plan (1981-1985).

Under the Fifth Plan (1971-1975) national income increased by 38 per cent, gross industrial production by 55 per cent, gross agriculture output by 26 per cent and the volume of foreign trade by 60 per cent. During the Plan period, capital investment increased by 30 per cent while real incomes and average wages increased more modestly by 17 and 8 per cent respectively. As a result of rapid industrial growth during 1971-1975 the role of industry in the national economy increased considerably.

The major objectives of the Sixth Development Plan (1976-1980) was "to turn the Mongolian People's Republic into an industrial-agrarian state in the near future with a rational structure of the mining and processing branches of industry".<sup>1/</sup> One of the main tasks of the Sixth Plan was to strengthen the material and technical base of agriculture, fuel and power, mining and building material industries through increased capital investment. An increase in industrial production by 60 per cent corresponding to annual growth rates of 9.8 - 10.5 per cent planned concomittant with a planned increase of 34-38 per cent in industrial productivity. The planned growth of national income was set at 37 - 41 per cent over the 1976-1980 period; however planned improvements in real per capita income and wages remained more modest at 16 - 18 and 7 - 9 per cent respectively. Total capital investments were expected to increase considerably by 80 - 100 per cent. Capital investment in the light industry, especially food processing, was expected to treble. Substantial investments were also envisaged for the building materials industry. Planned gross output of selected industrial

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<sup>1/</sup> Report of the Central Committee of the MPRP to the XVII Congress of the Mongolian People's Revolutionary Party.

Table 6. Mongolia's development plans 1971-1985: key targets and achievements

	1971-75 achievements	1976-80 plan	1976-80 achievements	1981-85 plan
		(Percentage growth)		
National income	38	37-41	30.9	38-41
Real per-capita income	17	16-18	14	10-12
Average monthly wage	8	7-9	3.8	4-6
Average annual herdsman's income		14-17	12	20-23
Gross industrial production	55	60-65	58	52-58
Industrial productivity		34-38	20	24-26
Average annual gross agricultural production	26	26-30	6.3	22-26
Retail trade turnover	31	32-35	30	27-31
Freight turnover		30-35	60	30-32
Foreign trade	60	40-45	50	50-55
<u>Annual production</u>				
Electricity (Million kwh)		1,440.0	1,569.1 <sup>a/</sup>	2,981.3 <sup>a/</sup>
Coal (million tonnes)		4.5-4.9	4.4 <sup>a/</sup>	6.8-7.2
Housing ('000 sq. ms)		730-760	740	830-860
Grain (five-year average) ('000 t)		500-530	347	580-640
Meat (five-year average) ('000 t) (live weight)		94.5-97.7	89.2	93.6-94.5

Source: Far Eastern Economic Review, 21 May 1976 and 29 May 1981.

a/ Derived from percentages.

branches were as follows: metal-working industry 150 to 160 per cent; leather, sheepskin and footwear industry 23 to 26 per cent; wool processing industry 33 to 38 per cent and food industry 33 to 38 per cent. Output in the mining industry was expected to grow at an annual rate of around 100 per cent reaching 4.5 to 4.9 million tons in 1980. The construction of the first part of the joint Mongolian-Soviet copper-molybdenum agglomeration combine at Erdenet was to be completed and put into operation. Substantial new capacities were also expected in the coal mining industry.

Evaluating the progress made during the Sixth Plan 1976-1980 the Government has indicated that "new and important successes" were achieved in the "creation of the material and technical basis of socialism".<sup>1/</sup> Most of the targets planned for development in 1976-1980 were approached but not reached. Apart from foreign trade and freight turnover which grew faster than plan targets, all other key development indicators of the Plan fell short of the targets set. The performance of the industry sector as a whole came close to the target; severe set-back occurred in the agricultural sector.

The draft guidelines for Mongolia's Seventh Development Plan 1981-1985 have recently been published.<sup>2/</sup> The guidelines emphasize consolidation rather than new developments. Table 6 provides information on key targets of the Plan. National income is expected to increase by 38 to 41 per cent; real per capita income by 10 to 12 per cent. A slight decline is envisaged in the growth of industrial production from 58 per cent achieved in 1976-1980 to 52-58 per cent in the 1981-1985 Plan, concomittant with an increase from 20 per cent to 24-26 per cent in industrial productivity. There is great emphasis upon savings in energy and raw materials and on improving productivity, quality and efficiency. To raise agricultural output higher grain and vegetable yields are planned, as well as improvements in food production and storage. A small increase in livestock is envisaged. The state will support and encourage food production in factory plots and private gardens and co-operative markets will be opened in towns. In

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1/ Far Eastern Economic Review, May 29, 1981, page 50.

2/ Far Eastern Economic Review, May 29, 1981, page 50.

regard to foreign trade Mongolia is expected to "expand and deepen as much as possible economic, scientific and technical co-operation with the Soviet Union and other fraternal socialist countries". However, there is likely to be some trade with certain developed market economies including Britain and Japan.

There are several notable projects of importance to the industrial sector included in the Plan guidelines. Preparatory work is to be commenced for the construction of a big power station at Baganuur coal field, east of Ulan Bator; the Erdenet copper and molybdenum mine and concentrator is expected to be completed and a substantial increase in fluorspar production for the Soviet steel industry is envisaged; geological surveys are expected to be undertaken for the Tsagaansuvraga copper and molybdenum deposits. Preliminary studies of the Tavan-Tolgoy coking coal and Burenhaan phosphate deposits are also included in the Plan guidelines.

Many new projects are expected to go into operation in 1981. These include inter alia a spinning mill (200,000 squaremetres/year) in Ulan Bator and the first stage of the Erdenet factory with an annual capacity of 300,000 tons.

Chapter IV

STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

Mongolia's industrial sector is still small in scale and local in character, but the sector is being developed vigorously. The Government has placed major emphasis upon the creation of infrastructure - roads, energy, mining, communication and education - upon which a modern industrial nation can be based. The focus on industrial development has been on intermediate goods and on extension of the processing industry, largely based on livestock, for export.

Table 7 shows the trend in the distribution of manufacturing value added, which almost doubled from 1970 to 1979, reaching 323.8 million Turgriks in 1979. The most important branches are food beverages and tobacco, 29.2 per cent of total MVA in 1979; wood and wood products 17.3 per cent; leather, leather products and footwear 11.9 per cent; textiles 9.6 per cent; wearing apparel 9.5 per cent; the remaining seven branches accounting for around 22.3 per cent. Apart from a decline in leather industries from 16.8 per cent in 1970 to 11.9 per cent in 1979, the structure of value added of the Mongolian industry has largely remained unchanged. Due to long gestation periods the investment in non-ferrous metals industry sector in 1975-76 has not yet permeated production statistics.

Table 8 provides information on gross fixed capital formation by various branches of industry for the period 1970-1978. There was a very substantial increase in gross fixed capital formation, especially since 1975, reaching 1,299 million Turgriks in 1978, more than double the level of 1976. There was a massive increase in gross capital formation in the non-ferrous metal industry sector especially after 1975; this sector accounted for 60.4 per cent of total gross fixed capital formation in manufacturing in 1978.

Table 9 reveals that employment in the manufacturing sector grew steadily from 40,700 persons in 1970 to 50,400 persons in 1978. The most important branches providing employment opportunities were: food, beverage and tobacco; wood and wood products; wearing apparel; leather, leather products and footwear; non-metallic mineral products; and metal products,

Table 7. Manufacturing value added, total and sectoral shares in total,

Mongolia, 1970 - 1979

(sectoral shares in per cent)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Food, beverages and tobacco	28.8	30.6	30.4	28.2	29.1	28.4	30.0	27.9	28.6	29.2
Textiles	10.6	10.4	11.0	11.3	10.9	11.0	10.4	10.8	10.0	9.6
Wearing apparel, except footwear	7.6	8.7	9.4	9.0	8.9	9.3	9.2	9.4	9.4	9.5
Leather, leather products and footwear	16.8	14.7	14.4	14.6	13.9	13.2	12.5	12.8	12.2	11.9
Wood and wood products, incl. furniture	19.1	17.6	16.5	16.7	16.8	17.3	17.2	17.9	17.4	17.3
Printing and publishing	1.4	1.4	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.3
Industrial chemicals and other chemical products	2.7	3.1	3.0	4.6	4.1	4.4	4.1	4.6	5.1	5.1
Pottery, china and earthenware	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
Non-metallic mineral products	6.8	6.6	7.3	7.1	7.2	7.1	6.7	6.1	6.7	6.7
Non-ferrous metals	0.5	0.4	0.3	0.2	0.4	0.5	0.5	0.6	0.4	0.4
Metal products, machinery and equipment	3.8	4.5	3.5	3.8	3.9	3.9	4.3	4.8	5.1	5.1
Other manufacturing industries	<u>1.8</u>	<u>2.1</u>	<u>2.7</u>	<u>3.2</u>	<u>3.3</u>	<u>3.6</u>	<u>3.6</u>	<u>3.7</u>	<u>3.6</u>	<u>3.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total in millions of turgriks	166.7	181.4	206.6	225.4	243.5	260.0	278.7	286.0	307.7	323.8
Average annual growth rate 1970 - 1979	: 7.6%									

Source: UNIDO data base, Regional and Country Studies Branch, UNIDO.



**Table 8. Manufacturing gross fixed capital formation, total and sectoral shares,**

**Mongolia, 1970 - 1978**

(sectoral shares in per cent)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Food, beverages and tobacco	35.9	28.4	10.4	10.9	19.5	8.5	3.7	1.4	1.3
Textiles	7.5	7.0	1.2	0.1	0.6	1.0	2.5	2.0	6.7
Wearing apparel, except footwear	1.5	0.7	0.0	0.4	1.5	0.6	0.1	0.1	0.0
Leather, leather products and footwear	9.1	6.0	1.2	3.8	6.8	8.5	2.0	2.9	2.5
Wood and wood products, incl. furniture	11.1	12.6	5.8	6.5	18.0	20.3	4.1	4.7	8.1
Printing and publishing	0.3	0.9	0.7	0.5	0.4	0.4	0.0	0.0	0.1
Industrial chemicals and other chemical products	6.3	8.9	11.9	14.3	7.6	0.6	0.2	0.1	5.2
Pottery, china, earthenware, glass and glass products	0.1	0.4	0.3	0.7	0.4	0.0	0.0	0.0	0.0
Non-metallic mineral products and other mining	7.3	9.2	21.2	20.6	15.7	25.9	32.4	18.2	10.2
Non-ferrous metals	3.5	14.0	31.3	20.2	16.3	22.3	50.5	61.3	60.4
Metal products, machinery and equipment	5.9	7.0	4.5	4.8	3.8	10.8	3.5	8.8	3.8
Other manufacturing industries	<u>11.6</u>	<u>5.0</u>	<u>11.6</u>	<u>17.3</u>	<u>9.2</u>	<u>1.0</u>	<u>1.0</u>	<u>0.3</u>	<u>1.8</u>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total (thousand tugriks)</b>	<b>228,700</b>	<b>247,500</b>	<b>258,600</b>	<b>241,700</b>	<b>268,600</b>	<b>307,000</b>	<b>522,400</b>	<b>997,800</b>	<b>1,299,000</b>

Average annual growth rate: 1970 - 1975 4.8% ; 1975 - 1978 64.5%

Source: UNIDO data base, Regional and Country Studies Branch, UNIDO.

Table 9. Manufacturing average number of employees, total and sectoral shares in total,  
Mongolia, 1970 - 1978

(sectoral shares in per cent)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Food, beverages and tobacco	21.9	22.7	21.2	21.1	20.7	20.3	19.9	19.4	19.8
Textiles	6.6	6.2	7.1	7.2	6.5	6.7	6.5	6.3	6.5
Wearing apparel, except footwear	11.5	11.2	11.4	11.6	11.5	15.7	15.9	15.9	17.1
Leather, leather products and footwear	12.3	11.2	12.4	12.3	12.8	11.9	11.6	11.4	11.7
Wood and wood products, incl. furniture	16.5	16.0	16.7	17.4	18.9	18.6	17.5	17.2	17.7
Printing and publishing	4.2	4.3	4.3	4.4	4.0	3.8	3.9	4.1	4.0
Industrial chemicals and other chemical products	2.2	2.4	2.9	3.5	3.4	2.9	3.0	3.3	3.8
Pottery, china, earthenware, glass and glass products	1.2	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8
Non-metallic mineral products and other mining	14.0	14.1	13.8	13.5	11.2	9.8	9.1	9.0	9.9
Non-ferrous metals	1.2	1.0	1.0	0.7	1.1	1.3	1.2	1.2	-
Metal products, machinery and equipment	5.9	6.4	6.4	5.1	5.4	5.0	6.3	6.7	8.7
Other manufacturing industries	2.5	3.6	1.9	2.3	3.6	3.3	4.3	4.9	-
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total (number)</b>	<b>40,700</b>	<b>41,900</b>	<b>42,000</b>	<b>43,100</b>	<b>44,500</b>	<b>47,900</b>	<b>49,200</b>	<b>51,100</b>	<b>50,400</b>
<b>Average annual growth rate 1970 - 1978</b>	<b>: 3.2%</b>								

Source: UNIDO data base, Regional and Country Studies Branch, UNIDO.

machinery and equipment in that order. Apart from a relative increase in employment in wearing apparel and decline in non-metallic mineral products there was no major structural change affecting the employment pattern of the Mongolian industry.

The following Table 10 provides information on the output of selected industrial products for the period 1977-1980.

Table 10. Output of selected industrial products, 1977-1980

		1977	1978	1979	1980 <sup>a/</sup>
Bricks	units	81,500,000	102,700,000	104,600,000	110,457,600
Lime	metric tons	36,900	56,200	45,900	64,500
Cement	metric tons	100,400	165,500	185,400	n.a.
Sawn timber	cubic metres	472,500	527,300	576,700	610,100
Felt	metres	577,700	603,700	611,700	614,700
Leather shoes	pairs	1,900,200	1,717,400	1,961,600	2,108,700
Matches	boxes	30,000,000	30,200,000	30,800,000	n.a.
Woollen cloth	metres	907,400	953,300	955,400	963,000
Flour	metric tons	116,000	112,000	141,400	83,400
Butter	metric tons	3,300	3,700	3,900	n.a.
Alcohol	litres	2,346,400	2,443,300	2,567,000	n.a.
Vodka	litres	5,175,500	5,306,800	5,873,500	n.a.
Beer	litres	7,781,200	8,139,200	8,900,000	9,816,700

Source: The Europa Year Book 1981, A World Survey, London , 1981.

a/ Derived from percentages.

Chapter V

LOCATION OF INDUSTRY AND OWNERSHIP PATTERN

The major industrial centre is at Ulan Bator with a population of 418,700 (1980) and more than 50 per cent of gross industrial production. Other industrial centres are at Darkhan (population 53,500), Choybalsan and Erdenet near supplies of coal.

Industrial production was primarily concentrated at Ulan Bator until the early 1960s. However many small-scale enterprises were scattered throughout the country in various "aimak" (province) centres. With the launching of the Third Five-Year Plan (1961-1965) a new trend towards greater dispersion of industry emerged as a conscious planning effort to locate industrial processing plants and mining near the source of raw materials and in "aimak" centres where population tends to concentrate.

As a result of deliberate planning two new industrial centres were constructed at Darkhan and Choybalsan. Since 1960 twenty new industrial enterprises have been constructed at the Darkhan complex. Basic to the development of this new industrial centre were coal mines at Sharyn Gol and a fuel and power combine, the most powerful thermo-electric complex in the country. Other industries established at Darkhan include cement and reinforced concrete plants, meat processing plant, wood-working enterprises, oxygen and acetylene compressor station, brick plant and repair shop.

In May 1967 the foundation was laid for an industrial centre at Choybalsan through the establishment of a heat and power plant. A small coal mine and small-scale processing enterprises have been operating at Choybalsan for some years. The city has now developed an industrial complex consisting of inter alia a large open coal mine, a wool-washing factory, a meat combine as well as new communication, housing and public facilities.

At the fourth industrial centre Erdenet, some 330 kilometres north west of Ulan Bator, a large-scale copper and molybdenum mining and concentrating commenced in 1978.

In regard to the ownership pattern most Monglian industry is state-owned. The importance of the co-operative sector has been gradually diminishing especially following major nationalization in 1972. In 1960, 81.6 per cent of gross industrial production originated in state-owned enterprises and 18.4 per cent in co-operatives (Table 11). By 1978 the role of state industry had increased to 97.4 per cent of total industrial output while the co-operative sector was reduced to 2.6 per cent.

Table 11. Gross industrial production by type of ownership,  
Mongolia, 1960 - 1978  
(in per cent)

<u>Year</u>	<u>State-owned</u>	<u>Co-operative</u>	<u>All industry</u>
1960	81.6	18.4	100
1965	80.9	19.1	100
1970	82.4	17.6	100
1975	97.3	2.7	100
1976	97.4	2.6	100
1977	97.6	2.4	100
1978	97.4	2.6	100

Source: Statistical Yearbook of Member States fo the Council  
for Mutual Economic Assistance, 1979.

Chapter VI

EXTERNAL TRADE AND AID

Foreign trade in Mongolia is state monopoly and plays an important role in the national economy. In 1977 the shares of exports and imports in GDP were 18.6 and 29.9 per cent respectively. Since 1960 imports have grown more than exports resulting in a widening trade deficit reaching 93 million Roubles in 1978. There was a significant expansion in foreign trade both import and exports during the 1970s as compared with the 1960s (Table 12).

The country's exports consist almost entirely of animals and animal products, such as meat, butter, cheese, wool, hides and furs. However, their share in total exports declined from 99.6 per cent in 1960 to 81.0 per cent in 1978 (Table 13), while the shares of fuel, mineral raw materials and metals, and industrial consumer goods increased from 0.1 and 0.3 per cent to 7.1 and 11.0 per cent respectively.

Major categories of imports included machinery and equipment which accounted for 33.2 per cent of total imports in 1978; industrial consumer goods 22.2 per cent and fuel, minerals and metals 21.5 per cent. The relative importance of raw material imports remained largely unchanged since 1960.

The main trading partners are socialist countries primarily USSR and other members of the Council for Mutual Economic Assistance. In 1978 96.4 per cent and 97.2 per cent of Mongolia's exports and imports respectively were with CMEA countries; trade with other socialist countries amounted to 2.2 and 1.7 per cent of exports and imports respectively. Trade with developed market economies was limited to 1.4 per cent of exports and 1.1 per cent of imports in 1979.

External assistance plays an important role in the economic development of Mongolia. Bilateral assistance efforts intensified rapidly especially after 1966 when the USSR and later other socialist countries initiated massive aid and trade with Mongolia.



Table 12. Volume of foreign trade, Mongolia, 1960 - 1978  
(in current prices; million roubles)

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	Average annual growth rate(per cent)	
								<u>1960-70</u>	<u>1970-78</u>
Imports	87.1	88.6	109.0	192.0	227.0	276.0	285.0	2.5	14.9
Exports	65.2	72.9	75.9	158.0	175.0	171.0	192.0	1.6	10.5
Balance	-21.9	-15.7	-33.1	-34.0	52.0	-105.0	-93.0		

Source: Statistical Yearbook of Member States of the Council for Mutual Economic Assistance, 1979.

Table 13. Export and import trade structure, Mongolia, 1960 - 1978

(as per cent. of total export/imports)

	Exports				Imports			
	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1978</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1978</u>
Machines, plant and vehicles	-	0.2	0.3	0.3	30.0	25.9	35.8	33.2
Fuel, mineral raw material, metals	0.1	5.4	6.5	7.1	10.3	12.8	10.3	21.5
Raw materials and processed products (non-food), raw materials for food stuffs production and foodstuffs	99.6	87.6	83.7	81.0	13.1	15.0	11.8	15.7
Industrial consumer goods	0.3	5.9	9.1	11.0	25.6	36.3	33.4	22.2
Chemical, fertilizers, rubber, construction materials and other commodities	-	0.9	0.4	0.6	21.0	10.0	8.7	7.4

Source: Statistical Yearbook of Member States of the Council for Mutual Economic Assistance, 1979.

Table 14. Geographical distribution of foreign trade 1974 - 1979  
(Percentage)

	<u>1974</u>	<u>1975</u>	<u>1979</u>
<u>Exports</u>			
to socialist countries	99.0	99.3	98.6
including:			
CMEA	96.0	96.4	96.4
Others	3.0	2.9	2.2
to developed market economies	1.0	0.7	1.4
<u>Imports</u>			
from socialist countries	98.3	98.5	98.9
including:			
CMEA	95.7	96.0	97.2
Others	2.6	2.5	1.7
from developed market economies	1.7	1.5	1.1

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Source: The Europa Year Book 1981, A World Survey, 1981.

Aid from USSR is partly in kind in the form of factories, machines, trucks, tractors, mining equipment, prefabricated housing, cattle and sheep, and partly in the form of monetary aid enabling Mongolia to purchase goods and services in the USSR including technicians and skilled workers. Frequent postponements on repayments on outstanding loans have been granted and the USSR has often converted loans and credits into outright grants. The USSR has also freely provided technicians, planners, administrators, engineers, geologists and workers to assist the government of Mongolia. In 1980 Soviet economic and technical assistance covered nearly 150 large-scale projects.

UNIDO has provided technical assistance to Mongolia in various fields. Major assistance has been directed towards the development of the leather goods industry and the processing of cashmere and camel and goat hair. Assistance has also been provided for the development of milk, meat and other food processing industries as well as repair and maintenance and industrial scientific and research equipment. Various smaller projects have aimed at assisting the development of production of glass, precious and semi-precious stones, jewelry, building and construction, mineral pigment, expanded perlite, refractory, soap, recycling of used lubricating oils, as well as the development of a pharmaceutical industry.

Under the current UNDP programming cycle 1978-1982 (IPF 10 million US dollars) UNIDO's approved and operational projects encompass four projects related to: the establishment of a national scientific and technical information center; the preparation of a feasibility study on the establishment of a baby food pilot plant; the start-up of the technical diagnostics laboratory; and the establishment of a pilot plant for processing of biochemical products.



