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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

Consultant: Mr. Tudor MILES

Backstop. Off.: M. Kapepula, PPD/.../...

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NATIONAL PROGRAMME FOR THE SECOND INDUSTRIAL DECADE FOR AFRICA (1991-2000)

SUDAN

Consultant's Report to UNIDO and the Government

CONTENTS

I INTRODUCTION

Sudan is a country which, in comparison with other African states is well endowed with natural resources. Its population includes sufficient professionally and technically trained manpower for a vibrant economy. However, since Independence in 1956, the economy has never performed near to its potential and, in recent years, has experienced deteriorating living standards. The factors which have brought the country to its present impoverished and debt-laden state have been fundamental and long-term. These unfavourable factors which include deteriorating terms of trade for commodity producers and a series of misdirected and mismanaged national plans have been fully described and analyzed in a number of authoritative reports which have been taken into account in preparing this report. They include:

1. The report of the Four Year Salvation and Development Programme, July 1988
2. The UNIDO Industrial Development Review Series: Sudan, Towards Industrial Revitalisation, September 1989
3. World Bank, Sudan, The Manufacturing Sector: Setting the Stage for Restructuring, 1987
4. World Bank, Sudan: Reversing the Economic Decline, July 1990
5. The Economist Intelligence Unit, Country Profile 1990-1991

As the purpose of this report is a review of the First IDDA and proposals for the Second IDDA, it will not deal with events before 1980 which was the base for the First plan. In fact, the present sector structure of the Sudan economy was already in place by 1980 following big investment programmes in the decade before it. The economy has been fairly static since then. Extensive use is made of the information in the above reports including extracts from them.

The report follows the outline derived from Chapters III and IV of the 'Framework and Guidelines'. It is structured as follows:

I Introduction

II Brief Overview of the Economy

III The Manufacturing Sector

IV Industrial Policies and Strategies

V Assessment of the Implementation of the First IDDA Programme and Current Development Aid

VI Programme for the Second IDDA

VII Modalities for Implementation

and,

VII Assessments and Recommendations

The final section, VIII, represents the consultant's own observations and recommendations concerning the country's industrial development objectives, priorities and strategies, taking account of the various views presented to him during the mission.

II BRIEF OVERVIEW OF THE ECONOMY

Geography and Demography

Sudan is the largest state in Africa with a land area that covers about one million square miles. It is bordered by eight states, sits astride the Nile river and has a coastline on the Red Sea with a deep water port. Land links with other states are poor. Much of the land is devoted to traditional subsistence farming but the rainfall area and the irrigated sectors are very productive and use modern farming methods for cash crops. Agriculture accounts for a third of gross domestic product and 95% of exports. There are mineral reserves including petroleum, iron ore and chromite which are undeveloped.

The country is sparsely populated by about 23 million people made up of a heterogenous mix of ethnic groups and religions. The fertility rate is high. At 2.9% per annum the population growth has put a strain on resources for food, education, health services and housing. Migration has been considerable. Famine and wars in neighbouring states have led to an influx of refugees and there has also been economic immigration. These people came without material resources and have no industrial skills. In contrast, Sudan has lost many of its professionally qualified and industrially skilled population who have left to work in oil exporting countries in the Gulf and North Africa. They number at least half a million. A mitigating feature of this development is the inflows of foreign exchange generated by those working abroad. A series of natural disasters in the 1980s giving drought, flooding, disease and insect despoliation of crops caused hardship and migration to the towns; they also reduced crop export earnings and increased food importing.

Political Climate

Political instability has been an important factor causing economic decline because it affected the willingness of foreign governments, international organisations, banks and individuals to invest in Sudanese development. The military government of President Numeiri which began in 1969, in its later years became increasingly arbitrary. Its nationalisation experiments, restrictive regulations on the private sector, application of Islamic laws to banking, business and taxation added to the other difficulties which led to the overthrow of the Government in 1985. There was a year of transitional military government before the return of party political politics and civilian rule in May 1986. After elections there were coalitions which were dissolved and reconstituted three times within three years. In June 1989, the military took over again and continue under General El-Beshir and the National Salvation Revolution Command Council. The Council are pledged to hand over power to the people through a comprehensive democratic system which has not yet been devised. The present regime must therefore be regarded as transitional. Meanwhile, the civil war persists. It is an obstacle to economic stability because it is preventing the exploitation of mineral resources and development of agriculture in the South. Military expenditure amounts to above 30% of the budget and extra budget expenditure to finance the war has contributed to large monetary expansion and inflation. The war has drained resources and manpower and engaged a great deal of government attention.

Recent Economic Trends and Accumulation of Debt

The trend rate (15 years) of growth of Gross Domestic Product has been 2.1 per cent which is below the growth of population so GDP per capita fell by 12 per cent over 15 years. Output since 1981 has fluctuated considerably, mainly because of the effects of disasters on the agriculture sector.

Table 1: Percent Changes in Output at Constant Factor Cost

Financial Years	*GDP*	*Agriculture*	*Manufacturing*
1982/83	+1.5	-8.9	+7.7
1983/84	-3.0	-4.6	0
1984/85	-5.9	-12.2	+4.5
1985/86	+9.7	+20.3	+9.9
1987/88	-2.7	-13.9	-1.3
1988/89	+8.4	+27.0	0

Source: Department of Statistics and Estimates by the Ministry of Finance and Economic Planning.

Because of the unfavourable trend in the terms of trade and a decline in remittances from Sudanese nationals working abroad the real decline in national product (GNP) per head was significantly larger than the fall in constant price GDP per capita. Until about 1983 Sudan attempted to compensate for poor domestic performance with high levels of foreign borrowing. The bulk of borrowing was to finance investments in public sector enterprises. Many of the projects were poorly conceived and poorly managed by the public sector, resulting in losses which prevented them from making enough returns to repay the debts and contribute to government revenue. The result was a rapid accumulation of external debt and repayment arrears. A series of Paris Club and London Club reschedulings followed but after failure to meet these timetables for payment the Sudan was declared ineligible to use the International Monetary Fund (IMF) resources in 1986. Despite severe cuts in imports external debt outstanding continued to mount, mainly because of the accumulation of arrears. From about US$ 6 billion in 1984, Sudan's total outstanding debt is likely to be US$ 14 billion by the end of 1990. Arrears constitute about 60% of the outstanding debt equivalent to 150% of GDP. Servicing the debt alone could be more than 100% of annual export earnings. In July 1990, because of non-payment of overdue arrears, the Board of Directors of the IMF declared the Sudan an 'uncooperative' country. There is no immediate consequence of this decision; however, it will make borrowing from other foreign sources more difficult and expensive.

Other African LDCs are also experiencing acute debt problems and they too are incapable of solving them by their own trading efforts, their debts being too large in relation to their economies. Until there is far reaching international action on the outstanding debt problem economic expansion is unlikely.

The Structure and State of the Economy

The Sudanese economy is dominated by services which contribute about 50% of GDP which is a high proportion for an LDC. Although since Independence there have been a series of national development plans directed at self-sufficiency and diversification of the economy, agriculture is still the dominant productive sector, with cotton as its principal cash crop. In 1988, it accounted for 43% of export revenue while gum arabic and sesame accounted for another 23%. The share of national product produced by the manufacturing sector has not been above 9% in the last decade and it is currently a lower proportion. The manufacturing sector's exports have been negligible. Imports have to be paid for by agricultural exports which have been severely affected by natural disasters and international price fluctuations. For a number of reasons emigrants' remittances, which also covered import costs, have been declining or avoiding the official accounts.

The policies of earlier regimes, which have not yet been effectively changed, involved the government extensively in the economy, directly through public enterprises, including a heavy presence in agriculture; and indirectly by attempting to micro-manage the private sector through a web of regulations, including comprehensive price controls and differential exchange rates. This approach to policy has greatly stifled incentives in the private sector for production and exports; and public enterprises have not made up for the lack of vigour in the private sector. A parallel 'free' market has developed including smuggling of consumer goods with access to emigrants' funds. Statistically, this may account for extra size of the services sector. Many of the public enterprises are inefficient, kept in business by a high degree of protection and dependent on either budgetary transfers or mounting advances from government banks. As there are also tight administrative controls on imports, exports and new investment, all sorts of distortions are present in the economy.

Table 2: Sector Breakdown of Gross Domestic Product at Factor Cost in 1988/89

		Percentages
<u>Primary Production</u>		36.1
Agriculture	36.0	
Mining	0.1	
<u>Secondary Production</u>		14.6
Manufacturing	8.2	
Construction	4.6	
Public utilities	1.8	
<u>Services</u>		49.3
Transportation and storage	9.3	
Commerce and hotels	13.9	
Finance and real estate	12.7	
Government services	11.6	
Personal services	1.8	
<u>Total</u>		100.0

Source: Estimates by the Ministry of Finance and Economic Planning.

III THE MANUFACTURING SECTOR

The manufacturing sector of the Sudanese economy was comprehensively surveyed in the Industrial Survey of 1981/82. Information on individual sub-sectors for later years is fragmentary but estimates have been made of the output of the sector as a whole, the annual changes being shown in Table 1. The structure is unlikely to have changed very much since 1981/82 because, after the multitude of new ventures and the nationalisation programme and return to private ownership in the 1970s recent years have seen little new investment and companies have mainly been concerned with survival in a period of inflation. Through physical deterioration and obsolescence the capital stock has been in decline.

Table 3: Branch Distribution of Manufacturing Industry, 1981/82

	Establishments		*Gross Output*		*MVA*		*Employment*	
	No.	*%*	*£Sm*	*%*	*£Sm*	*%*	*No.*	*%*
Food, beverages and tobacco	5,275	78.0	1,105,973	72.0	428,030	76.8	87,739	60.7
Textiles and leather	138	2.0	105,879	6.9	25,809	4.6	28,409	19.7
Wood and carpentry	182	2.7	10,217	0.7	5,411	1.0	2,091	1.5
Paper, printing	97	1.4	32,057	2.1	8 917	1.6	4,225	2.9
Chemicals	118	1.7	139,012	9.0	34,231	6.1	5,336	3.7
Non-metallic products	81	1.2	23,128	1.8	10,199	1.8	4,741	3.3
Basic metal	12	0.2	17,372	1.1	7,223	1.3	777	0.5
Metal products	854	12.6	90,601	5.9	36,940	6.6	10,803	7.5
Other	2	0.0	6,846	0.4	337	0.1	382	0.3
Total	6,759	100.0	1,536,085	100.00	557,097	100	144,503	100.0

Source: Official Industrial Survey

The survey recorded 6,759 manufacturing enterprises but most of these were very small. There were only 347 large scale enterprises of which 50 were public sector, 290 private and 7 mixed ownership. These 347 firms employed 75% of total employment in manufacturing and accounted for 51% of manufacturing value added (MVA).

In the survey the manufacturing sector was dominated by light consumer goods with food, beverages and tobacco account for 77% of gross value added. The production units were mainly very small but the group does include five large sugar refining factories. The metal products group was the second most important, generating 6.6% of MVA and chemicals

Table 4:	Ownership of Large Scale Enterprises					
	Establishment No.	%	*MVA* %	*Capital* %	*Employees* No.	%
Public	50	14.4	10.2	14.4	27,724	26.4
Mixed	7	2.0	20.1	33.0	33,424	31.7
Private	290	83.6	69.7	52.7	44,020	41.9

third, generating 6.1% of MVA. The metal products companies are mostly very small. A characteristic of the Sudanese manufacturing sector is the relatively low degree of processing undertaken, with manufacturing value added only accounting for 36% of gross output of the manufacturing sector. The greatest degree of processing was found in the wood products branch where the principal activity is making furniture usually from imported wood.

Manufacturing industry is concentrated mainly in the Khartoum and Central regions. This is because of the concentrations of population and therefore market for consumer goods. It also reflects the limitations of transport and communications outside these two areas and the relatively better infrastructure in the big towns.

Table 5:	Regional Distribution of Manufacturing in 1981/82					
	Establishment No.	%	*MVA* %	*Capital* %	*Employees* No.	%
Khartoum	1,922	28.4	28.6	28.6	49,576	34.3
Central	1,782	26.4	42.1	50.4	64,572	44.7
Eastern	777	11.5	21.1	16.2	12,807	8.9
Northern	933	13.8	3.7	1.0	4,879	3.4
Darfur	411	6.1	1.3	1.0	3,367	2.3
Kordofan	915	13.5	3.0	2.4	8,261	5.7
Equatoria	19	0.3	0.2	0.4	1,041	0.7
Total	6,759	100	100	100	144,503	100

Public Sector. In the 1970s the Government constructed 23 major factories, mainly for further processing of agricultural produce, e.g. cotton spinning mills and sugar refineries.

The list also included a foundry and a large fertiliser plant. Under the "Companies Nationalisation Act" 1970 the Government took over two cement factories which are still mainly public-owned. Of the 23 factories 8 have not come into production.

Capacity Utilisation. One of the uneconomic features of the manufacturing industry in the Sudan is the low rates of capacity utilisation. According to a government survey relating to 1985/86 capacity utilisation rates were as low as 5% in the manufacture of sweets, 27% in spinning, 12% in printing and 38% in dry cell battery making.

Table 6: Capacity Utilisation, Selected Industries 1985/86

Subsector	*Capacity Utilisation %*	*Subsector*	*Capacity Utilisation %*
A. Food and Sugar		D. Chemicals and Drugs	
Sugar	49	Drugs	21
Canning	30	Plastic materials	20
Edible oil	6	Perfumes and cosmetics	25
Biscuits	20	Matches	22
Sweets	5	Tyres	85
Mineral drinks	40	Soap	12
Cigarettes	55	E. Engineering	
B. Spinning and Weaving		Acetylene	29
Spinning	25	Batteries	21
Weaving	28	Dry-cell batteries	8
Traditional cloth	33	Aluminium products	25
Blankets	57	Air coolers	13
Knitwear	15	Zinc sheets	50
Ready-made clothes	12	Metallic pipes	12
Absorbant	60	F. Packing, Printing & Wood Products	
C. Leather and Shoe Industry		Packing	25
Tanneries	30	Printing	12
Shoes	17	Wood products	15

Source: Industrial Task Force Report 1988.

The reasons given for the poor performance were:

(a) lack of foreign exchange required for the procurement of raw materials and spare parts;

(b) weak infrastructure manifested in power supply and fuel shortages, poor transport facilities and deficiency in the provision of basic services;

(c) lack of capital due to reluctance of banks to finance industry and high interest rates which increased the indebtedness of the industrial enterprises;

(d) migration of skilled and trained workers to oil producing countries and uneven distribution of manpower over industrial enterprises;

(e) inefficient entrepreneurship and difficulties in filling management posts;

(f) poor administration and logistical support;

(g) complicated tax, foreign exchange, trade and licensing policies and procedures.

Since 1985/86 the availability of foreign exchange for imported raw materials, machinery and spare parts has become more difficult, inflation has increased and infrastructure services are less reliable. There have been a considerable number of business failures. A food manufacturer, for example, relies on refrigeration plant. Because of breaks in the public supply of electricity a stand-by generator is essential. Stand-by generators, transport and communications equipment and private waste disposal services are all extra cost burdens on manufacturing companies because of inadequate industrial infrastructure.

Representatives of manufacturers have indicated that many companies find it necessary to use the parallel economy to keep going. Low utilisation in the public enterprises resulted in financial targets not being attained. The corporations made considerable losses which contributed to excess borrowing and subsidies from the national budget.

The main manufacturing industry sub-sectors

1. Food processing, beverages and tobacco

In the survey there were 5,275 enterprises, but 151 large scale manufacturers accounted for 70% of total employment at 61% of gross output. Only 15 large scale enterprises were publicly owned. The major processing operations are sugar, fruit and vegetable canning, beverages, sweets and flour milling. Many are dependent on imported raw materials such as wheat, tomato paste, chemicals and packaging materials. Apart from sugar the larger units are characterised by low capacity utilisation and return on capital. Apart from sugar the manufacturing units are concentrated in the Khartoum and Central districts close to urban markets.

The sugar subsector is composed of 5 factories, 4 of them government owned. Kenana plant is a joint venture and its output exceeds that of the other four combined; it has consistently achieved a higher operating rate. Total output has recently matched domestic demand of about 550,000 tons per annum and imports have declined. The sugar industry is believed to be competitive based on international prices.

The edible oil and soap industries consist of 300 oil mills and soap factories capable of producing 500,000 tons of edible oil, 500,00 tons of laundry soap and 85,000 tons of toilet soap a year. Domestic demand is considerably less than this and plant capacity utilisation has been low; exports have not been significant. The manufacturers are dependent on the agricultural sector for cotton seed, ground nuts and sesame for their raw material. Crop output has been affected by droughts but improvements in the linkage between farmers and manufacturers would give greater consistency in manufactured product output and quality.

2. Textiles

The Sudanese textile industry was built on the basis of an abundant supply of locally grown cotton and a growing domestic market. The industry is highly capitalised with capacity for spinning, weaving, bleaching, dyeing and printing. Public sector investment involved construction of 13 factories of which 4 are not operating.

Table 7: Installed Capacities, 1986

	Private No.	%	*Public* No.	%	*Total* No.	%
Spindles	296,000	58.3	212,129	41.7	508,929	100
Looms	5,924	67.3	2,880	32.7	8,804	100

Capacity Utilisation

	Public	Private
Spinning	15%	30%
Weaving	30%	38%

The majority of the fabrics produced are of low pick, light weight, and mostly plain weave. Quality of both yarn and fabric is generally low.

The existing installed capacity is capable of supplying domestic demand; however, less than 40% of domestic demand is supplied by domestic production, the remainder met from imports, both official and unofficial.

To support the textile industry the Government has had to set the selling prices of cotton lower than would be realised if exported, the industry is therefore subsidised.

Reasons given for the failure of the textile industry to achieve its objectives are:

(i) unwillingness of management and workers to accept the continuous intensive working usual in spinning and weaving industries;

(ii) interruptions and unreliability in the electric power supply;

(iii) the uneconomic location of certain mills;

(iv) manpower problems including emigration of skilled workers and managers;

(v) lack of foreign exchange for imported raw materials and machinery spare parts;

(vi) transport, communications and other infrastructure limitations;

(vii) macro-economic and administrative difficulties, e.g. price controls and excessive regulatory environment.

3. Leather and tanning

Sudan has operating three large government owned tanneries capable of processing 570,000 hides and 1,800,000 skins out of an estimated supply of 1.2 million hides and 7.5 million skins. 70% of hides and skins are currently exported in raw form although semi-processed hides command a premium over raw hides. There are also three major private tanneries and numerous small-scale, artisanal tanneries in rural areas. One of the private factories which has proficient management and modern machinery works near to capacity but capacity utilisation in the public and other private tanneries is under 30%. The factors leading to this low utilisation are deficient herding and slaughtering practices, poor marketing, shortages of foreign exchange for imported chemicals, spare parts and packaging materials, infrastructure deficiencies including unreliable electricity supply.

4. Cement

Demand for cement in the Sudan is estimated to be between 700,000 and one million tons per year. The state owned Maspio factory and the Rabak plant which has 42% private sector participation have a capacity of 300,000 tons per annum. Output in 1987/88 was, however, only 132,000 tons, the restraints being inadequate fuel supplies and spare parts. Rehabilitation of the plants is currently in progress and there are proposals for additional capacity. Cement operations are competitive based on import prices.

5. Chemicals, plastics and pharmaceuticals

The survey indicated that there were 118 enterprises in the sub-sector of which 49 employed more than 25 people. Products include plastics, matches, perfumes and cosmetics, tyres, fertilisers, paraffins, pesticides and pharmaceuticals. The ratio between value added and gross output was low, indicating the limited degree of processing undertaken. The one tyre factory which has a capacity of 900,000 tyres and tubes produced 876,000 units in 1987/88. Capacity utilisation in other parts of the sector, however, have been low and the large Sudan fertiliser plant is non-operational.

6. Engineering products

In the survey there were only 34 enterprises employing more than 25 people and the engineering group only contributed 6.6 per cent of total manufacturing value added. Apart from jobbing, blacksmith-type work making simple tools, vehicle repairs and spare parts, the work is mainly assembly of imported kits for appliances such as refrigerators and air conditioners. There is one modern foundry but no forging plant. There are factories for producing wet and dry cell batteries but actual production is only a fraction of installed capacity (21% and 8% in 1985/86).

Other manufacturing industries cover wood products and furniture, paper and printing, building materials, non-metallic materials and basic metals. None of them individually contributes more than 2% of total manufacturing value added. The products are mainly consumer goods intended for the domestic market.

IV INDUSTRIAL POLICIES AND STRATEGIES

The present government inherited a deteriorating economic situation and it recognised that there was a clear need for far-reaching economic reforms. The proposed reforms are set out in the Three Year Economic Salvation Programme. They were summarised by General El Beshir at the UN Conference in Paris in September 1990.

> The objective of the programme and the reforms is to fully liberalise the Sudanese economy so that economic activity is mainly determined by free market forces. Furthermore, the role of the public sector will be significantly reduced, allowing for an enhanced role of the private sector, local and foreign. In this regard, an extensive process of privatisation of public enterprises and parastatals is currently underway. Government expenditure and overmanning in the Civil Service are

drastically curtailed. A more rational and efficient utilisation of resources is rigorously pursued.

These reform measures are coupled with a clear identification of priorities, concentrating national efforts and resources on the agricultural sector, particularly food production, including sugar and wheat where the target is self-sufficiency within two years. More focus is placed on reviving the export sector through deregulation, remunerative prices and incentives to producers as well as simplifying export procedures. At the same time, a new investment promotion law is elaborated to encourage, attract and protect local and foreign investment.

It has not yet been indicated how the privatisation policies will be implemented and how soon. Although deregulation of industry is the intention some controls are currently being reinforced with the declared intention of discouraging unscrupulous trading practices and weeding out the black market for foreign exchange.

There has recently been some liberalisation of prices, e.g. toothpaste, fruits, vegetables and meat, but these are not major items of economic significance. The government has increased the exchange rate applicable to cotton and gum arabic exports and has passed a new act intended to broaden the base of the sales tax system.

V ASSESSMENT OF THE IMPLEMENTATION OF THE FIRST IDDA PROGRAMME AND CURRENT DEVELOPMENT AID

The objective of the First IDDA was to achieve greater self-reliance and self-sustained development. It emphasised the importance of industrial development as a means of attaining rapid economic growth, overall development and a better standard of living in Africa. African countries were encouraged to exploit their own natural resources and to establish an industrial base for the development of other economic sectors. There would be increased use of local factor inputs and cooperative schemes with other African countries because a single country might not provide an adequate market for a major manufacturing unit.

Sudan is a typical example of an African country which is dependant on export sales of agricultural products, subject to vicissitudes, to pay for imports of manufactured goods, petroleum and many other inputs for its factories and public services. In the nineteen eighties a series of natural disasters affecting harvests and falling prices of commodities resulted in cuts to essential importing and delays to the programme of economic development.

In 1980 the recent experience of industrialisation in the Sudan had not been favourable. In the nineteen sixties and seventies industrial capacity grew rapidly, spurred largely by government investment. Fixed manufacturing assets expanded by more than 20% per year, raising the size of the workforce fourfold and the average capital per worker threefold over the two decades. The expansion could not be sustained, many projects were terminated in midstream. In the early nineteen seventies manufacturing had increased its share of GDP to 15% only to decline again to about 8%, where it remains today. The investment programmes were narrowly targeted with huge amounts of resources devoted to a few types of processing. The private sector was crowded out by the public projects and the few private schemes were subjected to tight regulation. As a result the industrial structure showed inadequate diversity and balance. Although the preferred sub-sectors were based primarily on domestic resources, e.g sugar and cotton, the expansion went too far and too fast compared with managerial capacity available. The growth of local infrastructure failed to keep pace and the need for foreign exchange exceeded the country's ability to generate it. The legacy at the beginning of the decade was widespread inefficiency in manufacturing operations and production costs twice that of international competitors resulting from heavy protection.

Because of these failures the emphasis of the industrialisation programme for the First IDDA lay on rehabilitating existing industries so as to ensure a reasonable degree of capacity utilisation. The industries involved in rationalisation and rehabilitation were to be sugar, textile mills, tanneries, cement and pharmaceutical plants. Policies were to aim at complementarity between industry, agriculture and natural resources; recommissioning of public sector enterprises; provision of training and research; priority allocation of foreign exchange for the purchase of energy, spare parts and other factor inputs to strategic industries; achievement of balanced regional development; and optimal utilisation of local resources.

In the early years of the 1980s the financial position of the country deteriorated partly because of the withdrawal of Arab funds following fluctuations in oil prices. In March 1981 an IMF inspired stabilisation programme and a series of three year rolling austerity plans was introduced to correct the deficits on the balance of payments. Shortages of foreign exchange were felt by most enterprises which went without essential raw materials, spare parts and new equipment. New investment was minimal and skilled manpower dwindled away to other Arab countries. Political changes, experimentation, e.g. Islamisation and withdrawal of concessions to industry, affected business confidence and willingness to change. The manufacturing sector share of GDP at the end of the decade was almost unchanged from that at the beginning, so very little progress was made in achieving the objectives of the IDDA. The objectives, though, are still relevant and urgent for the next decade.

Core Projects

Sudan is part of the North African sub-region and in the First IDDA it has participated in the Integrated Industrial Promotion Programme. The group of countries identified a number of 'core projects' which would be of benefit to the sub-region. Some of the projects were to be undertaken by individual countries and other would be schemes in which two or more countries would implement. Sudan was to be involved in nine core projects. The progress on these nine schemes is described below:

(i) Establishment of sugar mills. Other participating country - Egypt. There were already four public sector mills: Guned, New Halfa, Senner and Hajar Assalya; and one mainly privately owned mill at Kenana. Although rated capacity was 700,000 tons per annum actual output was under 500,000 tons. Output was insufficient to meet domestic demand and there was no surplus for export. The proposal was to build two additional mills, one at Kenana and another at Melut. Equipment for the Melut mill was ordered from Belgium and has been delivered but the factory has not been constructed. There is no second Kenana mill. The existing mills have been rehabilitated and output is now close to domestic consumption. The Kenana plant output is close to its rated capacity, but the others are still below.

(ii) Paper Factory. The proposal was to construct a paper factory at Kosti. A South Korean firm made a feasibility study in 1984 and would be able to construct the plant. In 1990 the Arab Industrial Development and Mining Organisation has been requested to make a further survey and Arab funds may be available for purchase of machinery. No construction work has started. Raw material is abundantly available locally.

(iii) Kenaf Sack Production Plant. The proposal is to expand the existing plant at Abu Naama from 30 million to 40 million sacks per annum. The plant was closed down in 1983/84 due to technical problems. The low-paid seasonal workers on the farms were insufficiently skilled to prepare the Kenaf properly for the factory. Refurbishment would cost US$ 12.5 million and the plant may be offered to the private sector.

(iv) Fine Cotton Yarn Mill. Seven other countries would be cooperating. This is a recent proposal and is still at the preparatory stage. Foreign investors have been obtained for 50% of the capital. It would be located at Port Sudan.

(v) Cement Factory and Marble Tile Factory - in partnership with Egypt. A feasibility study was made in 1985 for the construction of a cement factory at Port Sudan. Concessions were granted to a private sector developer but no construction began. There is surplus capacity and low prices in the Gulf area, so there is no interest by Arab investors. Priority has therefore been given to rehabilitation of the two existing cement factories.

The marble tile factory is a low priority scheme by the Egyptian - Sudanese enterprise, the Marble Production Company. Feasibility studies not yet completed for a factory at Durdaib.

(vi) Sheetglass Production Unit - Cooperation with Egypt. No progress has been made in establishing a sheetglass production unit for Sudan. The project has now been withdrawn from the programme.

(vii) Fertilizer Plants - Cooperation with Tunisia. A fertiliser factory was built at Port Sudan in 1975 but is not operational; it is state owned. A plant was also built at

Khartoum South with majority state ownership to produce 100 - 120 thousand tons per annum. The plant has been completed including a thermal power station. It has not though been commissioned because the raw material would all have to be imported and raw material transport costs from Port Sudan would be high.

The proposal with Tunisia is for a phosphate plant at Port Sudan, the raw material coming from Tunisia. No development has taken place.

(viii) Tractor Assembly Plant - Project with Egypt

Egypt already has an assembly plant for Yugoslav/Romanian tractors. These are not considered to be suitable for Sudan soil conditions and tractor component supplies are uncertain. Other sources are being examined but there are no definite proposals.

9. Production of Edible Vegetable Oils - Cooperation with four other states

This is a recent proposal for a plant to process oil from seed grown in the Sudan agricultural sector. The Minister has recently issued a decree setting up a technical committee.

Development Aid and Trade Agreements

Aid. Flows of aid to Sudan have fluctuated from year to year, reflecting political and economic developments. The International Development Agency (World Bank) and the European Community have in the recent period been the major multinational donors and the USA and Arab countries the largest bi-lateral donors. The latest position is that aid to Sudan is being severely reduced. The World Bank is limiting its involvement to one project per year not exceeding $US 50 million. The Gulf war has interrupted Arab countries aid;

and aid from the USA and the UK for new projects is being withheld because of the changes in the political system in the Sudan.

Trade Agreements. Sudan has a number of multi-lateral and bi-lateral trading agreements which have given the country access to trade credits. The main sources have been:

(a) Membership of the Arab Economic Council which has made available funds from several Arab economic development institutions. Recent loans have financed rehabilitation of roads and railways;

Table 8: Gross Official Development Assistance ($US million)

		1984	1985	1986	1987	1988
Bilateral		**545.7**	**347.0**	**702.2**	**677.7**	**605.6**
of which:	USA	145.0	347.0	149.0	103.0	110.0
	West Germany	53.2	71.4	59.0	47.4	52.1
	Italy	11.3	66.8	93.3	79.5	75.7
	UK	36.7	54.8	38.1	33.1	46.0
	Japan	28.8	25.8	32.7	77.7	59.6
	Netherlands	28.0	27.0	52.5	58.9	67.0
	Arab States	128.0	215.3	227.2	232.9	120.9
Multilateral		**199.0**	**269.7**	**326.1**	**260.8**	**342.4**
of which:	UNHCR	49.3	99.1	58.1	42.4	37.0
	EC	28.0	62.1	87.1	56.2	57.6
	IDA	79.3	38.1	67.2	61.7	123.0
	WFP	17.1	40.3	19.9	23.5	42.6
	UNICEF	6.2	7.6	12.9	14.2	12.6
Total		**744.7**	**1,135.9**	**1,028.2**	**938.5**	**948.0**
of which:	Grants	485.2	978.9	833.6	712.1	650.9

(b) bi-lateral agreement with Egypt to the limit of $US 200 million mainly used for imports of industrial raw materials;

(c) bi-lateral agreement with Jordan to the limit of $US 60 million for raw materials;

(d) bi-lateral agreement with Libya to limit of $US 400 - 500 million mainly for import of oil. Libya may also participate in development of Sudanese fertiliser plants.

(e) bi-lateral agreement with Turkey to the limit of $US 50 - 60 million.

VI PROGRAMME FOR THE SECOND IDDA

The programme is intended to chart the course of development of the economy to the end of the decade but the year 2000 should be regarded as a staging post on a longer journey to African inter-dependence, self-sufficiency and removal of poverty. It is as important to identify priorities as it is to decide on what are the right policies for the long term period. It will be already apparent from the assessment of the First IDDA that fundamental issues are still unresolved. The immediate outlook for the Sudanese economy is for a period of extreme difficulties and tension. The war in the South continues to impact on the economy drawing resources into an already over-large public sector; it is also affecting the willingness of foreign governments to donate development aid. There is the current trade deficit and the problem of international debt outstanding. The present Administration has inherited an economy in decline, a manufacturing industry sector in need of rehabilitation, social infrastructure in need of investment and a business structure distorted by inflation, administrative controls and high taxation.

Faced with this situation the government is proceeding on a step by step basis and has realistically shortened its planning perspective from four years to three. The three year plan is reviewed annually to take account of progress made and changes in external conditions.

As indicated below, a central theme of the National Salvation plan is to give the private sector an enhanced role with fewer decisions being taken by government. As industries become privatised it will be for them, taking account of business factors and market conditions, to decide on investment and development matters. The detail of the national programme is likely therefore to be imprecise for the period beyond the short term. The Programme is mainly a statement of principles and national objectives. Policies for implementation are drawn up for the three years to 1993 but only those for the first budget year are firm. Policies and programmes for industry have to be linked to development of other sectors, e.g agriculture, services, infrastructure.

Objectives for the National Programme

The Ministry of Industry (agreed with other Departments) has provided the following list of objectives and strategies for the industrial sector. It represents an updating and refinement of the statement of objectives for the Four Year Salvation, Recovery and Development Programme of 1988.

1. Provision of basic needs for the population and attainment of self-sufficiency in food, clothing, shelter and other essential goods;

2. Concentration on industries which depend on domestic raw materials, industries which produce intermediate goods and export-oriented industries;

3. Rehabilitation of basic and strategic industries of the public and private sectors (foodstuffs, sugar, textiles, tanneries and cement);

4. Improvement of productive capacities in existing industries through provision of inputs, spare parts, machinery and equipment;

5. Commissioning recently completed industrial public sector establishments and completion of those under implementation;

6. Promotion of national research and training institutions, improvement of production techniques, support of quality control units and promotion of locally developed technology;

7. Accomplishment of regional and geographic balanced development in the field of industry and restructuring of the small scale and rural industries sub-sector;

8. Realisation of integration between the industrial sector and other sectors such as agriculture, natural resources, livestock and mineral reserves to achieve meaningful rural development;

9. Protection of successful and infant national industries, against competition of imports and providing incentives which promote industrial investment;

10. Preparation of environment protection programmes, review and amend existing regulations and introduce provisions such as an apprentice Act appropriate to modern industry.

11. Concentration on training to upgrade the public and private sectors' labour force through training programmes in all lines of production;

12. Review existing laws promoting industrial investment and develop the institutions responsible for preparing and executing industrial strategies and policies;

13. Initiation of measures to reduce the turnover of the skilled labour force particularly in strategic industries (including inducing skilled emigrants to return).

Strategy and Policy

1. The thrust of the strategy for the manufacturing sector will be to raise the present levels of capacity utilisation and ensure the development of an efficient industrial base. To achieve this goal several rehabilitation programmes covering the sugar, textiles and food sub-sectors are already under implementation. A conducive climate which will attract investment of private sector in production will be aimed at.

2. To realise these objectives, the government intends to take measures which include, access to foreign exchange through the 'own resources scheme' or through other available official allocations for procuring capital goods, imports of inputs and spare parts, a trade tax structure which is conducive to efficient production, and reliable infrastructural services such as power, fuel, transport and communication which are essential for efficient industrial operations.

3. The 1990 Encouragement of Investment Act has been introduced with a view of attracting more investment in several areas including the manufacturing sector.

4. The strategy of industrial development also includes encouraging the development of small scale industrial undertaking as well as traditional handicrafts with particular emphasis on the need to develop rural areas.

5. Attractive incentives will be granted for industrial enterprises proposed to be located in the rural areas, particularly in the less developed districts of the Sudan.

All these measures are intended to contribute to the creation of a climate conducive to accelerated industrial investment.

Programme of Consolidation - The National Economic Salvation Programme 1990-93

The Programme issued in June 1990 states:

> the three year time span chosen as a medium-term framework should be sufficient to arrest the deterioration in the economy and lay the foundation for sound recovery to put the economy on a path of sustained growth and financial stability.

This indicates that it is a plan of consolidation rather than expansion. It covers the whole economy and as the industrial sector is relatively small the programme is mainly directed to agriculture, government, banking and other service sectors. The industrial sector will of course benefit if government and financial systems become more efficient and foreign trade controls are simplified and reduced. Linkages are an essential feature of the programme.

Specific proposals for the industrial programme are:

(1) Removal of Government monopoly in industrial production;

(2) Reform of the parastatal sector through liquidation, privatisation or turning public enterprises into joint ventures with domestic and foreign private sector participation;

(3) Deregulation of price and profit controls starting with an immediate and complete liberalisation of exports, prices to be followed by gradual deregulation of most prices of goods and limiting price controls to a short list of basic items.

(4) In the framework of the 1990 Investment Encouragement Act, implementation of additional incentives including:

- profits up to 15% of the total investment will be tax exempt. Profits above 15% will be subject to a flat rate of a maximum of 40% for a minimum period of ten years;

- imported production inputs, capital goods and equipment will be subject to unified custom duties of 10%;

- investors will be allowed to keep a foreign exchange account and retain a certain percentage of their export proceeds to finance remittance of profits and depreciation allowance and importation of production inputs needed for their projects.

These incentives apply for investments which start initially with $US 25 million or more.

Parastatals. The public enterprises listed for sale, liquidation or privatised by changing them into mixed ownership companies in the Fiscal Year 1990/91 are:

- all government owned textile companies and factories;
- all government owned food industries (excluding sugar mills);
- all government tanneries.

Intra-African Industrial Cooperation. Sudan will continue to cooperate with the other countries of the North African sub-region. The core projects of the First IDDA programme which are incomplete will be carried over to the Second IDDA programme. Proposals for new investments and Support projects proposed by members of the sub-region will be examined and if appropriate Sudan will consider participation.

After participating as an observer for one year Sudan officially joined the East and Southern African Preferential Trade Area (PTA) in August 1990. Sudan became the seventeenth member of the group. The decision to join the PTA should be of considerable long-term significance to the Sudanese economy. Several members have common frontiers with the Sudan and this will provide a wider market. The organisation is expected to form the nucleus of the proposed African Economic Community with the objective of trade liberalisation and a common market by year 2000. There is already set up the Clearing House and a PTA currency unit of exchange. Projects tentatively being considered for involvement with PTA countries are:

- a meat processing and canning plant;
- a leather tanning plant.

Examples of support projects where Sudanese participation would be beneficial are:

- Leather and leather products Institute;
- Metallurgical Technology Centre.

Programme of Expansion

There is not at present a specific programme for industrial expansion apart from the on-going core projects from the First IDDA programme, e.g edible oils, paper, tractor assembly. It is expected that the PTA sub-regional programme will be a major element in the Sudan Second IDDA programme but there has not been sufficient time since joining the group for proposals to have been evaluated.

Support Programme

Education. Policies of the education sub-sector will aim at improved maintenance and rehabilitation of school buildings. At the primary level, with the target of universal primary education by year 2000, the programme will aim at increasing enrolment from the present 75% to 90% by 1991/92. Other expansion will be in the area of teacher training facilities, as well as in the area of technical and vocational training. The national Economic Salvation Programme 1990/93 aims at securing financing for the first phase of the Education Revolution programme (doubling the intake of present universities and adding four new ones).

Transport and Communication. A railway rehabilitation programme is underway. In the roads plan priority is being given to maintenance of main routes. In the short and medium terms it is unlikely that resources will be more than sufficient to prevent further deterioration. The telecommunication network has been subject to breakdowns. The public investment programme includes the rehabilitation of this facility and the Telecommunication Public Corporation is being reorganised and strengthened. Private sector ownership, fully or partially, is intended.

Electricity. Rehabilitation of power stations is underway. National and foreign private sector investment is being invited to participate in building generating stations with a capacity of one thousand megawatts in Khartoum with very generous incentives for such investment.

External finance is being sought to complete the Rosseries Dam project and international finance will also be sought for Hamadab Dam.

VII. MODALITIES FOR IMPLEMENTATION

In the Sudan co-ordination and monitoring of national programmes is the responsibility of the Ministry of Finance and Economic Planning. The items for the years 1990/91 and 1991/92 of the Three Year Programme are being implemented with only minor variation. These are being largely funded from Arab sources. Where the foreign currency input is secure the Sudanese Government have undertaken to fund the Sudanese share from the budget account. The national share of projects is mainly concerned with transportation and infrastructure e.g. buildings and transport links which will not present a serious problem regarding available resources. In the case of rehabilitation programmes for private industry there is no government fund, the companies must arrange their own finance.

VII ASSESSMENTS AND RECOMMENDATIONS

During the mission to Khartoum in October 1990 the IDDA Programme and the current state of the industry sector in Sudan were discussed with:

1. The Minister and five senior officials of the Ministry of Industry.

2. Two senior officials of the Ministry of Finance and Economic Planning.

3. The Executive officials of the Sudan Industries Association.

4. The Chairman/Chief Executive of the Sudan Development Corporation

5. An official of the World Bank

6. A diplomat responsible for development aid at a Khartoum embassy

7. The UNIDO Resident Director

Among my informants there was a common theme that the performance of the manufacturing sector is unsatisfactory and this is due to a number of constraints. The constraints quoted, but not necessarily agreed by all parties, were:

1. Shortage of foreign exchange for inputs, spare parts and new machinery;

2. Inadequate infrastructure, particularly electricity supply, transport, communications, sewerage and other municipal services;

3. Inefficient and ineffective entrepreneurship and losses of skilled labour through migration.

4. Government administration unhelpful to industry - high taxation and customs duties, price controls, administrative regulations, frequent changes in concessions and policies

5. The burden of inefficient parastatals;

6. High cost of finance and inadequate banking facilities.

National Economic Salvation Programme.

I consider that the Council's intention to reform and liberalise the Sudanese economy so that economic activity is mainly determined by free market forces is merited and its implementation is urgent for the survival and development of the industry sector. There appears to be, however, no agreement between government departments on how this will be brought about. The Chambers of Industry also wish to be consulted.

The inherited system of regulation and intervention has eroded incentives for investors, managers and work people; and in the public sector industries there seem to be no penalties for inefficiency. The sooner that private sector financial disciplines are applied to the parastatals the better for the working of the economy as a whole. There is a need to change the business 'culture' to a climate where competitive efficient working is the usual requirement of business survival. Changing from a control economy to a market economy involves sacrifices, and in the short-term there will be business casualties and many will be worse off. Maintaining the momentum of change, against the inevitable opposition, will require political courage and there will also be a need for positive policies about retraining the unemployed and relieving social hardship during the transition period.

The Three Year Programme is designed to give quick short-term benefits, particularly in raising export revenue. As exports are now almost entirely agricultural products the production emphasis in the programme is on the agriculture sector. Where the programme specifies industries they are all agricultural product processing industries, namely textiles, food and tanneries.

The IDDA approach, however, calls for more priority for manufacturing industry and requires it to be broad-based. It is only by changing the balance of African economies through industrialisation that long-term economic development will be assured, so there is a conflict in priorities. There are obvious gaps and weaknesses in the Sudan economy, e.g. lack of an engineering sector, which require the attention of policymakers. When the programme is next reviewed I recommend that more priority be given to manufacturing industry incentives. Manufacturing industry representatives consider that recent changes in legislation, including the 1990 Investment Encouragement Act, have taken away authority from the Ministry of Industry and made it less able to represent industry interests in the formulation of policies and programmes. The Sudan Industry Association prefers to deal with a single Minister on all matters affecting industry. They consider that the Minister of Industry is the most appropriate person.

Industry Efficiency

The low rate of capacity utilisation in many parts of manufacturing industry is a common observation and complaint. It is general industrial experience in other countries that industries with a lot of capital equipment, e.g. chemicals, textiles, sugar refining, when operated with less than normal load waste resources and make large losses. The solution is to rationalise capital equipment and concentrate production at the low operating-cost plants thereby obtaining high rates of machinery utilisation where possible working two shifts per day. The plants taken out of service can be 'cannibalised' for spare parts for the operating plants. It is normal industrial experience that energy consumption per unit of output is much lower in a fully loaded plant than at factories operating at reduced rates of utilisation. Concentration of production will thus be a means of obtaining the best use of the limited supply of electricity in the Sudan.

The Industry Association reported that over-manning is widespread in Sudanese industry by as much as 30%. The excess labour is employed to cover losses from labour turnover. Manufacturing units operating near to capacity usually have good employee morale and low turnover rates so there should not be need for excess manpower. Workers' income is steady and managements obtain satisfaction from solving problems to keep output high and improve profits. In a fully working plant product quality is more consistent and operators learn better how to maintain the machinery. New resources should not be used on rehabilitating manufacturing units until rationalisation has been done and the surviving production facilities have been put under full operating pressure.

Manufacturing units which were constructed some years ago and have not been brought into commission are by now probably technologically obsolescent and would not be internationally competitive. The very limited foreign exchange resources should not therefore be used to bring them into commission at present. There is not the infrastructure to provide services to new industrial units at this time; policies should be directed at obtaining increased production from existing producers.

Parastatals

Many of the parastatals, because of low utilisation, inefficient management etc, are making losses. These losses fall on the national budget and increase taxation particularly on private sector manufacturers whose profits are thereby reduced. Parastatals, while in state ownership, need to be given financial operating targets with fixed cash limits. If they do not meet their target it will result in loss of incomes and staff reductions, the loss will not fall on the state budget. Parastatal losses in the past have contributed to budget deficits and increased inflation.

It has been indicated to me that privatisation will not take place until industries have been rehabilitated. Rehabilitation, however, is likely to be delayed by lack of finance, particularly foreign exchange.

Rehabilitation if necessary and cost effective should be left to the new owners. The diagnostic surveys currently being undertaken by foreign management consultants should reveal where efficiency can be improved. If properly managed, and with adequate incentives for good performance, many of these units should be capable of producing more output without substantial new investment.

Other Aspects

There are many aspects to liberalising the economy. Particular problems which have been experienced by manufacturing companies are:

(a) High rates of taxation on production and strict price controls at the factory sales. The distribution and trading sectors are less subject to taxation and price fixing. Without affecting final prices, there should be a fairer balance of profits between manufacturers and distributors. At present, traders can attract more private investment than the producers;

(b) When borrowing from banks under the Islamic system a forecast rate of profit is fixed which the banks insist on obtaining. This rate is frequently not achieved and the manufacturer bears the loss. Some manufacturers are driven to making 'black market' restrictive deals with the trading sector in order to stay in business;

(c) Industry suffers from having different exchange rates for imports and exports. This too has led to illegal transactions and foreign exchange wastage.

(d) the investment licence system does not guarantee that foreign exchange and other resources will be available. Licences have been issued although existing producers are working below capacity. There should be more interlinkage in the licence system.

Because of the impact on social welfare (e.g. food prices) decontrol will have to be introduced in stages. Priority should be given to enable the manufacturing industry sector where efficient, to earn profits which will attract investment for its development, particularly funds from Sudanese nationals abroad.

Engineering

A major restraint on manufacturing is shortage of spare machinery parts which are mostly imported. There is need for a larger and more comprehensive engineering sector, particularly medium-sized firms capable of producing castings and forging for machinery components. Manufacturers should be encouraged to sub-contract routine maintenance and component repair of their machines to engineering companies. Construction of a tractor assembly plant would usefully increase the range of engineering work.

Banking

Manufacturing companies do not consider that the banking sector meets their needs. The Sudan Development Corporation provides a high grade service to larger manufacturing companies. It provides professional advice and help with management and can organise a finance 'package' from a variety of lenders. The corporation's Capital resources, however, have not kept pace with inflation and its foreign exchange reserves are limited. The number of projects undertaken is few, relative to the volume of Sudanese business and the Corporation deals mainly with the reliable less risky projects.

The industrial banks mostly operate from Khartoum and there is inadequate regional service. Banks do not make provision for long-term investment. They provide short-term credit for imports and exports although the rates are high. They do not provide finance for working capital because they demand there to be physical assets as a co-lateral. In periods of inflation, as in the recent period, banks using the Islamic system for borrowing have demanded unrealistic profit rates to cover inflation risks. The implied real rate of interest is thus exceptionally high. The previous system of interest rates is more transparent and fairer to the borrower. Because of the shortcomings of the industrial banking system some manufacturers are driven to using unofficial (black-market) sources of finance to remain in business.

Infrastructure

It is generally agreed that there is a large and widespread need for infrastructure investment. At present, manufacturers have to install generators to cover breaks in the electricity supply, provide vehicles for transport and privately arrange waste disposal. It would be more economic and require less total resources if the investment was in the public service. Priority should therefore be given to improving electricity supply, railways, roads, ports and municipal services. It is important that there should be linkage between investment in infrastructure and development of the productive sectors.

Education and Training

Higher education (university especially) facilities in the Sudan appear to be adequate for the needs of the industry sector. Many qualified graduates have to seek employment abroad. If efficiency (and work satisfaction) in manufacturing companies improves they will be more attractive to qualified people and some qualified Sudanese nationals working abroad may return.

There is a general need for management training but the numbers involved would not be very large. Technological education, below university level, to train people for supervisory work in industry is where expansion in the system is required. Attention is rightly being given in the programme to training at the workplace at the larger manufacturing establishment.

Small-scale Enterprises

There are several estimates of the size of the small-scale enterprises sector of the Sudanese economy depending on definition. The 1981/82 census recorded 1,974 establishments employing under 25 persons with a total employment of 19,185. Most were producing food, tobacco and beverages, fabricated metal products or wood products and furniture. They were mostly in the Khartoum or Central regions. Official surveys in 1987 and 1988 which included cottage enterprises (handicrafts) as well estimated that there were 47,000 establishments with a total of 235,000 employees. Their output amounted to 40% of the total production of the industrial sector in Sudan valued at £S 22.5 billion. A study of the sector was published by UNIDO in 1985 (A.R. Sen) found that:

* small enterprises are discriminated against, they have little access to the banks or to foreign exchange and they do not benefit from the special provisions in Investment Encouragement Acts;
* 'compared to large industries, small industries produce 10 times more per unit of investment, need half of the investment to create a job and their value added per worker is about three times higher.';
* incomes, educational and training standards in many of these enterprises were comparatively high;
* there was access to finance from Sudanese workers abroad; and
* there was good mobility and many entrepreneurs moved on to management of larger business concerns.

This is clearly a dynamic and prospering sector which is meeting the particular needs of the economy with efficient use of resources. Policies should aim at removal of administrative and fiscal obstacles to its expansion.

T P Miles
November 1990