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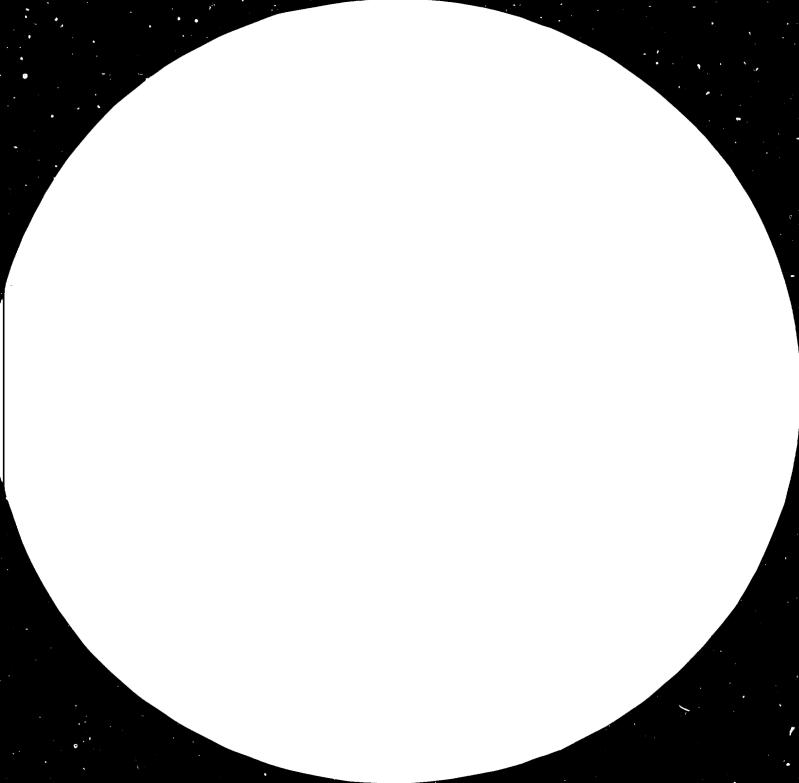
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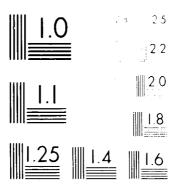
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COUNTRY INDUSTRIAL DEVELOPMENT PROFILE
OF ETHIOPIA\*

Prepared by the

Division for Industrial Studies
Regional and Country Studies Branch

Girth ...

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#### FREFACE

The Division for Industrial Studies, Regional and Country
Studies Branch, undertakes under its work programme the preparation
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.
12 is hoped that the profiles will provide analyses of use in activities relating to technical assistance, industrial redeployment and
investment co-operation.

This profile on Ethiopia is based on documents, reports and studies available at ECA/UNIDO Industry Division, Addis Ababa, as well as some material collected from Government agencies. 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 Ethiopia nor do they officially commit the United Nations Industrial Development Organization to any particular course of action.

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# EXPLANATORY NOTE

Currency Unit = Birr (Br.) - 100 cents

US \$1.00 = Birr 2.50 (for 1971 and prior)

Br. 2.303 (1972)

Br. 2.072 (1973 onwards)

Br. 1.00 = US \$0.483 (1973 onwards)

# Ethiopian calendar

The Ethiopian Calendar year runs from 11 September to 10 September; the Ethiopian fiscal year runs from 8 July to 7 July. Unless otherwise specified, all years are fiscal years.

### Abbreviations

AEPA - All-Ethiopian Peasant Association

AETU - All-Ethiopian Trade Union

AIDE - Agricultural and Industrial Development Bank

CBE - Commercial Bank of Ethiopia

CEM - Centre for Entrepreneurship and Management

CPCO - Central Planning Commission Office CPSC - Central Planning Supreme Council

CSO - Central Statistical Office ECC - Ethiopian Chamber of Commerce

ENEC - Ethiopian National Energy Commission

ESI - Ethiopian Standards Institute

FYDCP - First Year Development Campaign Programme

HASIDA - Handicraft and Small Industries Development Agency

HSB - Housing and Savings Bank
NHE - National Bank of Ethiopia

NIVTS - National Industrial Vocational Training Scheme

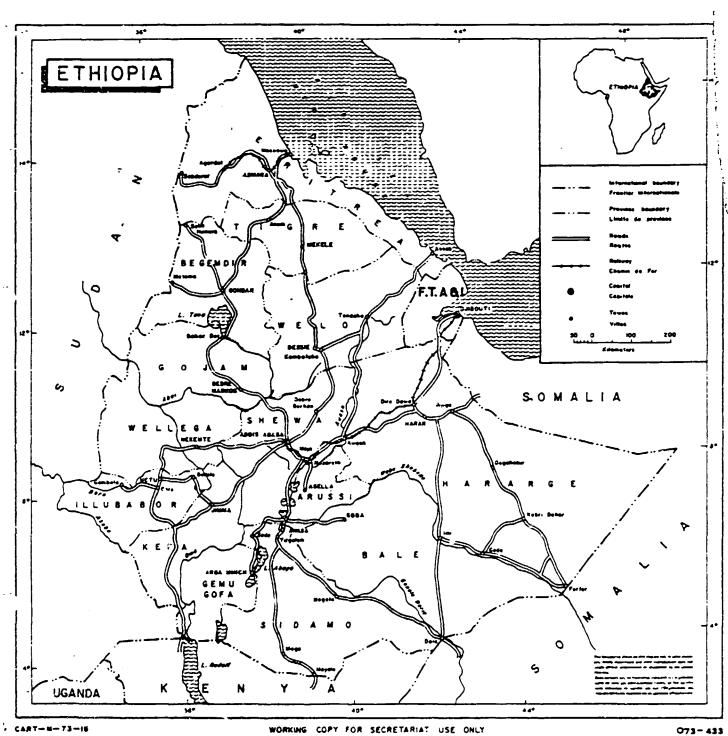
NML - National Metrology Laboratory

NQCTC - National Quality Control Testing Centre
NRDC - National Revolutionary Development Campaign
PMAC - Provisional Military Administrative Council

SSID - Small Scale Industry Division (AIDB)

SYDCP - Second Year Development Campaign Programme

WYA - Women and Youth Associations



EXEMPLAME DE TRAVAL A L'USAFE DU SECRETARIAT EXCLUSIVEMENT

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## SUMMARY AND CONCLUSIONS

Ethiopia is one of the least developed and least industrialized countries, with an estimated 1977 population of about 28.6 million people of which 3.6 million or 12.6 per cent live in urban areas and the rest of 25 million people or 87.4 per cent live in rural areas. Most of the people in the latter category are engaged in settled agriculture, some in agriculture and livestock farming, and the rest in pastoral livestock breeding. The country is endowed with limited mineral deposits, extensive arable land, favourable climatic conditions, fishery resources and relatively limited forest resources.

Information on income distribution as well as wages is scanty. The low purchasing power in the small domestic market is a severe constraint on the establishment of manufacturing industries. Industrialization is still in its infancy and heavily dependent on imported inputs. Exports of manufactures are insignificant; the main export is coffee which represents over 60 per cent of the country's export earnings.

The manufacturing sector has recorded an average annual growth in volume of 3.2 per cent during 1970-1977. However, output has continued to fall since 1974. This sector continues to be characterized mainly by the predominance of four light subsectors, i.e. textile, food, beverage and tobacco. The textile subsector is the largest, accounting for 32 per cent of the total gross manufacturing output; food production accounts for a further 20 per cent of output. Over 80 per cent of manufacturing output is contributed by public enterprises. Manufacturing industries are concentrated in three regions with the most advanced transportation system (Shoa, Eritrea and Harrarghe).

The tempo of industrial growth in the country is hindered by a number of constraints among which are: inadequate industrial finance, shortage of domestic entrepreneurship and skilled industrial personnel, inadequate communications, lack of incentives for private investment, technical problems arising from old machinery, shortage of raw materials, inadequate institutional infrastructure, such as incomplete planning machinery restructuring, lack of policy implementing tools (investment laws) and project preparation, implementation and monitoring capabilities.

The Government has enlarged the public sector by bringing a number of industrial enterprises under public ownership. On the other hand, the Government has published a Declaration on Economic Policy which is part and parcel of the 1975 Declaration on Ethiopian Socialism. Efforts have been made since to establish a planning machinery and institutional infrastructure to support the implementation of the Government policy for economic and in particular industrial development, but the exercise is far from completed. The Government has also launched short-term plans to cope with some of the most urgent problems facing the population. The First and Second Years of Development Campaign Programmes were aimed at coping with problems such as food shortages, industrial raw materials supplies, essential consumer goods, services supply, etc.

The prospects for the near future appear to be associated with the country's good potential for development of agro-industries, and industries using some non-agricultural local raw materials. It is therefore along this line that more explicit strategy for the industrial sector is needed if the objective of promoting indigenous and resource-based industrialization is to be achieved. Such strategy would involve among other priorities, the definition and establishment of a more comprehensive and coherent planning policy and mechanism as well as the determination of subsectoral policies and projects in more detail.

One of the most urgent tasks facing the Government is the formulation of plans and measures aimed at the gradual removal of the constraints and bottlenecks that now places strong brakes on industrialization expansion in the country. In this connexion, three sets of difficulties seem to deserve special attention, i.e. (1) lack of both managerial and technical skills especially for the design, preparation, implementation and monitoring of projects: extensive training programme is being called for, (2) inadequate finance available for industrialization as a result of both limited domestic savings and scarce foreign exchange: there is need for increased effort for mobilization of domestic resources and attraction of foreign investment, and (3) technical problems arising from old machinery, which necessitates more maintenance, spare parts, and wherever required, replacement of the already amortized equipment. In respect of the two

last constraints, it appears that mobilization of much needed foreign investment could be facilitated if a clear investment policy were defined which would in particular specify how the role to be played by the newly established public sector could be supplemented by the private sector and especially foreign private investment. Indeed, if the respective areas for public and private (including foreign) investment have been determined by the Proclamation on Economic Policy, clear rules and practical modalities still remain to be issued.

# Chapter I

#### GENERAL ECONOMIC BACKGROUND

# Geographical situation and area

Ethiopia is the largest of the three countries in the horn of Africa, with a total land area of 1,233,600 square kilometres, comprising a central highland mass surrounded by lowlands. Most of Ethiopia is well over 500 metres above sea level and the dome-shaped Ras Dashen, which is the highest mountain in the country, reaches the peak of 4,620 metres. Ethiopia shares borders with Sudan in the west and the north-west, Kenya in the south, and Somalia in the east.

# Population

No demographic census has ever been carried out in Ethiopia. The latest information available about the population is derived from a national sample survey, the second of its kind, which was conducted during 1969-1971. From the survey, the total population in 1977 is estimated to be 28.6 million and population density 23.4 per square kilometre (see Table 1). But according to the latest estimate made by the World Bank, the population seems to have been 31 million in 1978 and population density 25 per square kilometre. Some 90 per cent of the population is rural. The rural population is estimated to be growing at 2.1 per cent, the urban population at 6.5 per cent and the total population at 2.5 per cent per annum.

No reliable data are available on the labour force or on the levels of employment and unemployment. About 85 per cent of workers are in agriculture. Between 80 and 90 per cent of the latter are subsistence farmers. The urban work force, comprising the remaining 15 per cent of the active population, was estimated to number approximately 1.4 million in 1975.

Table 1. Area population estimate and population density by region and awraja in 1977

Region	Area	Population	Density (percentage)	
	(thousands of square kilometres)	(thousands)		
Hararghe	254.8	2,882.2	11.3	
Illubabor	50.8	745 • 4	14.7	
Kaffa	53.0	1,489.7	28.1	
Shoa	85.5	5,864.0	68.6	
Sidamo	116.7	2,589.0	22.2	
Tigray	65.7	1,993.8	30.3	
Wollega	69.8	1,862.5	26.7	
Wollo	79.0	2,408.0	30•5	
Total	1,223.6	28,637.1	23.4	

Source: Central Statistical Office, Statistical Abstract, 1977, p.22.

Employment in manufacturing sector is relatively limited. In 1975/76 the total number of employees in this sector amounted only to 59,222. Public sector employment increased by about 100,000 between 1975 and 1978 from 49,000 to 75,000 in the case of public sector manufacturing industries, from 60,000 to 80,000 in the case of state farms, and from 60,000 to 108,000 in the case of central Covernment. A good indication of total modern sector amployment in the cities is arrived at by adding central Covernment exployment to trade union membership, which reached about 212,000 in October 1977, giving a total of about 320,000 or one quarter of the estimated urban labour force of 1.3 million in the same year.

As far as unemployment is concerned, indications are that the number of job seekers is growing steadily. The data produced by the Ministry of Labour and Social Affairs show an increase in the number of registered job seekers from about 15,000 in 1973/74 to about 40,000 in 1974/75 and to over 100,000 in 1975/76.

#### Incomes

No Government wages or income policy has been announced. However, Covernment intervention in the labour market has been aimed at improving and safeguarding the position of the lowest paid and reducing income differences while preventing resulting wage increases from having inflationary effects.

In 1976 the Government introduced a minimum wage for Government employees and public enterprises of Birr 1.92 per day or Birr 50 per month and froze Government salaries above Birr 285 per month. It also introduced a three-year arrangement with the unions and the public enterprises providing for wage and salary increases up to 15 per cent in the first year, 8 and 7 per cent, respectively, in the second and third year for those earning less than Birr 450 per month, and a freeze on salaries above this level. In the same year, an All-Ethiopian Traie Union (AETU) was founded and trade unions were organized in all the main industries. The private sector has generally followed Government and public sector precedents not chiefly because they were formally mandatory, but because of wage leadership and union pressure. The arrangement was due for renewal in 1979. The Government has also intervened in the housing market with the objective of .educing rents for the lowest paid and increasing the supply of low-income group housing.

Since 1975, with the land reform, and with rising agricultural prices (especially for food), the rural-urban gap in incomes has probably narrowed somewhat. The ratio of food to non-food prices in the Addis Ababa retail price index (a crude indicator of the rural-urban terms of trade), has risen roughly one-third since 1975. However, this would have principally benefited food surplus producers; food deficit areas and rural households heavily depender on non-farm income could actually be worse off. If total real consumption has been stagnant or falling, while some income has shifted from urban to rural areas, then average urban real incomes and consumption levels must have fallen. One further indication of this is given by the trend in public sector real wages. Assuming the official guidelines on wages have been followed, the trend in money and real wages would be as follows:

#### Indices

	1975	1976	1977	1978
Money wages	100	115	124	133
Addis Ababa retail price index	100	120	150	171
Real wages	100	89	83	78

## Natural resources and primary products

The country's good soil and favourable climatic conditions provide a wide spectrum of possibilities for extensive and diversified agricultural production and animal husbandry. However, at present subsistence agriculture is predominant. About 65 per cent of the land area can be defined as agricultural land, of which only less than 10 per cent is accually under crops cultivation, the rest being used for permanent pasture.

In most of the highland areas, main agricultural products range from coffee, maize and bananas in the lower elevations, to wheat, barley, sorghum, teff, oilseeds and pulses in the high, cooler locations. There is intensive livestock production based on cattle, pigs and poultry. Ethiopia's forest resources are very limited as some parts of the country are nearly desert. The potentials for fisheries are promising.

To date few commercially exploitable mineral resources, mainly gold and platinum have been discovered, and the mining sector has made a very small contribution to national output. However, prospecting for oil and natural gas has been under way in the north-east (Red Sea) and south-east (Ogaden) region for several years, but no commercially exploitable findings have been announced.

# Energy

Ethiopia has an enormous hydro-electric potential which is the only advanced form of energy rescurces being exploited commercially to date. The prospects for development of other forms of energy are rather poor, exploration has led so far to no significant findings. The economically utilizable hydro-potential of the country is estimated to be about 46 billion KWH, most of which is concentrated in the Blue Nile Basin, while the remainer is divided among many rivers, particularly Wabi Shebelle, Takazie, Omo and Awash. However, only a very small fraction of this potential has yet been tapped (around 2.3 per cent) through the construction of large hydro-electric schemes aimed mainly at central electricity production, flood control and irrigation. In spite of the general survey that has been carried out in some river basins, an enormous amount of work still remains to be done to identify more suitable sites in particular with regards to the utilization of small rivers for small-scale hydro-electric plants for rural energy supplies.

As far as solid fuels are concerned, no systematic exploration work has been undertaken in the country. However, lignite deposits are noted in many localities of the Ethiopian plateau. The beds are most'y thin and the quality ranges in character from almost peat to sub-bituminous coal. Occurrences of lignite are known to exist in the provinces of Condar (Chelga), Wollo (Wuchale and east of Dessie), Shoa (Debre Berhan, Debre Libanos and Mugher Valley), Kaffa (Giren), Wollega (west of Nejo-Arjo) and Illubabor (near Urumu). From random samples it seems that the calorific values range from 1,910 to 6,400 kilocalories per kilogram.

As at present there is no crude oil or natural gas production in the country. However, oil seepages were recognized at seven places in the Red Sea coast area at four places in the Ogaden area. Out of 35 exploration boreholes drilled, 16 boreholes showed an indication of oil and gas. Trip or connection gas were also encountered at various depths of different formations. There are also some indications of the presence of oil shale and bituminous sands.

The search for natural gas is still at the exploration stage. The result reached so far is that the tertiary sediments of the Red Sea coastal area and the Harrar area are possible production areas. Some exploratory holes were drilled which led to some positive results but no exact estimates of deposits and flow characteristics are available.

The search for radio-active minerals, uranium and thorium, is also at the exploration stage. Uranium occurrences have been observed in various provinces, but up to now detailed geological mapping as well as drilling was carried out only in one location. As at present there are no reserve and/or quality estimates of any kind. No study has ever been undertaken up to now on the possibility of introducing nuclear power in the country's energy system in the future.

As far as geothermal power resources are concerned, a broad-scale exploration was carried out between 1969 and 1971 to study over 500 hydrothermal features identified by ground investigations and infra-red photography within 150,000 square kilometres. The conclusions were that in these areas of high temperature, gradients with probable shallow magma heat source exist which have enormous prospects for development of geothermal power. This led to the selection of three sites for detailed study.

Indeed, at the moment in-depth exploration is in progress in the Lake Langano area, but financial difficulties have slowed down progress of the drilling phase. Future plans consist in the completion of this detailed investigation to be followed by similar investigations in Tendaho and Dallol areas. On the basis of the findings of the test drilling programme, it is intended to construct a pilot power plant in the Langano area to prove the feasibility of geothermal power development as an alternative to other sources of energy. If successful, this phase will be followed by wide-scale development.

Because of its geographical location, Ethiopia possesses a very high intensity of solar energy. However, up to now, utilization of this energy is direct and very rudimentary and does not involve any form of advanced solar energy systems. Further, apart from some solar radiation duration and intensity, data measured in conjunction with meteorological

data gathering requirements carried out by the Ethiopian Civil Aviation Administration, no accurate solar energy parameters exist to enable an evaluation of the feasibility of installing solar energy systems in any part of the country. For the eventual consideration of solar energy as a possible alternative energy source, it will be necessary to install a network of some more accurate instruments from which more accurate data can be obtained from any location by simple comelation formulas.

The wind energy potential of Ethiopia is not in general as favourable as that of solar energy, except in some areas. Some wind energy parameters have been collected in some stations for exclusive use in meteorological services by the Civil Aviation Administration. As wind energy parameters are particular to each site, it will be necessary to install accurate wind energy data measuring instruments in those sites where it is intended to test wind energy systems. Wind and solar radiation datas known as "N Summary" are also available for some locations in Ethiopia.

Ethiopia's forest resources are very limited and consist mainly of closed forest estimated to be only between 2.6 and 7 million hectares and mostly located in the southwestern and southern central parts of the combe. About 850,000 hectares of these closed forests, at an altitude from 1,600 to 2,400 metres are dominated by soft woods, particularly the two all-purpose timber species Zigba (Podocarpus gracilor) and Tedh (Juniperus procera). The rest contains many hardwood species some of which are useful for general construction work and plywood.

Open savannah type woodlands, dominated by Acacia species, are estimated to cover about 20 million hectares, These areas are used for grazing and agricultural cultivation, and the trees are used as source of fuelwood for local consumption and for the production of charcoal supplied to urban areas.

Bamboo stands cover an estimated 700,000 hectares. The most widely planted tree species are Eucalyptus Globulus and Eucalyptus Comaldulensis, of which there are an estimated 40,000 hectares of plantations around Addis Ababa and elsewhere in the country.

These plantations are intensely used for fuelwood, building materials, electric transmission lines, and as raw materials for particle board and fibreboard. Apart from this and other isolated tree planting schemes there are not systematic large-scale plantations intended to replace those being destroyed for fuelwood and other uses. However, it is to be noted that over most of the low lands and the south-western highlands, fuelwood supplies are still inadequate and the situation in the rest of the country is even worse. Thus, particularly in the central and northern areas, fuelwood supplies are extremely scarce and in some areas non-existent.

As far as present energy consumption pattern in Ethiopia is concerned, the available data suggest that about 96 per cent of the total energy consumed in the country is non-commercial, consisting mainly of wood, cow dung and agricultural wastes. As for the remaining 4 per cent, most of it consists of oil and other forms of commercial energy.

In the urban areas and surroundings, commercial energy (pil, kerosine, gas, electricity, etc.) is used mainly for lighting, transportation, industry, commerce and for agro-industrial processes. It is also used by most households in the urban areas for lighting and to a lesser degree for ironing. Only a negligible section of the urban people in the middle and higher income brackets can afford to use commercial energy for heating, cooking and refrigeration.

In the rural areas, the consumption of energy for household needs (excluding therefore energy consumption for agricultural operations, transportation, water lifting and other domestic activities) is characterized by the almost total use of non-commercial energy, i.e. fuelwood where there are adequate supplies of this form of energy and cattle dung or agricultural wastes where there is no wood.

Assuming an average stocking density of 30 cubic metres per hectare, the destruction of woodlands for the supply of 20,000 cubic metres of fuelwood per year is estimated to be about 700,000 hectares per year. The destruction of forest for the production of charcoal to urban areas is only equivalent to about 60,000 hectares of Acacia woodlands per year.

In the final analysis, the growing scarcity of wood and charcoal coupled with the recent skyrocketing increases in the price of oil and other commercial energy forms as well as those of capital goods have made it impossible for the meager resources of the country to provide any meaningful amount of commercial energy to satisfy even partially the needs of the vast majority of the Ethiopian people. This in turn has increased the urgency of finding alternative energy sources suited to the technological and economic conditions of the bulk of the inhabitants (see Table 2 on this subject).

At present no well-defined energy policy has been published by the Government, but the latter is believed to be in the process of hammering out such comprehensive policy. As an indication of the importance attached to energy development, an Ethiopian National Energy Commission (ENEC) has been established in 1976 which is an advisory body charged with, among other things, the compilation of urban and rural energy demand and supply data, the conduct of the study on energy resources potential, the promotion and fostering of (i) the optional use and conservation of proven national energy resources; (ii) the exploration, development and utilization of all forms of energy resources, etc.

<sup>1/</sup> In 1975 approximately 840,000 persons or only 3 per cent of the total population benefited from electricity services.

Table 2. Estimated 1976 consumption of total energy, sector-wise

	Commercia	al energy	<u>.</u> /		boow)	commercial end t, charcoal, c and agricultu wastes)b/	Total energy consumption in coal equivalent		
	Fuel	Elec- tricity	Total coal equi		Total	Total coal equi			
Uses	Millions of metric tons	MWH	Millions of metric tons	Per capita kilogramme per person	Millions of metric tons	Millions of metric tons	Per capita kilogramme per person	Millions of metric tons	Per capita kilogramme per person
Industry	0.096	324.0	0. 1855	6.50	_	_	_	0.18550	5.50
Transport	0.280	-	0.4508	15.76		-	-	0.45080	15.76
Residence and	0.004	150.0	0.02547	0.90	31.0	19.6	685.31	19.62547	686.21
Other uses, including fuel used for production of electricity		74.0	0.20275	7.04	_	-	-	0.20275	7.04
Total	0.509	548.0	0.86452	30.20	31.0	19.6	685.31	20.46452	715,51

Source: Estimates by Ethiopian National Energy Commission (ENEC).

a/ In the total for commercial energy 0.054 million tons of fuel used for production of electricity have not been deducted.

b/ Non-commercial energy use has been assumed to be mainly for residential and commercial use.

### Transportation system

Highways are the p. Lominant mode of transportation in Ethiopia, which carry the bulk of internal commerce as well as two-thirds of foreign trade. The road network consists of an estimated 23,000 kilometres, but only 8,600 kilometres are allweather roads and less than 3,000 kilometres are paved. The primary road network connects Addis Ababa with Asmara in Eritrea province, with the part of Assab on the Red Sea and with the other provincial capitals and major market towns, but few allweather feeder roads exist. However, rail and air transport play also an important part. Ethiopia has two railways; the 790 kilometres Franco-Ethiopian Railways which join Addis Ababa with Djibeuti and the 306 Morthern Ethiopian Railways which link Massawa on the Red Sea with Asmara and Agordat in Eritrea province. Together these railroads carry on the average about onethird of all imports and exports. The main factors responsible for the limited development of Ethiopia's transport system are the country's mountainous topography and the long distances between the population centres in the highlands and the borders. There is an extensive domestic aviation system which serves some 45 airfields, only two of which, Addis Ababa and Asmara, can handle long-distance international traffic.

#### Overall economic performance

# Gross domestic product (GDP)

During the period 1970-1977, the GDP at constant factor cost grew at an average annual rate of 2.5 per cent. The movement of GDP is highly influenced by the level of agricultural output as the agriculture sector accounts for half of the total of GDP.

The agriculture sector grew at a modest rate of 0.9 per cent per annum during the period under review. During 1970-1975, the growth rate was only 0.7 per cent per annum due to the prevalence of drought in many parts of the country. The significantly improved growth during the past two years has been helped by the good weather conditions prevailing in the country.

The other commodity sectors, i.e. manufacturing and mining, registered growth rates of 3.5 per cent and 1.7 per cent, respectively. The decline in investment and the security problems in the province of Eritrea are some of the explanations for the decline in the rate of growth in manufacturing compared with the 1960s. On the other hand, mines were nationalized and the security problem in the regions where gold was mined had some affect on the rate of growth recorded.

The service sectors, excluding trade, transport and communications, registered the highest growth rate of 8 per cent per annum mainly due to the increased expenditure on defence.

Construction accounted for only 4.6 per cent of GDP in 1969/1970 and 4.1 per cent in 1976/1977. The growth rates for this sector have varied over the period 1970-1977. Now, despite high building material prices, there are signs of recovery and further growth in the construction sector as many building and construction projects are under way to improve social and economic infrastructure. As a result of the different growth rates in individual sectors, agriculture contributed 49.3 per cent of GDP in 1976/1977 compared with 56 per cent in 1969/1970; manufacturing increased its share of GDP from 9 to 10.4 per cent, wholesale and retail trade from 8.4 to 10 per cent, and services from 16.7 to 20.3 per cent.

From 1973/74 to 1977/78, real GDP growth was low (less than 0.5 per cent per annum), reflecting security problems, the inevitable uncertainties, dislocations and resistance which followed the radical reforms and the resulting difficulties in the internal marketing and distribution system. With this slow growth of GDP during recent years, and given an estimated population growth of 2.5 per cent per year, it is apparent that growth in per capita GDP fell over this period. While little information is available on distribution of income in Ethiopia,

Table 3. GDP by source, 1969/1970, 1974/1975, 1976/1977
(in millions of Birr)

Current prices	1969/70	Per cent	1974/75	1975/76	1976/77	Per cent		
	_							
Agriculture, forestry, fishing	2,327.2	56.0	2,423.4	2,767.8	2,880.4	49.3		
Mining	9.8	0.2	12.6	11.0	11.0	0.2		
Manufacturing	372.3	9.0	569.4	572.8	604.9	10.4		
Electricity and water	29•9	0.7	40.5	41.4	43.2	0.7		
Construction	190.0	4.6	232.3	229.8	237.9	4.1		
Wholesale and retail trade	350.6	8.4	522.7	558.3	583.2	10.0		
Transport and communications	183.5	4.4	272.9	288.1	291.0	5.0		
Services	691.5	16.7	1,029.4	1,118.9	1,182.9	20.3		
GDP at factor cost	4,154.8	100.0	5,103.2	5,588.1	5,834.5	100.0		
Taxes less subsidies	287.6		421.3	454 • 4	•••			
GDP at market prices	4,442.4		5,524.5	6,042.5	•••			
GDP at 1960/61 factor cost								
Agriculture, forestry, fishing	1,833.3		1,902.6	1,964.4	1,951.3			
Industry - manufacturing	139.9		170.6	167.4	177.5			
Industry - other	398.9		453.7	438.6	443.8			
Services	1,071.1		1,412.6	1,477.2	1,515.8			
	3,443.2		3,939.5	4,047.6	4,088.4			

Source: Ethiopia, Central Planning Commission Office, Department of Macre-Planning.

it is likely that growth in per capita incomes must have averaged less than 1.0 per cent per annum during the recent years and must have been accompanied by a worsening of the income distribution both between the agricultural and non-agricultural sectors, and among different income groups.

#### External trade

The main features of Ethiopia's external transactions in recent years have been declining in volume of most major exports and high growth in imports (about 14 per cent per annum on average from 1971/72 to 1977/78), especially in such items as drought relief and military imports, which might be considered exceptional.

The value of exports grew at about 6 per cent between 1972/73 and 1977/78. However, most of this increase is due to high prices, principally for coffee but to a lesser extent also for pulses, fruits and vegetables, live animals and oilseed cake.

Ethiopia's manufacturing industries are rather inward looking in that their output is designed for domestic markets. The country's major exports include agricultural products of which coffee accounted, in 1977, for 75.4 per cent of the total exports value, followed by pulses, hides and skins.

Manufactures represent a high percentage of Ethiopia's total imports. The value of imports has grown rapidly (at about 21 per cent per annum since 1973/74), or by 8 per cent per annum at 1976 prices. However, a decline in the share of capital goods (machinery and transport equipment) in the total import bill has been noted in the years up to 1977. Furthermore, if unrecorded imports which represent the National Bank of Ethiopia's estimates of drought relief and other unspecified items, are eliminated, imports at 1976 prices seem to have grown just over 1 per cent per annum, with most of this growth occuring in 1974/75 and again in 1976/77, the year before the emergency situation

occurred. All categories of imports rose in terms of value by similar amounts over the period 1973/74, except for raw materials and semi-finished goods, which fell after 1975/76.

### Balance of payments

The balance of payments which used to be a major constraint on economic growth in early 1970s, registered a surplus in the years up to 1976. In 1977, however, the balance of payments was marked by a deficit of Birr 133.8 million. Major factors responsible for this were a relatively slow growth of exports and an accelerated increase in imports, while lower net receipts were recorded for services, private transfers and particularly for capital compared with 1976.

As far as services are concerned, there had been a decline in receipts from Covernment transactions, travel and investment income. A substantial deficit was recorded in investment income following nationalization in early 1975. Despite a slight recovery in 1976, the situation worsened in 1977 due to lower interest earnings on foreign reserves.

The balance of payments deficit in 1977 led to a fall in net foreign assets of Birr 94.6 million over the year as a whole. Up to and including 1976/77, the deficit was financed by external assistance, either in the form of transfers or net inflows of public capital. Between 1973/74 and 1976/77, Ethiopia held foreign exchange reserves equivalent to almost a year's supply of imports. However, in 1977/78 a sizeable deficit, Birr 260.5 million, was incurred due to increased imports and a reduced capital inflow, and by the end of the year, foreign reserves stood at above five-months imports.

Table 4. External trade and balance of payments, 1970 and 1975-1977 (in millions of Err)

	1970	1975	1976	1977 <u>a</u> /
External trade				
Exports and re-exports	305.8	497.8	580.5	689.9
Imports	429.1	644.9	729.5	810.9
Palance	-123.3	-147.1	-149.0	-121.0
Balance of payments				
Goods and services (net)	-98.9	-178.8	-199.7	-287.7
Private transfers (net)	-6.6	30.0	45.3	29.2
Covernment transfers (net)	26.6	52.7	85.7	84.8
Capital (net)	45.0	129.7	111.8	72.4
Reserves and related items	42.3	<b>-</b> 7.6	-32.4	133.8
Errors and omissions	-8.4	-26.0	-10.7	-32.5

Source: National data from Ethiopia.

a/ Provisional.

## Chapter II

### THE MANUFACTURING SECTOR

# Role in the overall economy

Up to 1969 manufacturing contributed 10 per cent of GDP.

However, over the last three years, manufacturing production declined steadily. Production decreases have taken place in food, wood, non-metallic mineral products (mainly cement) and in metals. Production increases in textiles, beverages, tobacco, leather and leather foot-wear were not sufficient to meet the substantial demand increases which followed the land reform.

The major reason for production declines has been the situation in Eritrea, where transportation and security difficulties have affected both productive capacity and accessibility of markets, and which accounted for approximately 30 per cent of manufacturing output in normal times. Despite the fact that production outside Eritrea increased by 6.6 per cent in 1975/1976, a breakdown by industry shows some quite large decreases in tobacco, leather, footwear, wood and chemicals.

Other factors responsible for the decrease in production included management changes following nationalization, difficulties over raw materials and spare parts supplies and labour disputes. Complete data on the performance of the nationalized industries are not available, but it appears that sales by the enterprises under the Ministry of Industry increased by 3.3 per cent in 1974/1975 and by 13.3 per cent in 1975/1976.

Medium- and large-scale manufacturing which accounts for about 5.5 per cent of GDP has grown in 1975 more slowly than anticipated in recent years, reflecting the limited scope for further import substitution in consumer goods and the effects on existing lines of manufacturing of the slow growth in domestic incomes. The disappointing

performance has also been attributed to high internal transport costs, to unforeseen increases in international transport cost and to an uncertain investment climate for foreign capital. The short-fall in industrial investment can be partly attributed to the lower than anticipated inflow of foreign capital for manufacturing. As a result, the manufacturing sector has absorbed only a small fraction of the additions to the urban labour force.

Handicraft and small-scale industries account for approximately 5 per cent of GDP. Little published information is available for this sector which, however, makes a major contribution to employment with a minimal investment requirement.

## Employment

The Directory of Manufacturing Enterprises in Ethiopia, published in 1971, indicated that out of a total of 585 manufacturing establishments: (i) about 230 establishments employed between 10 and 50 workers; (ii) 106 establishments employed 10 people or less; and (iii) the other 249 establishments were medium— and large—scale with fixed capital investment above US \$100,000 and employment over 50 workers.

Table 5 below shows the number of establishments and employment by industrial branches. In 1975/1976, cut of 430 manufacturing establishments: (i) 104 establishments employed between 10 and 19 workers; (ii) 127 establishments employed between 20 and 49 people; and (iii) 199 establishments employed 50 and over workers. In 1975/1976 handicrafts and small-scale industries accounted for 9.1 per cent of total employment in manufacturing, and medium— and large-scale manufacturing accounted for 90.9 per cent.

Table 5. Number of establishments and total employment by industrial branches

	Establishments Number			Employees					
Branches				Number			As percentage of total		
	1973/74	1974/75	1975/76	1973/74	1974/75	1975/76	1973/74	1974/75	1975/76
Food	105	106	114	11,614	13,449	10,724	20.3	22.4	18.1
Beverages	32	32	30	2,905	3,068	3,625	5.1	5.1	6.1
Tobacco	2	2	2	477	689	662	0.8	1.2	1.1
Textiles	62	62	62	23,787	23,795	26,044	41.0	39.7	44.0
Leather and shoes	18	17	17	2,748	2,900	2,708	4.8	4.8	4.6
Wood	78	80	77	4,258	4,411	4,242	7.4	7.4	7.2
Non-metallic mineral products	46	46	37	4,069	3,953	3,338	7.1	6.6	5.6
Printing	21	21	2 <b>2</b>	1,500	1,500	1,634	2.6	2.5	2.8
Chemicals	42	40	38	4,289	4,408	4,511	7.5	7.3	7.6
Steel, metal and electrical products	30	29	31	1,973	1,809	1,734	3.4	3.0	2.9
Total	436	435	430	57,320	60,012	59,222	100.0	100.0	100.0

Source: Central Statistical Office, Statistical Abstract, 1977, page 79.

### Structure

The structure of Ethiopia's small and relatively underdeveloped manufacturing sector has significantly changed since early 1975 when the Government announced the complete or partial nationalization of the major manufacturing enterprises as well as financial institutions and distribution agencies. As a result of the proclamation, the public sector expanded notably and although no comprehensive data are available on the value of assets taken over, it appears that, as a very rough approximation, enterprises under the Ministry of Industry account for two-thirds of manufacturing production. It goes without saying that the proportion varies considerably from subsector to subsector. Parastatals under the Ministry of Industry are organized into 14 sector corporations as operating units rather than as subsidiary companies.

The share of large-scale manufacturing, handicraft and small-scale industry in GDP has ranged over the past seven years from 8.8 to 9.5 per cent of GDP at constant factor cost. In 1975/1976, the latest year for which comprehensive data are available, 430 establishments employed more than 10 persons, with a total employment of just over 59,000. Slightly over 80 per cent of these (48,500) worked in 147 publicly—owned establishments. The private manufacturing sector comprises the majority of enterprises (283), but accounts for less than 20 per cent of employment and about 10 per cent of value added and fixed assets.

The most important subsectors are the consumer goods industries of textiles (33 per cent of value added), foodstuffs (22 per cent) and beverages (16 per cent). These industries produce almost exclusively for the domestic market, especially previously limited exports of items like sugar have been curtailed to meet domestic demand. In 1975/1976 the four leading subsectors, i.e. textiles, chemicals, food and tobacco, accounted for 80.2 per cent of total gross value of manufacturing production. The same subsectors accounted for 75.8 per cent of total employment in the manufacturing sector, 76.8 per cent of total wages and salaries generated by the

same sector, 89.9 per cent of total fixed assets and 76.5 per cent of total investment in the same sector.

The above data are a clear indication of the extent to which the manufacturing industry in Ethiopia is limited and hence dominated by few subsectors. However, this sector's performance seems to record steady improvement as the number of the establishments has been falling down from 436 in 1973/1974 to 435 in 1974/1975 and to 430 in 1975/1976, while gross value of production kept on increasing over the same period from Birr 891 million in 1973/1974 to Birr 902 million in 1974/1975 and to Birr 1,010 million in 1975/1976. Out of 199 medium-and large-scale establishments existing in 1975/1976, 142 establishments belonged to five subsectors, i.e. food (47), textiles and readymade clothes (37), wood and cork products (27) and beverages (15). The same four subsectors comprise the largest number of small-scale establishments, i.e. 154 establishments out of a total of 231.

# Handicraft and small-scale industry

A survey conducted by the Handicraft and Small-scale Industry Development Agency (HASIDA) and the Central Statistical Office (CSO) in 1977/1978 identified 965 small-scale enterprises (defined as having fixed assets of less than Birr 200,000) in the major Ethiopian cities, mostly in food processing, woodworking and textiles. These enterprises employed about 9.700 people and accounted for less than 10 per cent of value-added for the manufacturing, handicraft and small-scale industry subsector. In addition, the artisan subsector is significant, with 5 to 10,000 establishments and probably 2 to 300,000 self-employed craftsmen in the informal sector. These establishments are very labour-intensive, use predominantly local raw materials and cater largely to local consumption needs, although some handicrafts are also exported.

Table 7. Main manufacturing subsectors  $\frac{a}{1}$ ,  $\frac{1971}{72} - \frac{1975}{76}$ 

	1971/72	1972/73	1973/74	1974/75	1975/76
Foodstuffs					
Cross value of production (millions of Birr)	167.2	180.8	165.4	177.1	203.8
Value added <sup>C</sup> / (millions of Birr)	74.3	74.8	81.4	94•3	105.3
Wages and salaries (millions of Birr)	14.9	17.5	19•5	22.6	25.3
Fixed assets (millions of Birr)	101.1	106.8	111.8	99•3	89.3
New capital expenditure (millions of Birr)	5.0	6.6	5.8	5.2	10.6
Number of employees $(thousands)$	9.1	9•7	11.6	13.5	10.8
Number of establishments	100	102	105	106	114
Beverages					
Cross value of production (millions of Birr)	70.3	76.2	88.0	89.1	103.6
Value added $\frac{c}{millions}$ of Birr)	50.2	54.4	65.1	64.9	74.1
Wages and salaries (millions of Birr)	5.2	5.6	5.3	4.7	6.6
Fixed assets (millions of Birr)	33.9	37.4	30.2	24.2	25.8
New capital expenditure (millions of Err)	5.1	5.0	0.9	1.7	3.9
Number of employees e/ (thousands)	3.0	2.9	2.9	3.1	3.6
Number of establishments	32	32	32	32	30
Textiles					
Gross value of production (millions of Birr)	228.5	240.0	275.1	287.2	287.7
Value added $\frac{c}{}$ (millions of Birr)	90.6	100.8	103.0	146.5	129.8
Wages and salaries (millions of Birr)	23.9	24.6	28.3	31.0	34.2
Fixed assets $\frac{d}{d}$ (millions of Birr)	84.1	83.8	88.9	80.9	89.3
New capital expenditure (millions of Birr)	10.5	8.1	16.4	8.1	10.6

Table 7. Main manufacturing subsectors 1971/72 - 1975/76<sup>b</sup>/(continued)

	1971/72	1972/73	1973/74	1974/75	1975/76
Textiles (continued)					
Number of employees / (thousands)	23.6	24. J	23.6	23.9	26. 1
Number of establishments	54	54	62	62	62
Chemicals and petroleum					
Gross value of production (millions of Eirr)	71.1	84.2	165.3	169.9	200.0
Value added <sup>C</sup> (millions of Rirr)	28.0	31-7	45.0	47.2	47.3
Wages and salaries (millions of Birr)	8.2	9-5	11.2	11.8	14.1
Fixed assets (millions of Rirr)	64.6	73.3	90.6	81.3	39.8
New capital expenditure (millions of Birr)	1.6	15.9	4.6	3.3	3.1
Number of employees (thousands)	2.6	2.9	3.6	3.9	3.9
Number of establishments	28	29	34	34	32
All manufacturing industry					
Gross value of production (millions of Birr)	689.5	772.5	890.6	902.7	1,010.8
Value added <sup>C</sup> (millions of Rirr)	313.5	341.8	380.8	432.2	454.3
Wages and salaries (millions of Birr)	73.7	80.1	88.0	94.7	106.3
Fixed assets (millions of Birr)	361.1	390.0	425.1	391.0	354.2
New capital expenditure (millions of Birr)	31.2	44.0	36.3	26.7	34.2
Number of employees / (thousands)	53.5	55.0	57.4	60.1	59.4
Number of establishments	420	421	436	435	430

Source: Central Statistical Office, Statistical Abstracts and Results of the Survey of Manufacturing Industry, 1976.

Includes manufacturing establishments employing 10 or more.

b/ Ethiopian calendar year, ending 10 September.

At market prices, including "non-industrial" costs, (fees, insurance and other services). In 1976, indirect taxes totalled Br. 110.7 million (24.4 per cent of value added as defined in this Table), and "non-industrial costs" totalled Br. 55.8 million (12.3 per cent of value added as defined in this Table).

d/ End of year.

e/ Includes working proprietors, partners and unpaid family workers.

# Manufacturing production

Manufacturing production stagnated from 1972/1973 to 1976/1977 and rose by about 2 per cent in 1977/1978, according to preliminary data. Much of this stagnation can be attributed to the situation in Asmara, where power-outages restricted production and transport difficulties reduced raw material supplies and limited exports. Estimates of gross output in the public sector enterprises outside Eritrea show increases of 7 per cent in 1976/1977 and 4.4 per cent in 1977/1978. However, since public sector enterprises would receive priority for goods in short supply, this picture is unlikely to be typical of the manufacturing sector as a whole, which depends on imports for about 35 per cent of its raw materials (excluding crude petroleum imports to the Assab refinery) and which has consequently suffered from the acute transportation difficulties of recent years. Raw material shortages have principally affected the production of edible oils, flour mills and building materials, causing these industries to produce well below capacity. Factors that have constrained capacity include machinery breakdowns, spare part shortages and the low level of investment. Given improvements in the transport and Eritrea's situations, a quick production response could therefore be achieved. Preliminary data for 1978/1979 indicate that substantial production increases have indeed been achieved, though somewhat less than 45 per cent increase targeted for the year under the Zemetcha.

### Trends in manufacturing production by main industry groups

#### Food

The food industry engaging 17.7 per cent of the total number of employees, accounts for about 18.7 per cent of the total value added. Table 8 shows that the food industry declined throughout

1973/1974 to 1977/1970, with a particularly substantial downfall in 1976/1977. This decline is mainly attributed to the three meat packing plants which stopped production since the end of 1973/1974. Of the meat packing plants included in Index (see Table 8) only one is still functioning. The major products of the food industry are sugar, canned and frozen meat, edible oils, flour and salt.

Table 8. Index of production in the food industry group

	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Food	100.0	89.4	95•4	89.5	87.9	95.3
Meat	100.0	51.5	25.3	11.1	18.7	12.4
Flour	100.0	108.7	128.9	134.9	134.1	146.2
Macaroni and pasta	100.0	109.7	171.9 •	212.0	187.4	162.5
Edible oil	100.0	74.8	75.1	65.0	68.2	48.0
Sugar	100.0	95•5	106.5	99.8	97.7	112.9
Salt	100.0	74.7	83.4	115.5	97.6	73.4

Source: Central Statistical Office, Statistical Bulletin No.20, Iddis Ababa, June 1979.

#### Textiles

Textile industry accounts for about 43.6 per cent of the total employment, 31.1 per cent of the total value of gross production and 30.8 per cent of the total value added. Cotton yarn and cotton fabrics constitute the highest proportion of textile production. These two products showed a substantial decline attaining the lowest levels in 1977/1978 with -19.4 per cent and -26.3 per cent, respectively, as compared to the corresponding figures for 1972/1973. Over the period as a whole, the production of textile industry has fallen, showing also an irregular trend.

Table 9. Index of production in the textile industry group

	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Textiles	100.0	98.0	95.2	97•9	92.8	79.8
Yarn	100.0	96.6	97.4	97•9	95.1	80.6
Fabrics (cotton)	100.0	96.9	89.3	96.7	89.7	73.7
Fabrics (nylon)	100.0	114.2	121.0	112.3	110.7	130.5
Blanket (cotton)	100.0	117.9	110.5	76.0	76.6	68.7
Blanket (woollen)	100.0	85.4	102.0	118.0	133.9	111.0
Fibre sacks	100.0	87.3	101.8	103.3	97.6	80.5

Source: Central Statistical Office, Statistical Bulletin No.20, Addis Ababa, June 1979.

#### Beverages

Beverage industry, which is one of the most important subsectors within manufacturing, achieved a considerable rate of growth during the last five years. The major product of the beverage industry is beer, followed by wine and soft drinks. There were increases in the production of beer and soft drinks, whereas the production of wine dropped in 1973/1974 and 1974/1975.

Table 10. Index of production in the beverage industry group

	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Beverages	100.0	113.0	121.7	114.2	128.5	132.0
Liquors	100.0	115.6	95.6	83.2	76.7	84.9
Wine	100.0	90.7	88.5	119.8	136.5	127.2
Beer	100.0	118.0	127.8	113.5	132.3	135.7
Soft drinks	100.0	107.0	142.8	153.3	167.8	176.9
Mineral water	100.0	94.4	106.1	94.3	109.6	104.0
Soft drinks	100.0	107.0	142.8	153.3	167.8	

Source: Central Statistical Office, Statistical Bulletin No. 20.

#### Other subsectors

There were declines in the year-to-year comparison of the production indexes of the other subsectors with the exception of footwear and chemicals. Particularly non-metallic mineral products and metal products have been characterized by a very low production, the lowest level of which was observed in 1975/1976 compared to that of the base year (1973/1974).

#### Value added

Despite the decrease in the number of establishments, total value added at factor cost in the manufacturing sector increased from Birr 340 million in 1976/1977 to Birr 434 million in 1977/1978. The four leading subsectors of textiles, food processing, beverages and tobacco increased their share of value added from 66.6 per cent in 1976/1977 to 68.0 per cent in 1977/1978. However, only slight increase in total gross value of manufacturing was recorded. This value rose from Birr 1,100 million in 1976/1977 to Birr 1,108 million in 1977/1978, which is an indication of very slow progress. Indeed, the annual rate of growth of total manufacturing showed only slight increase of 0.2 per cent and 0.4 per cent in 1973/1974 and 1974/1975, respectively, when compared to the corresponding figures for the preceding years. All the subsectors showed a declining trend, except food, beverages, footwear and chemicals. This trend seems to have been maintained during the last three years, and the rate of growth was even the lowest in 1977/1978 as the manufacturing sector has not shown any recovery and as a result, the annual index of manufacturing production was sharply declined.

## Import and export of manufactures

As already mentioned above, manufactures rank very high in Ethiopia's imports. The share of manufactured goods in total value of the country's imports was 83.6 per cent in 1975. In 1972, it was

even higher since it amounted to 94.1 per cent. On the contrary, manufactures' share of the country's total exports is relatively low and declining since it was only 20.1 per cent in 1976 as against 24.7 per cent in 1972.

Table 11. Imports by broad category and exports by industrial origin (percentage of total value)

Imports	1972	1975	Exports	1972	1975
Industrial supplies	32.0	36.3	Agriculture	75.0	79.4
Fuels	5•9	16.4	Mining	0.3	0.5
Transport	19.5	15.0	Manufacturing	24.7	20.1
Consumer goods	11.7	14.6	Food, beverages	(21.6)	(15.0)
Machinery	24.2	13.2	Textiles	(1.0)	(1.0)
Food, beverages	5.8	4.0	Wood and wood products	(0.1)	(0.2)
			Paper and paper products	(0.1)	-
			Chemicals	(1.3)	(3.2)
			Non-metal mineral	(0.3)	(0.2)

Source: Yearbook of International Trade Statistics, 1978, United Nations, New York.

#### Manufacturing investment

Manufacturing investment has been declining in real terms since the early 1970s, with nominal investment in 1975/1976, reaching about half the 1970/1971 level. Data are not broken down for a series of years for the public and private sectors, but in 1975/1976 virtually all new investment in enterprises covered by the Central Statistical Office annual survey was in the public sector. Investment is at present barely adequate to provide for replacement let alone expansion needs. As a very rough indication, manufacturing investment over the last 6 - 8 years has been

equal to between 7 and 11 per cent of the depreciated value of fixed assets, which would be sufficient to replace assets with a life of around 10 years. Yet, most of the equipment in use in Ethiopia today is much older than this and has probably been already fully amortized in enterprise accounts.

Low private sector investment probably reflects the uncertainties of recent years, attributable to nationalization fears, labour difficulties and the depressed state of business generally. In the public sector, it reflects difficulties associated with the transfer of management and shortages of technical personnel. It does not reflect low profitability or poor prospects; summary data for 1975/1976 show acceptable financial results for 11 out of 14 sector corporations under the Ministry of Industry.

#### Employment and wages

Employment in public sector industries increased by over 10,000 or 19 per cent between 1975/1976 and 1977/1978, while gross manufacturing output recorded only marginal growth during the same period. As a result, real value added per employee in manufacturing which was already declining for several years and was estimated to be 11 per cent lower in 1975/1976 than in 1972/1973 must have dropped even more. The average real product wage has consequently showed the same declining trend and fell by the same amount. Labour productivity also must have fallen as the real capital stock in manufacturing seems to have at best remained constant.

#### Intersectoral linkages

No input-output tables are available which can provide an insight into the linkages among the various sectors of Ethiopia's economy. However, there are factors which tend to be a fairly reliable indication of the poor intersectoral linkages that characterize the country's economy.

First, the high dependence upon both raw material and capital goods leaves little opportunities to generate linkages among the various sectors. Particularly striking is the case of the few linkages that exist between industry and agriculture. The import content of the manufactures is very high and only a negligible portion of domestic agricultural output is used as raw material input into food processing. Most of the agricultural products are exported unprocessed. On the other hand, the industrial sector hardly provides inputs (agricultural machinery, implements, fertilizers) into agriculture. Manufacturing output in the country consists mainly of consumer goods for the domestic market.

Second, even where some sectoral linkages exist, they are still very rudimentary, Illustrative in this regard is the example of the domestically produced manufacturing inputs to construction and building industries. Not only are these inputs (cement, bricks, roofing sheets, light steel structures, wood prefabricated structures, etc.) in too small quantity in relation to the massive imported ones, but most of them are light inputs while the bulk of imported inputs consists of items such as cement, tiles, sanitary ware, taps, aluminium, etc. Finally, given the fact that industry, which can play the role of catalyst in the generating of the intersectoral linkages, is still in its infancy in Ethiopia, and that on the other hand, the country's overall development is still in a preliminary stage, no strong linkages can realistically be expected to exist among the various sectors of the economy.

#### Geographical distribution of manufacturing

Manufacturing in Ethiopia is concentrated in the few urban centres where infrastructure and markets are most developed, i.e. principally Addis Ababa, Asmara and Dire Dawa, with respectively 43.2 per cent, 24.9 per cent and 4.2 per cent of the total number of manufacturing establishments in 1975/1976. Out of the 430 manufacturing establishments operating in Ethiopia in 1975/1976, 381

cstablishment, i.e. 89.6 per cent of the total number, were located in the three regions of Shoa, Eritrea, and Hararghe. Geographical distribution of the 430 establishments was as follows:

	Esta	blishments	Employment		
	Number	Percentage	Number	Percentage	
Shoa,	244	56.7	35, 483	59•7	
of which Addis Ababa	(186)	(43.2)	(20,009)	(33.7)	
Eritrea,	112	26.1	12,292	20.7	
of which Asmara	(107)	(24.9)	(10,802)	(18.2)	
Hararghe,	25	5.8	6,083	10.2	
of which Dire Dawa	(18)	(4.2)	(5,626)	(9.5)	
Others	49	11.4	5,551	9.4	
Total	430	100.0	59,409	100.0	

#### Chapter III

#### MAIN FEATURES OF THE ECONOMIC POLICY

#### Government ownership or control

The economic policy of Socialist Ethiopia, embodied in the Declaration on economic policy of Socialist Ethiopia that was issued in 1975, places strong emphasis on the role to be played by the Government in overall economic and social development of the country and in all sectors of the economy. However, the desirability of the beneficial participation of private capital is recognized. The main guidelines of this policy are as follows:

- Those resources that are either crucial for economic development or are of such a character that they provide an indispensable service to the community will have to be brought under Covernment control or ownership;
- Essential economic activities which are not amenable to centralized public management will, though outside the public sector, be subject to public monitoring to ensure that the public interest is properly served;
- Activities in the private sectors which are not harmful to the interest of the society will be left in private hands in so far as they do not impede the objectives of "Ethiopia Tikdem".

The Declaration states that a cornerstone of the motto "Ethiopia Tikdem" is self-reliance. Therefore, industrial activity, the exploitation of natural resources, the development of small-scale enterprises will be carried out on the basis of this principle.

#### Foreign participation

It is declared that foreign capital and know-how will be given the opportunity to participate in national development in so far as they promote overall economic development and bring benefit to the society.

#### Private participation

The reasons for and the scope of private participation in economic activities are as follows:

- (a) In the Covernment's view, the most important and immediate task in the economic sphere is that of increasing production to satisfy the basic needs of the people. Immediate application of the policies of Ethiopian Socialism relating to the ownership and control of the means of production may, in the short run, frustrate the basic goal of increased production, fail to satisfy the basic needs of the masses and create economic disruptions and dislocations. It is therefore necessary to allow and encourage the private sector to participate in certain defined fields of activity;
- (b) There are sectors of the economy in which the existing high degree of competition complemented by Governmental regulation can ensure that the public interest is served adequately and efficiently. There are also sectors which are amenable to Government control through licensing and/or through fiscal and credit policy and where, therefore, the actual production of goods and provision of services can safely be left to the private sector;
- (c) There is also a need for the Government to provide carefully delineated areas and investment opportunities where individuals could productively employ their capital. If such alternative use for private capital is not available, then the owners may resort to squandering their capital on luxurious living or to hoarding and thereby deprive the notion of much needed capital;
- (d) Ethiopia is a poor country where the forces of production are at a low level of development with the attendant shortage of investible surplus and low level of development of technology. It is, therefore, self-evident that, even though the people of Ethiopia will and must rely on themselves as much as possible, there are certain areas, ventures and problems which they cannot tackle alone or without the participation of foreign capital, technology and know-how. Indeed, foreign private investment will be given ample opportunities in many areas of economic activity and will be assured fair and adequate returns.

The Government has defined various areas for the application of the principles of Ethiopian Socialism to the utilization of natural resources and the development of the various sectors, as well as the respective roles of the public and private sectors. As far as industry is concerned these areas are as follows:

# (a) Broad areas of State ownership

There are broad areas where the State is determined to play a major role. These include the following:

- Basic industries which produce goods that serve as direct or indirect inputs to other industries and which have the capability of creating linkages in the economy (such as iron, steel and cement industries, fertilizer manufacturing, oil refinery, ship building, etc.);
- Industries which produce essential goods for the masses. The State is obliged to ensure unfailing supply of these goods at reasonable prices:
- Industries which directly or indirectly affect the health and well being of the Ethiopian people, e.g. drugs, medicine, tobacco, beverages, etc.:
- Other industries exclusively reserved for the State:
  - Textiles;
  - Leather and leather products;
  - Large-scale rubber manufacturing;
  - Class and bottle;
  - Large-scale printing.

# (b) Areas where State and foreign capital (public and private) could jointly operate

- Processing, canning and preserving of meat, fruits and vegetables which are mainly export-oriented;
- Paper and pulp industries;
- Manufacture of plastic and other synthetic materials:
- Large-scale construction works.

# (c) Activities which are left to the private sector subject to Government regulations

- Food processing, canning and marketing;
- Deiry;
- Small-scale grain milling and pressing of oil seeds;
- Bakery;
- Small-scale manufacture of wood and wood products;
- Fabricated metal products:
- Small-scale weaving, knitting, spinning, sewing and tailoring;

- Cottage industries and handicrafts;
- Repair and maintenance of vehicles and appliances;
- Small-scale construction works;
- Others not elsewhere classified.

#### Implementation of the economic policy

The Government recognizes that in line with the above-mentioned policies and in conformity with the Declaration of Ethiopian Socialism, it has become necessary to further elaborate and elucidate the economic and investment policies of Socialist Ethiopia. But this is an exercise which will understandably take time for the new resulting law, regulations and machinery to be established. Some strides have been achieved in this move, such as the establishment of the Central Planning Supreme Council, but a lot still remains to be done.

In the meantime, several actions along the policies lines have already been taken. Even before the Declaration, some erterprises and profit-making organizations were brought under Government ownership. These include: Kaliti Food Products, S.C., the St. George Brewery, the National Resources Development, S.C., etc.

After the Declaration of Socialism, all banks, financial intermediaries and insurance companies, were nationalized. The main reasons for this were that the banks were the principal nerve centres of the monetized sector of the economy and that the economic development could not be geared towards the improvement of the standard of living of peasants and workers without public ownership of these banks. Public ownership will provide impetus for the Covernment to expand the activities of the financial intermediaries in the various regions of the country in order to develop local productive factors and make credit available to peasants, workers and their co-operatives. Moreover, public ownership of the banks and insurance companies will bring an end to excessive outflow of profit (relative to paid-up capital) to foreigners.

#### Covernment programmes

The Covernment has not, to date, produced a comprehensive national plan. Its priority has instead been to set the stage for more meaningful long-term planning by improving the machinery of planning, and for the short-term, on developing sectoral programmes in certain key areas.

#### The "Zemetcha" campaign

A clear indication of Government intentions and priorities, at least for the short-term, is provided by the "Zemetcha", which was announced in 1978. It is intended to revive the economy and tackle the most pressing current economic problems. The main objectives of the campaign are to:

- reduce current food shortages by intensifying efforts in the organizations dealing with the peasant sector and doubling state farm area;
- help drought-affected highland areas by strengthening afforestation, rehabilitation and resettlement programmes;
- eliminate current shortages of consumer items and certain construction materials by increasing industrial production;
- improve the efficiency of Government agencies and businesses; and
- increase foreign exchange availability by promoting exports.

Production targets have been established for the main commodityproducing sectors. The largest production increases are expected in
agriculture. The goal for manufacturing production, primarily from the
publicly-owned industries, is a 46 per cent increase over 1977/1978
levels. The construction, transport, health, education and water supply
sectors are to be improved or upgraded to support productive effort
in the agricultural, industrial and trade sectors. Manpower and financial requirements have been estimated for each sector.

It is too early to draw conclusions on the effectiveness of the economic campaign. However, preliminary indications are that, in the industrial sector, production grew by 36 per cent (45 per cent were

planned) while in the agricultural sector, 94 per cent (about 145,000 hectares) of the planned State farm area was ploughed.

#### Sectoral programmes

Prior to the announcement of the Zemetcha, the Government had launched a number of programmes and projects in support of its general objectives. This applied most obviously to infrastructures, notably road, power and communications. In the case of industry emphasis has been given to small-scale, cottage and handicraft enterprises, and to the production of mass consumer goods based on linkages with agriculture and other local raw materials, especially in the light of increased demand for consumer goods generated since the land reform.

#### Small-scale and handicraft industries

The Government wishes to encourage small-scale enterprises and artisanal activities to help mass consumption needs and to generate employment. To date, its main initiative in this direction has been to establish, in 1977, the Handicraft and Small-scale Industries Development Agency (HASIDA), the main purpose of which is to provide technical assistance to the subsector, promote artisanal co-operatives, develop projects and license subsectoral enterprises.

In conjunction with the Small-scale Industry Division (SSID) of the Agricultural and Industrial Development Bank (AIDE), HASIDA is preparing project proposals for EEC and IDA financing, through the AIDE, and is trying to expand its technical assistance to small-scale industries and artisans. The SSID has made rodest loans to small-scale enterprises (about Rirr 250,000 in 1977) but has been prevented from greater efforts by staff constraints, by the need to simplify lending procedures, and by the general uncertainties confronting private business.

Despite the Covernment's wish to encourage small enterprises, especially co-operatives, a number of factors has continued to constrain development of the sector. First, although Government legislation

explicitly permits manufacturing enterprises below Birr 500,000 to remain in private hands, private businesses have, for various reasons, regarded their prospects as uncertain. Government actions to curb isolated and unauthorized expropriations by local authorities and, in some instances, by workers will in due course restore confidence. Second, transport difficulties and raw material shortages have burdened small industries particularly those which have not generally been given as high priority in the allocation of supplies as the larger public enterprises. Third, labour relations difficulties have affected all sectors, but may have been especially severe in the private sector. The Covernment is, however, re-examining the Labour Proclamation with, inter alia, the objective of clarifying management and labour prerogatives and is also taking steps in this direction under the Zemetcha. Finally, while the potential of small-scale and artisanal enterprises is considerable, generating specific, viable project proposals and relating them to particular local circumstances have proved difficult.

### Large-scale industries

Covernment's main priority, to date, has been to ensure that the industries nationalized in 1975 have been able to maintain their operations adequately, given the many difficulties they have faced. As already mentioned earlier, these have included severe staffing, raw material and spare parts shortage, machinery breakdowns and labour difficulties.

Newly-appointed Ethiopian managers found themselves having to assume significant new responsibilities, while learning management skills. In the short to medium-term, the main priority is to increase the existing production of those goods in short supply on the domestic market, especially textiles, sugar, footwear, salt and building materials. As the data indicate, the shortage of these goods does not generally reflect production decreases, but distribution difficulties and rapidly increasing demand attributable largely to the redistribution of incomes to the rural sector. The satisfaction of this demand represents the most obviously pressing need for the industrial sector; shortages of these goods have an adverse impact on farmers' incentives to produce a

marketable surplus. Some of the products concerned would also generate backward linkages to the agricultural sector, even if raw material supplies would have to be imported in the short run. A second priority is to expand export production for which there is potential in beverages, wine, leather and canned meat.

#### Short-term prospects

The prospects of reversing recent adverse trends, i.e. the stagnation in output, inadequate grain supply, falling export volumes and fiscal and monetary disequilibrium in the short term (through 1980) depend primarily on three related factors: the continuation of the relative political stability and security established since mid-1978; the maintenance of improved efficiency in transport operations, and the revival of the commodity-producing sector, especially agriculture. It appears likely that production will increase at least in the public sector (where the Zemetcha will have most impact), though possibly not by as much as at first expected.

In particular, industry will benefit from the revival of some plants at Asmara and from better capacity utilization. State farm output should also increase following the expansion of area under cultivation and the provision of additional equipment. Improvements in the transport situation would also increase the level of marketed output, and relieve some inflationary pressure. Increased attention will have to be given to the foreign exchange situation. The increase in output will require higher imports of capital goods, raw materials and fuel. In addition, many basic consumer items, including food, are in short supply and might have to be imported.

#### Main aspects of related Tovernment policies

Under the Government's new policy, all projects must be approved by the Central Planning Supreme Council. In addition, various other controls impinge on the manufacturing sector. The allocation of foreign

exchange is administered by the National Bank of Ethiopia, and priority is generally given to capital goods, spare parts, production materials and essential items such as medicine and food. The Ministries of Domestic and Foreign Trade issue industrial trade licenses as well as import licenses to wholesale imports and to corporations which wish to import directly. However, machinery, equipment and spare parts for industrial production are generally exempt from import duties. Certain raw materials such as cereals, oilseeds, hides, cotton and wool, are subject to duties of 30 - 60 per cent; duty and excise on tobacco are heavy. Protective tariffs of 30 - 80 per cent plus high excise taxes are levied on imported manufactured goods such as edible oil, sugar, beverages, salt, soap, shoes, leather products and textiles. The Ministry of Tomestic Trade also sets internal quotas for the distribution of products in short supply such as domestically produced yarn for handicraft weavers.

As far as pricing is concerned, the guiding principle is that public corporations should be profitable but not excessively so. Generally, a profit margin of about 10 per cent is allowed, provided capacity is utilized effectively. Each request for a price increase is examined for significant changes in the cost of manufacturing. The Ministry of Domestic Trade is required to respond to a request for a price increase within thirty days; otherwise the increase becomes effective automatically. Corporations are allowed to depreciate capital and to retain a portion of post-tax earnings for general reserves.

Wage policies, as already mentioned earlier, are the most contentious issue at present. The three-year labour contact that was negotiated in 1976 between the Covernment and the All-Ethiopia Trade Unions did not resolve existing discrepancies in wage scales among industries and within firms. A Wage Board has now been established to draw up a unified industrial wage structure and to negotiate a new three-year labour agreement.

An investment programme for public enterprises of about Birr 160 million is under way to expand capacity mainly in the food, textiles, shoes and leather industries. In addition, Birr 680 million

is in the pipeline for large new projects which are being prepared for the production of sugar, cement, textiles, beverages and spare parts. External assistance is being sought for most of these proposals. UNIDO is conducting detailed surveys of the textile and leather subsectors. Lines of credit of Birr 20 million each for machinery have been agreed with the German Democratic Republic, Czechoslovakia and Bulgaria. Italy has also provided a new suppliers credit.

The Covernment's investment proposals are aimed at addressing main needs and opportunities for industrial expansion. In particular, the on-going investment programme appears likely to achieve a quick production response by overcoming specific bottlenecks and increase capacity utilization. Returns on investments with these objectives should be correspondingly high. The main short-term difficulty lies in the fact that resources, especially finance, are likely to be limited. Consequently, the proposed investments will have to be phased over a period and some consideration given to their relative priority.

Although no explicit industrial sector strategy has yet been prepared, the implicit emphasis on resource-based (primary agricultural) and export-oriented industries appears commendable. The next step would appear to be the determination of subsectoral policies and projects more in detail. In eleborating industrial sector strategy, two issues deserve emphasis; the role of the sector, especially the public sector enterprises, in resource mobilization, and the respective roles of the large- and small subsectors.

#### Constraints

There is a number of constraints on the pace of industrialization in Ethiopia which should be removed or at least reduced to give fresh impetus to the country's industrial development.

#### Inadequate industrial finance

Ethiopia is one of the least developed countries with poor domestic investment. The majority of industries have been established by foreigners, or by Ethiopians of foreign descent either with foreign

or joint Ethiopian-foreign capital. There are comparatively few enterprises which have been established and financed by national Ethiopian entrepreneurs. The Government has taken over the ownership or the majority participation in quite a lot of enterprises but very little has been done so far to expand the existing investment or to effect a new one. This situation is attributed to a wide range of reasons, in particular to inadequate domestic savings, the low level of per capita income, low agricultural productivity which restricts purchasing power for farmers, peasants and Government as well as demand for industrial products, capital investment in industry, supply of cheap agricultural raw material for industry, etc. The above problems are compounded by the scarcity of the foreign investment inflow and foreign exchange available to the industrial sector.

## Shortage of domestic entrepreneurship and skilled industrial personnel

In addition to the shortage of domestic entrepreneurship already mentioned under "Inadequate industrial finance" above, there is no sufficient trained personnel, technological, technical, managerial or operational. The problem is linked with the shortage of educational facilities and instructors which leads to insufficient outflow of skilled personnel required to meet the requirements of accelerated industrialization.

### Inadequate communications

Present inadequate communications, particularly good, all-weather roads and railways, are a serious brake on industrial development. Slow and costly delivery of raw materials and distribution of finished products for both domestic and export markets, inaccessibility of raw materials and markets are each and all resulting from insufficient and unsuitable communications.

#### Low industrial productivity

Little, if any, attention appears to be given in the large majority of existing industries to the reducing and controlling of costs of manufacture by means of increasing the level of productivity and by improved production methods. This applies to machines, materials, and labour. Wastage in the forms of idle machines, idle or underemployed labour, and of unsatisfactory usage of materials, is apparent in most factories and workshops. Either form of wastage is unnecessarily increasing manufacturing costs and selling prices, and restricting demand, turnover and profits.

#### Investment and loan policies

The Investment Law passed by the Government in 1965 for the purpose of encouraging both domestic and foreign investment did not produce the results intended. In the first place, consessions and exemptions which the Law offers to potential investors are worded in insufficiently defined terms and discretionary powers vested in the Investment Committee and individual ministries, have tended to preclude assurance of long-term security for potential investors. Furthermore, the minimum figure of Birr 200,000 investment capital required for an enterprise to be eligible for income tax relief, during its first five years of operation, appears rather to have had no stimulating impact on the smaller entrepreneur. But to date both the Investment Law and the Investment Committee no longer stand in force since they do not fit in the changing context of socialism and of the Declaration on economic policy.

#### Government protection for industry

In order to increase customs revenues and to place a brake on imports, the Government has substantially raised protective import duties and taxes on domestic production. As this protection is not selective, the tendency is to increase import duties on certain essential goods not yet produced at home. On the other hand, taxes

on domestically produced goods are sometimes so high that they place a brake on sales.

Linked to some extent with the afore-mentioned deterrents to development is the deterrent to trade caused by the present system of price-fixing in retail trades. The fixing of a uniform margin of gross profit for all trades, for instance for retail groceries as well as for the jewellery or furniture trade, does not take into account the rate of turnover of different classes of goods. This is acting rather as a brake to encouragement and expansion of the retail trades and therefore a brake on demand for manufactured goods in certain industries.

There is a strong tendency for present Covernment regulations, unbalanced protection and excessive duties and taxes to defeat the object of expanding industrial development and increasing Covernment revenues.

#### Lack of incentives for private investment

In the Declaration on economic policy issued in 1975, the Government specified and defined the respective areas of the public and private sectors. But the role of private investment has not been determined yet nor the regulations and the machinery whereby this role can be played have been established. This vacuum compounded by the present exchange control regulations are unlikely to attract private investors which has been in fact very small, if any, since 1974.

#### Institutional constraints

- Inaccessibility and inability to adequately monitor implementation;
- Insufficient emphasis on manufacturing in relation to certain infrastructural investments given the high demand for manufactured goods and capacity constraints in the sector;
- Until a full-scale planning exercise can be completed, investment proposals must necessarily be somewhat ad hoc in nature, which does not allow the national priorities to be adequately reflected.

#### Technical problems arising from old machinery

Condition of machinery in many nationalized factories is rather poor. This is caused partly bacause second-hand machinery was installed originally; furthermore operating manuals or machinery inventory records are often not available, and this leads in turn to difficulties in ordering spare parts in addition to the scarcity of foreign currency which places a brake on such spare parts imports by the country. The new management of the said factories inherited financially weak enterprises characterized by heavy debts to local commercial banks.

It should be noted that as a result of the Proclamation of Ethiopian Socialism, and in particular the Declaration on economic policy of Socialist Ethiopia, most if not all legal tools, setting and institutions which were involved in industrialization or the activities of which were connected with industrial planning and policies formulation have become repealed, irrelevant as they no longer fit in the new policy framework. Consequently, a vacuum has been created and the need is self-evident for taking strong institutional measures, the character and extension of which should be closely determined by the implications of the new economic policy. The exercise should in particular take the following into account:

- The reorganization and/or restructuring of the status and functions of existing organizations already involved in the industrial development effort;
- the elaboration of a new investment law or code which will determine the policy and formulate rules and regulations concerning private investment, among other things;
- the establishment of a supporting machinery and appropriate institutions for the investment promotion in accordance with the official policy concerning the distribution between the private and the public sectors.

In short, well-known problems or constraints acting as a brake on industrial expansion have now been brought into greater light.

Those particularly pressing and deserving immediate attention include the following:

- availability of foreign exchange;
- technical problems arising mainly from the old age of machinery;
- shortage of skilled technicians;
- raw material supplies;
- project preparation and implementation capacity.

#### Chapter IV

#### DEVELOPMENT PLANNING

A new planning organization was established by Proclamation in October 1978. This is the National Revolutionary Development Campaign and Central Planning Supreme Council (NRDC and CPSC).

The NRDC and CPSC is responsible for the elaboration and followup of all short-term, medium— and long-term plans as well as for the overall guidance and management of the economy. It is vested with all the powers necessary to set priorities, to mobilize the human, financial — material resources required for launching and sustaining development campaign programmes.

The NRDC and CPSC consists of a Congress, an Executive Committee, and a Secretariat. Both the Congress and Executive Committee are chaired by the Head of State, which is a clear indication of the importance attached to the Development Campaign. Members of the Congress include other administration Council (PMAC), ministers, commissioners, regional administrators, force commanders, representatives of the All-Ethiopian Trade Union, All-Ethiopian Peasant Association, Women and Youth Associations. Members of the Executive Committee include two members of the Standing Committee of the PMAC and department heads of the Supreme Council secretariat.

The Congress as the supreme policy-making body, sets general target: and issues general directives while the Executive Committee is entristed with the task of preparing plans in accordance with the directives from the Congress and ensure plan implementation.

The NRDC and CTSC central structure has mirror image organs at the regional "Awraja" and "Wereda" levels. This is expected to facilitate the formulation, implementation and follow-up of the Development Campaign through ensuring the participation of the broad masses on the basis of democratic centralism. Branch offices in the fourteen administrative regions have already been established, staffed and made operational.

#### Short-term planning

Until the preparation and elaboration of medium— as well as long-term planning, it was found necessary to identify short-term objectives of economic and social development based upon the most immediate and pressing economic and social problems facing the country. Accordingly, the Supreme Council worked out such short-term objectives and launched the First Year Development Campaign Programme which was followed by a Second Year.

## First Year Development Campaign Programme (FYDCP)

The focus of the FYDCP was on agriculture, industry, trade and social services. Construction, transport, education, health, and water supply were incorporated into the Programme as support-rendering sectors. The Programme was limited in scope as it was specifically tailored to meet pressing and urgent national needs.

The broad overall objectives of the FYDCP were to:

- eliminate food shortage;
- increase the production of industrial raw materials to reduce foreign dependency and foster inter-sectoral linkages;
- improve marketing and distribution efficiency and widen the scope and the degree of State participation in both domestic and foreign trade;
- increase the volume, improve the quality, diversify the composition of exports and widen the country's foreign trade relations with a view to maximizing and stabilizing the country's foreign exchange earnings; and
- lay the foundation for alleviating the country's social problems, i.e. unemployment and inadequacy of essential social services.

The realization of the above objectives were predicated upon:

- increased acreage and raising labour and land productivity, utilization of excess capacity, reactivation of factories discontinued due to war and increase in managerial and administrative efficiency; and
- the provision of necessary manpower and financial resources.

As far as industrialization was concerned, the overriding target for industry as a whole under the FYDCP was an increase in the total output of State enterprises of 45.6 per cent over the level in the previous year. The food, leather and shoe, and textile subsectors were planned to increase by 46.7 per cent, 51.5 per cent and 35.3 per cent, respectively. The targets of the FYDCP were fulfilled all in all by over 90 per cent. The GDP grew by 5.2 per cent in real terms as against the expected increase of 5.9 per cent. The gross value of production in industry showed an uprecedented increase of 36.5 per cent as against a target of 45.6 per cent, thus fulfilling the target by 93 per cent.

# Second Year Development Campaign Programme (SYDCP)

The overall objectives of SYDCP are to:

- increase the production of essential consumer goods and services;
- increase the production of industrial goods required as inputs by agriculture; raise the production of agricultural products required as raw materials by industry, and thereby strengthen the agriculture-industry linkage;
- alleviate and lay the foundation for the eventual elimination of the country's social problems;
- accelerate the socialization process;
- systematize the distribution system and enhance the scope of Covernment participation and control in the trade sector;
- augment and save foreign exchange and thereus improve the country's import capacity; and
- ensure the equitable distribution of the benefits of development.

In realizing the above objectives, the strategies to be implemented include the following:

- increasing the level and rate of investment and domestic savings;
- raising the level of productivity of labour, capital and land;
- expanding the share of the State sector in production and distribution;
- promoting co-operatives in peasant agriculture and in handicrafts and small-scale industry;

- expanding output of exportable commodities;
- equitable geographical distribution of development project and infrastructural facilities;
- increasing the use of labour-intensive technologies; and
- improving administrative and organizational efficiency and accounting systems of State enterprises and organs as well as mass organizations.

Both during the First and the Second Year Development Campaign Programmes, priority was accorded to the agricultural sector since it accounts for over 48 per cent of real GDP and 90 per cent of exports in 1978/1979. Moreover, the agricultural sector has to generate the necessary surplus to be required for socialist reconstruction in general and industrialization in particular.

During the Second Year Development Campaign, GDP is expected to grow the 7.3 per cent at constant factor cost. Agricultural GDP is expected to increase by 3.95 per cent while that of manufacturing is expected to increase by 9 per cent.

The target set in particular for State-owned industries which account for 90 per cent of total industrial output is to raise the gross value of output at constant prices by 10.2 per cent. Food, textiles and beverages are targeted to grow by 13.4 per cent, 6.3 per cent and 17.7 per cent, respectively.

In final analysis, the main thrust of the SYDCP remains the same as that of the FYDCP, i.e. to reduce shortages especially of basic consumer goods as well as of other critical inputs such as building materials. More emphasis is placed on removing most of the constraints on industrialization and some elements are incorporated in long-term industrial policy such as a change in the pattern of industrialoutput from consumer goods to basic capital producing industries. As such the Government is pursuing a policy of internally self-sustained growth, output diversification and collective self-reliance.

# Medium- to long-term planning

The preparation and implementation of medium— to long-term comprehensive plans requires sufficient experience and adequately developed institutions which leaves more to be desired in the case of Ethiopia. Thus, it is found necessary to prepare and elaborate a series of one-year development campaign plans which will serve as schools for future medium— and long-term planning while at the same time help to solve immediate and pressing problems. At present, pre-planning activities of the Third Year Development Campaign are under way and concomitantly pre-planning activities of a ten-year indicative plan which focuses on few sectors and key products and essential services are also being undertaken.

#### Chapter V

#### INSTITUTIONAL INFRASTRUCTURE FOR INDUSTRIAL DEVELOPMENT

The existing institutional infrastructure for the support of development of manufacturing in Ethiopia does not result from a comprehensive and coherent institution building policy aimed at setting up such supporting agencies for industrialization. This infrastructure is rather a mixture of some institutions which belonged to the former economic organization and certain new institutions which are being gradually set up by the Government in line with the new economic policy of Socialist Ethiopia.

#### Planning and co-ordination

#### The Central Planning Supreme Council

The main institution is the Central Planning Supreme Council of the National Revolutionary Development Campaign. The objectives, the functioning and activities of the Council have been outlined in detail above. The Council is the central masterpiece of the new economic policy formulating and implementing machinery.

# Formulation and implementation of overall industrial policies, objectives and strategies

#### The Ministry of Industry

The Ministry of Industry was established in August 1977 under a general Covernment reorganization which resulted in, among other things, the splitting of the former Ministry of Commerce, Industry and

Tourism. The Minister of Ludustry initiates the country's industrial policy and determines industrial priorities and strategies. He is responsible for the initiation, the study and the implementation of industrial projects as well as for the negotiation and the conclusion of agreements necessary for the undertaking of feasibility studies of projects. The Minister's mandate includes also the following:

- to undertable the expansion of the industrial sector and determine for each project the manner in which local and foreign capital and technology can be jointly utilized as well as the appropriate technology most suited to the country's economic and social requirements;
- to establish, manage, expand and supervise the public industrial enterprises as well as those jointly established with Covernment and foreign capital;
- to safeguard the interests of the Government in industrial enterprises of which the Government is the major shareholder;
- to promote co-operation with international and regional organizations and friendly countries in the field of industrial development:
- to register, license and regulate all private industrial and handicraft enterprises as well as encourage and promote their organization, growth and expansion;
- to conduct research and experimental development at all levels to enhance industry, technology and industrial productivity, equipment and techniques, and ensure that fruitful results thereof are put to use.

# The Central Statistical Office

This Office is the country's main statistical organ, operating under the Central Planning Supreme Council and availing statistical figures in almost all aspects of economic and social developments. The Annual Statistical Abstract published by the Office contains such data as population growth, figures on imports and exports, employment, etc. Industrial information include, among other things, summary of results for manufacturing, gross value of production, number of establishments and of persons engaged, rates of growth, etc.

The Office also published results of surveys of manufacturing industries and a statistical bulletin on indices of manufacturing production and output of electricity.

### The Development Project Study Agency

This Agency, which was formerly known as the Technical Agency, was established by a proclamation in January 1980. The Agency fixes standards to be satisfied by all projects, supervises the compliance of such projects with the standards and recommends the corrective measures to be taken with respect to projects which do not satisfy the required standards. The Agency also identifies, studies, and prepares projects and renders consultancy services when requested by offices, mass or private organizations.

The Agency advises the Government on matters relating to investment and gives seminars and courses which enhance project identification, study, preparation, implementation and standardization.

When ordered by the Central Planning Supreme Council or requested by other offices or organizations, the Agency undertakes studies on the economic, technical and other similar failures of projects in the course of their implementation and recommends solutions therefor.

The functions of the Agency include also the collection of data on technology, the evaluation, selection and recommendation of the utilization of appropriate technology for projects implementation. The Agency keeps a roster of projects prepared by offices, mass or private organizations.

The Agency can employ the services of consulting persons or organizations to identify, study and prepare projects for which it does not have the necessary resources. It can also establish contacts with governments, international organizations, foreign private organizations or domestic mass and private organizations in order to fulfil its duties. The Agency is at present confronted by a

drastic shortage of manpower which hampers the carrying out of its expanded function. Until substantially increased manpower and financial resources are made available to the Agency, the support and the contribution it can render to the planning and the industrial development effort will remain limited in relation-to the needs in these early days of the restructuring of the institutional infrastructure for economic development planning.

# The National Productivity Centre (NPC)

The NPC was established in October 1975 by merging the Centre for entrepreneurship and management (CEM) and the National Industrial Vocational Training Scheme (NIVTS). The primary aim of establishing the NPC was to help nationalized manufacturing and service-rendering organizations increase their productivity. The objectives of the Centre include (a) training of personnel in various manufacturing and service-rendering organizations to produce skilled manpower in management and vocational fields; (b) providing organizations with consulting and advisory services so as to help them attain modern and efficient management methods; and (c) encouraging organizations to carry out research work in management and vocational fields which would in turn help them acquire new and better ways of getting things done.

In order to assist industrial enterprises in solving their managerial and technical problems with sound and modern practices, the NPC conducts upgrading courses, seminars and round-table discussions. The training programme focuses on (a) management; general accounting, production, personnel, marketing and distribution; (b) in-plant services; training methodology, mechanical, auto-mechanics; and (c) vocational training, among other things, metal work, wood work, leather processing and training, etc. In addition to advisory and consultancy services, which are provided to a reasonable number of industrial enterprises upon their requests, the NPC conducts research and offers documentation services.

Studies, enquiries, surveys in the field of management development and productivity are carried out.

# The Ethiopian Chamber of Commerce (ECC)

Under the new Proclamation of July 1978, the purposes of the ECC and city chambers, which shall be guided by the National Democratic Revolution Programme of Ethiopia, are as follows:

- (a) to provide forums where Government, public and private organizations engaged in commerce, industry, tourism, transport and related fields can come together and discuss activities, mutual relation and products, and economy of the country and seek solutions therefor in accordance with the above-mentioned programme and submit recommendations to the Government;
- (b) to provide, from time to time, to its members training on the latest techniques and ideas in areas of their activities and related matters;
- (c) to publicize the country's export products and commercial enterprises to foreign markets; and
- (d) to establish friendly relations with Chambers of Commerce of other countries.

In pursuance of its aims, the ECC among other things finds foreign markets for national products; collects, prepares and disseminates statistical information on the country's economic activities; conducts studies on matters pertaining to the betterment of export products; prepares commercial journals, directories, reports concerning trade; organizes and participates in exhibitions and seminars.

# The Ethiopian Standard Institute (ESI)

The Ethiopian Standards Institute was established in 1970 in order to (a) prepare and issue compulsory as well as optional Ethiopian standards relating to processes, practices, materials, products and commodities in the field of commerce and industry,

and enforce the same; (b) protect the interests of domestic consumers as well as secure wider export markets abroad for Ethiopian products by certifying the quality of locally produced and imported agricultural and industrial commodities through the application of the standards mark certification scheme; (c) introduce the metric system of measurement in the national economy and verify the accuracy of weighing and measuring instruments used in commercial transactions in order to protect the consumer against fraudulent measuring instruments.

At present, a first group of 108 Ethiopian standards is being implemented and a series of test analyses has been carried out on samples drawn from different agricultural and industrial products to prove that the products are in conformity with relevant Ethiopian standards. Another 500 Ethiopian standards have been already prepared which are waiting for the Government's approval to be published. Some other 800 standards are under preparation.

The ESI is at present faced with problems associated with insufficient staff although the number of employees has increased since the establishment of the Institute. However, certain developments are now under way which will have a direct impact on the ESI's work. These are the completion in the near future of the ESI building at present under construction, the proposed raising of the ESI to the rank of Government Commission which will reinforce it, the envisaged establishment of a National Quality Control Testing Centre (NQCTC) and of a National Metrology Laboratory (NML).

# The Handicrafts and Small-Scale Industries Development Agency (HASIDA)

The Agency is responsible for promoting the development of small-scale industries and handicrafts. In order to attain its main objectives, the Agency has been given the following powers and duties:

(a) in accordance with national policies and plans, formulate policies for the development of handicrafts and small-scale industries and supervise the implementation of such policies;

- (b) carry out surveys and research concerning handicrafts and small-scale industries;
- (c) assist in the identification of improvable handicrafts and potential small-scale industries;
- (d) study small-scale industries for the products of which there is durable demand; prepare projects for such industries and assist those who are willing and capable of implementing such projects;
- (e) assist and encourage the establishment, growth and expansion of handicrafts and small-scale industries in accordance with guidelines to be issued by the Ministry of Industry;
- (f) organize and operate demonstration and training centres designed to promote and assist handicraft enterprises and small-scale industries;
- (g) assist handicraft enterprises and small-scale industries in marketing, supply of raw materials and equipment, training, production techniques and management, and obtaining credits from banks;
- (h) promote, register, supervise artisans/producers and service co-operatives and assist them through the above activities.

# The Agricultural and Industrial Development Bank (AIDB)

The main objectives of the AIDB, which are relevant to industry, include the following:

- (a) extend medium- and long-term loans, give guarantee for lable development projects in the agricultural and industrial sectors of the national economy; extend short-term agricultural production credit to other sectors of national interests;
- (b) attract financial resources from other countries and international agencies;
- (c) assist in the promotion of the mobilization of savings;
- (d) co-operate with development agencies in project identification and promotional activities so as to ensure the efficient use of financial resources in accordance with national objectives:

- (e) take part in, or provide support to any plan, programme or organization, whose purpose is to provide services to expedite the flow of technical, managerial, and financial knowledge and innovation;
- (f) encourage the application of appropriate managerial techniques and technologies in all projects which it finances.

As far as extension of credit to small-scale industries is concerned, specific policies by which the Bank will be guided have not been established yet, but it is hoped that such policies will be adopted as soon as the relative policies on development strategy of the Government regarding the small-scale industries sector are finalized. This vacuum is one of the factors responsible for the negligible amount of credit that has been extended so far to this sector by the AIDB.

# The National Bank of Ethiopia (NBE)

Under the Monetary and Banking Proclamation issued in 1976, all banks and financial institutions, were under the National Bank of Ethiopia, whose powers to control credit to the non-government sector were extended to types of borrowers, purposes, maturities and security requirements. The NBE issued a credit policy document in 1976 which gives priority to public enterprises and co-operatives, and to agriculture, small-scale, cottage and handicraft industries and modern agro-based industry. As far as allocation of foreign exchange is concerned, the National Bank of Ethiopia generally gives priority to essential consumer goods and development goods.

#### The commercial banks

Following the nationalization of all banks and financial institutions in early 1975, three former private banks were merged to form the Addis Bank. Consequently, there are now two commercial banks, the Commercial Bank of Ethiopia (CEE) which was publicly owned before the nationalization, and the Addis Bank. The Housing and Savings Bank (HSB) was formed in late

1975 from a merger of a subsidiary of the CEE and a former savings and mortgage institution. But according to bank officials, a proclamation will be issued shortly to provide for the establishment of the "Commercial Bank of Ethiopia" (new formula), by the consolidation of the existing CEE and the Addis Bank. No information on the structure, powers and duties of the proposed bank is available at present.

There is a need for a comprehensive, coherent and rational restructuring of the institutional machinery for economic development and in particular for the industrial projects design, formulation and implementaion. This state of affairs is attributed to the reforms and institutional changes introduced by the Government since early 1975. The most important reforms were the rural and urban land reforms, the nationalization of industries and financial institutions, the labour proclamation and the private sector proclamation. The major institutional changes have been the establishment of peasant associations, urban dwellers associations (kebele) and the organization of central government, the parastatal enterprises and the banking system. What is now needed is the consolidation of these institutions and their blending into the planning and implementation process with regard to, in particular, the industrial development effort. Until such exercise is successfully and thoroughly conducted, the Central Planning Supreme Council and the Ministry of Industry which are the two institutions with most responsibilities for industrial development will lack proper feedback channels.

#### Chapter VI

# THE UNDP PROGRAMME, UNIDO'S ASSISTANCE AND CO-OPERATION WITH OTHER ORGANIZATIONS

The UNDP country programme for Ethiopia includes various ongoing projects which are being implemented with UNIDO's assistance. The sectoral projects are as follows:

## Industrial project development

This project is attached to the Project, Policy and Planning
Department of the Ministry of Industry. Its objectives are mainly to
assist the Ministry (i) in raising the performance of existing state
enterprises through techno-economic analysis and definition of possible
improvements, and (ii) in identifying developing and evaluating
industrial projects in priority sectors. The project provides for the
supply of four expoerts in the field of textile, leather and leather p
products, building materials and food manufacturing, 24 man-months
of consultancy services and small components of fellowship training
and equipment.

#### Handicrafts and small-scale industries development

The purpose of this project is to strengthen the Handicrafts and Small-scale industries Development Agency (HASIDA) by training its professional staff and assisting it in the promotion of handicrafts and small-scale industries, especially with regard to (i) project identification and preparation; (ii) improved production methods (appropriate technology); (iii) marketing schemes and input supplies; and (iv) promotion of co-operatives. The project provides for experts in the four areas mentioned above. There are provisions for consultants, fellowship training and equipment.

#### Adviser in leather manufacturing

This is a small-scale project which is attached to the National Leather and Shoe Corporation and has been going on for several years. It proved to be quite useful.

# Survey of the Ethiopian textile industry

The purpose of this project is to carry out a survey of the textile industry in Ethiopia resulting in a study with recommendations on the measures required to improve the efficiency of the industry.

#### Leather and leather products development

This is a priority project aimed at providing an integrated UNDP assistance to the leather and leather products industries. The project attempts to rectify this situation by substantially raising the amount of UNDP assistance, and, above all, by delivering the inputs in the form of a well-integrated package. The project is designed to last for three years and UNDP contribution over this period is expected to amount to \$1,505,600. Eight experts would be supplied in addition to short-term consultants. The project also includes a strong training component (individual fellowships as well as in-service training) and a provision for workshop equipment and vehicles.

#### Development and manufacture of improved farm implements

This is a joint FAO/UNIDO project for which the UNDP inputs are expected to amount to \$3,120,000. A preliminary study has already been prepared and arrangements are now under way for the project to enter the executing phase.

The main development objectives of the project include the following: (a) an increase of peasant productivity and agricultural production on small farms and agricultural co-operatives in Ethiopia, thus improving the living standards of the broad masses of the rural sector, as well as providing increased food supplies and raw materials for industries in the country; (b) development of a level of small-

scale appropriate mechanization technology that is agronomically and socially suitable to the size of farms, farming systems, the know-ledge and experience of the farmers; (c) establishment of a viable investigational and research organization for developing and introducing low-cost and more efficient farm implements and agricultural machinery for local manufacture, etc.

The immediate objectives of the project include the provision of assistance to (a) planning procurement and installation of machinery and equipment to the proposed centre for the manufacture of research prototypes; (b) the same centre, HASIDA, Blacksmiths' Co-operatives, Ethiopian Hand Tools Ltd. (Matal Work Corporation) for the (i) development of design capabilities (production and parts) for the manufacture of research and production prototypes; (ii) the development of technological and engineering capabilities for the accelerated production of the production prototypes; (iii) the market survey and techno-economic profiles of those implements already field-tested by the Centre; and (iv) in production planning and programming for mass-scale/batch production of items emanating from (iii) above.

The main activities of the product include an identification component which provides for a sample field survey in Ethiopia by consultants and a study tour in selected Asian and African countries by three Ethiopian experts in order to identify those farm implements that can be locally adapted. The second component provides for specific assistance to various centres and agencies concerned.

In addition to the above sectoral projects, UNDP assistance is also provided in the field of institution building and operation, namely to the existing Development Project Study Agency, and the National Productivity Centre (training) as well as the institutions still in the pipeline such as the National Quality Control and Testing Centre, the Building Material and Research Centre. UNDP total planned project delivery for 1979 stood at \$1,268,307. Total expenditure is expected to amount to \$2,273,000 for 1980 and \$1,421,000 for 1981.

# Potential areas for technical assistance and co-operation

In addition to the projects briefly described above, it is proposed that future UNDP/UNIDO assistance to the industrial sector should be expanded to include the following activities:

#### Subsectoral surveys

Such surveys should focus on the development of the engineering and chemical industries which is very important and necessary from the point of view of the long-term objective of transforming the industrial sector which at present is very small and dominated by light consumer goods industries. Therefore, the structural transformation of the industrial sector is expected to make it dynamic structurally balanced, and, ultimately, the leading sector of the economy.

The surveys would assess the present status of the engineering and chemical industries in the country, identify possibilities for their future development and formulate appropriate strategies and plans to accelerate their expansion process.

#### Pilot foundry

Due to the very limited scale of present castings production and the growing demand for cast spare parts, the question of establishing a foundry has been considered. Some of the main obstacles affecting the development of foundry industry in Ethiopia are the lack of skilled workers, managerial cadres and proper facilities for vocational training. Thus a pilot foundry is desired to be established with the financial and technical assistance of the UNDP/UNIDO. The assistance is envisaged to include: (1) the training of managerial cadres; (2) the assignment of required technical experts; and (3) the purchasing of machinery testing and laboratory equipment to be installed for training purposes.

#### Mini-steel plant

Based on existing reports on the deposits of iron ores and lignite in Ethiopia, it is recommended to undertake a comprehensive techno-economic study with regard to the feasibility of pig-iron production based on the direct-reduction process. The study should be programmed for a period of at least six months. The preliminary estimate of deposits of iron ores of above 60 per cent ferro-oxides is about 800,000 to 1,000,000 tons. Other deposits with contents of ferro-oxide below 60 per cent and 30 per cent also exist. The deposit of lignite (regarded as reducer) is estimated at about 10 million tons. The study is suggested to be carried out with the assistance of the UNDP/UNIDO by the appointment

of a metallurgical specialist, experienced in and familiar with the direct-reduction process. The specialist is expected to carry out, in close collaboration with the Ministry of Industry, the National Metal-Works Corporation, the Ministry of Mines, Energy and Water Resources, and other appropriate organizations, the techno-economic study, including the preliminary assessment of the following basic factors: suitability of the local iron-ores, lignite, limestones, etc. to be used in the said process; costs of exploitation of the required raw materials; demand for pig-iron foreseen on the basis of national development plans; minimum size and productivity of the plant, including the capital required for its establishment and operation; location of the plant; technical requirement; manpower requirement; and expected profitability.

## Building materials research

This project would focus on an area which is becoming increasingly important, i.e. the possibilities of finding suitable and economical substitutes for imported building and construction materials; increasing, diversifying and standardizing the output of local production units; organizing the cheapest and most efficient methods of producing the materials, devising formulae for their economical use, etc. must be explored through well-planned research. UNDP/UNIDO assistance could play a catalytic role in this effort, by providing the necessary expertise, assisting in the defining of priority areas and designing of appropriate research, supplying necessary equipment, and training of local research personnel.

#### Training of skilled manpower.

The shortage of skilled manpower has already been noted as one of the major constraints to industrial development. Very large and diverse numbers of qualified cadres are needed not only to efficiently manage, operate and maintain the existing factories but also to man the growing number of new industrial projects now in the pipeline (sugar, cement, textiles, edible oil, spare parts, bricks, beer, etc.) In view of the existing as well as emerging needs, it is necessary to undertake an expanded and much more aggressive training programme, which could be a combined scheme involving the expansion, strengthening and optimum

utilization of existing training facilities, as well as the creation of new ones (for instance, a regional centre in Asmara). UNDP/UNIDO would be expected to assist by providing funds to finance local costs, workshop equipment and other training aids, fellowships for longer-term training abroad, and necessary expert personnel.

#### Rilateral co-operation

Ethiopia has signed co-operation agreements with a number of countries which provide for the implementation of specific projects in various industrial subsectors. No detailed information on these projects is made available by the Ministry of Industry. However, as mentioned earlier, lines of credit for machinery have been agreed upon with at least three countries, and Italy has extended a new supplier's credit.

#### Regional and subregional

# African Industrial Development Fund (AIDF)

Ethiopia has signed the Statutes of the AIDF and is believed to be willing to strengthen its co-operation with other African countries co-signatories in the framework of the Fund when it comes into operation.

The principal objectives of the AIDF are to provide financing as well as technical assistance for industrial pre-investment activities and to ensure that resources are readily available for pre-investment feasibility studies for urgent projects of high priority which did not meet or are not likely to meet the conventional commercial funding conditions of ordinary commercial financial institutions. These studies shall include, in particular, pre-investment feasibility studies for multinational, regional and subregional projects that member States consider critical for the structurel evolution of the economy of the area concerned rather than projects which merely offer a high internal rate of return.

# Preferential Trade Area (PTA) of eastern and southern African subregion

The establishment of the PTA which is under way will provide expanded markets to Ethiopia's industrial exportable products such as salt, meat, wines, liquors, leather, shoes and cement. The production of these commodities, local processed or semi-processed, as well as the products with potential for export such as potash and canned fruits and vegetables, can be justifiably increased in order to meet sub-regional demand originating in other PTA countries.

#### Lagos Plan of Action

Ethiopia, like the other African countries, adopted the Lagos Plan of Action for the implementation of the Monrovia Strategy for the Economic Development of Africa. As far as industrial co-operation is concerned, the Plan urges the African countries, among other things, to strengthen this co-operation at the subregional as well as regional level, in order to establish such multi-national resource-based industries as would ensure the satisfaction of the basic needs of the population, the processing of local raw materials, the creation of jobs, the development of other economic sectors, the development and acquisition of suitable technology, the modernization of the society. The Plan also places special emphasis on the need for the African countries to achieve, especially through enhanced co-operation, specific global quantitative objectives of increased share of world industrial production and to attain self-sufficiency in food, building materials, clothing and energy during the 1980-1990 decade.

<sup>1/</sup> Up to the year 2000: 2 per cent; during the 1980-1990 decade: 1.4 per cent; up to the year 1985: at least 1.0 per cent.

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