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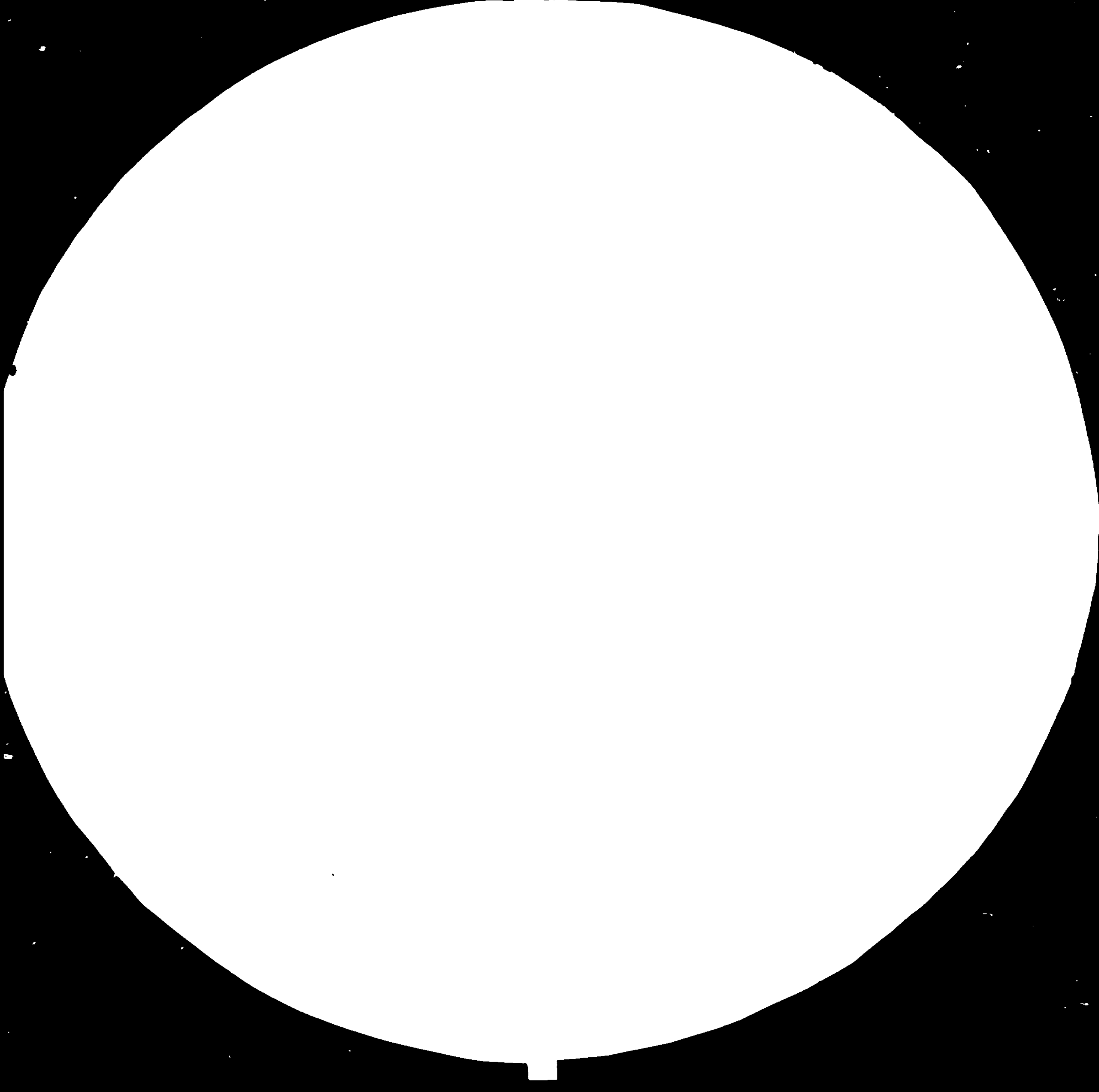

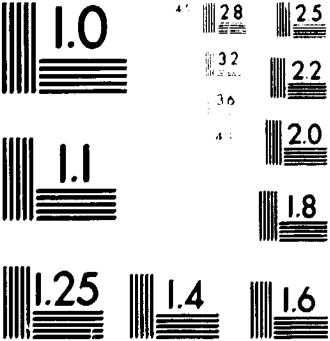


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# INDUSTRIAL DEVELOPMENT REVIEW SERIES

# SWAZILAND

Prepared by the
Regional and Country Studies Branch
Division for Industrial Studies

V.85-22051

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The views and comments contained in this study do not necessarily reflect those of the Government of Swaziland nor do they officially commit UNIDO to any particular course of action.

## Preface

Within the framework of UNIDO country survey and studies, series of country industrial development reviews are prepared on developing countries by the Regional and Country Studies Branch of the Division for Industrial Studies.

The reviews aim at presenting a general survey and brief analysis of the country's industrial development, both as a service to those within UNIDO and other international agencies concerned with industrial policy, planning, project development, and implementation, and as a ready source of information for governments. It is hoped that the reviews will prove useful as well to financial and industrial enterprises, both public and private, research institutes and to aid agencies in developed countries. The reviews also aim at providing a basis for undertaking in-depth studies of specific aspects of industrial policies, strategies and programmes in the developing countries and at providing a basis for informed discussion and analyses of industrial development trends and policies.

The industrial development review of Swaziland has been prepared on the basis of information available at UNIDO Headquarters. It utilizes information provided by UNIDO data base, and material available from national and international statistical publications, and other sources. In the preparation of the review up-to-date national statistics have, however, not always been available in relation to all aspects of industrial development. The industrial development reviews will be updated periodically and efforts are being made to improve the data base and to monitor industrial progress and changes in industrial policy on a regular basis.

It should be noted that the reviews are not official statements of intentions or policies by governments or UNIDO, nor are they intended to represent an official assessment by UNIDO of industrial development in the countries concerned. Readers are invited to comment on the findings and analyses of the reviews and thereby assist UNIDO in improving and updating the reviews.

## EXPLANATORY NOTES

Regional classifications, industrial classifications, trade classifications and symbols used in the statistical tables of this report, unless otherwise indicated, follow those adopted in the United Nations *Statistical Yearbook*.

Dates divided by a slash (1970/71) indicate a crop year or a financial year. Dates divided by a hyphen (1970-71) indicate the full period, including the beginning and end year.

In tables:

Three dots (...) indicate that data are not available or are not separately reported;

A dash (-) indicates that the amount is nil or negligible;

A blank indicates that the item is not applicable;

One dot (.) indicates that there is insufficient data from which to calculate the figure.

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## BASIC INDICATORS 1

### Socio-economic structure

| | |
|---|---|
| **In 1982** | |
| Population: Total: | 605,000 |
| Annual average growth rate: | 2.7 per cent (1970-1981) |
| Projected population: | 1 million by year 2000 |
| Density: | 34.8 per sq.km |
| Labour force: | 188,000 |
| Social indicators: | |
| Life expectancy: | 47 years |
| Infant mortality rate: | 157 per thousand |
| GDP per capita: | US $699 (1983) |
| GDP: | US $423 million |
| GDP growth (at constant 1980 prices) 1980-83: | 3 per cent per annum |
| Structure of production (1981): | Agriculture 25 per cent |
| | Mining 3 per cent |
| | Manufacturing 20 per cent |
| | Construction 5 per cent |
| | Trade and finance 14 per cent |
| | Services 33 per cent |
| Inflation rate (1979-83): | 10 per cent per annum |
| Exchange rate: | Lilangeni 1.65 = US$ 1.00 (September 1984) |

## BASIC INDICATORS 2

### Resources and transport infrastructure

| | |
|---|---|
| **Resources:** | |
| Cash crops | Sugar, citrus, pineapples, tobacco, cotton, maize |
| Livestock | Cattle |
| Forests | Coniferous trees from which sawlogs and woodpulp are produced mainly for export. Wood products account for 20 percent of total exports |
| Minerals | Asbestos, coal, diamonds, clay, tin |
| **Transport:** | |
| Roads: | 2653 Km (54 per cent main roads, 46 per cent district roads) |
| Railways: | 244 Km used mainly for iron ore transportation |
| Airports: | Matsapha Airport |

## BASIC INDICATORS 3

### Foreign trade and balance of payments

| | | |
|---|---|---|
| In 1983 | | |
| Exports | Total value: | US$ 271 million |
| | Main goods: | Sugar, fertilizer, wood products, electronics, asbestos, citrus fruit, canned fruit |
| | Main destinations: | UK, South Africa, USA, Japan |
| Imports | Total value: | US$ 495 million |
| | Main goods: | Motor vehicles, heavy machinery, fuel and lubricants, foodstuffs, clothing |
| | Main origins: | South Africa |
| Balance of payments: | | US$ 70.5 million deficit (1982) |
| External public debt: | | US$ 178 million 1982 |
| Debt service: | | Estimated under 10 per cent of exports of goods and services |
| Foreign currency reserves: (excluding gold) | | US$ 77.4 million (June 1984) |

BASIC INDICATORS 4

Country comparison of selected indicators

| Indicator | Unit | Botswana | Lesotho | Malawi | Swaziland | Zambia | Zimbabwe |
|---|---|---|---|---|---|---|---|
| Population (mid-1982) | millions | 0.9 | 1.4 | 6.5 | 0.6 | 6.0 | 7.5 |
| Population growth (1970-82) | per cent per annum | 2.7 | 2.4 | 3.0 | 2.8 | 3.1 | 3.2 |
| Infant mortality (1982) | per thousand | ... | 94 | 137 | 157 | 105 | 83 |
| Area | thousands of sq.km. | 600 | 30 | 118 | 17 | 753 | 391 |
| Density (mid-1982) | persons per sq.km. | 2 | 46 | 52.8 | 35 | 8 | 19 |
| GDP (1981) | millions US $ | 617 | 300 | 785 | 408 | 3,830 | 5,900 |
| GDP growth (1970-81) | per cent per annum | 10.2 | 6.6 | 5.1 | 9.4 | 0.9 | 2.2 |
| GDP per capita (1981) | US $ | 740 | 214 | 120 | 680 | 334 | 788 |
| Agriculture(1981) | per cent of GDP | 14 | 23 | 47 | 22 | 14 | 15 |
| Industry (1981) | per cent of GDP | 44 | 22 | 18 | 38 | 36 | 35 |
| Manufacturing (1981) | per cent of GDP | 12 | 6 | 13 | 26 | 19 | 25 |
| Services (1981) | per cent of GDP | 42 | 55 | 35 | 40 | 50 | 50 |
| Exports of goods (1981) | per cent of GDP | 51 | 14 | 29 | 69 | 27 | 25 |
| Gross domestic investment (1981) | per cent of GDP | ... | 29 | 20 | ... | 17 | 27 |
| External public debt (1981) | per cent of GNP | ... | 20.4 | 48.8 | 37.9 | 66.3 | 19.1 |
| Share of world MVA (1981) | per cent | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.05 |
| Average annual growth of MVA (1970-81) | per cent | 17.5 | 13.4 | 5.4 | 13.4 | 1.4 | -4.1 |

## EXECUTIVE SUMMARY

The 1980s have seen a significant slowing down of growth in Swaziland. 1982 was the first year in which real GDP growth was negative. The trend is likely to have persisted during 1983 and 1984.

The major factor behind the downturn has been deteriorating conditions in the markets for Swaziland's exports - sugar and chemicals. The collapse of the 1984 International Sugar Agreement Negotiations and continuing adverse weather conditions in Southern Africa mean that export prospects are not likely to improve at least in the short run.

The response of the Government of Swaziland to the continuing economic slow-down has been to increase incentives for foreign industrial investment and to limit the growth of public expenditure and the role of the parastatals within the manufacturing sector. As yet the response from foreign investors - particularly within manufacturing - has not been encouraging.

The Government's policy options are limited due to its membership of the Southern African Customs Union and the Rand Monetary Area. This precludes the possibility of independent initiatives in the area of monetary, foreign exchange and commercial policies. Nevertheless measures to enhance industrial production in Swaziland have been adopted.

The manufacturing sector now accounts for 23 per cent of GDP. It has grown more rapidly than the other major sectors during the past decade. However growth has slowed down since 1981. The manufacturing sector is export-oriented and is dominated by the sugar, wood-pulp and chemical branches. It provides employment for a very small proportion of the total labour force. More than 70 per cent of Swazis remain dependant on subsistence agriculture and are very marginal consumers of industrial production.

A reorientation of the structure of manufacturing production and investment is required to reduce dependance on and vulnerability to unforeseen development in international commodity markets. It is also required to meet rising employment needs. Employing a more labour-intensive technology of production will significantly curtail the problem of unemployment within the formal sector.

A reorientation of industrial structure requires the development of a new policy framework. Multinational aid agencies - including UNIDO - can make a significant contribution towards Swaziland's industrial development by helping in the identification of financially sound projects geared to meeting domestic demand requirements and by facilitating the development of an appropriate macroeconomic policy framework for encouraging the integration of manufacturing sector with the national economy.

## 1. THE ECONOMY OF SWAZILAND

### 1.1 Recent economic trends

The Swaziland economy has been depressed since the end of 1981 and there are as yet few signs of recovery. GDP recorded a negative growth rate of -0.5 per cent during 1982 and growth is unlikely to have been positive in 1983 or 1984. The two important factors affecting the country's economic prospects are the large reductions in the world price of sugar and the damage inflicted upon the agricultural sector by droughts and cyclones during 1983 and 1984.

Over the period August 1983-August 1984 sugar prices fell by 54 per cent - by far the largest fall recorded in any commodity group of interest to African countries. Prices are now at their lowest level for 13 years. They are likely to continue to fall over the next 12 months period as production for the 1984/85 season is expected to be significantly larger than consumption and stocks currently represent over 40 per cent of total consumption.

In May 1984 negotiations for the establishment of a new International Sugar Agreement (ISA) collapsed in Geneva - the current ISA expired at the end of 1984. The four main sugar exporters - Australia, Brazil, Cuba and the EEC - failed to agree on a new division of international export quotas. The expiry of the existing ISA will mean that each country will be able to export what it can and there will be no obligation to hold reserve stocks. Some countries have spoken of the inevitability of a price war as the large exporters try to corner the market. The situation is thus very grim for Swaziland which depends on sugar for a third of her export earnings and which has to expand sugar exports to meet IMF financial obligations in early 1985. A number of other major sugar exporters - Brazil, the Dominican Republic, Malawi, Mauritius and Zimbabwe - are in a similar position and their collective action might lead to substantial destocking and a consequent catastrophic decline in world sugar prices. This would seriously affect Swaziland's trade and development prospects.

The second major adverse factor affecting medium-term economic prospects has been the damage caused by the cyclone Dominia which hit Swaziland in early 1984. The total cost is estimated at between E50 to E100 million - (i.e. between 13 to 26 per cent of annual current GDP). The sugar crop was not affected as it had been harvested in December but the cyclone destroyed the corn, tobacco and several fruit crops. Damage to industrial and commercial property is estimated at over E. 10 million. The distruption caused to the communication network led to a substantial decline in exports. Necessary reconstruction will require time and substantial financial resources. International assistance provided during 1984 has been relatively limited.

The Government has pursued a cautious economic policy since the beginning of the current recession which has seen a decline in production in all the major sectors of the economy including agriculture, construction, commerce, distribution and mining. Manufacturing is the only exception. The real value of output is estimated to have grown by 4.8 per cent during 1982. However, many companies have reported rising costs of imported industrial inputs during 1983 and 1984. This is likely to reduce their value added contribution to GDP.

The economic slowdown has been accentuated by rising interest rates, characteristic of the entire Rand Monetary Area during 1983 and 1984. In August 1983 the Swaziland Central Bank raised prime and call rates and announced measures which have subsequently led to a reduction in bank lending to the private sector. Inflation became an important problem during 1983 with price rises of 10.5 per cent. The budget deficit for the year 1983/84 is estimated at over E30 million - four times higher than the level anticipated (E 7.1 million) at the beginning of the financial year. The 1984/85 budget seeks to reduce the deficit to E 2.06 million by increasing revenues by 17 per cent and limiting public expenditure growth. The deficit is to be financed entirely by domestic borrowing. The 1984/85 budget aims at controlling government and parastatal spending and providing incentives for attracting foreign capital to Swaziland.

The dependence on foreign capital has been accentuated by Swaziland's deteriorating international trade situation in recent years. Exports during 1983 were below 1982 levels. Total reserves (excluding gold) have also been declining - they fell by as much as 30 per cent over the period January to March 1984. Outstanding public debt is expected to have risen by 10 per cent during 1983.

## 1.2 The economic structure

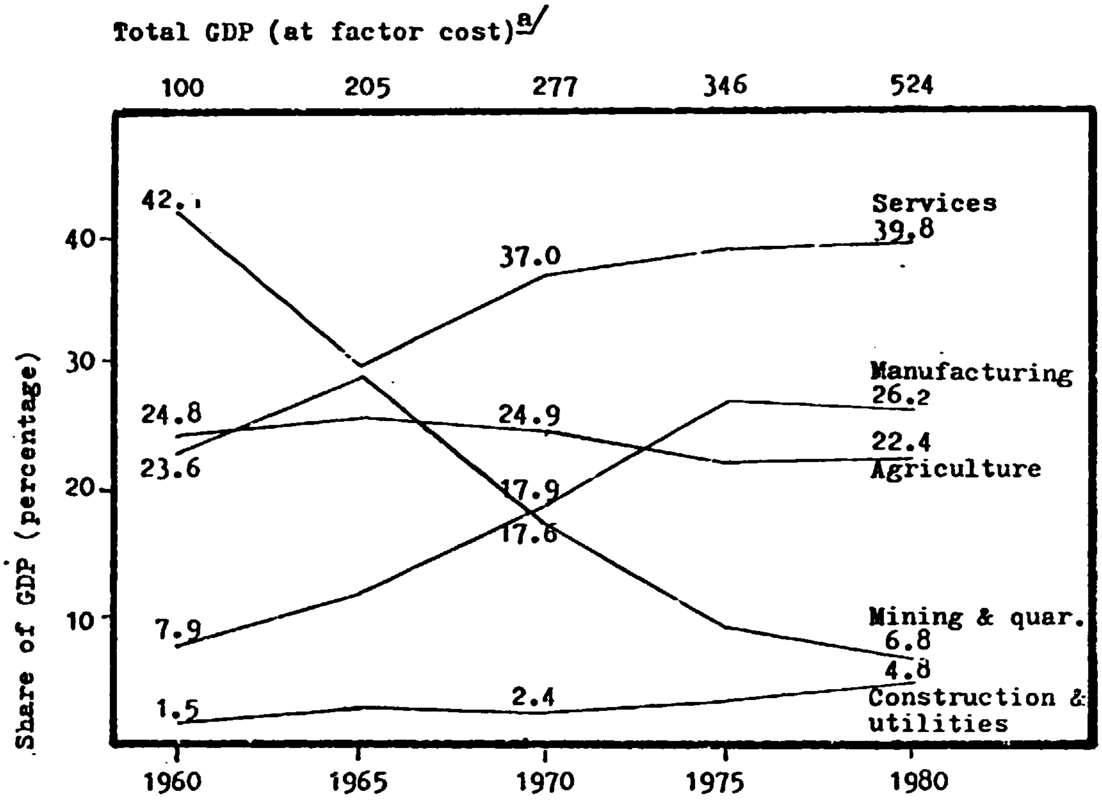
The economic difficulties Swaziland has been experiencing in the 1980s are in sharp contrast to the economic performance of the 1970s. Between 1968 and 1976 GDP grew at an annual average rate of over 20 per cent measured in current prices. This pace slowed down after 1976 but during 1976-82 GDP grew at an annual rate of 6.4 per cent. Since 1982 however GDP growth has been negative.

Swaziland has ample natural resources. The country followed an export-oriented development strategy and growth has occured in commercial agriculture and export-oriented mining and manufacturing. In these sectors foreign capital remains strongly represented. The bulk of the population - amounting to 70 per cent of the total - remain dependant on the subsistance agricultural sector. Total employment within the formal sector is estimated at about 70,000 in 1982, the equivalent of 11.6 per cent of the total Swaziland population.

An analysis of the composition of GDP at constant (1975) prices shows that the mining sector contributed 6.8 per cent to the total GDP in 1980 as compared to 23.6 per cent in 1960 (Figure 1). The drastic contraction of this sector was largely due to the closure of the iron ore mines. As against this, the expansion of manufacturing sector was strikingly high. Its contribution to GDP increased from 7.9 per cent in 1960 to 26.2 per cent in 1980. The bulk of this rise represented rapid growth of the manufacturing sector up to 1975 and a subsequent marginal decline thereafter. The tertiary sector comprising all the services contributed 39.8 per cent to GDP in 1980 as against 42.1 per cent in 1960. Between 1960 and 1970 its contribution seemed to have fluctuated markedly, but after 1970 its contribution has remained fairly stable exhibiting a marginal rise. The agricultural sector which accounted for 24.8 per cent of GDP in 1960 slightly declined to 22.4 per cent in 1980; its relative contribution to a structural change of GDP over a twenty-year period seems to have been marginal.

The Swaziland economy is heavily dependant on the external sector. The trade GNP ratio was as high as 1.9 in 1982. Exports equalled 81.6 per cent of GDP at factor cost. Over 90 per cent of imports are obtained through South Africa.

Figure 1: DISTRIBUTION OF GDP BY SECTORS OF ORIGIN, 1960-1980




Source: UNIDO data base, information supplied by the United Nations Office of Development Research and Policy Analysis.

a/ Millions of US dollars at constant 1975 prices.

The balance of trade situation has been deteriorating in recent years. The trade deficit grew at an annual average rate of 24 per cent over the period 1978-1982. Major exports are sugar, chemicals, wood-pulp, asbestos and electrical equipment. The balance of payments situation has also been deteriorating since 1978 (1980 was an exception). The net out flow of repatriated profits and salaried remittances on the services account was almost 40 per cent of annual export receipts for the period 1978-1982. Outflows also occur on the short-term capital account - they averaged 9 per cent of export revenue during 1978-82. Thus only about 50 per cent of export revenue is typically available for financing imports into Swaziland.

The membership of Swaziland in the Southern African Customs Union (SACU) and the Rand Monetary Area have also played a significant role in tying her closely to the economy of the Republic of South Africa. SACU provides for the free movement of goods among the four members (South Africa, Lesotho, Botswana and Swaziland). The Customs Union has enabled the highly industrialized and diversified South African economy to exert a major influence on production, prices, wages and patterns of trade of the smaller member countries.

The Rand Monetary Agreement (RMA) provides for the transfer of funds within the South African, Swaziland, Lesotho area and the pooling of gold and foreign exchange reserves under South African management. The RMA has, therefore, limited Swaziland's policy alternatives and has made Swaziland vulnerable to South African influence and control. Swaziland does have its own currency and Central Bank but the South African Rand circulates as legal tender and the Swazi Lilangeni is backed by 90 per cent in Rand. Monetary policy is, therefore, only slightly effective and monetary data only reflects part of the economy's savings and utilization of credits.

## 1.3 The manufacturing sector: an overview

The manufacturing sector of Swaziland has grown steadily since independence. However, growth has slowed down in recent years. The Government has been active in promoting the expansion of the sector especially in the area of agriculturally based manufacturing and processing. Commercial agro-processing involves the following main commodities: sugar, wood-pulp, citrus, pineapples, cotton, rice and meat. In addition to food processing, cement, chemicals, fertilizer, and textile factories constitute part of the manufacturing industry. The manufacturing sector is dominated by South African nationals who own most of the largest enterprises.

Sugar is the main export earner and accounts for the employment of about 8,500 people. There are three sugar mills in the country. The Government has a majority share holding in one of the mills. Sugar production was down by 7 per cent in 1983/84 as compared to the previous year but is expected to rise during 1984/85. Sugar production has not been affected by the cyclone. The sharp fall in international sugar prices may lead to substantial loses for Swaziland. International demand is also weak for wood-pulp - another major Swaziland export item.

Since the early 1980s chemicals have become an important manufacturing export product. However, Swaziland Chemical Industries which completed an ambitious investment programme in 1982 went into liquidation in 1984 following a collapse of export demand.

Despite a significant level of GDP contribution of 27 per cent the manufacturing sector contains a relatively small number of enterprises. Six manufacturing units accounted for 68 per cent of MVA and 45 per cent of manufacturing employment according to the 1980 census.

Slower growth in the manufacturing sector in 1982 resulted in 2,681 workers being retrenched. In general job creation in the manufacturing sector as a whole has been almost nil through 1982 and 1983. This situation poses many problems for the Swaziland economy because the agricultural sector will find it very difficult to absorb the ever increasing number of job seekers.

## 2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

### 2.1 Growth and structural change

MVA per capita rose - in 1975 constant prices - from US $22 in 1963 to US $213 in 1981. Over the same period MVA per capita in Africa as a whole rose from US $25 to US $46 - the Swaziland manufacturing sector was thus one of the fastest growing manufacturing sectors in Africa. Growth of MVA per capita was 18.07 per cent per annum over 1963-1970 and 11.43 per cent per annum during 1970-81. The growth rate of GDP in Swaziland during these two periods was 4.81 per cent and 8.85 per cent per annum respectively. All growth rates are calculated on the basis of 1975 prices.

MVA's share in GDP rose from 7.9 per cent in 1960 to 17.6 per cent in 1970 (in constant 1975 prices - in current price terms the rise is more marked). The rise since 1970 has been more modest. MVA accounted for 24.2 per cent of GDP in 1981. Growth rates are fairly evenly distributed over the period 1970-1980. Industrial chemicals recorded the most rapid expansion rate.

Table 1 presents estimates of structural change within the manufacturing sector in terms of both output and value added. The figures on which the estimates in Table 1 are based ought to be viewed with extreme caution. They contain errors of omission and incorporate assumptions which might be unrealistic. Also there are significant problems associated with aggregation.

The major conclusion to be drawn from Table 1 is the continuing importance of the food processing sector in Swaziland. It accounts for more than half of manufacturing output and value added. It is also apparently more efficient than any other branch. It has a higher MVA/output ratio than that of any other branch providing some limited indications of greater industrial efficiency.

Table 1 shows that the share of output of the food processing branches has changed relatively little during the 1970s. They accounted for 50.9 per cent of manufacturing output in 1973 and 50.1 per cent in 1980. In terms of the branch distribution of value added, however, the share of the food proessing industries (ISIC 311 and 313) rose from 31.6 per ent in 1973 to 41.9 per cent in 1980. The share of the wood processing branches declined -

Table 1: GROSS OUPUT AND VALUE ADDED IN MANUFACTURING, 1973 and 1980

(at current prices)

(currency = Lilangeni)

| Description (ISIC) | Gross ouput | | | | Value added | | | |
|---|---|---|---|---|---|---|---|---|
| | (thousands) Producer val. | (thousands) Producer val. | Share in total (percentage) | | (thousands) Producer val. | (thousands) Producer val. | Share in total (percentage) | |
| | 1973 | 1980 | 1973 | 1980 | 1973 | 1980 | 1973 | 1980 |
| Total manufacturing (300) | 60,186 | 296,165 | 100.0 | 100.0 | 21,555 | 79,620 | 100.0 | 100.0 |
| Food products (311) | 28,264 | 137,056 | 47.0 | 46.3 | 6,138 | 30,014 | 28.5 | 37.7 |
| Beverages (313) | 2,325 | 11,341 | 3.9 | 3.8 | 674 | 3,309 | 3.1 | 4.2 |
| Textiles (321) | 2,921 a/ | 12,458 b/ | 4.9a/ | 4.2b/ | 615 a/ | 2,164 b/ | 2.9a/ | 2.7b/ |
| Wood products, except furniture (331) | 4,323 c/ | 16,003 c/ | 7.2c/ | 5.4c/ | 13,593 d/ | 6,058 c/ | 63.1d/ | 7.6c/ |
| Paper and products (341) | 19,899 | 60,781 e/ | 33.1 | 20.5e/ | ... | 24,402 e/ | ... | 30.6e/ |
| Industrial chemicals (351) | ... | 35,478 f/ | ... | 12.0f/ | ... | 8,528 f/ | ... | 10.7f/ |
| Glass and products (362) | ... | 3,086 g/ | ... | 1.0g/ | ... | 926 g/ | ... | 1.2g/ |
| Iron and steel (371) | ... | 0 | ... | 0.0 | ... | 0 | ... | 0.0 |
| Non-ferrous metals (372) | ... | 0 | ... | 0.0 | ... | 0 | ... | 0.0 |
| Fabricated metal products (381) | ... | 13,769 | ... | 4.6 | ... | 3,473 | ... | 4.4 |
| Machinery, except electrical (382) | ... | 5,457 h/ | ... | 1.8h/ | ... | 549 h/ | ... | 0.7h/ |
| Other manufactured products (390) | 2,454 | 736 | 4.1 | 0.2 | 535 | 197 | 2.5 | 0.2 |

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Notes:
- a/ 3210 includes 3220.
- b/ 3210 includes 3220, 3230.
- c/ 3310 includes 3320.
- d/ 3310 includes 3320, 3410.
- e/ 3410 includes 3420.
- f/ 3510 includes 3520, 3530, 3540, 3560.
- g/ 3620 includes 3690.
- h/ 3820 includes 3830

although unavailability of data on value added in 1973 and aggregation in relation to the wood products branches (ISIC 3310, 3320, 3410) make a quantitative estimation impossible. Finally, it is possible to observe from Table 1 that the value added share of the major intermediate industrial branches (industrial chemicals and fabricated metal products) is roughly in line with their share of total manufacturing output - the latter being 15.1 per cent, the former 16.6 per cent in 1980.

Two important developments since 1980 ought to be noticed. In 1984 the major chemical firm Swaziland Chemical Industries went into liquidation being unable to find customers for its products in South Africa. Secondly, the activities of the Finnish-owned firm Salera Swaziland have expanded significantly. The firm exports televisions, radios and hi-fi equipment principally to South Africa. Both these developments are likely to have effected the structure of the inter-industrial distribution of MVA and manufacturing output. However, the prominence of the food processing units - particularly within the sugar industry - is likely to have remain unchanged.

## 2.2 Performance of the manufacturing sector

It is very difficult to derive accurate estimates of industrial efficiency in an open economy like Swaziland where there are virtually no restrictions on the movement of capital to and from South Africa. Most of the large industrial units have corporate and other financial relationships with Johannesburg-based firms. Often this leads to an obscuring of details in company balance sheet and it becomes difficult to clearly differentiate between Swaziland and non-Swaziland-based activities.

UNIDO estimate shows that, measured in constant 1975 prices, MVA grew at an annual rate of 4.2 per cent over the period 1970-1980. Variations about this mean were large ranging from 22.1 per cent in 1973-74 to -19.3 per cent in 1977/78. The standard deviation for tne series is 11.47 per cent. Growth rates since 1980 have been lower but the wide variations characteristic of the 1970s has been somewhat reduced.

Some aggregate figures of relevance to an assesment of industrial performance are summarized in Tables 2 and 3. Figures given there are in current prices. Constant price data is not available at the branch level.

Table 2: EMPLOYMENT, WAGES AND SALARIES IN MANUFACTURING, 1973 and 1980
(at current prices)
(currency = Lilangeni)

| Description (ISIC) | Employment | | Wages and salaries | |
|---|---|---|---|---|
| | Pers. engaged | Pers. engaged | (thousands) | |
| | 1973 | 1980 | 1973 | 1980 |
| Total manufacturing (300) | 6,499 | 10,757 | 7,573 | 30,335 |
| Food products (311) | 2,732 | 4,069 | 2,555 | 11,701 |
| Beverages (313) | 231 | 345 | 290 | 1,335 |
| Textiles (321) | 621 a/ | 670 b/ | 269 a/ | 1,077 b/ |
| Wood products, except furniture (331) | 1,278 c/ | 2,540 c/ | 925 c/ | 2,589 c/ |
| Paper and products (341) | 1,285 | 1,163 d/ | 3,268 | 8,232 d/ |
| Industrial chemicals (351) | ... | 527 e/ | ... | 1,539 e/ |
| Glass and products (362) | ... | 234 f/ | ... | 429 f/ |
| Fabricated metal products (381) | ... | 504 | ... | 1,739 |
| Machinery, except electrical (382) | ... | 565 g/ | ... | 1,403 g/ |
| Other manufactured products (390) | 352 | 140 | 266 | 294 |

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Notes: a/ 3210 includes 3220.
b/ 3210 includes 3220, 3230.
c/ 3310 includes 3320.
d/ 3410 includes 3420.
e/ 3510 includes 3520, 3530, 3540, 3560.
f/ 3620 includes 3690.
g/ 3820 includes 3830.

Comparison of Tables 1 and 2 shows that the rate of growth of manufacturing employment has been substantially below the rate of growth of MVA (measured in current prices) over the period 1973-80. The data enables us to compare the performance of four industrial branches - food products, beverages, textiles and wood products (including paper products) - in terms of employment and MVA growth over this period. In all cases the current price data shows a substantial excess of the growth rate of MVA over the employment growth rate. There is no (statistically) significant difference between the ratios of growth in MVA to growth in employment - the growth of productivity - among the food, beverages and textile industries. The wood processing industries - including paper products - however tends to lag behind substantially. It is this difference in the relative performance of the wood processing branches which gives some credibility to these estimates. Productivity growth estimates for the food processing, beverages and textile branches are bunched very closely together.

Table 2 contains information on the branch distribution of employment,[1/] wages and value added. The overall importance of the food manufacturing industries once again stands out in terms of the structure of employment and wages. Food products account for 38 per cent of total manufacturing employment recorded in Table 2 and also for 38 per cent of the wage bill in 1980. The sector accounted for 42 per cent of employment and for 34 per cent of manufacturing wages in 1973. The contraction of the wood processing sector has been much more marked. Its share of manufacturing employment and wages fell by 24 per cent (from 39 per cent in 1973 to 15 per cent in 1973) and 20 per cent (from 55 per cent in 1973 to 35 per cent in 1980) respectively. The share of other sectors has risen. By 1980 their combined contribution in manufacturing employment had risen to 17 per cent.

Table 3 permits some speculation about industrial efficiency trends. Productivity (as measured by value added per employee at current prices)[2/] is highest in paper products, industrial chemicals, food manufacturing and beverages. It is impossible to determine the extent to which this is due to higher capital intensity or the general rise in prices. In general wage levels are higher in these branches indicating perhaps greater skill requirements (usually associated with higher capital intensity). The share of value added to gross output is highest in the paper products, wood products, glass products and beverages branches. In general the association between value added per employee and the value added to gross output ratio is weak. The Spearman's rank correlation coefficient between the two rankings is only 0.28.

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1/ Note that employment attributed to branch 311 includes workers in the sugar mills.

2/ Though it must be admitted that this is an extremely unsatisfactory estimation of productivity.

Table 3: SELECTED INDUSTRIAL INDICATORS, BY BRANCH OF MANUFACTURING, 1973 and 1980
(at current prices)
(currency = Lilangeni)

| Description (ISIC) | Value added per employee | | Wages and salaries per employee | | Share of value added in gross output (percentage) | | Share of wages and salaries in value added (percentage) | |
|---|---|---|---|---|---|---|---|---|
| | 1973 | 1980 | 1973 | 1980 | 1973 | 1980 | 1973 | 1980 |
| Total manufacturing (300) | 3,317 | 7,402 | 1,165 | 2,820 | 35.8 | 26.9 | 35.2 | 38.1 |
| Food products (311) | 2,247 | 7,376 | 935 | 2,876 | 21.7 | 21.9 | 41.6 | 39.0 |
| Beverages (313) | 2,919 | 9,591 | 1,256 | 3,870 | 29.0 | 29.2 | 43.0 | 40.3 |
| Textiles (321) | 990 a/ | 3,230 b/ | 433 a/ | 1,607 b/ | 21.1a/ | 17.4b/ | 43.7a/ | 49.8b/ |
| Wood products, except furniture (331) | ... | 2,385 c/ | 724 c/ | 1,019 c/ | ... | 37.9c/ | ... | 42.7c/ |
| Paper and products (341) | ... | 20,982 d/ | 2,543 | 7,078 d/ | ... | 40.1d/ | ... | 33.7d/ |
| Industrial chemicals (351) | ... | 16,182 e/ | ... | 2,920 e/ | ... | 24.0e/ | ... | 18.0e/ |
| Glass and products (362) | ... | 3,957 f/ | ... | 1,833 f/ | ... | 30.0f/ | ... | 46.3f/ |
| Fabricated metal products (381) | ... | 6,891 | ... | 3,444 | ... | 25.2 | ... | 50.0 |
| Machinery, except electrical (382) | ... | 972 g/ | ... | 2,483 g/ | ... | 10.1g/ | ... | 255.6g/ |
| Other manufactured products (390) | 1,520 | 1,407 | 756 | 2,100 | 21.8 | 26.8 | 49.7 | 149.2 |

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Notes:
a/ 3210 includes 3220.
b/ 3210 includes 3220, 3230.
c/ 3310 includes 3320.
d/ 3410 includes 3420.
e/ 3510 includes 3520, 3530, 3540, 3560.
f/ 3620 includes 3690.
g/ 3820 includes 3830.

A more accurate estimation of efficency is the non-wage value added share measure. The last column of Table 3 shows that this ratio is highest for industrial chemicals, paper products, food products and beverages. There is close association between the inter-branch distribution of value added to employee and the non-value added share ratio - Spearman's rank correlation being as high as 0.85. This demonstrates that on the whole capital intensity may be an important determinant of productivity levels. It is interesting to note the relatively weak association between the value added to gross output ratio and the non-value added share ratio. A value for the latter ratio is associated with relatively high material costs indicating that despite a low wage share in Swaziland manufacturing the profit levels are not particularly high at least as indicated by these - admitedly highly imperfect - estimates. Levels of industrial efficiency are thus likely to be relatively low within the Swaziland manufacturing sector.

Unfortunately Table 3 does not permit a comparison of productivty and efficiency levels for any branch over the period 1973-1980. However, the aggregate estimates presented in row 1 indicate a substantial fall in the share of value added to gross output and a smaller reduction in the share of non-wage value added. This would once again indicate that industrial costs - both material and labour - rose within the Swaziland manufacturing sector in 1980 compared to 1973 and there are grounds for expecting industrial efficiency to have declined.

## 2.3 Manufacturing trade

It is very difficult to obtain accurate estimates particularly at a disaggregated level of Swaziland exports and imports. This is because Swaziland is part of the Southern African Customs Union and only consolidated trade figures are generally available.

A breakdown of Swazilands' exports is made available by the Central Bank. These are reproduced in Table 4. The share of manufacturing depends entirely on how one chooses to classify sugar. If the entire sugar output is classified under ISIC 3118 (as output of sugar factories and refineries) the share of manufacturing in exports would be well over 50 per cent of the total over the period 1978-83. Similar ambiguities also arise in connection with

Table 4: MAIN EXPORTS OF SWAZILAND, 1978-1983

(E million)

| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | Average (percentage) |
|---|---|---|---|---|---|---|---|
| Sugar | 59.6 | 69.1 | 128.4 | 125.8 | 105.0 | 112 | 38.53 |
| Wood-pulp | 27.1 | 28.2 | 36.9 | 50.6 | 46.5 | 40 | 14.72 |
| Chemicals | 6.7 | 10.0 | 19.2 | 36.4 | 55.3 | 36 | 10.50 |
| Asbestos | 18.2 | 17.6 | 15.6 | 17.8 | 14.9 | 18 | 6.55 |
| Citrus | 7.2 | 9.4 | 7.6 | 9.2 | 15.6 | 13 | 3.98 |
| Canned fruit | 8.2 | 9.2 | 9.4 | 12.7 | 18.0 | 13 | 4.52 |
| Electrical equipment | 3.2 | 3.5 | 8.2 | 11.6 | 15.4 | 7 | 1.55 |
| Meat | 6.4 | 9.1 | 8.0 | 4.2 | 5.3 | | 2.11 |
| Coal | 2.1 | 2.9 | 2.0 | 3.4 | 3.0 | | 0.86 |
| Iron ore | 6.2 | 5.3 | 2.9 | 0 | 0 | | 0.92 |
| Total (incl. others) | 170.6 | 196.6 | 279.2 | 318.0 | 321.4 | 271 | |

Source: Central Bank of Swaziland.

wood-pulp and meat products. Various assumptions can be made as to how much of the output of these branches should properly be regarded as 'manufactured'. The most generous assumption - that the entire output of these branches be classified as manufactures - would show that the share of manufactures in Swaziland exports rose from 65.4 per cent to 76.7 per cent over the period 1978-1983. Sugar exports represented 34.9 per cent of total exports at the beginning and 41.3 per cent of total exports at the end of the period. The elimination of iron ore exports has contributed towards an increase in the share of manufactured exports. Besides sugar the main manufactured exports are wood pulp and chemicals - both of these have fallen in volume terms due to the fall in South African import demand. The continuing drought in South Africa has affected the demand for Swaziland's fertilizers particularly seriously.

Detailed estimates of imports are not readily available. The World Bank estimates that over the period 1974-1978 manufactured imports represented about 60 per cent of total imports, with machinery and transport equipment representing the main import item. These trends have persisted during the 1980s. Thus, despite the fall in import levels which began in the third quarter of 1983 the import of machinery and transport equipment has not been affected.

South Africa remains Swazilands' main trading partner. It provides more than 90 per cent of Swaziland's imports and absorbs a large proportion of her exports. Sugar exports are directed to the USA and UK. Moreover the official estimates of the South African share in Swaziland's external trade are likely to be conservative as much of the 'intra-firm' trade that characterises transaction between Swaziland parent companies and their Swaziland affiliates is likely to remain unrecorded.

The Swaziland Government remains concerned with increasing export revenues. The country's export prospects depend very largely on the health of the South African economy and conditions prevailing in the international sugar market. With the collapse of the ISA negotiations and the continuing drought in Southern African countries, there can be very few grounds for optimism. As a longer-term strategy the Swaziland government seeks to emphasize the importance of diversifying the country's export portfolio and the sources and destinations of her external trade. Membership of the Southern African Development Co-ordinating Council (SADCC) can facilitate the achievement of these objectives. This will however require a restructuring of industrial investment, location and production.

### 2.4 Ownership and location

Seventy five per cent of industrial enterprises are concentrated in the Mbabane-Mansini corridor - most of these being located in the Matsapha Industrial Estates. Within the large-scale sector the main investors are foreign enterprises and government bodies. Major public investment is located in three large sugar refineries, the Usutu pulp mills, cotton ginneries and other food processing plants. Foreign investment has taken place in chemicals, electrical equipment wood products and sugar refining branches. South African and British firms dominate the manufacturing sectors. They have a stake in the ten largest manufacturing enterprises in Swaziland often in collaboration with the public sector.

Industrial ownership and location is thus heavily concentrated. Most industrial investment is capital intensive. However since the late 1970s the government has been seeking to develop medium scale enterprises. Since 1981 a number of medium scale firms have been established - these include three bakeries, and a brake factory. The overall employment generating capacity of Swaziland manufacturing remains relatively limited. Despite contributing 27 per cent of GDP it provides employment for only about 1 per cent of the population. Small- and medium-scale industry - including handicrafts - can play an important part in stimulating employment and in increasing the manufacturing sector's linkages with the domestic Swaziland economy.

# 3. INDUSTRIAL DEVELOPMENT OBJECTIVES, POLICIES AND INSTITUTIONAL INFRASTRUCTURE

## 3.1 Industrial planning and objectives

Macroeconomic planning - including planning for the industrial sector - is contrained by two factors. One is Swaziland's special relationship with South Africa. This is symbolized by Swaziland's membership in both the Southern African Customs Union (along with Botswana, Lesotho and South Africa) and the Rand Monetary Area (along with Lesotho and South Africa). Membership within these organizations makes it impossible for the country to have an independant monetary or foreign exchange policy. The Rand circulates freely throughout the Rand Monetary Area and is legal tender in Swaziland. No restrictions can be imposed by the Swaziland Government on the movement of goods or capital to or from other countries within the Southern African Union (SACU). There are common import duties and common sales and excise taxes in SACU. Revenues collected through these taxes are pooled and distributed among the member countries on the basis of a mutually agreed revenue sharing formula.

Another factor limiting the role of macroeconomic planning is the structure of the administrative system. Two parallel administrations exist side by side. The Ligogo - or royal council - consisting mainly of tribal chiefs is charged with safeguarding tribal interests. The Central Government is formally in charge of national development. There is however significant functional overlapping. The tribal authorities have considerable financial assets - managed by the Tibiyo Taka Ngwane Fund and not integrated into the national budget. The Tibiyo fund has made extensive investments in industry and in plantation agriculture and has received contribution from the Central Government's budgetary resources. It enjoys a high level of operational autonomy.

Planning - particularly plan implementation - is a difficult task under these circumstances. Nevertheless the Government has announced a series of industrial policy objectives. The Third National Development Plan (1978/79 - 1982/83) included the following industrial policy objectives:

- To promote rapid industrial growth in order to raise incomes and employment, with special emphasis on labour-intensive industries.

- To promote the development of local enterprises and management and to increase the participation of Swazi nationals at all levels of the industrial sector.

- To achieve a greater measure of Swazi control over industry.

- To establish industries in the less developed areas of the country.

- To obtain maximum value from all local natural resources, especially by raising the level of the stage of procesing in existing and future industries.

- To establish export-oriented industries, primarily those with a potential for markets outside the Southern African region.

For the achievement of the foregoing industrial objectives, the following targets were specified:

- To create 6,200 jobs in industry, of which 3,000 will be in the less developed areas, and 3,700 will require government parastatal assistance.

- To develop the Nhlangano and Ngwenya industrial estates and to expand the Matsapha industrial estate.

- To create a new trade fair ground near Matsapha to replace the existing site at Manzini.

- To establish a trade promotion body within the Ministry of Industry.

- To ensure the successful establishment of the third sugar mill and to bring its annual capacity up to 113,000 tonnes by 1983.

The Plan aimed at an annual growth rate of 7 per cent within the manufacturing sector. More than 50 per cent of the expenditure within the industrial sector (which represented 17 per cent of total capital outlay) was devoted to the establishment of Swaziland's third sugar mill. The share of the small enterprise development company fell to 6 per cent of total industrial investment - its share had been about 8 per cent during the Second Plan period. The Third Plan has so far not been superceeded by another document. Industrial priorities are indicated in the annual budgets. These are discussed below.

### 3.2 Recent developments in industrial policy

As noted in Chapter 1 industrial growth in the last two years has somewhat slowed down and many of the targets of the Third Five-Year Plan remain unfulfilled. There has been, for example, little net growth in employment generated by the manufacturing sector and with annual additions to the labour force of about 7,000 school leavers, unemployment is likely to become a serious problem in the medium term.

The industrial downturn has become most pronounced since 1982. Sugar production in 1983 was only 0.07 per cent higher in volume terms than the previous years. Production of wood-pulp fell by 6 per cent and of chemicals by 26.5 per cent in value terms over the same period. In real (constant price) terms this represents a much more significant decline in output. The low world sugar prices are likely to further depress industrial output.

A US $16 million textile mill is to be established by a South African investor on condition that Swaziland maintains membership of SACU. However 1984 has also seen industrial retrenchment. This includes the liquidation of Swaziland chemicals and the sale by Nestle SA of its holdings (amounting to 89.54 per cent) in Swaziland Fruit Canners (Libbys).

The Government remains convinced that the principal source of industrial finance must be the foreign investor. The 1984/85 budget aims to severly restrict the growth of parastatal spending - thereby limiting government investment - and to provide incentives for private investment. Swaziland plans to reduce the corporate tax rate and to further increase investment incentives in order to compete with terms being offered to foreign investors under South Africa's decentralization policy.

A new package of incentives[1/] to attract foreign investment is likely to be announced in late 1984 or early 1985. It will probably reduce the rate of corporate tax by 5 per cent. The hope is to attract investment for establishing export-oriented units aimed at the rapidly expanding Preferential Trading Area for East and Southern Africa. Special incentives will be provided for relatively labour-intensive projects and for projects within the mining and the agricultural sector.

Another development likely to affect the growth of the manufacturing sector is the decision announced by the government in August 1984 to impose a 5 per cent sales tax on all goods. This will reduce the budget deficit for the current fiscal year but it will fuel inflation. Inflation is currently running at the rate of about 11 per cent per annum. An acceleration in this rate is likely to seriously affect industrial costs and thus jeopardize export prospects.

## 3.3 Institutional infrastructure

Some of the most important national institutions which have a direct bearing on industrialization in Swaziland are as follows:

### Central Government Organs

- The Ministry of Finance - The Ministry is responsible for the formulation of the budget and monetary and fiscal matters. However, the excessive dependence of Swaziland on external forces and South Africa limits the Ministry's powers relating to the application of monetary and fiscal policies (exchange rate, interest rates, indirect taxes and other economic tools).

- The Prime Minister's Office - Department of Planning [2/] - The Department is the highest planning authority; it issues guidelines for

1/ Existing incentive measures are summarized in Appendix 1.

2/ The planning activities of the Department cover only the public sector; investments in the private sector are left to private decisions which are guided or influenced by government policies and regulations, incentives and investments of governments funds.

the preparation of the five year development plan. In addition the Department advises on the formulation of annual budgets and co-ordinates foreign financial and technical assistance. Through its support units, it undertakes feasibility studies of projects, monitors progress in implementation and identifies constraints.

- The Ministry of Commerce, Industry, Mines and Tourism - The ministry is responsible for matters relating to overall industrial and commercial development strategies and policies. The Ministry also controls such important parastatal organizations as: The National Industrial Development Corpration of Swaziland (NIDCS) and the Small Enterprises Development Corporation (SEDCO).

- The Ministry of Agriculture - The Ministry plays a major role in the production of raw materials for the agro-industries as well as in the consumption of such industrial products as fertilizers.

Public Sector Industrial Development Agencies

- The National Industrial Development Corporation of Swaziland (NIDCS) - The corporation promotes large- medium- and small-scale industries as well as finances industrial development by way of loans and equity participation. Other functions performed by the corporation include carrying out studies aimed at identifying projects, as well as undertaking detailed feasibility studies and mobilization of domestic and foreign financial resources for industry. In addition the corporation constructs estates or industrial premises for rentals to small-scale entrepreneurs.

- The Small Enterprises Development Company (SEDCO) - The company was established in 1970 and since 1976 it is a subsidiary of the National Industrial Development Corporation of Swaziland. SEDCO assists small entrepreneurs by providing interest free loans for purchases of raw material and provides working capital and machinery and equipment under lease or purchase arrangements. It also assists in the procurement of raw materials in bulk, marketing of finished products and provision of short- and long-term credits. In addition the company offers managerial and technical advice and training to small entrepreneurs.

- The two organizations are constrained by shortage of staff and lack of funds. These factors inevitably lead to delays in project appraisal, promotion and monitoring. This points to the need for devising such measures as will strengthen the organization, management and operations of these organizations.

Financial Institutions

- The Tibiyo Fund - The fund was established in 1968 to handle royalties "held in trust" for the nation by the King. The fund has invested in mining, sugar, meat, brewery, and other industries. It is the most important source of industrial finance in Swaziland today.

- The Swaziland Development and Savings Bank (SDSB) - This is a public-owned bank which finances commerce, industry, etc.

- Standard Bank of Swaziland - This is a commercial bank with a government share of 40 per cent.

- Barclay's Bank of Swaziland - It is another commercial bank, with a 40 per cent government ownership of the share capital.

## 4. RESOURCES FOR INDUSTRIAL DEVELOPMENT

### 4.1 Human resources

The population of Swaziland is estimated at 605,000 (1982) persons, growing at an average rate of 2.7 per cent per annum. It is estimated that almost 50 per cent of the resident population are under 15 years of age. There is a current shortage of qualified personnel at middle and upper manpower levels. The country will continue to rely on expatriates as a source of technical and managerial manpower requirements for some time to come. The Government in its Third National Development Plan made forecasts of demand for and supply of skilled labour by level of education required up to the end of the present decade. These estimates are presented in Table 5.

The Table predicts that manpower shortages will not be a major constraint on the expansion of the Swaziland economy - and on the manufacturing sector - in the medium run. The Third Plan estimated that in 1982/83 there would be a surplus of manpower supply over demand in every educational category expcept the highest (degree). Here there would be an excess demand of 700 persons. By the end of the decade this deficit is likely to have been eliminated. The Table shows an excess supply of 200 at 'low' growth levels - this 'low' growth level was assumed to be 5 per cent per annum. Growth rates in the first half of the 1980s at least - are likely to be considerably lower and hence manpower needs are likely to be reduced.

Swaziland thus faces an emerging and serious unemployment problem. The country's active population is expected to grow by 8,000 persons or at 4 per cent per annum during the 1980s. According to projections, contained in the plan, the population will increase to 690,000 in 1985 and 816,000 in 1990; and the active labour force to 233,000 and 278,000 respectively. It is estimated that some 22,200 additional jobs would have been created between 1980-85 or 3,700 jobs per annum if share of formal sector employment was to rise to 50 per cent and South Africa continued to absorb some 20,000 persons. The estimates based on GDP annual growth rate of 5 per cent suggest that only about 2,200 new jobs would be created per annum. The over-riding need therefore is to increase the labour intensity of production capacity. Technical training facilities are well developed and equipped to take care of

Table 5: SWAZILAND: EXPECTED SUPPLY AND DEMAND FOR SKILLED EMPLOYMENT BY LEVEL OF EDUCATION REQUIRED

| | Minimum required education a/ | | | | |
|---|---|---|---|---|---|
| | Std 5 b/ | Form 1 | Form 3 | Form 5 | Degree |
| **1976/77** | | | | | |
| Swazis in Post c/ | 3,113 | 901 | 6,735 | 2,826 | 362 |
| Non-Swazis in Post c/ | 239 | 147 | 771 | 1,292 | 755 |
| **1982/83** | | | | | |
| Expected Total Demand | 5,300 | 1,600 | 11,400 | 6,300 | 1,700 |
| Swazis Remaining from 1976/77 c/ | 2,800 | 800 | 6,100 | 2,500 | 300 |
| Additions from Education/ Training, 1977/1982 d/ | 15,000 | 8,000 | 15,000 | 4,900 | 700 |
| Surplus (+)/Shortage (-) | +12,500 | +7,200 | +10,500 | +1,100 | -700 |
| **1989/90** | | | | | |
| Expected Total Demand | | | | | |
| Assuming High Growth | 8,700 | 2,800 | 18,100 | 10,300 | 2,600 |
| Assuming Low Growth | 7,300 | 2,200 | 15,500 | 8,500 | 2,200 |
| Swazis Remaining from 1976/77 e/ | 2,400 | 700 | 5,300 | 2,200 | 300 |
| Additions from Education/ Training, 1977-1989 d/ | 37,600 | 20,200 | 41,300 | 12,900 | 2,100 |
| Surplus (+)/Shortage (-) | | | | | |
| Assuming High Growth | +31,300 | +18,100 | +28,500 | +4,800 | -200 |
| Assuming Low Growth | +32,700 | +18,700 | +31,100 | +6,600 | +200 |

a/ Each required education level includes all levels up to, but not including, the next level shown.

b/ Including only those "skilled" jobs requiring Standard 5 education; most of these were in Government. Semi-skilled jobs requiring Standard 5 were not included in the survey.

c/ The 1976/77 skilled workers are grouped according to the level of education required for their present jobs.

d/ Calculated from projected outputs from all types of schools. Mortality rates, based upon life tables for the Swazi population, have been applied separately to each cohort of leavers for each year of the projection period. Assumed participation rates are: junior secondary 75 per cent, senior secondary 85 per cent degree 95 per cent.

e/ Mortality rates are based upon life tables for the Swazi population, applied separately for each five-year age group. An average retirement age of 60 is assumed.

Source: Ministry of Finance and Economic Planning, Skills for the Future: Education and Manpower Perspectives in Swaziland, 1978; Third National Development Plan 1978-79 to 1982-83, p. 55.

the needs of the manufacturing sector in the medium run. A list of the main technical training institutes is given in Appendix 2.

### 4.2 Agricultural resources

Agricultural produce used for industrial processing is generally grown on plantations and not on Swazi Nation Land (SNL) which is mainly devoted to the production of maize - the national staple food. Production in commercialized agriculture has grown much more rapidly than SNL production which between 1978-1981 grew at an annual average rate of only 0.36 per cent.

The main commercial crops include sugar, timber, citrus, cotton and tobacco. Sugar is grown on a large scale by 25 companies and 253 small holders under the Commonwealth Development Corporation Vulvulane Irrigated Farms Scheme. Production and export volumes vary considerably due to weather conditions and changes in international prices. Over the period 1977 - 1984/85 production has increased from 238,497 tons to 353,000 tons but there have been large annual variations. Capacity for sugar refining has increased due to the construction in 1980 of the Simunya sugar mill. The mill is jointly-owned by the Government, the Tibiyo Fund, Mitsue, Cocoa Cola Export Corporation, Tate and Lyle and the Nigerian Government. Production at Simunya during 1983-84 was 125,000 tons - larger than that of the other two mills in the country.

Timber plantations cover 6 per cent of the total land area. 170,000 tons of unbleached wood-pulp are produced annually by the Usuthu Pulp Company, jointly owned by the government, Commonwealth Development Corporation (CDC) and Courtaulds, with exports to over 30 countries. Sawn and mine timbers are sold by five other mills mainly to South Africa. Some 70 per cent of wood-pulp exports are sold in US dollars. This has helped maintain earnings in local currency terms during the recession.

Cotton is mainly grown by SNL small farmers; seed cotton production in 1982 was 14,300 tons, 43 per cent below the 25,000 tons produced in 1981 and the lowest crop since 1978, due to the drought and reduced planting. The area under cultivation during the 1983 season was expected to show a fall from 22,000 to 17,000 ha. Some 70 per cent of the crop is processed by Swaziland

Cotton Ginnery with output of lint and cotton seed sold to South Africa.

Tobacco is grown in the high and middle by small holders and production has fallen considerably due to adverse growing conditions, and the cyclone has destroyed many plots. Output fell from 246,000 kg in 1980 to 125,000 kg in 1982.

Swaziland meat processing industry has been operating below capacity. The national herd declined by 6 per cent over the period 1979-1983. Livestock is mainly owned by the Swazis and processed meat exports are directed to the EEC, South African and Gabonere markets.

## 4.3 Mineral resources

Iron ore production ended in 1979 and the production of chrysolite asbestos declined by 18.5 per cent over the period 1979-82. Chrysolite asbestos reserves are expected to be exhausted soon. Turner and Newell, the firm operating the main asbestos mines expects to wind up operations by 1986. Small deposits of diamonds, kaolin and industrial stones have been discovered and South African firms have obtained licenses for further exploration work.

## 4.4 Energy

Swaziland is at present dependant on South Africa for meeting the energy requirements of the industrial sector. Seventy per cent of electricity needs are met by imports from South Africa. The Swaziland Electricity Board has a generating capacity of 20 MW of power. Production of electricity declined by almost 50 per cent during the current drought. Plans to build another hydropower station have been delayed and construction costs have escalated by over 50 per cent. Oil is imported from South Africa through Mozambique and there are no known reserves.

Coal reserves are estimated at over 2 billion tons. Fifity per cent of total production is currently exported. Production has declined from 170,288 tons in 1978 to 115,043 in 1983. However new reserves have been discovered by European, South Korean and Japanese firms.

Japan's International Corporation Agency has during 1984 provided funds for feasibility studies on a coal belt along Swaziland's eastern boarder. Japan is providing E 3.5 million for these studies which are due for completion in 1985. Coal production is expected to increase by 500,000 tons annually over the next 25 years. It was expected that coal production during 1984 would exceed 200,000 tons.

## 5. INDUSTRIAL PROSPECTS AND THE ROLE OF MULTILATERAL ASSISTANCE

Industrial potential exists in a wide range of manufacturing branches in Swaziland. These are discussed below:

(a) Agro-based industries. As a predominantly agricultural and pastoral country, Swaziland's industrial future is dependent on the development and exploitation of agricultural resources. Feasible prospects are envisaged in the following areas:

- Crop-based industrial opportunities. There are already two sugar factories and a cotton ginnery. Food processing activities and beverage manufacturing are also in existence. The range of crop-processing industrial activities could be extended, given increased diversification and expansion of agricultural production, and efforts to identify crop-based investment opportunities.

- Animal-based industries. The already large animal husbandry activity, especially cattle, points to opportunities for the establishment or expansion of animal-based industries such as: meat and meat products processing, diary products, processing of hides and skins, tanning and possibly manufacture of leather and leather-based products, etc.

- Forestry-based industries. The existence of rain forests and plantation of new trees augur well for the expansion of wood-based industries and products. Expansion of local furniture production to meet domestic needs and possibly exports appear to be feasible, given good quality and competitive prices in export markets. It is suggested that studies be undertaken in detail for the identification of wood-based industries, including small-scale and cottage industries which could be established. Technical assistance might be required to carry out the proposed studies.

(b) Agro-allied industries - There appear to be possibilities for the local manufacture of a variety of goods which are related to agricultural production or processing, storage and distribution of agricultural products, either in a raw or processed form. On the production side, the manufacture of fertilizers, animal and chicken feed are some of the evident opportunities. But since there is already an animal feed plant and a fertilizer factory, installation of new capacities might be economically unjustifiable in the absence of increased demand. It may, however, be advisable to re-examine these two fields with a view to deciding whether or not there is room for additional manufacturing capacities, bearing in mind marketing opportunities which might exist in SADCC. The manufacture of a number of agricultural implements, parts and components and repair facilities for agricultural machinery and equipment, water pipes and engines for irrigation etc. should be investigated as medium- and long-term industrial prospects.

On the storage side, parts for silos and special types of containers and bags could be manufactured locally. This is particularly important in view of the scourges of the current drought which has drawn attention to the importance of storing food, which may be available in good times, for use in times of severe scarcity. As far as distribution is concerned, there is a variety of containers, cartons, sisal, plastic and paper bags, bottles and cans, etc. which might be economically feasible, given expansion in production and marketing at home and abroad, especially in the SADCC member countries. Most of these opportunities will require detailed studies and investigations to prove their economic viability before decisions are reached for investing. Technical and financial assistance in undertaking pre-feasibility and feasibility studies is envisaged.

(c) Mineral-based industries - Of the existing minerals, clay could constitute an important raw material for a wide range of products for domestic and possibly export markets. The potential for clay-based industries would require detailed studies to identify the products and the most appropriate technology to be applied. The technology could suit small-scale industrial use of clay. Increased use of asbestos and tin in the building and canning industry, respectively, might prove viable. All these and other minerals call for further studies or investigations to determine whether or not they could form the basis for further local industrial production.

(d) Small-scale industries prospects - The most important factors for furthering the development of small-scale and cottage industries include: identification of investment opportunities; development and up-grading of skills; availability of raw materials, finance and credit; and marketing avenues. Thus the realization of the prospects will necessitate the formulation and implementation of programmes covering: formal and informal training of carefully selected potential entrepreneurs; training of officials to render extension services; undertaking pre-feasibility and feasibility studies; providing finance and credit facilities; provide premises and workplaces, tools and equipment to operators; acquisition of raw materials on behalf of some producers; undertaking research, quality control, standardization and introduction of appropriate technology for small-scale operators; assist producers in the marketing of their products, etc.

The slowing down of manufacturing growth in Swaziland since the early 1980s necessitates an investigation of the opportunities for import substitution and for the reorientation of industrial production to meet domestic demand requirements. Growth in the areas identified above requires such a reorientation of industrial production. Changes in industrial policies are necessary to facilitate such a reorientation and to reduce Swaziland's vulnerability to developments in international commodity market.

Multilateral assistance[1/] can play a useful role by providing means for:

1. Undertaking feasibility and prefeasibility studies for identifying investment opportunities in the manufacturing branches identified in this sector;

2. Developing a consistent and adequately elaborated policy framework with respect to industrial taxation and protection for reducing the out-flow of investible resources;

3. Exploring possibilities for integration of trade and investment strategies in the SADCC region;

4. Encouraging the development of small scale industries and the employment of relatively labour intensive technologies throughout the manufacturing sector in order to stimulate employment.

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1/ A list of the completed technical co-operation projects of UNIDO is presented in Appendix 3.

# APPENDICES

## APPENDIX 1: INDUSTRIAL INCENTIVES IN SWAZILAND

- Depreciation allowances of an industrial concern. The following annual deductions are allowable in computing taxable income:

| | |
|---|---|
| Motor vehicles | 20 per cent |
| Plant and machinery | 10-15 per cent |
| Furniture and fittings | 5-10 per cent |
| Industrial buildings | 4 per cent |
| Housing for employees | up to E5,000 per house in the year of construction |

- Investment allowances. In addition to the usual depreciation allowances, a manufacturer is also permitted to claim a special investment allowance of 30 per cent of the actual cost of new and unused machinery in the first year. The allowance also applies to industrial buildings and to certain categories of second-hand machinery.

- Initial allowances. For machinery and plant qualifying for the investment allowance, an additional amount of 20 per cent of cost is allowable in the first year. There is a similar allowance of 10 per cent for industrial buildings.

- Training allowances. An allowance which provides incentives for industrialists to train their employees and to use more labour-intensive methods of production. Expenses incurred for the purpose of training employees are, subject to the approval of the commissioner of taxes, deductable twice, firstly as normal expenses and secondly as training expenses.

- Carry-forward of losses. Provided training is carried on, assessed losses may be carried forward indefinitely, and set off against income in later years.

- Special incentives for regional development. Under the Income Tax Act of 1975, the Government may designate specific areas as development areas, where certain industries may qualify for additional concessions.

- Tariff protection against imports (non-Customs Union). The Government of Swaziland, or an individual industry in Swaziland, may apply to the South African Government for external tariff protection in certain cases. There are several conditions which have to be met before such protection is granted, the most important being that the industry concerned should have the capacity to supply at least 60 per cent of the quantitative requirements of the Customs Union.

- Company tax. Company income less allowances represent taxable income, which is subject to tax at the rate of 37.5 per cent. Dividends accruing to or received by a company incorporated in Swaziland are free of tax. There are double taxation agreements with the UK and the Republic of South Africa. There are tax holidays granted during the initial years of operation of a new manufacturing enterprise.

- Repatriation of dividends, interest and earnings. The repatriation of dividends is freely permitted subject to a withholding tax of 15 per cent or 12.5 per cent in the case of a shareholder being a company registered in any of the Custom's Union member countries. Individual expatriate employees are allowed to repatriate 33 per cent of gross income, plus gratuity and leave pay due on termination of contract.

- Exchange control. Within the Rand Monetary Area, there are in general no restrictions on the free transfer of funds, so that the exchange control regulations apply only to transfers between Swaziland and areas outside the Rand Monetary Area. Approval of the monetary authority is required in the following cases:

  (1) Transfer of capital to Swaziland from outside the Rand monetary area;

  (2) Raising of capital in Swaziland by the issue of bonds, shares, etc. in aggregate amounts exceeding E100,000 during any twelve-month period;

  (3) Raising of capital through borrowing within the Rand monetary area by companies with more than 25 per cent of their capital owned by non-residents;

(4) Transfer of dividends and interest outside Swaziland. These are subject to special taxes (see company tax);

(5) Repatriation of foreign capital outside the Rand Monetary Area;

(6) Payment of directors' fees, travel expenses, royalties, technical service fees and management fees.

## APPENDIX 2: TRAINING AND INDUSTRIAL MANPOWER DEVELOPMENT INSTITUTIONS

There are a relatively large number of institutes, business organizations, colleges and schools engaged in formal and informal training at different level and in a variety of cadres. Some of the most important are:

- The University of Botswana and Swaziland (UBS) - The University consists of two university colleges, namely: the University College of Swaziland with a campus at Luyengo and the Universisty College of Botswana with a campus in Kwaluseni. The university provides courses in economics, sciences, etc. which facilitate the development of high level managerial and scientific knowledge which is useful to industry.

- Swaziland Institute of Management and Public Administration - The Institute provides tuition in management.

- The Institute of Development Management, University of Botswana and Swaziland - This Institute also provides management courses.

- Department of Extra-Mural Studies, University College of Swaziland - Undertakes training in small business management and accounting.

- Management Training Institute - Also deals with training in management.

- Swaziland International Education Centre - Provides vocational training.

- The Swaziland College of Technology - Provides technical, vocational and scientific training in co-operation with public and private sector industrial employers.

APPENDIX 3: THE COMPLETED TECHNICAL CO-OPERATION PROJECTS OF UNIDO

Kingdom of SWAZILAND

since 1972

(as of January 1985)

| Division/ Section | Prog.Comp.Code Spec.Act.Code | Project Number | Project Title |
|---|---|---|---|
| IO/COOP: | 31.1.A | DP/SWA/73/005 | Operational posts for the national industrial development corporation of Swaziland |
| | 31.1.A | TF/SWA/73/003 | Operational assistance to NIDCS |
| IO/PLAN: | 31.2.A | DP/SWA/71/506 | Industrial advisory and consulting services |
| | 31.2.A | TF/SWA/70/601 | Managing Director, National Industrial Development Corporation (NIDCS)/(SIDA Trust Fund) |
| IO/INFR: | 00.0 | DP/SWA/72/002 | Under-Secretary (Industry), Minister of Industry, Mines and Tourism (OPAS) |
| | 00.0 | IS/SWA/71/802 | Under-Secretary (Industry), Ministry of Commerce, Industry and Mines (OPAS) |
| | 32.3.02 | RP/SWA/73/001 | Training in export promotion |
| | 31.3.C | DP/SWA/72/012 | Senior industrial adviser, Ministry of Industry, Mines and Tourism |
| | 31.3.D | IS/SWA/75/004 | Survey of small-scale industrial investment opportunities |
| | 31.3.D | DU/SWA/71/505 | Small enterprises and handicrafts development (Executing agency: ILO) |
| | 31.3.D | TF/SWA/73/002 | Associate expert to small enterprises and handicrafts development |
| IO/FCTY: | 31.4.B | DP/SWA/78/016 | Industrial management co-operation with NIDCS |
| | 31.4.B | SI/SWA/78/802 | Improvement of financial management techniques |
| | 31.4.B | SI/SWA/79/802 | Assistance to the National Industrial Development Corporation of Swaziland (NIDCS) |
| | 31.4.B | TF/SWA/75/001 | Associate financial controller, department of post and telecommunications |
| IO/TRNG: | 31.5.B | RP/SWA/82/001 | Training assistance to the national industrial development corporation of Swaziland |

| Division/ Section | Prog.Comp.Code Spec.Act.Code | Project Number | Project Title |
|---|---|---|---|
| IO/FEAS: | 32.1.02 | RP/SWA/74/002 | Fellowship in industrialization |
| IO/AGRO: | 30.3.04 | IS/SWA/71/804 | Market study for wood and bagasse based panels for export |
| | 30.6.00 | IS/SWA/71/807 | Joint UNIDO/FAO appraisal mission for the agro-industrial development of an export-oriented fruit and vegetable processing industry |
| | 30.6.02 | IS/SWA/71/803 | Assistance for industrial utilization of sugar by-products (molasses) |
| | 30.6.02 | IS/SWA/71/805 | Use of bagasse as a foodstuff compoment |
| | 31.7.A | SI/SWA/79/801 | Up-dating of an appraisal on the viability of producing particle board from bagasse |
| | 31.7.D | SI/SWA/75/810 | Study on production of vegetable tannings from wattle bark |
| | 31.8.D | SI/SWA/81/802 | Technical Assistance to the Swaziland Foundry and Pattern Makers Pty., Ltd. |
| IO/ENG: | 00.0 | IS/SWA/71/806 | Process and engineering services for the installation and commencing production of a tall oil production plant |
| | 30.1.00 | IS/SWA/71/808 | Study on the establishment of an industry for the manufacture of valves, fittings and similar products |
| | 30.1.02 | IS/SWA/72/006 | Assistance to the industrial development corporation of Swaziland 'Tinkhabi Tractor' |
| | 30.1.02 | IS/SWA/72/007 | Tinkhabi tractor production advisory services |
| | 31.9.A | VC/SWA/76/076 | Assistance to National Development Corporation: Techno-economic workshop on Swazi Tinkhabi small low-cost tractor (manufacturing promotion and regional co-operation) |
| IS/TEC: | 62.4.Z | SI/SWA/81/801 | Assistance to the Ministry of Industry in re-drafting legislation on establishment of industrial joint-ventures |

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