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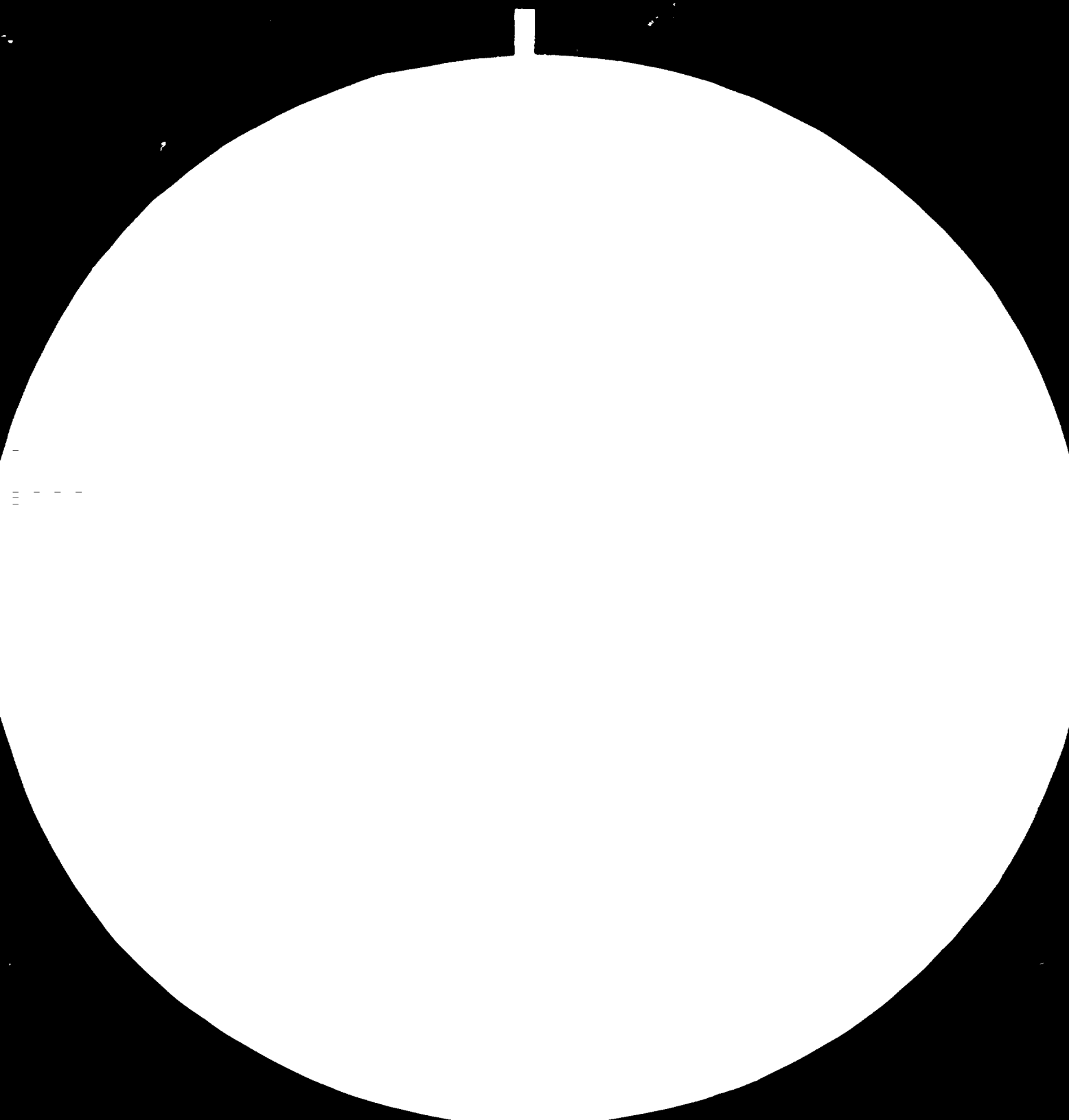

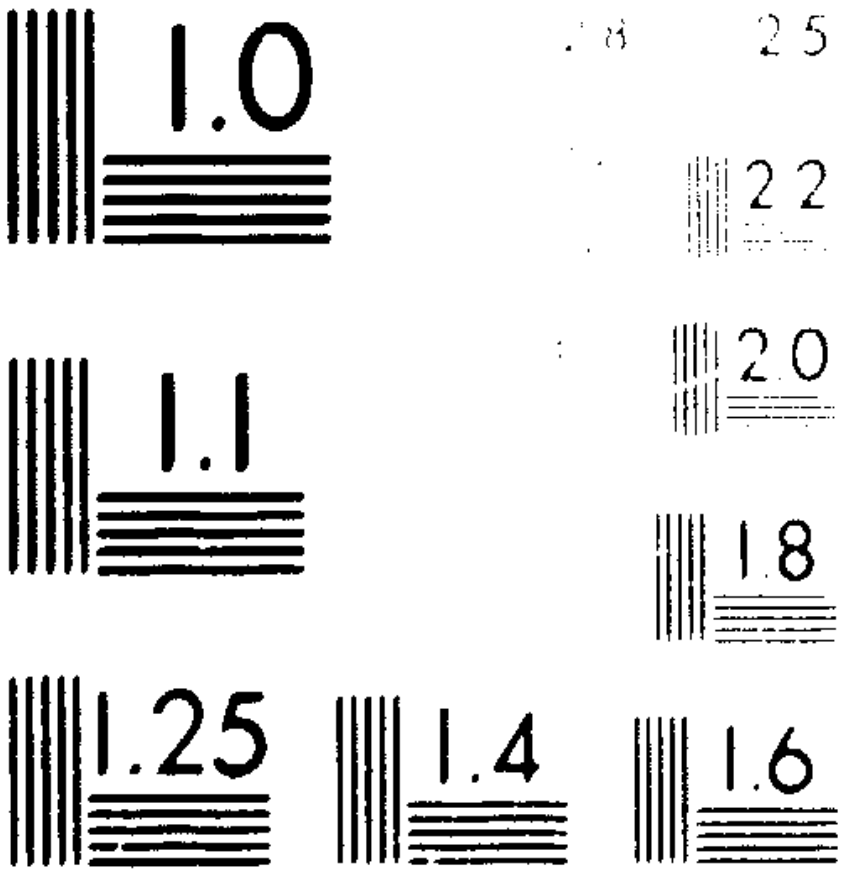
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COUNTRY [illegible] DEVELOPMENT STUDY

OF THE GAMBIA

BY [illegible] OF THE MINISTRY OF ECONOMIC PLANNING AND INDUSTRIAL DEVELOPMENT

AUGUST 1982

003183

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List of Abbreviations

[illegible]	-	[illegible]
[illegible]	-	[illegible]
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GENERAL ECONOMIC BACKGROUND

1.1 BASIC COUNTRY DATA

The Gambia is a small West African Country of 10.360 square Kilometres which forms a narrow strip of 350 Kilometres entirely contained within senegal and bordered on the West by the Atlantic Ocean. The Gambia is besected by the river, from which the Country derives its name, and consists of two banks of the river. The country varies in width far South from 48 Kilometres at the Atlantic Coast to 24 Kilometres in the Eastern portion.

The Gambia is a very flat country with a maximum elevation of 35 metres. It can be divided into three basic geographical regions running on an east - west axis parallel to the Gambia River from the mouth on the Altantic Ocean to more than 200 kilometres inland.

The "Banto Faro", which lies behind the mangrove belt and on slightly lighter ground, become swamp, during the rainy season. In the up river regions the banto faros are flooded with forest water and are suitable for rice cultivation behind there swamps stretch the third geographical region, the sandstone plateau in which most of the country's crops are grown, primarily groundnuts, millet and sorghum.

The Gambia is one of the Saholian countries and its climate is characterised by a long dry season lasting from November to May and a short rainy Season lasting from June to October. to Average rainfall ranges from 800mm on the cost/1,700mm on the Western end of the Country. The short rainy Season restricts agricultural production to crops with short cycles, such as groundnuts, millet, Sorghum and rice. In addition the

frequent droughts which afflict the Sahelian region have very unfavourable results for agricultural production. On the other hand, the long dry season continued with the wide expanse of sandy beach and unspoiled beaches along the Atlantic Coast have led to the development of a substantial beach-based Tourist industry in recent years.

1.2 The latest (June 1980) estimated population of the Gambia is 603,000 persons; some 85 percent of the population derive their livelihood from Agriculture and livestock raising. Urban population is still small but it is increasing fast (4,2 % per year as compared to the national average rate of 2.8%). On average, there is one dependent per active person (15-65 years old). Overall population pressure is high, 90 per square km of agricultural land. The resulting high land use intensity has caused a serious degradation of Agricultural soils.

1.3 The Gambia economy is dominated by groundnut production which is the country's main source of foreign exchange and the basis for its major industrial activity, groundnut oil milling. Groundnuts and related products (oil and cake) account for 90% of domestic exports and 25 - 40% of GDP. In the fiscal year 1980/81 largly due to the Sahelian drough groundnut population has fallen by nearly 50% and is currently at its lowest level in the three decades. The most important food crops are millet, sorghum and rice, the basic staple of the population. Millet is grown in rotation with groundnuts on light upland soils, white rice is cultivated mainly in swamps along the Gambia River. Due to competition with groundnuts, local food production only covers 70% of the country's food requirements and about 35,000 tons of cereals (mainly rice) have to be imported every year.

Livestock is an important but not fully exploited potentially with an off-take rate of about 8 - 10%, this sub-sector contributes less than 3% to the formation of GDP. Largely because of the relatively low levels of Agricultural yields, a considerable disparity (estimated of four to one) has risen between the level of incomes in urban areas and those in rural areas.

Despite the predominance of the rural economy (40% of GDP and employing 85% of the working population), The Gambia has a relatively active modern sector. Trade and Transport have always been important and reflect to a large extent the role of the Gambia as an entrepot for Senegal and neighbouring Countries. This transit trade, which results from the unique geographical situation of the Gambia and from low import. Customs duty is an important source of revenue for this country in general. Tourism has also emerged as an important sector during the last 10 years, contributing about 8% to GDP and employing as estimated 5000 persons. Another Major sector of the economy is the public Administration accounting for 15% of the GDP, 25% of the salaried labour force is employed by the Government, primarily in Construction, Education and public health. Modern industrial activity is very limited, two groundnut oil mills from the bulk of manufacturing production.

The Gambia economy has now become increasingly dependent on external financial flows in order to finance development projects, and to provide emergency assistance - largely food aid and stabex payments.

1.4 Physical Infrastructure

The Gambia river is the most navigable water way in West Africa. It is navigable by small boats along its length of the Gambia and ocean going vessels can go upriver as far as 240 kilometres upstream from Banjul, the capital and Major ports which lies along the rivers outlet at the Atlantic Ocean. The transport sector consists of about 2,319 km of roads, the river and an international airport at Yundum 24 kilometres from Banjul. There is no railway or domestic air transport in the Gambia. The transport system has been gradually developed during the last two decades to connect the main areas of economic activity, and can now adequately handly exports and imports that move through the port of Banjul.

Apart from the groundnut loading facility at Kaur, Banjul is the only deep water port of the Gambia. Traffic in Banjul port, the capacity of which was recently expanded substantially has been affected by the energy crisis and the ensuing increase in freight rates. Banjul port management is entrusted to the Gambia port Authority (GPA) an autonomous public corporation which also operates a passenger service boat and Cargo vessels. Bus transportation in the Banjul - Kombo St. Mary area is provided by the Gambia public Transport Corporation (GPTC), it has recently extended its services to the rural areas.

The International Airport at Yundum has been under expansion to be able to handle bigger aircraft. The final phase includes a further expansion of the runway to 3600 metres, the improvement of the fire fighting services, communication and approach landing facilities.

1.5 Domestic Capital Formation

The financing of industrial projects is of great concern to government and the private entrepreneurs. The Gambia Commercial and Development Bank established by the government is playing a major role in mobilzing local funds through regular campaigns to encourage savings, especially in the rural areas where the habit of savings in a banking institute is not yet popular. To some extent, the bank has been successful. Substantive incentives for saving have been provided by the increases in interest rates effected during the past two years, since the rate of inflation is less than the interest on long-term deposits. New savings instruments such as saving certificates and government bonds of various maturities are introduced. The number of branches of the post office saving Bank and of the Commercial Banks will be increased and cooperative societies will make intensive efforts to attract deposits from their members.

1.6 External Trade and Balance of Payment

Exports:

Total exports, including re-exports but excluding unrecorded border trade, have fluctuated widely in recent years. Groundnuts and groundnut products are by far the most important export commodities, accounting for an average of over 90% of total exports in a year. The fluctuations in the World prices of groundnuts, as well as changes in weather conditions in the Sahelian region, are immediately reflected in the variations in export earnings. In the last six years export earnings fluctuated from D75.5 million in 1975/76 to a peck of D104.6 million in 1976/77 and declined to D64.8 million in

1979/80. In 1980/81 they are projected to fall to D40.9 million export shortfalls occur in 1975/76, 1977/78, 1979/80 and 1980/81 because of severe drought. As a result, export of groundnut products declined from D98.0 million in 1976/77 to a projected level of D30.9 million in 1980/81 their share in total exports fall from 92% to 49%. Other export commodities are mainly fish and fish products, palm kernels and nuts. (See Table 1.1)

The rapid increase in other exports in recent years, highlights the importance of re-exports in the Gambia's economy. From an average of D6.8 million in the period 1975/76 - 1977/78, estimated re-exports increased to an average of 21.5 million in 1978/79 - 1980/81 or from 6.3% of export earnings to 26.6%.

1.6.1 Imports.

The Gambia's imports consist mainly of foodstuffs, manufactured goods, machinery and transport equipments. These items have accounted for 65-75% of total imports in recent years. Other important items of imports are mineral and fuel oils, and chemicals.

The marked increase in imports of machinery and transport equipment from D22.0 million in 1975/76 to D60.[illegible] million in 1979/80, reflects to a large extent the increase in development expenditures as the first five Year Development Plan approached its end. The share of imports of mineral and fuel oils in total imports increased from 6.4% in 1975/76 to an average rate of 9.2% in 1977/78 - 1979/80. (See Table 1.2).

Table ~~Annex~~ E-1

Exports by principal commodities 1974/75-1980/81

	1974/75	1975/76	1976/77
Groundnuts, shelled and unshelled	47.0	43.7	52.6
Groundnut oil, unrefined	26.1	21.8	31.0
Groundnut meal and cake	7.7	5.8	14.5
Total groundnut products	80.7	71.4	98.0
Palm kernels and nuts	0.7	0.4	0.8
Fish and fish preparations	1.7	2.6	4.3
Other products	0.5	0.7	1.1
Total domestic exports	33.4	75.0	104.6
Re-exports	1.5	2.3	4.6
Total exports, f.o.b.	34.8	77.4	109.2

(1) figures for 1977/78 -1980/81 are preliminary

Source Second Five Year Development Plan.

(Million dalasi)

1977/78	1978/79	1979/80	1980/81
25.2	40.1	35.3	12.6
27.5	16.7	14.7	14.9
9.2	5.9	5.1	3.4
69.0	62.8	55.6	30.9
1.6	0.8	0.8	0.9
7.6	3.7	6.6	6.4
2.2	2.1	1.8	2.7
74.4	69.4	64.8	40.9
13.6	25.0	18.2	15.0
88.0	94.3	83.1	55.9

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Table 1.2

Imports by [illegible], 1974/75-1980/81 (1) (million dalasi)

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Food and live animals	17.1	99.9	31.5	41.5	48.8	63.9	63.7
Beverages and tobacco	4.1	9.9	12.8	13.8	9.9	14.6	9.7
Crude materials	2.5	3.5	4.1	4.5	4.4	3.4	[illegible]
Mineral fuels	7.9	9.1	11.3	19.4	21.0	26.2	39.3
Animal&Vegetable oils and fats	0.2	0.3	0.7	0.5	0.3	0,5	2.1
Chemicals	8.6	9.8	12.4	17.0	13.3	15.8	14.0
Manufactured goods classified by material	26.0	45.5	52.6	48.7	57.0	37.8	76.8
Machinery and transport equipment	12.5	22.0	26.9	48.8	43.7	60.8	50.2
Miscellaneous manufactured articles	3.1	12.0	15.1	12.6	15.9	15.7	13.2
Miscellaneous commodities	1.0	2.3	2.4	1.4	1.6	2.0	0.8
Total imports, c.i.f.	88.9	144.4	169.8	203.1	221.0	250.4	275.8

(1) Figures for 1977/78 -1980/81 are preliminary source:
Second five year plan, p.28

1.6.2 Terms of trade

During the period 1974/75 - 1979/80, the terms of trade have been on a sharply declining trend, the terms of trade in 1979/80 is 50% lower, relative to their level in 1974/75. A substantial increase in import prices in 1974/75. Led to a deterioration in the terms of trade by 19%, a sharp reduction in export prices in 1975/76 reduce the terms of trade by 27%. In 1976/77, a considerable improvement in export prices increased the terms of trade by 16%. In 1977/78 and 1978/79 the increase in import prices offset some minor improvements in export prices and resulted in a further decline of the terms of trade.

1.7 Gross Domestic Product

GDP at current market prices reached D403.7 million in 1979/80 and thus increased at an average annual rate of 13.5% over the 5 preceeding years. Estimates at constant (1976/77) prices, however show a real growth rate of only 2.9%p.a. since population increased at about the same rate, real per capita GDP remained almost unchanged at D574 (at current 1980 prices D678). The slow real growth was mainly due to the decline in agricultural production during the latter part of the period, with a negative average growth rate of 8% p.a. In contrast several non agricultural sectors achieved positive growth rates over 10% p.a. Significant growth in construction, transport and communication was related to large public investments in physical infrastructure, particularly transport. Growth of industry and trade reflects rapid expansion of these sectors with a dominance of private

enterprise. The growth in industry was due mainly to the small base of expansion while growth in the trade sector was related to the three fold increase in imports.

1.8 Public finance and Indebtedness

Government recurrent revenue and expenditure increased at an average annual rate of 23%, far in excess of GDP Growth. The rapid increase in revenue was mainly due to import duties, which accounted for nearly 60% of all revenue. These receipts come mostly from import for domestic consumption and re-exports. The sizeable increase of recurrent expenditure was mainly due to import duties, which accounted for nearly 60% of all revenue. These receipts come mostly from import for domestic consumption and re-exports. The sizeable increase of recurrent expenditure was mainly absorbed by a doubled member of public employees and high allocation for goods and services. This combined with strongly increasing requirements for subsidies and debit service, left only a total surplus of D10 million (during 1975-1981) for development financing consequently, development financing had to rely almost completely on external sources. Despite rapid increase in grants, large shares had to be financed by long-term borrowing so that these requirements reached about 18% of GDP in 1980/81. The foreign monetary position deteriorated accordingly, from assets of D81.5 million in 1975 to a debt of D74.2 million in 1981. Domestic debt of government, parastatals and private sector increased during the same period from 16.0 million to D159.4 million.

1.9 Development Planning

The serious depression of the Gambian economy coincided with the launching of Second Five Year Plan for economic and Social Development (1981-1985/86). Realising the urgent need for economic growth for diversification of the productive base for improvements in Government finances and the balance of payments position, the Second Plan envisages a period of consolidation with major efforts towards productive investments. Top priority has been given to allocate large parts of the total development expenditure of D. D475 million to directly productive sectors, particularly Agriculture.

Agricultural and Natural Resources.

The plan continues to give primary emphasis to increasing of food production in order to raise the nutritional level of the population and to reduce imports. This involves increasing output of cereals, fish and livestock. The Second major objective is to achieve speedy recovery in production of groundnuts in order to increase foreign exchange earnings and the incomes of the farmers. The improvements in institutional infrastructures and the strengthening of the support services for Agricultural extension achieved during the first plan period and the experience with implementation of Agricultural development projects will contribute to the achievement of those objectives. (for further information please see Annex 1).

1.10 Provisions of the Development Act of 1973

The Gambian Development Act of 1973 mainly contains provisions regarding the definition of Development Projects, the granting of Development Certificates and concurrent customs duty and income tax exemptions. These are complemented by interpretations of relevant terms and miscellaneous provisions concerning alterations and transfer of projects, penalities etc. The main contents can be summarized under systematic headings as follows:

1) Field of Application

Any "development project" concerned on a factory scale with the provision of "development products or activities", which are enumerated in the "first schedule". This schedule contains a large number of manufactured consumer and intermediate goods crop cultivation (except oil seeds), fish and livestock processing as well as the establishment of hotels.

The Minister responsible for the administration of the Act (supposedly the Minister of Planning and/or Finance) can add or delete any item from the first schedule.

2) General Provisions, Guarantees, Conditions

The project must be in the interest of development in The Gambia. The applicant must have adequate means of financing, trained personnel, place of business and technical know-how. Investment guarantees may be granted by the Minister relating to fiscal stability, transfer of capital and dividends and others, if in the national interest. These guarantees are not limited in time by any provisions of the Act.

3) Incentives, Period and Degree

The Development Certificate entitles to

- full customs duty exemption on all directly imported construction materials, plant, machinery, equipment, spareparts for the implementation or expansion of a development project; or 90% duty refund if said items were bought in The Gambia. This entitlement is valid between the effective date of the agreement and the production date (i.e. start of regular operation);

- full or partial waiver of customs duty on any raw or semi-processed materials required for the provision of the development product. The exemption shall not extend ten years; alterations of the duty rate may be ordered by the Minister at any time;

- full or partial relief from income tax, with a maximum tax holiday period of ten years, and not exceeding the rate of income tax on companies; carry-forward of not losses incurred during, or six years before, the tax

/2...

holiday period for the succeeding six years of assessment;

relief from dividend tax for all Gambian residents and for all non-residents if not liable to income tax in their country of residence.

4) Obligations of Investor, holding a development certificate is obliged

- to provide all relevant information during the implementation period (acquisition of site, installation of machinery, start of production etc.)
- to implement the project according to the adopted time schedule before the specified "production date"
- to keep detailed and comprehensive records on all duty free imports throughout the relevant period and to permit inspection by authorised persons.

5) Application Procedure and Contents of Certificate

The application for a Development Certificate shall be addressed to the Minister and has to contain the following information:

- the proposed scale of operation, source and quantity of material inputs, sales market estimates;
- the proposed place of business with specification on cost of construction, site improvements etc.
- the list of plant, machinery, equipment with relevant cost
- an estimate on construction period and production data
- number and category of Gambian employees, and of expatriates giving reason for their employment
- a cash flow forecast for the first three years of operation.

Every Development Certificate shall specify:

- the construction period and production date
- the development product and scale of operation
- the project location
- the tax holiday period
- the degree of customs duty and income tax relief
- all specific conditions imposed and all concessions and guarantees granted.

6) Cancellation and Penalties

The Minister may cancel a Development Certificate if an investor fails to implement the project according to schedule or to provide the product in marketable quantity on the production date.

Penalties will be incurred if an investor keeps false accounts or submits false returns relating to customs duty or income tax benefits.

II STRUCTURE OF INDUSTRIAL SECTOR

2. (Review of Manufacturing Industry)

Manufacturing Industry in the Gambia is defined according to the International Standard Industrial Classification (ISIC) as the mechanical or chemical transformation of inorganic or organic substance into new products. Consequently, all repair services are seperately classified and excluded from the manufacturing sectors for classification of manufacturing establishments by size of the three suitable criteria (number of employees, use of motive power, amount of investment) only the level of employment is applied in The Gambia at present. Accordingly, establishments are considered large-scale with 30 or more employers, medium-scale with 5 to 29 employees and small-scale with less than 5 employees Whereas medium and large scale enterprises constitute the formal manufacturing sector, the small-scale category forms part of the so-called informal sector.

Without implying any judgement of importance, in the context of this report emphasis is given to the formal manufacturing sector, feeding the informal sector in a monoly complementory manner where it appears appropriate.

Industrial Statistics and documentation are until present in The Gambia quite scarce, sometimes incomplete and conflicting when different sources of information are used. Thus, a vigorous quantitative analysis of industrial performance and structure becomes fairly complicated, if not inhibited. It is further note worthy that the relatively small number of formal sector establishments in the industrial universe will usually render aggregate branch data and indicators less meaningful - so much more as large structure fluctuations occur already over a medium - term period. The interpretation of data therefore has to take care of specific distortions and to refer largely to the individual enterprise level. For similar reason the manufacturing branch classification will divert from the usual ISIC scheme and instead will conveniently group enterprises according to certain common characteristics.

Systematic industry data collection started only in recent years in The Gambia. A first comprehensive coverage of the industrial sector is given in National Income Accounts (See Sources and Methods of Estimation of National Income at Current prices in The Gambia, Central Statistics Department (CSD) 1981 for the years 1974/75 to 1977/78. The manufacturing industry data were collected annually by a complete enumeration of large and medium-scale manufacturing enterprise, and complemented by information from relevant income tax files. For the present analysis these data were to the possible extent updated from CSD questionnaires for 1979/80. Further detailed information is available in the industry chapter of the Five Year Plan and in the Industrial Survey of the formal sector, undertaken by the Industrial Development Unit/IDEPID in 1981. The latter survey particularly differs from the CSD survey in that it focused on physical and economic performance of manufacturing enterprises (employment, capacity, market, technical aspects, inputs and intermediates etc.) As well as appraising the need for assistance and plans for improvements.

For small-scale manufacturing a representative survey was conducted by the statistics Department in 1980, yet the reliability of data obtained is somewhat low, for the lack of enterprise records. A special survey. (Employment, Incomes and Production in the Informal sector in The Gambia, JASPA 1980) was mainly concerned with the employment creation capacity of the informal sector and gave a fairly detailed evaluation for small enterprises the capital area Banjul/Kombo St. Mary.

Based on these information sources, Augmented by ad-hoc investigations and several visits to manufacturing enterprises, this chapter presents a descriptive account of manufacturing industry development as well as an analysis of prevailing structure and efficiency of the formal manufacturing sector.

2:1 SECTOR PERFORMANCE AND DEVELOPMENT POTENTIAL

With the predominance of agriculture and the bias to import trade the manufacturing industry sector in The Gambia has been traditionally very narrow and comparatively insignificant. The initial years of existing manufacturing enterprises show that in fact only nine establishments started operation before 1970. At that time two groundnut decortication plants (Banjul and Kuntaur), the groundnut oil mill at Banjul and a rice mill at Kuntaur accounted for the major share of manufacturing complemented by five medium-scale enterprises producing simple consumer goods (3 softdrink plants) and intermediates (mechanical works and cement tiles). This situation remained almost unchanged until 1975 which therefore can be marked as the year of inception for manufacturing industry expansion in The Gambia. This was also the time of launching the First Five Year Plan, and of the Development Act of 1973 (granting generous investment incentives) becoming operational. Whereas small-scale industry has continued to play an important role in the informal sector - with the particular merit of employment creation - formal manufacturing industry experienced a sizeable expansion after 1975, when most of the now existing enterprises were established.

Despite impressive growth at 10% annually in the late 1970's total manufacturing value (see table 1.1) added still accounts for less than 5% of GDP, and the sector gives a source of income for less than 2 percent of the national work force. However, with high growth rates projected, the manufacturing sector is expected to gain more important in the future. In fact, a significant structure change in manufacturing could already be observed in recent years, which show a gradual broadening and diversification of formal industry. Whereas groundnut processing and fish preserving (both mostly export - oriented) accounted traditionally for about 75% of formal manufacturing value - added the "Rest of the Sector" (i.e. mainly import substitution) increased rapidly and contributes now about half of the sector share. (see table 2.1).

Table 7.1

Gross domestic product from Large and Medium-Scale Manufacturing 1974/75 to 1985/86(1)

(Value in million Naira)

		74/5	75/6	76/7	77/8	78/9	79/80	80/81	81/2	82/3	83/4	84/5	85/6
A.	At current market prices(2) and at factor cost												
1.	GDP in processing manufacturing	1.2	4.7	6.1	2.5	5.3	1.5	1.5	6.0	7.8	8.5	8.6	9.2
2.	GDP in fish processing	0.7	1.5	1.6	1.5	0.6	1.3	1.3	1.4	1.4	1.4	2.4	3.1
3.	GDP in cotton ginning	-	0.1	0.4	0.4	0.3	0.3	0.4	0.6	0.7	0.9	1.1	1.4
4.	GDP in the "Rest of Sector"	1.1	1.7	2.8	4.1	4.7	5.2	5.9	6.4	6.7	7.1	7.5	8.0
5.	Total GDP at current market prices	3.0	8.0	10.9	8.5	10.9	8.3	9.1	14.4	16.6	17.9	19.6	21.7
6.	Indirect taxes	1.7	2.0	3.9	4.0	3.0	1.9	1.9	4.3	5.2	5.8	5.8	6.4
	Total GDP at factor cost	1.3	6.0	7.0	4.5	7.9	6.4	7.2	10.1	11.4	12.1	13.8	15.3
B.	In constant 1976/77 market price and factor cost												
8.	Total GDP at constant 1977/77 market price	4.1	10.9	10.9	7.1	10.8	7.0	6.7	11.2	13.1	14.4	15.4	17.1
9.	GDP at factor cost	1.5	6.0	2.8	3.7	4.0	4.2	4.4	4.8	5.0	5.2	5.6	6.0
10.	Indirect taxes	2.0	3.6	3.9	3.2	2.2	1.9	1.0	2.2	3.9	4.4	4.4	4.8
11.	GDP at factor cost in 1976/7 prices	1.1	7.3	7.0	4.9	8.9	5.1	5.7	8.0	9.2	10.0	11.0	12.3
12.	Implicit GDP deflator	73	73	100	120	101	110	126	129	127	124	127	127

Notes - (1) NSO estimates for 1974/75 to 1977/78; preliminary estimates for 1978/79 and 1979/80 and projections for 1980/81 to 1985/86 by NIPSD

(2) The current price series are at current prices for the year 1974/75 to 1980/81, at constant 1980/81 prices for 1981/82 to 1985/86

source: NIPSD, 1982

The structure of the manufacturing sector is further evidenced by National Accounts data for medium - and large - scale as well as small - scale industry (see tables 2.2 and 2.3, 1977/78 latest year available).

Overall it will be observed that GDP from small-scale manufacturing was with D 9.1 mill, higher than the share from formal manufacturing (D8.5 mill). This is explained by the large number of small enterprises in The Gambia - about 1400 units - and their relatively high share of value - added to gross output ( ). Formal manufacturing is definitely dominated in term of gross output by groundnut processing but since respective intermediate consumption of groundnut oil manufacturing, valued at export rather than purchasing prices, forms more than 90% manufacturing value added is comparatively low. The composition of the formal manufacturing sector shows the two fold structure of natural resource based and other, mostly import substitution industries. In the later category the food and beverage, and chemicals branches are the most important. Whereas the overall former sector value - added ratio is low with less than 20% (due to distortion from groundnut processing) sizeable ratios around 50% are achieved in fish preserving, bakeries, bever ges and printing. Gross value-added distribution among productive factors was high in favour of compensation of employees with 56% against 17% for depreciation and 27% for entrepreneurial income (before indirect and direct tax).

This relationship would usually be interpreted as a positive indication for labour intensive manufacturing, however the state-controlled enterprises for grain and oil processing are largely responsible for distortions of these aggregates. (See table 2.2, line 2.3.4).

The indicated trend of expansion and diversification in the formal industry sector continued throughout the First Plan period (1974/75 - 1980/81) and total private sector investment of some D 25 mill resulted in the creation of about thirty new industrial establishments. During the same period employment in private enterprises increased from 470 to 1160 employees, whereas employment in public enterprises dropped 2640 to 2095

Table 1.2 in the Text : 1972/73 (at current prices)

Industry	Gross output	Inter-mediate consump-tion	Gross domes-tic pro-duct	Con-sump-tion of fixed capi-tal	Net domes-tic pro-duct at market prices
1. Fish preserving (freezing)	2,484	1,020	1,464	320	1,144
2. Manufacturing groundnut oil	35,500	33,764	1,736	341	1,395
3. Decortication of groundnut	1,416	618	798	136	662
4. Rice milling	591	508	83	4	79
5. Bakeries	1,812	559	453	30	423
6. Soft drinks	1,348	637	711	30	681
7. Beer	3,134	1,461	1,673	363	1,310
8. Cotton ginning	1,191	774	417	16	401
9. Manufacture of furniture (wooden)	67	36	31	5	26
10. Printing	255	93	162	48	114
Chemical products except rubber	. .	. .	. .	. .	. .
11. shoes	916	499	417	. .	343
12. Leather shoes	82	49	33	24	9
13. Cement blocks and tiles	112	65	47	8	39
14. Metal furniture	1,236	757	479	71	408
15. Total	49,344	40,840	8,504	1,467	7,037

Source: Estimation of Nation

Indirect taxes less subsidies	Net domestic product at factor cost	Compensation of employees	Entrepreneurial income
-	1,144	589	555
4,[illegible]5	(-)[illegible],[illegible]90	1,668	(-)4,298
-	[illegible]662	662	-
-	79	79	-
-	423	121	302
-	[illegible]81	224	457
419	891	549	342
-	401	209	192
-	26	16	10
-	114	89	25
-	[illegible]	[illegible]	[illegible]
-	[illegible]46	144	202
-	9	40	(-) 31
-	39	32	7
-	408	333	75
4,444	2,593	4,755	(-)2,162

[illegible]al Income, "BlueBook" 1981

persons. Thus the private sector slightly overcompensated the loss of jobs in public enterprises, so that overall employment to formal manufacturing had a modest increase.

Drawing all available manufacturing industry data together, the formal sector structure in 1980 is evidenced in table 2.4 which is largely self-explanatory and will be commented only by a few additional remarks. The agro-based branch comprises the nine productive units of the Gambia Produce Marketing Board (GMB). Further two state-owned enterprises are included in the woodworking branch i.e. Nyambai Sawmill and Public Works Carpentry. The state also holds substantial shares in two private enterprises, namely of 49% each in processing (Seagull) and beverages (Brewery). Hence, the gambian state controls well over one third of formal manufacturing - in terms of investment, employment and value-added and about two thirds of total sector output, which comprise almost the total exports of the country. Most private enterprises are owned by gambian nationals, however, particularly a few large companies are majority foreign-owned (e.g. Seagull Fishing, Brewery, Chellaram softdrinks, HACO confectionery, ACE candles and cosmetics).

The latter companies control more than half of private sector value-added. The most sizable investments are concentrated in fish processing, beverages (brewery) and chemicals (new soap factory). Total sector sales are still dominated by GPME (groundnut products), however with most of the respective value-added occuring to the agricultural sector. About 40% (D23.0 mill) of total sector sales are destined for the domestic market, of which about half is absorbed by food and beverages alone,

Employment by branches is quite evenly distributed along with respective investments, with significant deviations towards capital intensity, in beverages and to labour intensity in woodworking. Average sector investment per employee is with D 15,600 moderate compared to industrialised standards, yet manifold higher than in small-scale industry and apparently inhibiting large employment creation. Labour productivity, i.e. value-added per employee, is on the average D6400, showing

Table 8.3 Domestic product from small scale manufacturing

	Industry	Gross	Intermediate consumption	Gross Domestic product
1.	Basket making	1,123	374	749
2.	Tailoring	5,505	1,269	4,236
3.	Welding	1,399	541	858
4.	Wooden furniture	1,521	524	996
5.	Shoe making and repairing	734	118	616
6.	Gold and silver smithing	656	225	431
7.	Wood carving	93	33	60
8.	Black smithing	893	504	389
9.	Mattress making	165	48	117
10.	Palm Oil	1,457	1,085	372
11.	Fish smoking	846	603	243
	Total	14,392	5,315	9,067

Source: Estimation of National Income, 'Blue Book'

1977/78

Depreciation	Net Domestic product
2	747
142	4,094
90	763
3	993
1	615
5	426
-	60
3	386
2	115
15	351
-	243
363	8,804

1981

high exceptions only in the beverage and chemicals branches due to their significant degree of mechanization.

The value-added ratios measure gross value-added to sales/output and indicate the degree of processing, backward and forward integration. For the agro-based branch the low ratio of 7% shows the minor degree of processing achieved so far with agricultural products. Separating this branch, the rest of the sector has an average value-added ratio of 45%. This appears high for the fact that most enterprises are producing consumer goods with a strong reliance on imported materials. Whereas in the fisheries branch the ratio of 44% expresses the actual backward integration, the high ratios for beverages, chemicals and others seem to be due to distorted market prices rather than genuine value-added.

2.2 Analysis of Manufacturing Branches

Given the economic structure of the formal manufacturing sector the analysis now has to focus on individual branches and enterprises. This will allow to determine specific operating conditions and main parameters influencing efficiency and profitability of enterprises. For convenience, detailed enterprise data for all branches are assembled in one table 2.5 at the end of this section.

Agro - based Industry

This branch is dominated by GPMB which holds a state monopoly for trading and processing of virtually all agricultural produce. The Board controls nine processing establishments, with a concentration however on groundnut and cotton processing, and some less important side-activities like animal feed, laundry soap production and briquetting of groundnut shells.

The two groundnut decortication plant in Banjul and Kaur have a capacity of 600 and 2200 tons per week, respectively, and produced in 1980 together 19900 tons of shelled groundnuts (of which 1,340 tons EEC confectioner nuts) The low capacity utilisation of 25% was due to lack of groundnut produce after a bad harvest. The oil mill, with its own decortication facilities, produced crude oil (9200 tons), refined oil (1090 tons) and cakes (12,630 tons). Whereas decorticated nuts, crude oil and cake are exported to EEC markets, refined oil is sold locally.

The cotton ginnery in Basse was started as part of an agricultural diversification effort, in conjunction with cotton plantations. Inspite of some recent progress in cotton production the plant remained underutilized at about 30%, i.e. a production of 930 tons of cotton lint and 1520 tons of cotton seed in 1980. Cotton lint is exported in bulk to the UK whereas seeds are redistributed to farmers and partly sold to a cotton seed mill in Senegal.

The rice milling plant located in Kuntaur processes paddy bought from local farmers; the entire production (1900 tons in 1980) is sold on the domestic market. The low capacity utilization (about 20%) is due to insufficient supply and transport facilities.

The lime juice plant in Kundum was acquired by GPMB from a private entrepreneur, together with a lime plantation of 200 hectares. The plantation production of some 300 tons p.a. is augmented by about the same quantity purchased from local farmers. Lime juice produced (about 40% of input quantity) was 340 tons and lime oil about 0.6 tons. Lime juice (as well as oil) is sold to UK at a price of about D900 per ton, whereas the producer price paid for fresh lime is only D100 per ton. It appears that low capacity utilization (35%) is due to low plantation yields (16 kg per tree) and to inadequate producer prices.

The animal feed mill processes local materials (groundnut cake, cereals rice bran, dried fish, oyster shells) mostly into chicken feed for the domestic market. Because of limited demand the plant is working far below capacity limits, with a production of 250 tons in 1980.

Laundry Soap production is a marginal side-line of GPMB, using oil mill residue to obtain a crude laundry soap for the domestic market. With fairly simple and limited equipment (boiler, mixer, cutter) about 60 tons of soap were produced in 1980.

Briquetting of groundnut shells was started in 1980 with a plant able to process 48 tons of shells per shift. After initial production it was found that the product is not accepted on the market as a domestic fuel substitute and consequently activities were suspended. In the meantime a project is prepared for the carbonisation of groundnut shells, to complement the plant and to provide for a marketable product.

The Abattoir is controled by the livestock Marketing Board (LMB), which also holds the state monopoly to buy and export cattle hides and skins. The abattoir took up regular oporations only in late 1980. With present installation, and some modernisation programme already prepared, the abattoir should appropriately serve the capital area with fresh meat products, obtained exclusively from local cattle.

Fish Processing

After the state-controlled Fish Marketing Corporation (FMC) was dissolved in 1979, fish production for export was taken over by two major private companies, Seagull Cold Stores and National Partnership Enterprise (NPE). Their processing activities are so far limited to freezing and packing of fish and shrimps. All freezing and cold storage capacity is at present under the major company (Seagull) and only in part subcontracted to NPE. Seagull is specialised on sardinella fish which is mostly exported to Ghana, whereas NPE prepares and freezes predominantly white fish, shrimps and lobsters selling about 70% to the EEC and the rest to local hotels and supermarkets.

The production in 1980 was for Seagull 5143 tons of frozen fish; for NFD 120 tons of shrimps and 210 tons of fish. Facing constraints of freezing and cold storage capacity NFD is at present implementing a new plant, with a total investment of D 1.7 million.

Food (Bakeries and Confectionery)

The branch consists of nine medium scale bakery companies with overall similar features, and only one large modern confectionery plant. All bakeries produce mostly simple household-bread and with this achieved sales of D 3.5 million in 1980.

Total consumption of imported wheat flour was 2300 tons. Average capacity utilization is below 50%, which is due to high competition in a limited mainly urban market.

The confectionery plant produces a variety of seeds for the local market as well as 'formal' exports, relying entirely on imported materials (sugar etc). Capacity utilization is mainly constrained by competition from imported confectionary. Production was in 1980 about 360 tons and competing imports amounted to some 157 tons.

Beverages

In the beverages branch one modern brewery (Julbrew) is by far the largest enterprise. Beside the brewery, which apart from lager beer and stout also produces softdrinks, there exist six further softdrinks plants. Of the latter group only one company (Chellaram; Coca Cola etc) operates a large modern plant and second enterprise (Teranga) is in the process of modernisation and expansion. These three largest enterprises account for over 90% of the branch output and sales value. The production quantities were in 1980; for the brewery 13,400 hectoliters of beer, 9700 hl of softdrinks and Teranga 3500 hl.

All companies depend entirely on imported materials, like bottle and caps, oxygen, hops, cereals, sugar, flavour, packing materials. Beer and softdrinks production is still present completely destined to the domestic market. The brewery with a capacity utilization of 60% for beer already serves 95% of the domestic market, whereas the softdrink plant run at less than 40% capacity facing some competition from imports. The branch capacity is overall far in excess of present domestic demand.

Metalworking

Apart from one large metal workshop (Cham and Secka) six other are of medium size and by the nature of their operation and facilities rather belong to the informal sector. Only Cham and Secka produce some limited series of standard metal products, like office and school furniture, doors, windows, agricultural equipment and wire nails. The company relies for 70% of its orders on the public sector (education, public works, agriculture) and sells only 30% to the private domestic market, except for some occasional exports to Guines - Bissau. Productivity and capacity utilization is hampered by lack of organisation, insufficient working capital and irregular imported supplies. Some competition is also faced from imported metal furniture and agricultural equipment.

Wood working

The state - controlled Nyambai Sawmill and the large Public Works Carpentry dominate the branch. The six other medium-scale carpentries are rather informal sector enterprises with limited production to irregular order. The only sawmill in the country produces about 800 m^3 p.a. of sawn timber, fence poles, firewood etc. from high value local species and gmelina. However, the output of quality sawn timber, is by far insufficient for local demand, so that the carpentries have to rely largely on expensive timber imported via local suppliers.

Chemicals

The chemicals branch so far comprise only four companies engaged in the production of paint, cosmetics, candles and soap. The recently opened large-scale soap factory is further establishing a production line for plastic products. All companies rely on imported semi-processed supplies so that their range of processing is fairly limited to final stages (like mixing, pressing packing). Output of paint, candles and cosmetics is so far restricted to the local market since high tariffs of neighbouring countries are inhibiting export expansion. The new soap company will definitely have to conquer the entire domestic and a small export market, to use its capacity above break-even-level. (see projection, for Sankung Sillah in table 2.5; further comments on production and competing imports of in section 5.4/ this report).

Construction Materials and Others.

The branch incorporates four diverse companies, namely a stone quarry, a cement block and tile factory, a small manufacturer of suitcases and a larger stationery printer. The stone quarry started in 1980 with a modern plant for crushing and grinding of quarried laterite rock into aggregate and concrete filling material. The company so far has not achieved any large production in spite of large demand for crushed rock and present expensive imports from Senegal.

The block and tile factory produces some 26000 cement blocks and 4500 m^2 of tiles p.a., where the latter do not meet quality standards and face strong competition from imported floor tiles.

The printing company is apart from the "government Printer" the only press in the country, producing a variety of stationery for office and private use. As evidenced by respective imports, competition on the local market is high, but certainly also a result of the rather highly priced local products (see extraordinary high value-added, table 5.4).

Cedar Enterprises produce a simple collection of suitcase and handbags, based on imported materials like plywood, carton, plastic etc., for sale on the local market. Some production for export is envisaged but so far restricted by inadequate old machinery.

2.3 Critical Features and Constraints

Having analysed the formal manufacturing sector in some detail a number of prevalent features and constraints call for critical consideration.

In fact, Gambian manufacturing industry has achieved some substantial progress, especially since 1975. Advances were made in diversifying and expanding resource-based industries as well as in broadening the import substitution activities. Yet, for employment creation and spatial decentralization of industry the results are less satisfactory. Against the employment objective a tendency to higher mechanization and corresponding investment per employee can be observed particularly for modern import substitution enterprises. In terms of location industrial establishment apparently respond to more appropriate infrastructure and centralized markets in the capital area. All, except four resource based enterprises, are concentrated in or near Banjul.

The implementation of several resource - based enterprises has resulted in some sizeable overcapacity and partly inefficient or marginal activities, especially under GPMB. Through insufficient supply from the agricultural sector as well as unfavourable market prices are to some extent responsible for these unsatisfactory developments, there are obvious cases of poor planning, management and a lack of profit orientation in state-controlled entities. The lime juice plant and cotton ginnery are only two outstanding examples where, despite high margins between producer and export prices, GPMB accrued exorbitant losses in minor processing operations, adding further to its overall deficit. On the contrary, by and large satisfactory results are accomplished by the two private fish processing companies which positively contribute to foreign exchange earnings and national value added.

On the other hand, import substitution industry was enlarged with several ambitions modern enterprises despite the narrow domestic markets (e.g. brewery, Soap factory). Overall low capacity utilization points to this particular constraints and to the need for appropriate incentives to reduce competing imports and to support export potentials. At the same time the market constraints is compounded in several cases by inadequate quality and high prices of locally manufactured goods. Although little is known about commercial profitability and return on investment private companies apparently perform much better in this regard than public enterprises. National accounts data indicate that profitability is at least satisfactory in food, softdrink and some chemical enterprises.

The utilization of domestic resources and skills, in particular for wood and metal working as well as construction materials, was rather neglected by the industrialization process so far. Since these branches could well serve a substantial domestic demand, also contributing favourably to the national economy and creating internal linkages effects they offer ample scope for improvement.

A number of specific constraints and needs, with regard to financing, Technical assistance, skilled manpower and infrastructure, were expressed by individual entrepreneurs under the Industrial Survey (1981). These call for critical attention and an effort to improve the public institutional framework for industrial promotion (see chapter 5.4 and 7.)

Table 2.4 Structure of [illegible] - and Large-Scale [illegible]

Branch	Establishment No.	Establishment %	Investment (fixed, at current value) D1000	Investment (fixed, at current value) %
1. Agro-based incl. livestock	10	19	8736	27
2. Fish processing	2	4	3336	10
3. Food	10	19	2933	9
4. Beverages	7	13	10364	33
5. Metal working	7	13	1682	5
6. Wood working	8	15	912	3
7. Chemicals 1)	4	8	3060	9
8. Construction materials and others	4	8	1000	3
Total	52	100	32423	100

(1) including [illegible] soap industry [illegible]
sources: [illegible] survey 1979/80, Industrial [illegible]

...nufacturing (1980)

Sales/Output D1000	%	Employment No	Employment %	Gross added D1000	Value %	Value-added ratio
33463	57	574	28	2259	17	7
3572	6	269	13	1586	12	44
4968	9	245	12	1590	12	32
7474	13	193	9	3880	29	52
1768	3	100	5	520	4	29
810	1	399	19	700	5	n.a.
5657	10	190	9	2390	18	42
701	1	107	5	464	3	66
58413	100	2077	100	13389	100	23

...1981 and projected performance
...urvey 1981, own calculations.

Table 2.5 Manufacturing Enterprise Data (198)

Branch/ Establishment	Initial Year	Fix Investment (current value (1))	Sales (D1)	Employment	Gross value added (1)	Capacity Utilisation (%)
Branch 1: Agro-based						
Decortication Banjul (incl. ... plant)	195[illegible]	813	jointly 16,3[illegible]6	6[illegible]	-	25
Decortication Kaur	1965	533	-	44	1,5 (all groundnut processing)	-
Groundnut oil mill	195[illegible]	2415	13,339	255	-	4[illegible]
Cotton ginnery	1976	1527	1540	88	4[illegible]	30
Rice mill	1965	27	1761	52	154	200
Lime juice plant	1974	1237	3[illegible]5	2[illegible]	135	35
Animal feed mill	1974	53	95	1[illegible]	6[illegible]	1[illegible]
Laundry Soap	1976	4	57	13	1[illegible]	n.a.
Bri...tting plant	1980	833	-	-	-	-
... coir	1979	1318	n.a.	22	-	n.a.
Total	-	3736	23453	574	2259	-
Branch 2: Fishprocessing						
National Partnership	1976	87	1[illegible]1	1[illegible]6	2[illegible]	n.a.
...ll	1978	2299	2571	165	1336	9
Total		2386	2572	269	1536	

Table 2.5 continued

Branch/Establishment	Initial Year	Investment (1000)
Branch 3: Food		
9 Bakeries	73-81	2233
NDC Confectionery	1978	1450
Total	-	2233
Branch 4: Beverages		
6 soft drink plants	78-7[illegible]	2[illegible]4
Brewery (Calibre)	1977	3000
Total	-	10664
Branch 5: Metal Working		
Chain and Decks	1975	1500
6 medium-scale	69-81	102
Total		1602
Branch 6: Woodworking		
Nyamboi Sawmill	-	250
Public Works	-	300
6 medium-scale	-	362
Total		912

Sales (£1000)	Employment -	Gross v.a. (£1000)	Capacity Initial (%)
3518	201	870	30-50
1450	44	720	30
4968	245	1590	-
2547	91	1300	40
4927	102	2530	30
7474	193	3830	-
1484	51	400	n.a.
284	49	120	n.a.
1768	100	520	-
90	25	60	30%
370	35	500	
350	65	140	n.a. n.a.
810	125	700	

Table 2.5 con'd

Branch/Establishment	Initial Year	Invest…
Branch 7: Chemicals		
General Paint	1980	339
Marantaba (paint cosmetics)	1974	100
A[illegible] Ltd(candles, cosmetics)	1978	621
Sankung Silleh(soap) (projected)	1981	2000
Total		3060
Branch 8: Construction Materials/others		
Danso [illegible](quarry)	1980	200
[illegible]arr's tile factory	1968	60
Cedar suitcases	1970	140
Clear type printing	1976	600
Total		1000

Source: [illegible] survey 1979/80, [illegible]

...ent	Sales	Employment	Gross v.a.(D1000)	Capacity util.(%)
	324	20	120	30
	150	16	60	n.a.
	983	85	710	60
	4,200	69	1500	80
	5,657	139	2320	-
	10	19	4	n.a.
	126	21	48	35
	135	13	72	50
	430	54	340	n.a.
	701	107	464	

...rvey 1981, firm estimates and calculations

[illegible]

3. Analysis of Industrial Resource Potential

This Chapter presents an inventory of the Zambian resource base with a possible direct or indirect impact on industrial development. The analysis of natural resources is of great importance as these will determine to a large extent the long-term industrialization process, providing the basic supplies for industrial manufacturing. The appraisal of primary productive factors further has to incorporate human and financial resources, their availability and suitability for industrialization.

Thus, the analysis of basic resources shall provide solid background data, to guide long-term industrial policy decisions and to formulate an appropriate sector programme.

3.1. Agriculture

The importance of the agricultural resource base is evidenced by the fact that the sector (including livestock and fisheries) provides a livelihood for more than 80% of the population, accounts for about 30% of GDP and contributes over 90% of the country's export earnings. Furthermore, the primary production of cash crops (as well as livestock and fishing) constitutes the basis for major processing industries in the secondary sector.

Unfortunately, available data on vegetation, soil conditions and agricultural land-use are not sufficiently comprehensive and detailed to allow an overall and quantitative appraisal of optimal designation of land, product mix and quantitative output. Hence, the determination of long-term agricultural potential has to rely largely on indicative parameters, like present land use, farming systems, present production of major crops.

A comparative survey of overall land-use and vegetation (see Land Resource Study, 1976) shows some significant shift over a period of 20 years.

Vegetation and Land-Use Designation	1948	1968
	%	%
Forest (complete ground cover of trees)	28.9	3.4
Woodland Savanna (tree canopy over 50-75% of ground)	31.3	4.6

/2...

	%	%
Savanna (25% tree canopy)	14.9	17.6
Thorn and Small Trees (marginal areas, usually not suitable for annual cropping)	7.8	31.7
Low Bush Shrub (some visible bare soil)	0.4	19.9
Cropping with Fallow	17.6	5.5
Continuous Cropping	0.0	17.3
	100.0	100.0

Apart from the obviously serious effects of deforestation the much higher land-use with shorter fallow periods is evident. Population pressure, (90 persons per km^2 of agricultural land) higher incentives for cash crops and some agricultural implements have induce nearly continuous cultivation with maximum rotation, allowing only short periods for re-establishment of plants and soil amelioration. Furthermore, land tends to be overgrazed by cattle, sheep and goats. This trend certainly calls for preventive measures and careful land management and conservation, but on the other hand the actual cultivation of only part of suitable agricultural land indicates the potential for expansion. According to the land resource survey, agricultural potential and land use were given as follows: 555,000 ha (54%) of total land suitable for agriculture with 326,000 ha for rainfed crops and 229,000 ha suitable with qualifications; 117,000 ha actually cultivated and 351,000 under fallow.

The Gambia river is potentially the most important natural resource for agricultural development. However, the river is tidal and during the dry season, salt water intrudes almost 240km upstream. Consequently large areas of irrigable and productive land can only be fully utilised by appropriate control of salt water and river regulation. In this regard a major bridge/barrage to be located near the present Trans-Gambia highway crossing, at present studied by the OMVG, could have major impact with long-term creation of 24,000 ha for irrigated rice.

The Gambia farming system is still largely traditional with a large number (40,000) of farming units cultivating small plots with less than half a hectare per adult. The hand hoe remains the basic tool and the use of animal drawn equipment, fertilisers and other inputs is still limited. Concurrently, yields of the major crops - cereals and groundnuts - are low with 800 and 1,100 kgs per hectare respectively.

/3...

Rainfed crop production, limited to the short rainy season, is dominated by groundnuts for export and cereals as staple food (millet, sorghum, maize and rice). Irrigated and swamp rice are more important in the eastern divisions where salt intrusion through the river is limited. Cotton is grown on a small scale in the Upper River Division where soils and climate are favourable.

Groundnut production accounted for more than half of total agricultural production with an average of 134,000 tons until 1972 when it dropped sharply subject to the Sahelian drought. All groundnut produce - apart from some minor share for domestic consumption - is bought, processed and marketed for export by GMB. Rainfed rice production covers an area of about 20,000 ha and accounts for about 70% of total paddy production of 340,000 tons per year. Irrigated rice has been developed since 1966 and reached a cultivated area close to 3,000 ha with average yields more than twice those of rainfed rice.

All rice is milled and consumed locally and further 35,000 tons of milled rice have to be imported annually. Other cereals cultivated for domestic consumption (sorghum, millet, fundo) provide about 40,000 tons per year.

Cotton, introduced in 1974 as an additional export crop besides groundnuts, has achieved a total production of 1,100 tons in 1981 on a planted area of about 1,000 ha. The project is aiming at a total output of 4,000 tons.

The relevant data for present agricultural production and projections for the Plan period are shown in table 3.1.

Apart from the major cash crops and cereals, a number of other agricultural products deserve attention for potential industrial exploitation. Prevalent tree crops already used for local consumption and some export are oil palm, lime and mangoes. Considerable stands of wild oil palm are scattered mainly in the Western Division, where palm nuts are collected and used for home production of palm oil. Palm kernels are sold to GMB for export. Annual average export quantities of kernels are around 1,500 tons. Corresponding domestic production of crude palm oil was estimated at about 250 tons. Small oil palm plantations have been encouraged by the Department of Agriculture, but

/4...

Table 3.1.

[illegible], 1981/82 - 1985/86 (Thousand metric tons)

	1981/82	1982/83	1983/84	1984/85	1985/86
Groundnuts	110.0	127.0	130.0	132.0	135.0
of which, available for purchase	93.0	111.0	114.0	115.0	118.0
Cotton	1.6	2.0	2.5	3.2	4.0
Cereals					
Sorghum	14.4	14.7	14.9	15.2	15.5
Millet	18.2	18.5	18.8	19.3	19.9
Maize	8.2	8.3	8.6	9.0	9.8
Findo	1.3	1.3	1.3	1.4	1.4
Rice (paddy)	36.4	36.9	42.6	45.2	48.5
of which, rainfed rice	24.6	24.8	25.2	25.3	25.6
irrigated rice	11.8	12.1	17.4	19.9	22.9
Total cereals (including rice as milled)	65.8	66.8	71.3	74.4	78.3

Note - The basic assumptions used in making the above projections are discussed in section 2.1. of Chapter 5, the Macro-economic Framework. The specific annual rates of growth used in projecting the area planted under each crop are the following: groundnuts 1%; sorghum, millet and findo 1.5%; maize 2%; inter-cropped millet 1%; irrigated rice 2%. The incremental production attributable to the Agricultural Development Project as of 1983/84 has been added to the production thus projected.

Source: Five Year Plan, p.155

climatic and soil conditions of The Gambia were found unsuitable for large-scale production (see Land Resource Study, p.204).

Limes have been grown for many years in The Gambia and yields are good with up to 100 kg of a mature tree per year. Juice, oil and peel are of satisfactory commercial quality. In 1967 a factory at Yundum was established for the extraction of lime juice and oil for export. Also, the production of more easily transportable and saleable concentrated juice is considered feasible. Beside a lime plantation (GPMB) at Kunkujang of 200 ha which produces about 500 tons p.a., roughly the same quantity is collected by local farmers and delivered to the processing plant. Lime juice and oil produced in 1980/81 were 270 tons and 0.64 tons respectively. There is ample potential for increased production by introduction of irrigation facilities on the plantation and by raising producer prices to more attractive levels.

The ecological conditions in The Gambia are very suitable for mango and excellent trees are found throughout the country. Fruit yields are good and deemed to be in excess of local consumption. Some exports of fruit to Britain was started in 1971, but the trade was stopped due to difficulties in regular shipping.

Trial processing of juice and canned slices with certain available species was carried out in 1973 and found feasible for commercial production, (see Land Resource Study, p.198). Reliable information does not exist on quantities available for potential processing. A comparatively small number of 2,000 trees in plantation schemes is known to yield a total of about 200 tons of fruit per annum.

Papaya is a common compound crop for home consumption, but several suggestions were already made to use the crop for papain; this is obtained from dried latex of the unripe fruit and used as a meat tenderiser and as stabilizer for bottled beer etc. Samples tested were found to be satisfactory, but no trial planting has been undertaken so far.

Cassava is a traditional compound crop for domestic consumption, but since 1973 it received interest also as a cash crop. Some 120 ha. with an average yield of 13 tons/ha were planted, but yield up to 40 tons could be achieved under well-controlled conditions. Total cassava planted at present amounts to about 600 ha.

/5...

With a high local demand, expressed by prices of up to 600 per ton, processing for export is not deemed feasible. However, expanded production for the domestic market and the rehabilitation of an existing gari plant deserve attention.

Tomatoes are still present only grown in small vegetable gardens and sold fresh in minor quantities on the local markets. However, production on a commercial scale would be most desirable to substitute for the sizeable imports of canned tomato products (see import statistics, mainly tomato concentrate). Planting trials (see Land Resource Study p.210) have determined suitable cultivars for The Gambia and also canning trials were conducted with tomato plantations elsewhere in West Africa the economics of production and processing need to be carefully studied.

Hot Peppers of good quality are commonly grown and used as a spice by Gambian households. Total annual production is estimated at 100 tons and production of dried pepper, eventually for export, might be appropriate.

3.2. Livestock

Livestock is an important resource for the domestic supply of meat, export of live animals and potential processing of meat and by-products. The present cattle population is estimated at around 300,000 head, sheep and goats at 146,000 and 153,000 head respectively. About 15% of the population hold cattle in a sedentary manner, combined with other farming activities. Almost all compounds keep some sheep, goats and poultry. Natural fodder is available in abundance during the rainy season, but has to be supplemented by crop residues (groundnut hay, rice bran etc.) during the dry season. The present cattle offtake is about 30,000 head per year, which are mostly slaughtered and consumed as fresh beef locally. Only a small number of Ndama cattle is exported to Nigeria as breeding stock.

In order to reduce excessive stocking rates and to avoid overgrazing it is planned to increase the annual offtake to 37,000 until 1986 and to keep the total cattle herd almost stable. The export of Ndama heifers is expected to reach 1,000 per year. The total sheep and goat population should remain stable with an offtake rate of 35%.

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All responsibilities for livestock matters are vested in the Livestock Marketing Board (LMB) which however concentrated mainly on the supply of cattle to the capital area and on the operation of a modern abattoir. LMB further controls the collection and export marketing section of suspension dried hides and skins. Exports in 1981 were about 25,000 cattle hides (140 tons) and 26,000 sheep and goat skins.

For further processing of livestock products the potential has been realised to start a meat-canning operation and to produce tanned leather and simple leather products locally.

2.3. Fisheries

Fish resources along the Gambian Atlantic Coast as well as in the Gambia river are quite rich and have significant potential for further exploitation.

The river Gambia with a surface area of about 2,000 km^2 produces only a minor share of present total catch and, though its fisheries potential has not yet been systematically determined, is believed to offer ample scope for expanded production. The Atlantic Coast extends over 57 km and covers approximately 5,000 km^2 of continental shelf. The determination of the maritime fish resources and sustainable catch estimates are rather complicated because of the small area of territorial waters and the migratory nature of pelagic species. Estimates are therefore based on comprehensive regional surveys and will need confirmation by experimental fishing before any large investment decision is taken.

According to the Fishery Committee for the Eastern Central Atlantic (CECAF) and FAO, the annual sustainable yield for Gambian ocean fisheries is about 75,000 tons, comprising 65,000 tons pelagics (including 15,000 tons of bonga), 800 tons demersals and 1,000 tons crustaceans (shrimp, lobster, oysters etc.). Actual catch data compiled by the Department of Fisheries state for 1980 the following quantities and composition:

- total artisanal 13,745 tons, of which 10,255 tons sea fish and 3,490 tons inland fisheries
- total industrial (ocean): 13,500 tons
  of which 3,000 tons Bonga

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7,300 tons Sardinella
1,700 tons Catfish
500 tons Shark
450 tons Shrimps etc.

Fishing activities are shared among a large number of fishermen (about 2,600) operating on an artisanal scale and two industrial companies. Artisanal fishing is undertaken mostly with motorized canoes close to shore and about 70% of the catch mainly Bonga, is consumed locally. Artisanal processing is so far limited to fish smoking, salting and sun-drying. Industrial fishing is carried out by two licensed companies operating steel - purse-seiners for pelagics (mainly sardinella) and trawler - trawlers for demersal species. Also four foreign freezer trawlers are licensed to operate in Gambian waters.

Industrial on shore processing covers deep-freezing and cold storage mostly for export marketing.

With two major projects for artisanal and industrial fishing in the current Development Plan the fish production is projected as follows: (in thousand metric tons)

	1981/82	1982/83	1983/84	1984/85	1985/86
Artisanal	14.7	15.4	16.2	17.0	17.9
Industrial	12.0	12.0	12.0	20.0	26.2
Total	26.7	27.4	28.2	37.2	44.1

Furthermore, the development of oyster resources has received high priority and will be further pursued during the Plan period, initially with an assessment of resources.

3.4. Forestry

Forests and woodlands are of a major importance in The Gambia as a primary source of fuel and construction materials and evidently a major factor for the preservation of the overall ecosystem.

Most of the country had a fairly heavy forest cover until the beginning of the 20th century, however with the rapid increase of human and livestock populations forest resources have been heavily depleted. The degree of more recent forest destruction by expanded farming, cattle grazing, cutting of firewood and uncontrolled

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bush fires (see shift in vegetation and land use, chapter 3.1) has caused serious concern for the conservation of forests.

Gambia's forest resources have not yet been fully evaluated and little is known about wood volume and annual natural production (a comprehensive inventory will be completed in late 1982 by the FAO Forestry Project). So far, total wood volume is estimated at about 13 million m^3, with the major shares of mangroves (rhizophora and avicennia 4.9m^3 on 80,000 ha) and closed heterogeneous forests (5.2 mill. m^3 on 171,000 ha). State-controlled forest reserves cover only 34,000 ha and are of minor importance for wood production. Afforestation efforts started in 1959 with 1,200 ha of gmelina arborea plantations in the Western Division, being expanded to 1,300 ha. Estimated annual production will be about 13,000 m^3.

Forest products of a large number of species are used by the population. The major part (about 90%) is used as fuelwood by the rural and also part of the urban population. Construction wood (for fencing, roof construction etc.) is fregue this gathered directly by the rural population in need. A sizeable quantity of sawn wood for door/window frames, furniture etc. is also imported from West African countries. Imports, including unrecorded quantities were estimated at about 25,000 m^3. (Openshaw 1973).

The only sawmill and wood processing industry in the country, based on domestic wood, is the Forestry Department's Utilization Unit at N'Yambai. The sawmill has a capacity of 1,000 m^3 p.a. and processes mainly mahogany and gmelina into sawnwood, fence poles as well as firewood.

Although the major concern of the Government Forestry Policy is focused on forest conservation, expanded afforestation and control of fuelwood consumption, there appears to be reasonable potential for further processing of local wood to meet local demand more efficiently and to reduce avoidable imports of sawn timber and wood-based products like matches, furniture items, brooms and brushes etc. The wood from gmelina plantations is suitable for matches, but less suited for construction timber (need for creosote preservation) and furniture. On the other hand, the local mahogany and other selected species are of superior quality for the latter uses. In view of the potential plantation output an

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expansion of the M'Yambai sawmill seems appropriate. With a focus on rural demand especially for construction timber, which at present is mostly hewn from the almost depleted mangrove, small local sawmills processing selected and controlled species would serve a vital purpose.

3.5. Minerals

Mineral resources of The Gambia are known to be very limited and to offer only modest prospects for industrial exploitation. Minerals identified with some economic potentials are titaniferous beach sands (ilmenite, zircon, rutile), kaolin/clay, laterite, quartz sand, sea shells and salt (from sea water). The titaniferous sands occur along the coastline and constitute the only known metallic mineral deposit in the country. The deposits were briefly mined in the 1950's, by a subsidiary of British Titan Products Ltd., but then found uneconomic because of competing exports from India and an alternative process for production of pigments, the main product obtained from ilmenite. However, the reserves were further studied and a recent comprehensive investigation (see Geological Unit, Final Report on Heavy Mineral Reserves...., 1981) concludes that proven reserves are about 826,000 tons (79.9% ilmenite, 16.4% zircon, 3.7% rutile) and recoverable reserves, corrected for mining and beneficiation losses, about 659,000 tons. Gambian ilmenite, zircon and rutile are all of acceptable commercial quality for specified export marketing outlets and mining could well be viable under favourable economic and especially market conditions.

Basic ceramic materials (kaolin/clay etc.) are abundantly available in Gambia. (See UNIDO, Final Report, Commercial Exploitation of Kaolin Deposits, 1975). Main locations and proven deposits are:

Basse	-	kaolinitic claystone	3.6 mill. tons
Fatoto	-	kaolinitic clay	4.0 mill. tons
Sare Alpha	-	kaolinitic clay	3.1 mill. tons
Brufut	-	quartz sand	28.5 mill. tons
Abuko	-	quartz sand	5.3 mill. tons
Jeswang Kubuni	-	sea shells	0.5 mill. tons

Detailed technical studies have ascertained the suitability of the known ceramic material deposits for the production of

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wall tiles, floor tiles, facade tiles, sewerage pipes and fired clay bricks. Technological trials were however unsatisfactory for the production of earthenware (see UNIDO, Exploitation of Kaolin Deposits, 1974). The quartz sand deposits, apart from the use for building ceramics, were found suitable for the production of packing and utility glass.

Many further clay deposits are known to be suitable for fired brick production like in Brikama, Kerewan, Mansakonko, Pusumbala and Mandinary. (See UNIDO, Feasibility Study on Brick Making Plant, 1980). Sea shells in the estuary of the Gambia river are the only known source of limestone and extraction of shells is actually carried out on an artisanal scale for local production of lime and as filling material for road construction.

Laterite deposits, suitable for quarry operations to obtain natural aggregates for road construction and concrete, were estimated at:

Kotu	-	1.5 mill. tons
Bakoti	-	1.0 mill. tons
Bafuloto	-	0.5 mill. tons

The quarrying of laterite is already developed on a small scale, with blasting, crushing, and sorting equipment, however insufficient to cover local demand.

The production of salt from sea water intruding in the creeks of the Gambia river has been practised with artisanal methods for many years in the Kerewan district. A project is now under implementation to improve salt production and to raise output quantities to eventually 1,000 tons per year.

3.6. Energy

The Gambia is a non-petroleum-producing country and exploration in this regard has not given evidence of any commercial deposits of oil or gas, neither were any deposits of coal or coke discovered. The present energy situation is characterised by the fact that firewood accounts for 84% of total primary energy consumption (320,000 tons of oil equivalent); groundnut shells contribute 3.7% and imported oil products 12.3% of the total energy balance. The current urban use of butane gas is still negligible but gradually increasing after the ban imposed a charcoal production in 1980,

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The peculiar prospects and limitations of future fuelwood supply are focused by Government Forest policy and studied in an Energy Survey and Master Plan (see [illegible] 1982). Projections of supply and demand as well as policy measures proposed are still preliminary and to some extent conflicting, but it is evident that expanded industrial energy consumption will have to rely largely on imported energy sources, i.e. mainly petroleum products. The utilization of groundnut shells (briquetted and carbonized) may have some alleviating effect but will remain on a comparatively insignificant level, limited by input quantity available.

The total imports of petroleum-products were in 1981 about 60,000 m^3 (mostly gasoline and gas oil) and the average annual increase since 1972 was 8.3% conservatively projected future demand reaches 100,000 tons by 1990.

Electricity generation in the country relies completely on imported oil. The 11 power plants, controlled by Gambia Utility Corporation (GUC), have a total installed capacity of about 12 MW with 80% of concentrated in the Banjul area. The capacity of power plants in rural towns varies according to population and other demand:

Town	Installed Capacity (KW)
Banjul	
- Half Dio	2,400 (actual estimate)
- Kotu	7,000
Brikama	358
Bwiam	166
Farafenni	290
Mansakonko	188
Georgetown	290
Bansang	290
Basse	915
Yorobawol	166
Fatoto	166 (source [illegible], p.76 revised)

A significant improvement for urban power supply was achieved by the recent implementation of the Kotu Plant, which will further have to expand and gradually substitute cheaper heavy fuel for currently used diesel oil.

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Total electricity production of GUC is annually about 25,000 MWh of which about 95% in the Banjul area. Per capita consumption reached almost 40 MWh and grew annually by roughly 4%. Electricity consumption by users was in 1979 distributed as follows:

domestic	40%
trade and industry	30%
hotels	10%
administration	10%
GUC	8%
public lighting	2%

With regard to industry and local distribution of installed capacity it is clear that the Banjul area received high preferences and with the new Kotu station offers the best prospects for a regular and expanding power supply. However, in general energy-intensive industrial production will be handicapped by the high cost of electricity, and any major industrial project will require a corresponding expansion of generating capacity.

A significant change of these constraints can only be expected at long term, if the proposed hydro-power stations in the Gambia river (at Sambangalon and Mokroti on Guinean territory) with a capacity of 160 MW will be implemented. Because of the low gradient of the Gambian part of the river there is practically no hydroelectric potential in The Gambia.

3.7. Manpower, Employment and Training

The total Gambian workforce in 1980 was 278,000 and is projected to grow by 31,000 till 1985. By the year 2000, assuming no net immigration, the economically active population will probably reach 426,000.

The workforce, reflecting the agrarian economy, is to 75% employed, or underemployed, in agriculture while the rest is engaged in other sectors or unemployed. As rates of unemployment and underemployment are not exactly known, a conservative estimate gives 12,000 fully unemployed, mostly in urban areas. Most of the agricultural workforce is underemployed except during seasonal peaks of production.

Employment statistics, existing only for the formal sector (i.e. all public and private establishments with more than 5 employees) give for 1980 a total of 28,000 employees, roughly 10% of the total labour force. Sectoral distribution, level of skills, age-distribution, etc. are not well documented except for some indicative estimates. In 1980, of the total workforce 215,000 were in agriculture, 16,000 in industry (including handicrafts) and 31,000 in services. Formal sector employment is highly concentrated in the capital area and in public service (20,500 employees). Industrial distribution in the formal sector was given in 1978 with 2,900 in trade, 4,040 in transport and communication, 7,840 in services and 3,850 in construction.

The evolution of the workforce is characterized by increasing rural-urban migration, which turns rural underemployment into urban unemployment, and an increase of the proportion of wage and salary earners (to 15% in 1980). Most of the increase in paid employees (13,000 from 1975 to 1980) was absorbed by the public sector (8,500) and the remainder by the informal sector (regular wage earners, apprentices, domestic servants).

Employment projections for the formal sector until 1986 give an increase by 10,000 workers. Adding another 4,000 in the informal sector leaves about 17,000 out of the total increase to join the ranks of the urban unemployed. This estimate implies an employment increase of about 9% p.a. in the formal private sector compared to roughly 5% in the public sector.

This said, it is clear that the workforce is growing much faster than the economy's capacity to employ. Consequently, decisive policy measures are imperative. In particular, the industrial programme has to emphasise distinctly labour intensive production and to avoid the establishment of foreign enclaves with little impact on the indigenous economy.

Turning to the level of training and skilled manpower for industrialization and gainful employment, there will be a sizeable excess of secondary, higher education as well as primary school graduates. In particular, the supply of secondary and higher institution graduates will exceed the demand for established staff in the formal sector by at least 2,000 in 1985. Many of the primary school graduates will have to rely on informal sector employ-

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Table [illegible] 1975 - 1986

	Actuals/estimates 1975	1978
Employees in establishments employing 5 or more workers		
Employees in public establishments (all sizes)	15,489	17,972
of which:		
Central government	(9,378)	(11,156)
Local government	(1,716)	(645)
Quasi government (parastatals)	(4,395)	(6,171)
Employees in private establishments (employing 5 or more workers)	4,133	5,875
Subtotal (formal sector)	19,622	23,847
Other labour force		
Employees (and apprentices) in private establishments employing less than 5 workers	3,378	4,453
Employees in private households (domestic servants)	7,000	8,500
Employers, persons working on their own account and unpaid family workers	208,000	218,000
Unemployed	10,000	11,200
Subtotal (informal & unemployed)	228,378	242,153
Total	248,000	266,000

(1) Projections for 1981 and 1985 will be revised as soon

Source: Five Year Plan, p.104.

Estimates	Projections[1]		
1980	1981	1985	1986
20,500	21,400	26,300	27,200
(12,550)	(13,300)	(15,900)	(16,400)
(450)	(450)	(400)	(400)
(7,500)	(7,650)	(10,000)	(10,400)
7,700	7,600	10,900	11,800
28,200	29,000	37,200	39,000
5,300	6,000	7,300	8,000
9,500	10,000	11,500	12,000
223,000	227,000	239,000	242,000
12,000	12,000	14,000	14,000
249,800	255,000	271,800	276,000
278,000	284,000	309,000	315,000

as actuals for 1980 become available.

ment or to remain in the agricultural sector. The level of education is generally low and the process of skill formation is only at a first stage. Hence, there is likely to be a shortage of skilled manpower, despite the excess number of graduates, particularly pronounced for vocational and technical skills (mechanical, electrical, civil engineers/technicians as well as accountants, economists etc.).

Shortage of skilled manpower is recognized as one of the main constraints on economic development and government policy is geared to increase especially skills and efficiency. Relevant projects in this regard are the operation of a Vocational Training Centre, an Agricultural and Technical Centre, a rural vocational training programme with 60 key village workshops. A Management Development Institute will serve as a professional centre for management training and will gradually introduce and develop in-service training to meet the needs of upper and middle level managers, administrators, accountants and technicians.

3.8. Financial Funds for Investment

An assessment of financial resources for industrial investment in The Gambia is rather complicated and must be restricted to a few indicative remarks, since statistics in this regard are insufficient and a base for future projections is missing.

A broad view on domestic savings and investment is given by the Macro-economic Supply and Use of Resources (see Plan p.26). The data show that total domestic savings suffered a steep decline as of 1978 from D53.2 million to only D9.9 million in 1980/81, the latter being 8% of GDP. During the same period total fixed investment increased from D110.0 to D125.7 million (26.4% of GDP). The investment increase was most pronounced in the public sector, largely financed by foreign loans and grants. Comparatively significant is the decrease in Public Coorporations' investment to a low of D2.5 million in 1980/81. Private sector investment, to overall increasing during recent years, reached D35 million in 1980/81 (7.5% of GDP). It should be noted, however, that private investments consist principally of investment in housing whereas industrial enterprises account only for a minor share. The financing of private industrial projects

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contains a large component of foreign equity and loan participation. Specific amounts are not documented, neither the degree of industrial self-financing.

A particular role in financing public investment and parastatals has been taken by CMMB, the financially most important institution in The Gambia. Among public enterprises, GMMB was the largest saver. With a favourable resource position until 1980, GMMB was able to finance most of public corporation investment and to contribute the government's current and development budget. But the actually difficult financial position which evolved after the decline of groundnut revenues and related operating surplus will preclude similar financing in the future. GMMB might even have to disengage from some of its secondary investments (lime juice plant, cotton ginnery etc.) in favour of private participation and financing.

With regard to public sector investment and the ambitious current development programme a total of D475 million until 1986 will have to be financed by about 90% from external sources. Concurrent strains on government finances with a strongly increasing debt burden will not allow any major industry financing, except for those projects already included in the Plan.

Thus, for the foreseeable future, funds for further industrial expansion will have to be generated by reserves (self-financing) of existing enterprises, additional private equity financing from local and foreign entrepreneurs and commercial bank loans.

Though this outlook is somewhat bleak, there is still good prospect that feasible and profitable industrial projects will attract the necessary funds from the private sectors. With proper guidance and monitoring it can be envisaged that the Gambian private investors will gradually shift from real estate to productive investments, that the expected decline in import/re-export trade will induce some flow of funds into manufacturing activities and that foreign joint venture investors can be attracted. An important function will be assigned to the Development Bank (GCDB) to expand industrial loan facilities, since other commercial banks in The Gambia do not generally involve in long-term financing.

I. Policies, Strategies and Machineries for Industrial Development

4. Industrial Policy and Strategies

A medium and long-term industrialization strategy has to take into account the major structural features prevailing in the economy and the resource base available, or to be developed, for industrial production. It further has to recognise the actual need for structural adjustments as required by external and internal factors, at the same time responding positively to the needs and demands of the entire society.

Agriculture, and in particular groundnut production, is the predominant base of the Gambian economy. Most of the economic activity in the country depends directly or indirectly on the size of this crop and its price obtained on the world market. The second most significant sector is trade, where import and reexport of goods has taken advantage of The Gambia's low tariffs, simple entry procedures and the relatively open borders to neighbouring countries. Tourism has developed rapidly during the last decade and achieved now 8% GDP contribution, however, revenues and profitability have been declining recently so that a medium-term consolidation period is expected. Net foreign exchange earnings and employment effects of the tourism sector are considered inadequate. The role of manufacturing industry in the economy is still modest with less than 5% GDP contribution, though recent annual growth rates (10%) are promising. Processing of agricultural products being the core of modern manufacturing, the few import substitution industries have remained less significant due to the restricted domestic market and to low-tariff imports of manufactures.

Given the resource endowment and the size of the country, the agricultural sector will definitely remain the backbone of the Gambian economy for the foreseeable future. Yet, the diversification of the groundnut economy is dictated by its vulnerability to climatic changes and in view of world market price decline expected in the long run.

In fact, the worsening conditions of the groundnut market, compounded by recent unsatisfactory harvests and low productivity, constitute the major challenge for a structural adjustment of the

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economy. Far-reaching changes are to be expected in the trade sector as with regard to reexport trade especially Senegal is anxious to protect its own markets. The Senegambia Confederation has provided the framework for control of this trade through tariff measures. A marked contraction of the reexport volume is expected shortly and foreign exchange shortfalls of The Gambia will profit from this trend. However, the restriction of the reexport trade, with serious effects on Government revenues, could on the positive side give greater opportunities for local manufacturing and export. The diversification of agriculture will open up new fields of industrial processing, as well as other natural resources have further prospects for extended industrial activities.

Having experienced low real growth during the last decade, hardly keeping pace with population growth, the Gambian economy obviously calls for a growth-oriented development strategy. Living standards remained very low with a pronounced disadvantage of the rural population. Rural per capita income is with about D400 p.a. far less than half that of the urban average. The pattern of land ownership and the structure of rural production facilitate the implementation of growth oriented policies which at the same time give benefit to the rural poor and do not worsen income distribution. Thus, a growth policy could well be complementary and supporting to a basic needs approach (see World Bank, Basic Needs in The Gambia; 1980). Yet it must be realised that higher school enrollment and rural urban migration will increase demands for modern sector employment, which add a further challenge and priority to the industrialization strategy.

4.1. National Objectives, Strategy and Prospects

The Second Five Year Plan basically endorsed the overall objectives of the First Plan, to transform the agrarian economy to a diversified, progressively self-reliant economy capable of sustained economic and social progress through development and efficient utilisation of its own natural and human resources. At the same time, emphasis is given to ensuring equity and increasing welfare of the population. The development philosophy is based on the commitment to parliamentary democracy and preservation of political stability, to be maintained by balanced economic and social development. Beside self-reliance and economic transformation, rural development is a dominant principle.

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The Plan, recognising severe budgetary and balance of payments difficulties, states the following principal objectives:

1) adequate growth of GDP (5% p.a. in real terms) with structural adjustments and diversification,

2) removal of balance of payments constraints,

3) strengthening of the government financial position,

4) maintaining of free imports and payments, to avoid distortions and to provide an appropriate environment for participation of private enterprise in economic development.

While these objectives appear to be very ambitious and serious doubts must be raised about their simultaneous achievement, no fundamental discussion is intended here at the general level. For the present purpose it is more important to recognise the broad directions and in particular the strategies concerning industry. The Plan explicitly calls for increased private entrepreneurial activity, to contribute to production and income, to provide employment and to widen the tax base. Government will continue to encourage Gambian enterprise in manufacturing, commercial, agricultural fisheries, construction and tourism. Participation of foreign enterprises will be welcomed where it can make a distinctive contribution. The structure of investment incentives will be reviewed, the system of free payments and transfers maintained, and a suitable climate for private entrepreneurship will be provided.

With regard to regional cooperation the policy will aim at strengthening the economic links within ECOWAS, particularly the bilateral cooperation with Senegal in fields like agriculture, industry, trade etc.

4.2. Industry Sector Objectives and Strategies

The objective of the First Plan (1975 to 1981) was, for the industry sector, to create employment in industries which would be net contributors to foreign exchange earnings. The strategy essentially consisted of reinforcement of institutional and physical infrastructure and improved supply of trained technical and managerial Gambian manpower. Realising so far modest achievements in

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terms of employment creation and foreign exchange, the Second Five Year Plan addresses again the serious constraints for expansion of the manufacturing industry:

- the limited domestic market which restricts the scope for import substitution
- the scarcity of domestic raw materials
- the shortage of local technical and managerial enterprise
- the inclination of domestic investors to favour traditional channels of investment like trade and real estate.

However, as the manufacturing sector still must be considered quite undeveloped and on the other hand several resources are by far not utilised to the maximum extent (see Resource Analysis), manufacturing industry offers substantial opportunities, contributing to growth and employment of the economy.

The Plan consequently states the principal objectives for the manufacturing sector:

1) to improve the balance of payments by stimulating export-oriented industries and selected import substitution industries
2) to expand employment opportunities in the manufacturing sector
3) to promote linkages with other sectors of the economy, particularly agriculture and tourism
4) to increase productivity and improve the quality of products in small and medium-scale industries
5) to contribute to the reduction of rural out-migration through a deliberate spatial allocation of manufacturing activities away from the capital.

These industrial objectives are evidently inspired by serious balance of payments constraints which are also addressed in principal national objectives. They are typically faced in conjunction with fluctuating revenues of a highly vulnerable export sector which in The Gambia depends on one primary export-product. This situation usually leads to a foreign trade oriented

industrial policy which tries to [illegible] as well as import substitution industries. As this policy, combined with the commitment to free trade (see national objective [illegible]) almost necessarily implies the dependence on foreign technology, capital, expertise and complementary goods, the principle of self reliance must decline to less importance.

Nevertheless, with an export-oriented and import substitution industrialisation as the given policy, some further specifications are required to avoid well-known disadvantages [illegible] otherwise due to evolve.

The substitution of imports at their existing structure will tend to encourage capital-intensive production with a bias to higher income urban demand. Advanced production technology will concurrently reduce desired industrial employment effects. Experience with import substitution has also shown that dependence on imported input supplies and services remains high and that consequently foreign exchange contributions are often negligible or even negative. A further hindrance to beneficial import substitution are the low economies of scale limited by narrow domestic markets.

In the industrial objectives which emphasise selective import substitution, employment creation and promotion of backward linkages, i.e. reduction of imported material supplies, are already stated as explicit criteria. These will at the same time support the foreign exchange objective. However, two further guidelines should be added to avoid import substitution bias to a narrow market segment and to advance economies of scale. Firstly import substitution must be focused on basic mass consumer and intermediate goods with a sustained growth potential. Secondly, regional cooperation and trade arrangements have to open up markets suitable for economic capacity utilization and scale. In this sense import substitution has to be a selective, and simultaneously a joint regional policy.

The complementary export-oriented policy, which can count only in part on regional import substitutes, needs to be predominantly based on domestic resources. Resource-based export industry will best achieve growth of national value-added and foreign exchange

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earnings. Given the limited resource base of Zambia, as analysed in the previous chapter, all possibilities have to be explored for further processing and this, to be combined with a struggle for higher export commodity prices. Export orientation should mean an emphasis on manufactured final rather than primary products.

Since import substituting and export-oriented industry alone will not be able to provide sufficient gainful employment for a growing labour force and to satisfy appropriately domestic needs and demands, a third kind of industrial policy should be added. That is the development of resource-based industry with a focus on domestic and regional demand. With options for appropriate technology usually available, this type of industry will lend itself best to employment creation and spatial decentralization into rural areas. The fairly general industrial objective to increase productivity in industry (see 3 above) firstly points to the need for technical and managerial improvements in existing enterprises. Yet, apart from this well-conceived requirement, the actually low capacity utilisation also calls for decisive measures to support expanded production. To reduce competing imports and to enhance exports, of existing enterprises and new industries as well, subsidies, incentives and protective tariffs have to be granted. This almost necessarily contradicts principal national objectives, namely strengthening of the government's financial position (at least in medium term), maintaining of price stability and of free imports. Yet, a decisive effort for industrialization, starting from an infant stage, and for diversification of the Zambian economy away from its present trade bias will necessitate compromises in this regard.

Certain strategic measures to achieve the set objectives for industry are outlined in the Five Year Plan. They can be summarized under the following systematic headings:

- Priority Industries

  Industries based on the use of agricultural and other natural resources such as fish, meat, fruits and vegetables (canning/processing), hides and skins (tanning) and clay (brick manufacturing).

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- Investment and Financing

  Domestic as well as foreign investment to be encouraged by appropriate incentives;

  private initiative and domestic capital formation to be supported by credit and technical assistance

- Role of Government and Parastatals

  Government's role to be limited to promotional and assistance functions;

  parastatals to seek suitable joint ventures with private Gambian and foreign investors.

- Industrial Infrastructure

  Necessary infrastructure to be provided for industries in the provinces, particularly Farafenni and Basse;

  need for a second industrial estate to be evaluated.

- Legal Framework

  Development Act of 1973 to be revised, to provide instrumental investment incentives and to assure national economic benefits in terms of output, income and foreign exchange as well as employment and formation of skills.

- Institutional Framework

  The Gambia Commercial and Development Bank (GCDB) and the Indigenous Business Advisory Service (IBAS) to be further involved in the provision of industrial credit and technical assistance;

  The new Technical Institute to provide skilled manpower, specially trained for branches of industry and their level of development.

PROSPECTS FOR INDUSTRIES TO SUPPORT INDIGENOUS EXPLOITATION OF THE COUNTRY'S RESOURCES

5.

In logical sequence to the preceeding elaboration this chapter shall explore possibilities for further industrialization in The Gambia, and will specifically determine an appropriate programme, containing relevant projects for optimal expansion of manufacturing industry. In this regard the Review of existing manufacturing industry, with emphasis on medium - and large-scale enterprises, is the underlying base of departure. The analysis of the economic resource base, in fact an appraisal of primary productive factors (natural resources, labour and capital) and their future foreseeable development provides the necessary information on long-term supply potential for manufacturing industry. On the demand side for industrial output the data base is much less solid and, particularly, long-term forecasts would involve a number of complicated issues. External demand for established commodities is to some extent predictable but generally very difficult to determine for further processed and diversified products (e.g. groundnut based products). Domestic demand/consumption depends on private purchasing power, income distribution changing urban/rural consumer patterns etc. - all fairly beyond any precise prediction in a structurally changing economy. Conventional macro-economic projections are therefore of little help for specific project identification and, in the best case, estimated aggregate growth rates provide some guideline when applied to prevailing import and domestic demand patterns.

Given this situation, aggravated by well-known market imperfections in developing countries, the national objectives and deliberate strategies for industrialization have to take a crucial role for an optimal resource allocation and in guiding industry, corresponding to conceived and justified needs and demands. The established industrial policy and specific strategies (national value-added, employment creation, local decentralization etc.) will therefore have to be adopted as main criteria for project identification - beside market and technical feasibility considerations.

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Consequently, the approach adopted here for determination of an industrial programme is geared to project identification and possibilities for further industrial production by a three-fold analysis of:

- Selection import substitution
- Resource-based expansion and exports
- Public investments and industrial linkages.

These approaches are obviously not mutually exclusive but complementary, and shall comprehensively cover the entire potential for manufacturing industry. In particular, public projects as specified in the current Five Year Plan, are included in the analysis since they will create sizeable demand and supply for industrial production. These inputs and outputs, at least partly controlled by the national government, could to some extent be reasonably linked to local manufacturing. Furthermore, the public investment programme incorporates important resource-based production for local needs which otherwise risk to be neglected by an overall mere foreign trade-oriented industrial policy.

The analysical procedure will generate priorities for new projects with a distinct medium and long-term potential as well as necessary conditions and measures for preparation and implementation. In addition, indications will be obtained for expanded production possibilities of existing enterprises in The Gambia as well as prospects for industrial intergretion within the Senegambia Confederation.

5.1. Selective Import Substitution

In absence of sufficiently detailed domestic demand projections the primary data base for identification of import substitution projects are the official import statistics of recent years. A further constituent of present domestic demand is given by the actual production/domestic sales of existing import substitution enterprises (see Review of Manufacturing Industry). The implicit but unavoidable shortcomings of determining long-term import substitution from past data have to be recognised. The past import structure and respective demand patterns are thereby assumed as stable for the future. The volume of import products can only be roughly projected by applying aggregate growth rates.

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Whereas these are problems of a general nature, they are compounded in The Gambia because of the large share of import/reexport trade. As already stated, The Gambia has taken a particular role as an entrepot for regional imports to be trans-shiped to neighbouring countries (Senegal, Mali, Guinea etc.). Re-exports are insufficiently registered in official trade statistics and known to be generally understated. However, in view of import substitution it can be assumed that the total imports entering The Gambia represent a regional demand which at present is not appropriately met by manufacturing in respective countries. Since for a large number of items import substitution manufacturing will basically be some backward integration, still largely depending on imported materials and without significant comparative advantages of particular countries in the region, The Gambia could well attract a sizeable manufacturing share of certain regional import items. Certainly, import statistics projects selected under this assumption will need further study of regional market conditions, fulfilment of ECOWAS trade requirements and of complementary structures in Senegal.

Under these reservations the selection procedure for import substitution project starts from the official import statistics as published by the Central Statistics Department (CSD), according to the SITC-System. Since published data were only available until 1976/77, updated series until 1979/80 were obtained on a preliminary basis directly from CSD. (To demonstrate the overall import development, data by SITC sections are given in table 5.1).

The <u>first selection</u> of products with prospects for substitution is based on the detailed 6-digit SITC classification of imports (External Trade Statistics, Table 11) containing several hundred items with quantity, value and country of origin. A careful scrutiny is undertaken with the following basic selection criteria:

1) Essential consumption and intermediate goods meeting a mass demand with sustaining expansion (i.e. exclude certain luxuries and minority items)

2) Appropriateness for local production in terms of technology, skill, and energy requirements etc. (exclude certain machinery and transport equipment, electronic equipment etc.)

3) Availability of local resources or productive factors for substitution with comparative advantage (e.g. exclude certain primary products like steel, chemicals etc.)

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Table 5.1.

IMPORTS BY SITC SECTIONS, 1974/75 - 1980/81[1]

	1974/75	1975/76
Food and live animals	17.1	29.9
Beverages and tobacco	4.1	9.9
Crude materials	2.5	3.5
Mineral fuels	7.9	9.1
Animal & vegetable oils and fats	0.2	0.3
Chemicals	8.0	9.8
Manufactured goods classified by material	26.0	45.5
Machinery and transport equipment	12.5	22.0
Miscellaneous manufactured articles	8.1	12.0
Miscellaneous commodities	2.0	2.3
Total imports, c.i.f.	88.3	144.4

(1) Figures for 1977/78 - 1980/81 are preliminary

Source: Five Year Plan, p.28

(Million Dalasi)

1976/77	1977/78	1978/79	1979/80	1980/81
31.5	41.5	48.8	63.9	63.7
12.8	13.8	9.9	14.6	9.7
4.1	4.5	4.4	3.4	6.0
11.3	19.4	21.0	26.2	39.3
0.7	0.5	0.3	0.3	2.1
12.4	17.0	13.3	15.8	14.0
52.6	48.7	57.0	87.8	76.8
26.9	48.8	48.7	60.8	50.2
15.1	12.6	15.9	15.7	13.2
2.4	1.4	1.6	2.0	0.8
169.8	208.1	221.0	290.4	275.8

4) Technical reasons for treatment of products in the context of resource-based projects (see next section)

The majority of products primarily qualifying for import substitution is found in the sections food and beverages, chemical products and other manufactured goods. Major reexport components are contained in items like milk and cream, wheat flour, tomato paste, sugar, cigarettes, cotton fabrics, dry cell batteries, plastic footwear and matches. These products at the same time account for the major value proportion of the selected imports.

For a second stage of selection, which shall evaluate general project feasibility and compliance with industrial objectives and strategies, primarily selected import goods are listed again as shown in table 5.2. It should be noted that a small number of products is omitted here, because sizeable production capacity already exists.

The products thus transferred for more appropriate treatment in the context of expansion of existing enterprises (section 5.4) are:

- non-alcoholic beverages (excl. juices)
- beer
- ointments and pomade
- electric accumulators
- metal furniture

An item added to the project identification list (table 5.2) is pharmaceuticals, meaning only a basic variety of drugs which is not stated separately in import statistics.

Evaluation criteria applied on the subsequent second stage of identification correspond to technico-economic feasibility conditions and determined objectives and strategies for manufacturing industry.

1) Demand versus output: comparison of actual and projected local/regional demand (as expressed by imports) with minimum feasible capacity of an appropriate domestic production unit. Rating "high" expresses positive judgement.

2) Input/linkage: measure for domestic/regional input potential, availability of materials for backward linkage.

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Table 5.2

IMPORT SUBSTITUTION PRODUCT IDENTIFICATION

Products	Demand vs. Output	Input/ Linkage	Value-added
Section 0			
canned meat	low	future	high
milk and cream (reconstitution)	high	none	low
canned sardines	medium	future	high
wheat flour (milling)	high	none	low
biscuits	medium	future	medium
jams/marmalade	low	present	high
tomato paste	high	future	high
refined sugar	high	none	-
sugar confectionary	medium	none	medium
margarine	low	future	-

Capital/ Labour	Location	Remarks
medium	urban	refer to resource-based projects
high	urban	study re-exports and capacity in Senegal
low	urban	long-term viability with industrial fisheries project
medium	urban	immediate viability, re-exports crucial
medium	urban	immediate viability
low	rural	immediate viability (mangoes) and gradual expansion
low	rural	potential for domestic resource base
-	-	lack of resource base; production in Senegal
medium	urban	refer to existing plant (IVACO)
-	-	no present potential unless substitution by peanut butter

Table 5.2. Cont.

Products	Demand vs. Output	Input/ Linkage	Value-added
Section 1			
cigarettes	high	none	medium
Section 2			
salt	high	present	high
Section 3			
petrol, gas-oil etc.	low	none	low
Section 5			
inorganic acids (oxygen etc.)	low	none	high
caustic soda	low	future	high
paints etc.	medium	none	medium
pharmaceuticals (antimalaria, aspirin etc.)	high	none	high
common and toilet soap	medium	present	medium
detergents	low	none	medium

Capital/ Labour	Location	Remarks
high	urban	based on re-exports; careful market assessment crucial; production in Senegal
low	rural	given resource potential, solar salt project
high	urban	refinery not viable; unless domestic oil exploration positive
high	urban	small domestic demand prohibitive, production in Senegal
high	urban	small domestic demand prohibitive; energy-intensive reliance on large salt inputs
medium	urban	existing capacity; need for quality improvement
low	urban	small unit based on imported ingredients immediately feasible
high	urban	large new plant established; inquiry needed for use of local materials
high	urban	small demand prohibitive

Table 5.2. Cont.

Products	Demand vs. Output	Input/ Linkage	Value-added	Capital/ Labour
plastic materials and pipes	medium	none	medium	high
disinfectants/ insecticides	medium	none	medium	medium
Section 6				
paperboard/bags	low	none	low	medium
exercise books etc.	low	none	medium	high
cotton fabrics (printed, dyed)	medium	none	medium	high
bags of jute	small	future	high	medium
cement	small	none	low	high
glass bottles (containers)	medium	present	medium	high
steel bars, rods etc.	low	non	low	high
roofing sheets, galvanised	medium	none	medium	high
nails (iron/ steel)	small	none	medium	high
hand tools for agriculture	medium	none	high	low
crown corks	low	none	low	high

Location	Remarks
urban	existing enterprise
urban	scope for small filling unit; market to be studied for types of product
urban	cutting, assembling
urban	cutting, printing, assembling
urban	printing only, see resource-base cotton
rural	see resource base for fibres
urban	resources and available capacity in Senegal
urban	demand assumes Senegambia market
urban	small demand prohibitive; plant in Senegal
urban	galvanization energy intensive
urban	existing plant with marginal performance
rural	Small scale labour-intensive production
urban	possible with simple equipment

Table 5.2. Contd.

Products	Demand vs. Output	Input/ Linkage	Value-added	Capital/ Labour
Section 7				
agricultural machinery	high	none	high	low
dry cell batteries	high	none	medium	high
Section 8				
mattresses	high	present	medium	low
footwear (rubber and plastic)	medium	none	low	medium
footwear (leather etc.)	low	future	high	low
brooms and brushes	low	present	high	low
candles	medium	future	medium	medium
matches	medium	future	high	high

Location	Remarks
urban/ rural	existing mechanical workshops; rural potential (Farafenni)
urban	based on re-export market; high quality crucial
urban	inner spring mattresses with local fibres
urban	marginal processing; existing plant in Senegal
urban	future potential linked to tannery
rural	potential linkage to saw mill, local fibres
urban	2 existing plants not competitive with imports
urban	based on re-export market; utilization of plantation wood

Rating refers to 'present' or prospects for 'future' availability.

3) Value-added: overall measure to judge economic feasibility, with the understanding that national value added is incorperating also foreign exchange effects. Rating "high" expresses positive judgement.

4) Capital/labour: measure for investment per employee with regard to scarcity of capital and need for employment creation.

5) Location: suitability of project for rural or urban location.

With objective of industrial decentralization the rating "rural" is favourable.

The actual qualitative ratings for individual products/projects, as given in table 5.2, were made by using all available and comparable project profiles and structural industry data and are based on a sound knowledge of many analogous import substitution projects implemented elsewhere in the West African region. Nevertheless the expressed judgements allow only the overall determination of prospects and priorities, to be followed-up by more detailed and quantitative project studies. One step in this direction is taken by the elaboration specific profiles for certain priority projects (see chapter 5.5). Evidently, the diversity of selection criteria and the qualitative nature of ratings preclude any weighting and summing-up to arrive at cardinal priority measures. Instead some comprehensive judgements are given under remarks (table 5.2) and followed by a priority ranking of projects.

High priority projects (value of imports 1979/80 given for reference in 1000 D.)

1) Biscuit manufacturing (D448.5)
with imported wheat flour and sugar; local inputs groundnut, cassava etc.

2) Wheat milling (D4,535.6)
with imported wheat, by-product wheat bran for animal feed

3) Pharmaceuticals (not seperated)
basic drugs: aspirin, chloroquine etc. tablets mixing, pressing and packing of imported substances

4) Fibre bags (D671.0)
rough bags for agricultural purposes; weaving of local imported fibres

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5) Hand-tools for agriculture (D2,160)
hoes, shovels etc.; blacksmith production in series

6) Mattresses (D256.0)
inner spring type, imported steel wire and textile, local fibres

7) Matches (D1,720.0)
wooden safety matches; local gmelina wood for sticks and boxes, imported chemicals and paper

All these projects have good prospects for feasibility and implementation in the medium-term future. They also have (except for biscuits) the merit of being basic needs oriented. Wheat flour, biscuits and match production rely heavily on regional exports and need thorough market studies.

Low priority projects (value of imports 1979/80; in 1,000D)

1) Reconstituted milk and cream (D2,640.3)
reconstitution and canning of imported powder milk (see existing plant in Senegal)

2) Cigarettes (D4,783.6)
mechanised production dependent on imported tobacco, very sensitive to market demand (consumer preferences)

3) Insecticides (not separated)
for lack of local chemicals only marginal canning/aerosol filling possible

4) Paperboard bags and boxes (D683.0)
cutting and assembling of imported (corrugated) cardboard, small local demand prevents corrugated cardboard plant; no resources for paper production

5) Glass bottles/containers (D389.0)
local quartz sand suitable; domestic market prohibitive but prospects for Senegambia (no plant in Senegal)

6) Crown corks (D128.0)
marginal activity (cutting and pressing of imported sheet metal

7) Dry cell batteries (D5,178.0)
manufacturing with foreign technology, brandname and materials; large regional demand.

8) Brooms and brushes (D129.0)
possible forward integration of local sawmill; with gmelina wood and natural fibres.

These projects qualify for pre-feasibility investigations. The large units, milk and cream, cigarettes, glass bottles and dry cell batteries depend heavily on regional markets.

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Projects transferred to Resource - based Expansion and Public Investment linkages (chapter 5.2 and 5.3)

1) Canned meat
2) Canned sardines
3) Jams and marmalade
4) Tomato paste
5) Salt
6) Leather footwear
7) Agricultural Machinery

Projects transferred to Existing Enterprise Expansion (chapter 5.4)

1) Sugar confectionery
2) Paints
3) Plastic materials and pipes
4) Common and toilet soap
5) Exercise books (cutting/printing)
6) Iron and steel nails
7) Candles

These imports have to be analysed with regard to existing capacities, type and quality of local production, competitive prices and appropriate tariff protection.

Projects not feasible

1) Refined sugar (plant in Senegal
2) Margarine
3) Petroleum Refinery
4) Inorganic Acids (plant in Senegal)
5) Caustic Soda (energy prohibitive)
6) Detergents (plant in Senegal)
7) Cement (plant in Senegal)
8) Cotton printing (integrated plant in Senegal)
9) Steel rolling mill (plant in Senegal)
10) Galvanised roofing sheets (energy prohibitive)
11) Plastic footwear (plant in Senegal)

These projects are found not feasible in the long-term future because of insufficient economies of scale, large energy requirements and/or insufficient resources. Further aspects are existing capacities with comparative advantages in Senegal, which are sufficient to serve the Gambian market.

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5.2. Resource-based Expansion and Exports

Opportunities for an expanded resource-based production and for an export increase of manufactured products is predetermined by the present and future availability of domestic natural resources and other productive factors. The relevant background information in this regard has been elaborated in chapter 2. Past exports and related processing represent the present situation of resource-based production in The Gambia. Major existing processing facilities in this subsector are under control of GMB: groundnut decortication, oil milling, rice milling, cotton ginnery, lime juice plant and others. Further capacities exist for livestock products, (abattoir), fisheries (fish freezing) and forest products (saw mill and wood processing). Except for groundnut oil milling all these resource-based enterprises however, are so far limited to a primary processing stage. Consequently an analysis for expansion has to explore all possible secondary and further processing stages. Furthermore, a number of resources identified, are at present not yet utilized for processing on an industrial scale (e.g. fruit and vegetables, minerals like clay and quartz sand).

To ascertain a systematic identification procedure the potential utilisation of natural resources is specified by possible processing linkages, (see table 5.3). Being primarily concerned here with the identification of new industrial projects, the existing processing establishments are left aside for analysis in the appropriate section (chapter 2 and 5.4). There is however, a need to consider additional processing units for rice milling and saw mills in appropriate rural locations. For expansion of primary fish processing relevant projects (industrial and artisanal) form part of the public investment programme.

To determine overall feasibility and socio-economic priorities for new projects (as outlined in table 5.3) similar criteria can be applied as done for import substitution, but with greater importance attached to availability of primary inputs. The basic selection criteria for resource-based projects are then:

1) available (future) input materials versus minimum industrial capacity
2) local/export demand versus minimum output level
3) Value added in processing
4) employment effects (capital/labour ratio)
5) rural or urban location

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Table 5.3

NATURAL RESOURCES AND MANUFACTURING INDUSTRY POSSIBILITIES
(existing industrial processing underlined)

primary resource	primary processing	secondary & further processing
Agriculture		
Groundnut	decortication	
	- oilseed	oilmilling
		- crude and refined oil
		- oil cake
		- animal feed
		- peanut butter
	- [illegible] nuts	- roasted confectionary nuts
	- shells	- briquetting
		- carbonisation
Cotton	ginnery	
	- lintels	- industrial spinning, weaving, textiles
		- small scale spinning cotton yarn, artisanal weaving
		- cotton wool (pharmaceutical)
	- seeds	- cottonseed oil
Oil palm fruit	oil milling	
	- crude oil	- oil refinery
	- kernels	- kernel oil mill
Rice Paddy	rice milling	
	- clean rice	
	- rice husk	- pozzolana cement (with clay)
		- animal feed
	- rice straw	- straw fibre board

Table 5.3 cont.

Fruit/vegetables		
- citrus	- juice extraction	- concentration
	- oil extraction	
- mango	- juice extraction	- canning, other drinks
	- fruit and pulp	- jam, chutney
- cassava	- gari production	- starch
		- flour
- hot pepper	- dried powdered pepper	
- papaya	- papaine	
Livestock		
Cattle	Slaughtering	
	- fresh meat	- meat freezing
		- meat canning
	- hides	- tanning, leather products
	- blood, bones, offals, horns	- animal feed, fertilizer
	- tallow	- soap, candles
goats, sheep	- fresh meat	
	- skins	- tanning
Fisheries		
Pelagic, demersel fish, crustaceans	- freezing	- fish canning
	- smoking, salting	- fish meal/oil
	- sun drying	- canned smoked oysters
	- fresh fish	

Table 5.3. cont.

Forestry Wood	sawmilling - sawn timber	- construction/roofing timber - door/window frames, furniture - matches (see import substitution)
Fibres	ropemaking	- mattresses (see import substitution)
Bee honey	artisanal canning	
Minerals Clay	- burnt clay bricks and tiles - pozzolana cement	
Kaolin	- floor/wall tiles	
Sand (quartz)	- glass ware (bottles) (see import substitution)	
Sea shells	- burnt lime	
Sea salt	- solar salt, edible	
Laterite	- quarrying (crushed rock)	
Titaniferous Sands	mining/separation - ilmenite - rutile - zircon	

With regard to input quantities available (criterion 1), the following projects have no prospects for feasibility on an industrial scale in the foreseeable future:

- Industrial Spinning and Weaving (cotton lint less than 2,000 t.p.a.)
- Cotton seed oil mill (cotton seed less than 3,000 t.p.a.) (crude palm oil locally consumed)
- Palm kernel oil mill (palm kernels less than 2,000 t.p.a.) (palm kernels exported)
- Hot pepper powder (less than 150 t.p.a. fresh pepper)
- Cassava starch and flour (less than 15,000 t.p.a.) (cassava consumed fresh locally; see Jari project)
- Soap and candles from tallow (tallow sold with fresh meat; quantities by far insufficient)
- Animal feed/fertiliser from livestock by-products (most by-products like bones, intestines sold with meat; quantities of blood, horns etc. insufficient).

Application of above-mentioned selection-criteria allows an overall evaluation, and classification of the remaining resource-based projects in three distinct groups. High priority is given to new projects to be based on already sufficiently available resources with concurrently good prospects for implementation in the medium term (i.e. less than 5 years). They usually fulfill favourably the additional value-added criterion, incorporating net foreign exchange earnings, and/or support desirable appropriate rural industrialisation in terms of location and essential demand.

The second group contains projects which depend strongly on further development of primary resources and/or uncertain market conditions, and therefore have rather long-term prospects for implementation. A third group is formed of projects which for restriction of resource quantities or insufficiently known production technology qualify only for small-scale or pilot production.

High priority projects with medium-term prospects

Project	Primary selection criteria
1) peanut butter	high value-added, export
2) roasted confectionery groundnuts	high value-added, export
3) carbonisation of groundnut shells	renewable energy source, rural location

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4)	palm oil mill	appropriate rural industry
5)	rice mills	appropriate rural industry (decentralised units)
6)	mango juice/jam	high value-added, export rural location
7)	guar plant	appropriate rural industry
8)	leather tanning	high value-added, export
9)	soap making	appropriate rural industry, (import substitution, 3 units in rural centres)
10)	clay bricks	high value-added, substantial rural and urban demand (see also public project)
11)	sea salt	appropriate rural industry, labour intensive, import substitution (see also public project)
12)	mats or 13) mattresses)	see import substitution projects

Low priority projects with long-term prospects

Project	Main preconditions
1) tomato paste	large plantation development; trial production
2) papaine	plantation development, trial production
3) leather manufacturing/ footwear	firm establishment of tannery
4) fish meal/oil	implementation of fisheries project; confirmation of resources
5) fish canning	implementation of industrial fisheries project
6) [illegible]	long-term market upturn for zircon; economic appraisal
7) floor/wall tiles	firm establishment of clay brick operation
8) glass ware (bottles)	market expansion; see import substitution

Small-scale and pilot production projects

Project	Inputs, conditions
1) meat (canning)	integration with abbatoir; revision of market and economics
2) cashew or other canning	resource confirmation, trial production and marketing
3) pharmaceutical cotton wool	integration with pharmaceutical plant (see import substitution)

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4)	rope making (nature fibres)	small-scale promotion, resource appraisal
5)	spinning cotton yarn	small-scale promotion, integration with local weaving
6)	porcelana cement (clay/rice husk)	appropriate technology studies
	straw/fibre board	trial production
	burnt lime (sea shells)	integration with clay brick projects and urban development programme (local building materials)

5.3. Public Projects and Manufacturing Industry Linkages

The public investment programme is comprehensively documented in the Five Year Plan (1981/82 - 1985/86) which gives objectives, major features and financial allocations by sectors. The predominant shares of total investment (D475 mill.), in agriculture and natural resources (27.6%), Industry (6.2%), public utilities (14.2%), Transport and Communication (30.3%) reflect the emphasis placed on agricultural development and infrastructural support for expanded production. Specific information on individual public projects has been compiled in project profiles which will soon be published by UNPID in a comprehensive document. Thus, it is not the intention here to give any detailed description of the public investment programme but rather to present the results of a thorough analysis of project profiles with regard to industrial linkages.

An immediate impact on industrial production is expected from direct public investments properly in the industry sector. Relevant projects are:

- GMD modernisation phase I
- Fired brick manufacturing
- Groundnut shell carbonisation
- Salt production
- Industrial fisheries project, phase I

All these projects were prepared by feasibility studies and are now at various stages of implementation. (For further information see Project Profiles, Annex). The GMD modernisation project will, particularly on the manufacturing side, expand and improve decortication facilities for an expected volume of

130,000 t.p.a. in the first phase (until 1984) and rehabilitate oil processing installations,

The industrial fisheries project incorporates besides fishing operations with five vessels the mechanised processing and freezing plant to handle additional total catch of 17,000 tons expected by 1985. In a second phase after 1986 the relevant project document (FAO: The Zambia General Fisheries Project) proposes also fish meal/oil production (6 t per day raw material capacity) and a dockyard for local construction of medium-sized fishing vessels, to be integrated under the Ports Authority.

The brick plant, initially proposed with a capacity of only 500,000 bricks p.a., needs revision to correspond with demand from urban development programmes (70 to 120 housing units p.a.). Furthermore, there are good prospects for other rural brick plants, given the suitable resources and interest in the private sector. The groundnut shell carbonisation project to be located at Kaur adjacent to the GRZB decortication plant will convert about 15,000 tons of shells to 5,000 tons p.a. of charcoal briquettes. The product is intended for private fuel consumption.

The salt project with an annual production of 500 to 600 t.p.a. edible salt has scope for expansion up to 2,000 tons which would almost cover total domestic demand. Larger scale production for industrial salt is deemed not feasible.

All other public projects, not properly in the industrial sector, were analysed with regard to industrial linkages under the following aspects:

1) forward processing linkage based on primary output created

2) backward linkage by continuous input demand

3) linkage by initial investment demand

Under the first category basically all agricultural projects as well as livestock and forestry projects contribute to some expanded processing which however was already taken into account by primary product projections. Relevant output quantities do in general not warrant any additional processing establishments, except for those already identified in the resource base analysis.

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A horticultural programme which, with the production of 40,000 budded fruit trees and seedlings until 1986, might give scope for fruit processing and canning, does not yet allow quantitative output estimates.

Under the second category also the main agricultural projects and the rural development programme create some demand for possibly local manufactured products. Distinct items identified are agricultural equipment and tools, simple transport equipment, handpumps and fertiliser. (Agricultural Development Project ADP II, Mixed farming project, Jahally and Pacharr rice project, Rural Water supply programme).

The third category brings into focus the bulk of infrastructural projects, with high civil works components, as well as education, health and public housing projects. From these a large demand for a variety of construction materials (cement, reinforcing steel, crushed rock etc.) is realized, though not quantitatively determined at this level. However, since the relevant natural resource base is very limited, the resource based manufacturing approach will best explore local supply potential. Distinct demand items identified from social sector projects (education, health, housing) are clay bricks, lime, construction timber, wooden door and window frames, school furniture.

Summarising, there is only a small number of additional project openings identifiable with regard to public investment linkage. High priority should certainly be given to:

1) agricultural and simple transport equipment
2) production/assembling of hand pumps
3) school furniture

The demand for these projects, generated by public projects alone is substantial with

- about 1,000 oxen-drawn carts and implements p.a.
- 250 handpumps p.a.
- school furniture at a value over D300,000 p.a.

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For agricultural equipment, given the increasing volume of demand and the limitations of one existing urban company, a new enterprise seems warranted in a rural centre (like Mansakonko/ Farafenni; see plan of Chan and Secka). The manufacturing of handpumps will have to be limited to mostly assembling, with possibility of parts being supplied from an existing factory in Senegal.

The expanded production of school furniture should be integrated in existing larger enterprises (public works department; Chan and Secka) and also give benefit to some smaller establishments.

The local manufacturing/mixing of inorganic fertilisers is prevented by lack of raw materials and relatively small demand (present around 8,000 t.p.a.). Appropriate supply can be obtained from Senegal.

5.4. Expansion and Improvement of Existing Enterprises

The adopted procedure and analysis for identification of new industrial projects has simultaneously generated significant indications for expanded production and improvement possibilities for existing enterprises. These are now discussed with regard to individual products and enterprises, by integrating basic data from the Review of Manufacturing Industry (chapter 2) and the Industrial Survey. An appropriate distinction is made between import substitution and resource-based industries.

Import Substitution Enterprises

Existing import substitution enterprises (mostly in the private sector) produce predominantly final consumer goods and some intermediate products with generally under-utilized capacities. At the same time sizeable quantities of competing imports are entering the domestic market. Certainly, many import items contain re-export shares but again it is argued that local industries could well capture part of the respective manufacturing value-added and realise regional exports potential. Relevant conditions will be satisfactory quality and quantity of production as well appropriate support by tariff and tax measures.

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- Food and Beverage Branch -

Import substitution companies existing are a sugar confectionery plant, a brewery and several soft drink bottling plants.

1) The sugar confectionery plant has a capacity of 1,100 tons p.a. and as actual production of 360 tons, whereas competing imports amounted to 157 tons in 1980. Obviously, the capacity would allow full import substitution, however, the company relies already heavily on unofficial exports. Therefore, the tariff situation and export market needs examination.

2) The capacity of the Brewery is utilized at about 60%, serving already 95% of domestic demand. Competing imports are insignificant. Tax incentives are to be considered to expand export trade, (waiver of excise tax and respective import duties).

3) Several softdrink plants run at a capacity utilization of about 40%, realizing total sales above D3 million. Still, competition from imports of D740,000 worth is strong. At the same time one company (Teranga) is implementing a modernisation and expansion. The scope to reach full import substitution is limited because of special brands and qualities; some exports could be realized. Overall, the branch needs streamlining by reduction of inefficient capacity.

- Chemicals branch -

Major companies exist for production of paint, soap, plastic materials, candles, ointments.

4) The General Paint Company established in 1980 a capacity of 6,000 litres per day which in the first year of operation was utilized to less than 20% (sales of D324,000). Competing imports were about 360,000 litres of paint at a value of D1,264,000. By quantity the imports could well be substituted, given the large over capacity. Improvements of quality and tariff adjustments will be needed.

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5) A large modern soap factory (Sankung Sillah Enterprises) was implemented in 1982 with total capacity for more than 1,800 tons p.a. of laundry soap and 600 tons p.a. of toilet soap. Imports in 1980 (containing a major re-export share) were 2,540 tons and 126 tons, respectively, at a total value of almost D4 million. Thus, given capacity can supply the entire domestic and most of the present reexport market. In the latter regard tariff protection and export trade support will be crucial.

6) The same company (Sankung Sillah) is implementing a production line for plastic ware and pipes to substitute most of the corresponding import products (value of D642,000 in 1980).

7) Candles are at present produced by ACE Ltd., with a capacity utilisation of 60%. Further capacity is lying idle at Chellarams Industries. Production in 1980 was about 240,000 kg; competing imports were about the same quantity at a total value of almost D1.0 million. Without any need for capacity expansion, competitive pricing needs appraisal and protective tariffs should be considered.

8) ACE Ltd. also manufactures (mixing and filling) ointments and related items like pomade etc., where capacity utilization is only about 50%. Competing imports were at a value of D790,000. Further import substitution does not warrant capacity expansion but rather requires diversification and quality improvement of products.

Resource-based Industries

Resource-based industries in The Gambia (mostly parastatals) have so far almost exclusively limited their activities to primary processing. Since further processing possibilities and projects have been identified (see chapter 5.2), needs and prospects for extension and improvement of existing installation shall be briefly analysed here. This basically requires a judgement on the adequacy of present capacities (in quantitative and qualitative terms) for projected supply and/or demand.

1) Groundnut decortication and oil milling installation are to be modernised under a public investment programme (see above)

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and will thereby gain appropriate capacity to process 130,000 tons of groundnuts per year. Projected production for purchase and export is 118,000 tons in 1986. Accordingly, there will be no need for further capacity extension, but rather the emphasis on efficient and profitable handling and processing.

2) The Cotton Ginnery has a capacity of about 5,000 tons per season which at present is utilized at only 30%, and will accomodate projected local cotton production up to 4,000 tons in 1986. The company's high losses point to a strong need to improve efficiency and commercial performance.

3) The rice milling plant of GMB at Kuntaur complements several other smaller units in the private sector, on which however no performance data are available. The GMB mill is operating at only about 30% of total capacity, being 6,000 tons p.a. As total rice production - actual and projected - exceeds by far the milling capacities, capacity utilization should improve and further decentralized mills should be established as new projects (see above).

4) The lime juic plant (GMB) with a crushing capacity of 1,800 t per season is underutilized with only 600 tons at present. Future supply is not determined, but will probably stay within given capacity. However, the plant will need additional storage and lime juice concentration facilities. Major emphasis has to be given to economic performance to change the unsatisfactory present loss situation.

5) The Abuko Abattoir (LMB), established in 1979, has sufficient capacity for projected slaughterstock, but should undergo a modernisation scheme, already elaborated and soon to be implemented. (Report Tropical Products Institute).

6) The private fishing company National Partnership Enterprise is implementing a freezing and cold storage plant (150 tons) to process own and purchased catch mostly for export. Fish meal production and fish canning is intended at a later stage.

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7) The only modern sawmill at M'Yambai (Forest Department) with a capacity of about 1,000m^3 p.a. will need sizeable extension to process future output of gmelina plantations, estimated over 10,000 m^3 per year. A further modern sawmill is said to be idle under Chellarams Industries for lack of licensed wood supply.

8) Quarrying for crushed rock and aggregate is undertaken by only one Company (Dansa Doloh) with a small capacity definitely far below present and more so, future demand. The company plans an extension, with a second unit in a rural centre (probably Mansakonko).

Summarising, it must be said that in the medium term future for most of the existing enterprises in The Gambia there is neither need nor economic prospect for quantitative enlargement of capacities. This applies strictly for all import substitution companies, which already have high overcapacities and will rather have to improve quality and efficiency. They will further need substantial tariff and tax incentives to capture relevant shares of traditional reexport markets. The latter will be a sensitive endeavour in view of the Senegambia Confederation, i.e. intended tariff harmonisation, and a similar and more advanced import substitution industry in Senegal.

With regard to resource-based industries appropriate capacities are sufficiently existing or will be assured by respective modernisation programs. Sizeable extensions, concurrent strong promotion and institutional support, are warranted only for sawmilling and stone/laterite quarrying. A matter of serious concern is the unsatisfactory economic performance of literally all GPMB processing plants. High losses incurred make a detailed technical and economic investigation imperative.

5.5. Industrial Priority Programme and Required Action

The broad analysis of the industrialisation potential, with a focus on growth of manufacturing industry, results in a programme for new project promotion and extended utilisation of existing industrial capacities.

In line with determined sector objectives and strategies priority is given to 18 selected projects for import substitution

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and resource-based expansion with a medium-term possibility for implementation. These projects are listed in table 5.4 with relevant information on the status of preparation and required action towards implementation. As can be seen, priority projects are about equally distributed in the import substitution and resource-based categories.

With regard to polyvent markets the import substitution projects are obviously geared to produce for domestic demand, but will also realise some regional exports (especially wheat milling, biscuits, matches). Among the resource-based projects only four products (peanut butter, roasted confectionery nuts, mango juice, tanned leather) are export-orientated. The remaining number qualifies under the aspect of resource-based production for essential domestic demand, noteworthy also intermediate goods (e.g. construction materials, sawn timber).

All priority projects are suitable and have good prospects to be implemented in the private sector. Given the limited public finances and the generally unsatisfactory performance of parastatals this is an important condition for success. Joint ventures and private investment participation should therefore be strongly supported. Public assistance needs to be concentrated on project preparation and studies, contracting of preferential loans and granting of appropriate tax and tariff incentives.

The status of preparation differs widely for the identified priority projects and accordingly specific actions towards implementation are required. Four projects - carbonisation of groundnut shells, leather tanning, clay bricks and salt plant - are far advanced and to be implemented in 1982/83, with public sector/parastatal participation. It should be noted that a second modern brick factory (near Lusse) is under study by a private investor, at the pre-feasibility level. For other projects basic investment profiles for equipment, production capacity and process, input-output relations are available, but follow-up with market and feasibility studies is generally needed. In particular, for rice mills and saw mills, which are both intended as project schemes, each with several identical units, appropriate locations with regard to supply and demand have to be determined. (For further details see table 5.4 and Annex with Project Profiles).

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Table 5.4.

PRIORITY [illegible] - PLANNED ACTION

Project	Status of Preparation
1) Carbonisation of groundnut shells	Feasibility Study, Investors and financing under negotiation
2) Leather tanning	Feasibility Study, joint venture agreement negotiated
3) Clay bricks plant - public	Feasibility Study Preliminary, Financing commitments
- private	Prefeasibility; private sponsor
4) Salt plant	Feasibility study; implementation under Divisional Dev. Fund
5) Mango juice/jam	Project profile, investor identified
6) Peanut butter	Project profile
7) Roasted confectionery nuts	Project profile
8) Palm oil mill	Project profile
9) Rice mills	Standard project profile
10) Sari plant	Project profile
11) Saw mills	Project profile

Required Action
Revision of feasibility study; financing contracts
Finalize joint venture agreement; implementation schedule
Revision of feasibility study for larger capacity implementation schedule
Feasibility Study, loan arrangements
Monitoring of implementation
Supply and export market study
Market (export) and feasibility tudy
Market and short feasibility study
Market and short feasibility study
Coordination with agricultural department; market study
Market study (local)
Coordination with forestry department; supply and market study (regional center)

Table 5.4 cont.

Project	Status of Preparation
12) Biscuits plant	Project profile
13) Wheat mill	Project profile
14) Pharmaceuticals	Project profile, details of demand and supply
15) Agricultural fibre bags	Project profile
16) Mechanical works; agricultural equipment, tools, pumps	Product and demand specification, investor identified
17) Mattresses	Project profile; joint venture contracts, investor identified
18) Matches	Feasibility study; investor identified

Required Action
Market (export) study; feasibility study
Market (export) and feasibility study
Short feasibility study; coordination with Public Health Department
Raw material supply and feasibility study
Technical design, feasibility study
Raw material study; short feasibility and Senegambia market appraisal
Regional market and feasibility study

Beside this priority programme three major project groups were determined:

1) Import substitution projects with lower priority

- Reconstituted milk and cream
- Cigarettes
- Insecticides
- Paperbags and boxes
- Glassware, bottles
- Crown corks
- Dry cell batteries
- Brooms and brushes

Relevant information is given in chapter 5.1. All projects require pre-feasibility studies and market studies, with a medium-term perspective.

2) Resource-based projects with long-term prospects for implementation

- Tomato paste
- Papaine
- Leather manufactures/footwear
- Fish meal/oil
- Fish canning
- Titaniferous sand mining
- Ceramic tiles

Major preconditions, mostly primary resource development are specified in chapter 5.2.

3) Small-scale and pilot production projects

- Meat canning
- Smoked oyster canning
- Pharmaceutical cotton wool
- Ropes of natural fibre
- Spinning of cotton yarn
- Appropriate building materials (pozzolana/cement, fibre board, burnt lime).

SUMMARY AND CONCLUSIONS

Industrialization is part of the economic development process during which an increasing part of resources is transformed to industrial activities. It is also clear that The Gambia, its development effort has been concentrated in the agricultural sector. Since 1975, manufacturing industry has registered some progress especially in the utilisation of locally available raw material.

The Gambia, like other developing countries has negative features which limit or alter rapid industrial development such as limited market size, lack of industrial skills, lack of capital, etc.

The policies which guide the industrialisation process in The Gambia are based /export-oriented and import-substitution strategies. It is true that these strategies may have some merits, they also have certain inherent drawbacks given the present realities of the country which are characterised by a lack of raw materials and the dependence on a few agricultural crops for exports. Faced with this situation, the country must pursue a more positive policy of industrialization based on a strategy which would anticipate the needs of the people and further the industrial production structure to produce goods to fulfil them.

Opportunities in strategic sectors which are not taken advantage of by the private entrepreneurs should be realised by Government through public investment. All investments should obviously be based on thoroughly prepared and properly evaluated feasibility study. Technical assistance for a particular feasibility study should be commissioned through the right agencies (like UNIDO, UNCTC etc.).

Projects identified and implemented would show a low capital labour ratio, use low energy and require greater use of local resources, skills and other managerial services.

The role of small and medium size industry would be emphasised and emphasis would be placed on inter-industry linkage. The informal sector should be strengthened to make improvement for the generation of income and employment in the concept of "KOOTO" (self help) as stated in the plan.

Annex I

	Total cost	Second Plan Expenditure
Agriculture and Natural Resources	**186.7**	**131.3**
Jahally and Pacharr Rice Development	31.0	27.6
Swamp Development/Rain-fed Dev.	5.0	5.0
Horticultural Development	2.0	2.0
Ndama Multiplication Programme	6.0	6.0
Forestry Programme	9.0	6.0
Artisanal Fisheries	8.7	7.7
IndustrialFisheries	60.0	30.0
RDP -I	1.0	1.0
Mixed Farming/Resources Management	11.0	8.0
ADP-II	50.0	35.0
Miscellaneous(GLF-Funds)	3.0	3.0
Industry	**29.2**	**29.2**
Salt Project	0.2	0.2
GPMB Modernisation Phase I	24.0	24.0
Carbonisation Project	4.0	4.0
Fired Bricks Manufacturing	1.0	1.0
Public Utilities	**86.7**	**67.3**
Kotu Power Project	19.0	3.0
Third Generator/Repair No.2	6.0	6.0
Electricity Transmission/Distribution	5.0	5.0
Rural Electrification Programme	2.0	2.0
Urban Water Supply	3.2	3.2
Rural Water Supply/Wells Programme	12.0	12.0
Banjul Sewerage/Drainage Project	36.6	35.6
Kotu Sewerage	2.9	0.5

Source - Second Five Year Development Pla

Financing								
Grant	Loan	GLF	1981/82	1982/83	1983/84	1984/85	1985/86	Carry-over Third Plan
62.3	55.6	13.4	6.8	19.5	33.4	35.6	36.0	46.4
8.0	16.6	3.0	-	6.7	10.6	7.4	2.9	3.4
5.0	-	-	-	1.0	1.0	1.0	2.0	-
-	-	2.0	0.3	0.3	0.4	0.5	0.5	-
3.0	4.0	-	-	-	1.0	2.0	3.0	-
5.0	-	1.0	1.2	1.2	1.2	1.2	1.2	3.0
7.5	-	0.2	1.5	3.0	3.2	-	-	-
7.0	22.5	0.5	1.2	2.0	8.0	8.0	10.8	25.0
-	1.0	-	1.0	-	-	-	-	-
7.8	-	0.2	1.1	1.8	2.0	2.0	1.1	-
20.0	11.5	3.5	-	3.0	5.0	13.0	14.0	15.0
-	-	3.0	0.5	0.5	1.0	0.5	0.5	-
-	22.0	7.2	0.8	10.0	10.2	8.0	0.2	-
-	-	0.2	0.1	0.1	-	-	-	-
-	18.0	6.0	0.5	7.7	8.0	7.8	-	-
-	4.0	-	-	2.0	2.0	-	-	-
-	-	1.0	0.2	0.2	0.2	0.2	0.2	-
32.0	24.5	10.8	4.5	8.0	8.2	20.2	26.4	1.0
-	1.0	2.0	2.5	1.0	-	-	-	-
6.0	-	-	-	1.0	-	-	5.0	-
-	4.0	1.0	0.8	1.8	0.8	0.8	0.8	-
-	-	2.0	0.6	0.6	0.4	0.4	-	-
3.0	0.2	-	0.2	-	-	-	3.0	-
10.0	-	-	2.0	1.6	3.0	4.0	3.0	-
13.0	19.0	3.6	-	2.0	4.0	15.0	14.6	1.0
-	0.3	0.2	0.5	-	-	-	-	-

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	Total cost	Second Plan Expenditure	Financing Grant	Loan	GLF
Health, Labour and Social Welfare	**17.5**	**15.0**	**6.0**	**3.0**	**6.0**
Hospitals and Specialised Units	5.0	5.0	2.2	-	2.8
Health Centres and Dispensaries	7.1	4.6	0.6	3.0	1.0
Other Health Care	3.0	3.0	2.3	-	0.7
Prisons, Social Welfare and Labour	1.5	1.5	0.4	-	1.1
Support Services	0.9	0.9	0.5	-	0.4
Housing and Community Development	**34.0**	**21.0**	**6.5**	**9.0**	**5.5**
Low-income Housing Project	25.0	15.0	5.0	9.0	1.0
GEMCO Housing Scheme	5.0	2.0	-	-	2.0
Community Development Fund	2.0	2.0	1.0	-	1.0
Divisional Development Fund	2.0	2.0	0.5	-	1.5
General Public Services					
General Administration	23.0	23.0	7.0	7.5	8.5
General Administration	4.6	4.6	0.5	1.5	2.6
Public Order and Safety	16.3	16.3	6.0	6.0	4.3
Information and Broadcasting	1.6	1.6	0.5	-	1.1
Miscellaneous	0.5	0.5	-	-	0.5
Total	362.6	475.0	160.0	235.0	80.0

Source - Second Five Year Development Plan

Expenditure by year (Million Dalasi)					
1981/82	1982/83	1983/84	1984/85	1985/86	Carryover Third Plan
3.2	2.7	3.1	3.0	2.9	-
2.2	0.9	-0.6	0.7	0.6	-
0.6	1.2	1.5	0.8	0.5	-
0.4	0.4	0.7	0.7	0.8	-
0.1	0.1	0.1	0.5	0.7	-
-	0.1	0.2	0.3	0.3	-
2.8	2.8	3.8	5.8	5.8	10.0
-	2.0	3.0	5.0	5.0	10.0
2.0	-	-	-	-	-
0.4	0.4	0.4	0.4	0.4	-
0.4	0.4	0.4	0.4	0.4	-
1.5	4.6	6.3	6.5	4.1	—
0.2	0.5	0.8	1.8	1.3	-
0.9	3.4	5.0	4.3	2.7	-
0.3	0.6	0.4	0.3	0.1	-
0.2	0.1	0.1	0.1	-	-
70.0	95.0	110.0	110.0	90.0	63.6

Annex I

	Total Cost	Second Plan Expenditure	Financing Grant	Loan	GLF
Transport and Communication	**212.2**	**143.9**	**37.4**	**89.2**	**17.3**
Soma-YBK -Basse Road	58.0	9.6	-	6.0	3.6
Bundadu-Alkoeda-Kuntair Road	6.6	3.3	3.2	-	0.1
Lamin Koto-Passimus Rd.,	20.0	17.0	-	15.0	2.0
Feeder Roads Phase III	5.0	2.6	2.0	-	0.6
First Highway Maintenance Programme	11.6	4.0	-	4.0	-
Highway Maintenance Workshop	9.0	8.6	7.9	-	0.7
Essau-Kerewan Road	3.0	3.0	3.0	-	-
Banjul-Serrekunda Dual Carriageway	40.7	37.5	11.6	20.4	5.5
Gambia River Ferries	12.6	12.6	1.0	10.6	1.0
Banjul Second Port	36.6	36.6	8.0	26.1	2.5
Banjul Port Dredger	7.1	7.1	-	7.1	-
Yundum Airport Improvement	2.0	2.0	0.7	-	1.3
Tourism, Trade and Finance	**12.5**	**7.3**	**-**	**3.0**	**4.3**
Miscellaneous Tourism Projects	1.0	1.0	-	-	1.0
Equity Contribution IDB	5.5	3.3	-	-	3.3
Rural and Urban Enterprises Creidit	6.0	3.0	-	3.0	-
Education, Youth, Sports and Culture	**60.8**	**37.0**	**3.8**	**21.2**	**7.0**
Primary Education	2.0	2.0	1.5	-	0.5
Secondary Education	2.6	2.6	-	0.8	1.8
Post Secondary/National Education	23.5	12.9	6.3	3.9	2.7
Youth, Sports and Culture	30.0	16.8	-	15.6	1.2
Support Services	2.7	2.7	1.0	1.0	0.7

Source - Second Five Year Development

Million Dalasis

Expenditure by Year					
1981/82	1982/83	1983/84	1984/85	1985/86	Carry Over Third Plan
24.3	**37.8**	**40.3**	**20.8**	**12.7**	**6.2**
6.0	2.6	1.0	-	-	-
3.3	-	-	-	-	-
0.3	1.0	6.0	5.7	4.0	3.0
1.0	1.6	-	-	-	-
1.6	2.0	0.4	-	-	-
1.0	4.0	2.0	1.6	-	-
-	-	1.0	1.0	1.0	-
1.0	6.0	11.5	11.3	7.7	3.2
0.6	4.0	5.0	3.0	-	-
2.4	15.6	12.7	5.9	-	-
6.4	0.7	-	-	-	-
0.7	0.3	0.7	0.3	-	-
2.3	**2.3**	**0.2**	**0.2**	**0.2**	**-**
0.2	0.2	0.2	0.2	0.2	-
1.1	1.1	1.1	-	-	-
1.0	1.0	1.0	-	-	-
23.7	**7.3**	**2.4**	**1.9**	**1.7**	**-**
0.2	0.2	0.5	0.5	0.6	-
1.0	0.5	0.3	0.4	0.4	-
8.6	2.9	0.8	0.4	0.2	-
13.0	3.1	0.3	0.1	0.3	-
0.7	0.9	0.5	0.5	0.2	-

Plan.

Cost Financing and Development Expenditure of Second Plan Projects Summary by projects

(Million dalasi)

Sector	Total(i) Cost	Second Plan Expenditure	Financing Grant	Loan	GLF	Expenditure by Year 1981/82	1982/83	1983/84	1984/85	1985/86	Carryover Third Plan
Agriculture and Natural Resources	186.7	131.3	62.3	55.6	13.4	6.8	19.5	33.4	35.6	36.0	46.4
Industry	29.2	29.2	-	22.0	7.2	0.3	10.0	10.2	8.0	0.2	-
Public Utilities	86.7	67.3	32.0	24.5	10.8	4.5	8.0	8.2	20.2	26.4	1.0
Transport and Communications	213.2	143.9	37.4	89.2	17.3	24.3	37.8	40.3	28.8	12.7	-
Tourism, Trade and Finance	12.5	7.3	-	3.0	4.3	2.3	2.3	2.3	0.2	0.2	
Education, Youth, Sports and Culture	60.8	37.0	8.8	21.2	7.0	23.7	7.3	2.4	1.9	1.7	-
Health, Labour and Social Welfare	17.5	15.0	6.0	3.0	6.0	3.3	2.7	3.1	3.0	2.9	-
Housing and Community Dev., General Public Services	54.0	21.0	6.5	9.0	5.5	2.8	3.8	3.8	5.8	5.8	10.0
	23.0	23.0	7.0	7.5	8.5	1.5	4.6	6.3	6.5	4.1	-
Unallocated Expenditure	-	-	-	-	-	-	-	-	-	-	-
Total	662.6(1)	475.0	160.0	235.0	80.0	70.0	95.0	110.0	110.0	90.0	63.6

(1) Includes expenditure of D124 million incurred on projects carried over from First Plan

Source - Second Five Year Development Plan

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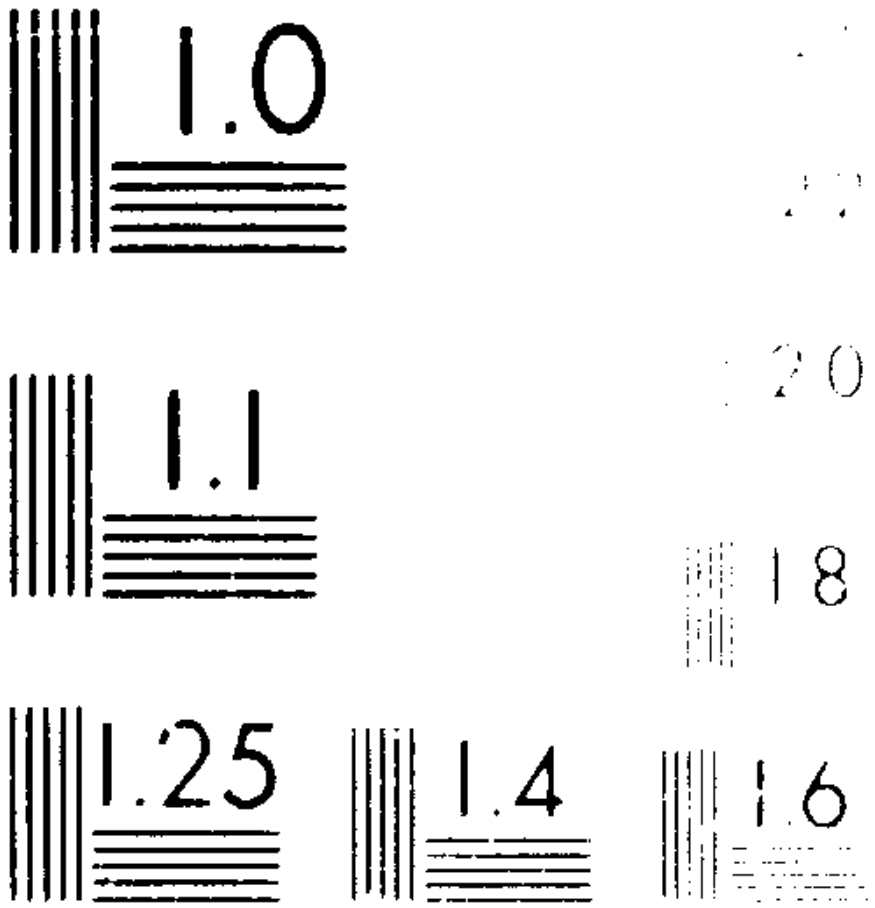
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[illegible] BALANCES, 1974/75-1980/81

	1974/75	1975/76	1976/77	1977/78
Recurrent expenditure(1)	32.3	42.8	57.3	65.5
Development expenditure	11.1	11.3	33.6	78.5
Expenditure	43.4	54.1	90.9	144.0
Extrabudgetary lending.net	- 0.5	2.6	4.3	3.1
Expenditure and lending	42.9	56.7	95.2	147.1
Current revenue	32.4	46.2	65.5	65.9
Grants	4.2	3.5	3.5	45.1
Revenue and grants	36.6	49.7	69.0	111.0
Overall balance	-6.3	-6.9	-26.2	-36.2
Amortization of government debt	0.8	1.2	1.3	1.0
Financing requirement (-)	7.2	-8,2	-27.6	-37.2
Borrowing for Development Fund	5.4	11.3	7.7	32.2
Short term and other financing	1.8	-3.1	19.9	5.0
GDP at purchasers' values	214.3	271.2	347.6	352.6
Ratios to GDP				
Taxes	12.4	14.1	16.2	16.4
Revenue	15.1	17.0	18.8	18.7
Recurrent expenditure(1)	15.1	15.8	16.5	18.6
Development expenditure	5.2	4.2	9.7	22.3
Expenditure and lending	20.0	20.9	27.4	41.7
Financing requirement	-3.4	- 3.0	-7.9	-10. 6

(1) Including amortization and transfers

Source. Second Five Year Development

(Million dalasi at current prices)

1978/79	1979/80	1980/81	Annual rate of change (%) 1974-75-1979/80
70.8	87.7	92.4	22.1
59.4	73.7	93.4	46.0
130.3	161.4	185.8	30.0
1.8	-5.4	..	.
132.0	156.0	185.8	29.5
79.7	93.2	81.9	23.5
22.7	22.0	29.3	39.3
102.4	115.2	111.2	25.8
-29.6	-40.8	-74.6	.
2.3	0.6	2.4	-5.5
-32.0	-41.4	-76.9	.
24.5	40.9	70.2	49.9
7.5	0.5	6.7	.
404.4	403.7	420.6	13.5
16.9	20.2	16.9	.
19.7	23.1	19.5	.
17.5	21.7	22.0	.
14.7	18.3	22.2	.
32.6	38.6	44.2	
- 7.9	-10.3	-18. 3	.

to Development Fund

Plan.

Annex 1

Central Government Revenue and Expenditure 1974/75 - 1980/81 (Million dalasi at current prices)

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	Annual rate of change (%) 1974 - 1979/80
Revenue:								
Direct taxes	3.9	4.3	8.4	10.1	13.1	14.8	14.4	30.6
Import duties and taxes	16.1	27.1	38.5	37.3	45.8	55.0	47.8	27.8
Other taxes	6.5	8.8	9.3	10.6	9.5	11.9	9.0	12.9
Tax revenue	26.5	38.2	56.2	58.0	68.4	81.7	71.1	25.3
Other revenue and receipts	5.9	8.0	9.4	7.8	11.3	11.5	13.9	14.3
GDP receipts	32.4	46.2	65.5	65.9	79.7	93.2	85.0	23.5
Expenditure								
Compensation of employees	17.7	24.4	31.1	34.9	36.0	40.0	46.1	18.4
Goods and services	12.3	15.4	12.4	15.6	28.4	34.1	31.1	22.6
Subsidies and transfer	1.7	1.7	2.8	3.0	5.0	9.0	10.7	39.6
Debt service	0.9	1.4	2.1	2.0	3.7	4.6	6.4	38.6
Other expenditure	1.0	1.1	0.3	0.2	0.0	0.5	0.5	13.0
Transfer to Development Fund	-	-	1.5	7.3	3.0	3.0	2.0	..
Total expenditure	33.1	44.0	58.7	66.5	73.2	88.3	94.8	21.7
GDP at purchasers'	33.1	44.0	60.3	73.8	76.2	91.3	96.8	22.5
GDP at purchasers'	214.3	271.3	347.6	352.6	404.4	403.7	420.6	13.5

Source: Second Five Year Development Plan

Annex I

1974/75-1980/81

	1974/75	1975/76	1976/77	1977/78
GDP at purchasers' values	214.3	271.2	347.6	352.6
Imports of goods and services	108.1	160.4	192.6	248.2
Supply of resources	322.4	431.6	540.2	600.8
Exports of goods and services(1)	119.3	[illegible]	118.4	153.4
Private consumption (2)	13[illegible].7	208.7	253.0	256.6
Central government consumption	28.2	37.2	51.8	60.1
Local Government consumption	[illegible]	2.8	2.5	[illegible]
Private and Government consumption	169.2	248.7	307.3	319.4
Technical assistance expenditure	1.5	3.5	3.2	[illegible]
Total consumption	170.7	252.2	310.5	325.8
Private sector investment	15.0	17.0	22.0	18.0
Central government investment (3)	10.5	13.1	30.1	71.[illegible]
Local Government investment	0.2	0.2	0.2	0.7
Public corporation investment(4)	6.6	7.7	15.0	21.7
Total fixed investment	32.4	38.0	67.3	111.6
Domestic final use	203.1	290.[illegible]	377.8	447.4
Changes in stocks(2)	..	..	..	..
Domestic saving(5)	45.1	23.5	40.3	32.2
Gross national saving	43.9	27.1	41.4	27.6
Resources balance(1)(5)	12.7	-15.5	-27.0	-78.4

(1) Exports of [illegible] delayed from 1978/79 included [illegible]
(2) Other changes in stocks included in private consumption [illegible]
(3) Includes expenditure financed by direct disbursements [illegible]
(4) Financed from [illegible] own sources or own borrowing

So[illegible]

(Million dalasi at current prices)

1978/79	1979/80	1980/81	Ratio (4) to GDP (6)
404.4	403.7	420.6	100.0
353.4	336.1	315.2	68.5
657.8	739.8	735.8	168.5
193.6	101.1	162.4	45.2
283.5	304.4	323.8	74.0
65.2	78.3	83.7	17.1
3.9	3.0	3.2	0.8
351.2	386.2	410.7	92.0
18.0	20.0	22.0	3.8
[illegible]	406.[illegible]	432.7	95.8
28.0	45.0	36.0	7.5
56.5	55.7	86.5	14.7
0.9	1.3	0.7	0.2
24.6	15.5	2.5	4.0
110.0	127.5	125.7	26.4
447.4	479.7	558.4	122.1
-15.0	25.0	15.0	1.1
53.2	17.5	9.9	8.0
45.5	14.5	8.8	7.5
-41.8	-135.0	-130.8	-19.5

...in 1979/80 (5) Excluding technical assistance expenditure
...ion
...s or in kind (6) Ratios of first plan period (1975/76-1980/81) totals to total GDP

...rce-Second Five Year Development Plan

PURCHASES AND PRICES OF GROUNDNUT AND TERMS OF TRA

	1974/75	1975/76	1976/77	1977/78
Purchase of groundnut by GPMB thousand metric tons	137.2	137.8	124.8	82.3
Export price(f.o.b. Banjul) Dalasi/metric ton (1)	633	549	841	879
Purchase price of groundnut Dalasi/metric ton (2)	306	365	402	402
Purchase price/export price (%)	48.3	66.5	47.8	45.7
International price: in current $/m.t. (c.i.f. Rotterdam) (3)	452	424	551	621
-do - in constant 1977 $	499	460	551	525
Index of terms of trade of The Gambia(1965/66=100)	116.6	84.5	97.8	89.6

(1) unshelled basis, weighted average (f.a.q.
(2) since the quantity of h.p.s. nuts is very
tial between f.a.q. and h.p.s. prices has
(3) source: IBRD - Commodity price forecasts -
(4) estimated.

ED OF THE GAMBIA, 1974/75-1980/81

1978/79	1979/80	1980/81
119.7	65.8	45.0
729	608	816
421	421	460
57.8	69.2	56.4
565	493	650 (4)
417	326	403 (4)
85.6	58.2	..

* h.p.s.)
small (generally under 2000 m.t.) the differen-
been ignored in the calculation
June 1981

Annex 1 [illegible] 1972/73 - 1976/77

(a) [illegible]

[illegible]	1973/73	1973/74	1974/75	1975/76	1976/77
Argentina	3,105	-	45,490	-	3,010
Australia	34,333	33,367	4,258	40,499	65,663
Austria	79,764	119,090	10,333	260,143	314,657
Bahamas	2,276	2,279	1,[illegible]	9,[illegible]	11,[illegible]59
Bangladesh	601,455	356,084	132,350	[illegible]24,125	1,051,[illegible]
Belgium	1,245,507	972,008	1,365,703	2,079,572	1,365,036
Brazil	6,443	15,[illegible]	69,308	47,274	1,234,819
Bulgaria	32,845	12,084	48,198	123,600	32,462
Burma	1,659,400	2,695,458	4,760,248	11,313,797	7,239,600
Canada	356,405	388,614	181,436	438,973	187,556
Canary I	38,314	171,221	138,656	313,373	660,306
China	7,278,193	6,406,216	10,140,035	17,363,793	27,158,244
Cuba	2,010	1,142		3,940	-
[illegible]					
Cyprus	101,884	148,916	121,119	158,507	311,392
Chchslvk	334,312	737,201	905,045	1,510,325	1,538,539
Denmark	581,298	729,675	674,610	1,729,600	1,603,023
Zaire	24,397	23,592	24,405	31,428	254
Ethiopia	7,900	1,500	-	6,963	-
Finland	29,242	13,612	12,895	925	67,475
France	2,341,133	3,201,260	3,096,537	7,051,877	10,640,394
Lisbon	15,468	479,636	65,336	-	52,795
Germany E	618,410	532,837	400,224	1,140,078	1,712,027
Germany W.	1,387,503	2,709,559	4,479,579	5,376,911	9,256,916
China	146,961	108,723	353,925	259,305	385,525
Greece	1,307	295	1,808	3,925	15,132
Guinea	-	-	317	19,711	1,500
Guyana	215	39	-	1,053	1,268
Hong Kong	576,415	597.760	1,362,679	3,239,272	2,556,054
Hungary	1,005,540	1,444,952	1,328,543	1,775,477	3,566,763
India	282,258	528,330	1,763,673	472,295	862,631
Iran	3,250	2,211	296	16,393	200

Annex I

DIRECTION OF TRADE 1972/73 - 1976/77

(a) IMPORTS CLASSIFIED BY COUNTRY OF ORIGIN (Contd.)

COUNTRY OF ORIGIN	1972/73	1973/74	1974/75	1975/76	1976/77
Israel	2,670	1,208	704	24,227	5,544
Italy	367,314	2,067,954	4,338,649	2,354,340	3,134,090
Ivory CT.	24,996	583,966	31,980	129,920	241,143
Jamaica	-	1,910	-	445	4,040
Japan	5,399,768	2,346,476	3,983,327	10,399,779	5,941,300
Kenya	13,944	37,027	43,431	4,021	17,040
Korea RP.	36,659	29,204	42,107	146,839	86,908
Lebanon	318	360	8,704	-	7,000
Liberia	4,424	31,542	156,398	642,017	515,301
Libya	273,265	-	-	36,417	31,769
Luxemburg	-	22,815	-	55,247	15,193
Malawi	545,176	772,741	491,437	3,247,468	5,207,641
Malta	-	3,112	4,971	427	342
Mexico	758	6,740	-	216	5,705
Morocco	100,513	69,437	112,141	108,142	173,401
Nethlands	1,649,901	2,583,072	5,228,576	8,325,386	8,785,287
Malaysia	30,551	4,361	14,000	2,040	24,575
New Zealand	22,496	61,213	25,233	183,749	13,905
Nigeria	35,065	91,451	36,477	77,325	207,918
Norway	1,265	12,894	13,647	31,951	34,136
Pakistan	5,742	7,785	37,632	8,626	1,292
Poland	1,003,462	3,169,663	1,776,091	3,963,891	2,941,621
Rumania	447,312	265,023	364,065	860,290	853,991
Saud Arab	-	100	500	22,386	1,493
Senegal	2,434,635	8,939,594	13,408,802	2,765,153	1,916,613
Sierra Leone	343,503	1,055,780	1,115,190	2,646,203	2,466,535
Singapore	37,749	158,031	328,700	295,353	190,100

[illegible], 1972/73 -1976/77

D) Exports(Domestic and Re-exports) Classified by country of Destination(Calasis)

Country of Destination	1972/73	1973/74	1974/75	1975/76	1976/77
Australia	265	423	-	1592	4,[illegible]
Belgium			60	1,920,086	13,720,733
Canada	-	2,274	-	2,027	6,998
Canary Is	147,426	271,888	140,703	1,974	186,632
China	350	18,541	2,000	2,340	140,998
Denmark	150	741	1,206	3,328	3,974
France	6,680,945	15,309,239	7,229,797	5,205,774	8,695,817
Germany Fr	2,974,734	4,643,234	2,783,546	1,314,137	1,314,137
Ghana	65,754	291,155	393,221	2,188,499	5,515,175
Greece	32,163	65,255	35,454	13,226	235,302
Guinea	39,197	104,813	519,732	2,272,309	22,300
Hongkong	1,250	184	2,603	26,597	12,355
India	100	1,455	-	12,447	40,656
Italy	824, 434	3,725,473	9,886,706	6,998,604	4,678,652
Ivory Coast	5, 768	1,445	-	5,378	901
Japan	77, 157	316,983	2,615	13,332	29,459
Lebanon	675	700	1,000	6,273	17,477
Liberia	114, 695	17,433	28,650	14,370	23,062
Mauritania	550	22,416	1,885	77,751	570,325
Netherlands	735, 46	11,402,720	16,883,296	15,243,636	24,931,015
Nigeria	27,431	31,168	38,379	169,377	153,148
Norway	610,130	100	-	8,452	14,370
Portugal	1,363,098	5,144,606	11,788,824	11,497,920	13,551,547
Senegal	37,194	241,217	869,385	721,399	283,755
SierraLeone	130,392	313,331	395,423	149,210	151,338
Spain	172,201	23,303	34,031	1,027	47,121
Sweden	99,111	28,966	176,095	38,855	21,342
U.S.America	6,650	64,170		396,231	327,348
United Kingdom	13,262,980	24,847,501	32,049,431	23,671,331	31,056,712
Other Foreign countries	-	2,000		2,355	1,332

Source-External Trade Statistics of the Gambia 1974/77

DIRECTION OF TRADE 1972/73 - 1976/77

COUNTRY OF ORIGIN	1972/73	1973/74	1974/75	1975/76	1976/77
SOMALIA	-	10,000	30	-	-
BRAZIL	13,310	3,489	-	3,633	19,267
SPAIN	138,349	105,579	2,849,421	826,339	1,498,266
SUDAN	400	-	-	-	-
SWEDEN	1,054,036	2,056,159	2,321,091	1,517,220	2,368,483
SWITZERLAND	124,037	149,810	127,659	467,885	140,487
TAIWAN	178,794	353,991	453,983	1,218,936	557,032
TANZANIA	1,328	-	2,333	200	422
THAILAND	-	-	1,520,320	-	3,122,840
TOGO	-	81,248	-	184,944	-
TRINIDAD	555,168	1,640	5,208	2,201,466	2,886,836
TURKEY	2,986	-	5,397	201	-
URGANDA	-	-	-	25	2,489
U.A.R. REP.	7,859	-	500	-	-
U.S.A.	1,368,231	2,987,476	2,903,511	5,663,217	5,347,063
U.S.S.R.	527,306	906,268	599,994	1,290,535	1,659,714
U.K.	15,415,534	15,441,737	21,263,778	36,887,071	42,941,651
UPPER VOLTA	1,242	1,091	-	-	725
VENEZUELA[a]	-	-	-	792,702	251
WEST INDIES	286,602	47,349	775	-	-
YUGOSLAVIA	53,447	148,267	58,351	89,966	85,862
ZAIRE	-	-	-	1,960	2,200
ZAMBIA	1,100	-	15,500	446	35
OTHCOMLTH	.....	1,478	8,159	-	-
OTHFORGN	.....	15,000	958,106	24,257	23,029
NOT SPEC	-	-	-	-	-
CUS PROV	643,115	822,055	1,023,291	1,290,897	1,081,796
BAGGAGE	36,283	28,317	23,675	19,136	15,733
TOTAL	54,418,533	63,494,509	88,348,975	144,366,821	169,834,193

(a) Previously classified as "Other Foreign Country".

Source : External trade statistics of the Gambia

EXTERNAL TRADE AND BALANCE OF PAYMENTS, 1974/75-1980/81
(Million dalasi at current prices)

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Exports:							
Groundnut products	80.7	71.4	98.0	63.0	68.8	55.6	30.9
Other domestic exports	27.7	3.6	6.6	11.4	6.6	9.2	10.0
Re-exports and adjustments(1)	19.8	45.8	29.4	49.9	64.2	86.1	73.0
Merchandise exports f.o.b.	103.2	120.8	134.0	124.3	133.6	150.9	113.9
Travel(2)	10.3	13.4	19.1	18.3	30.1	32.2	35.0
Other services	5.7	7.1	9.3	10.9	11.9	13.0	13.5
Exports of services	16.1	20.6	28.4	29.1	45.0	45.2	48.5
Exports of good and services	119.3	141.4	162.4	153.4	178.6	196.1	162.4
Imports:							
Imports of goods,c.i.f.	88.3	144.3	169.3	208.1	221.0	290.4	275.8
Adjustments(3)	-0.4	-14.2	-16.3	-13.1	-25.8	-24.6	-29.9
Merchandise imports, f.o.b.	87.9	130.1	153.2	195.0	195.2	265.8	245.9
Freight and insurance	12.3	20.5	24.2	29.8	31.6	41.5	39.8
Technical Assistance Services (4)	1.1	2.6	2.4	12.3	13.5	15.0	16.5
Other sefvices	6.5	7.2	12.8	11.1	13.1	13.8	13.4
Imports of services	20.2	30.3	39.4	53.2	58.2	70.3	69.3
Imports of goods and services	108.1	160.4	192.6	248.2	253.4	336.1	315.2
Balance of trade f.o.b.	15.3	- 9.3	19.2	70.7	-61.6	114.9	-132.0
Balance of goods and services	11.2	19.0	-30.2	-94.8	-74.8	-140.0	152.8
Interest and other income,net	-0.3	2.5	-0.4	- 7.8	- 6.5	- 10.0	-11.7
Private transfers, net	-0.4	2.6	2.3	0.2	- 1.8	6.5	8.0
Current official transfers, net	1.0	3.0	7.4	18.4	13.6	20.6	24.6
Development grants	2.1	1.0	1.0	24.2	18.7	17.1	26.8
Balance on current account	13.6	-9.9	-24.9	-59.8	-45.8	-105.8	-105.7
Private sector long term capital,net	-1.0	2.1	2.2	2.7	10.0	22.3	21.5
Public sector long term capital, net	4.8	5.2	10.5	34.4	31.9	47.7	69.7
Basic balance	17.4	-2.6	-11.2	-22.7	-3.9	-35.8	-14.5
Short term capital net	-5.9	-2.5	-3.6	5.9	-3.5	17.9	18.0
Exports and omissions, net	12.5	-13.4	16.5	-10.9	-21.6	-4.3	5.4
Overall balance	24.0	-13.4	2.0	27.7	-29.0	-22.2	8.9
Change in foreign exchange reserves(=increase)	-24.0	17.2	-18.6	26.6	29.0	8.3	-36.1
Use of IMF credit and other items	-	3.8	-16.6	1.2	6.0	13.9	27.2
		index,1974/75 = 100					

EXTERNAL TRADE AND BALANCE OF PAYMENTS (CONT'D)

Unit value of domestic exports	100.0	83.4	113.4	116.2	122.5	89.9	110.3
Unit value of imports	100.0	115.0	135.2	151.3	167.0	180.0	198.2
Terms of trade	100.0	72.5	83.9	76.8	73.4	49.9	55.7

(1) Including recorded and estimated re-exports

(2) Receipts from tourism

(3) Including estimates of non-recorded imports and deduction for freight and insurance

(4) Assumed at 75% of total expenditure on technical assistance

Source Second Five Year Plan.

MEAT PROCESSING PROJECT [illegible] REGION OF THE GAMBIA

Name of Establishment: Gambia Livestock Marketing Board

Physical Location: [illegible]UMO (Western Division)

Principal Activity: Production of processed meat, fresh, chilled and sausages

Number of Unit: 1

Ownership/ Management: Livestock Marketing Board Foreign/local

Staff Requirement:
1 Master Butcher, expatriate
1 Plant Supervisor
1 Driver
1 Foreman
6 Workmen
1 Lab. Technician

Ingredients, Containers, Packing Materials/Year:

Salt & Nitrate	3500 kg.
Flour	1500 kg.
Spices	300 kg.
Soya Isolate Vegetables	6000 kg.

Containers

Cans	410 gr	25000)
Jams	0 gr	10000) To be imported
Casing	3 gr	5000)
Plastic bags	0.5 kg	30000)

Packing materials

Labels	500,000)	
Cartons	15,000)	To be imported
Plastic (crimp) foil	)	

Raw materials/year

Animals and (parts of carcasses) Available equivalent to 1500 head)

Estimated production

180,000 kg. - Corned beef
Sausages
Meat basis
Luncheon meat
Pet food
Various soups

Estimated Total Investment Cost

D1,100,000

Name of Establishment:	Alhaji Sankung Sillah & Sons Ltd.
Physical Location:	Kanifing Industrial Estate
Principal Activity:	Manufacture of Soap
Number of Units:	1
Ownership/Management:	Private - Alhaji Sankung Sillah Gambian/Foreign
Managerial:	3
Technical:	
Clerical:	-
Skilled:	17
Semi skilled:	-
Unskilled:	48
Total Employment:	
Production capacity:	Year 1: 1,433 tons; Year 2: 1,632 tons
Laundry soap	
Toilet soap	Year 1: 420 tons; Year 2: 510 tons

Raw materials:

Laundry soap:	Fancy tallow	- 1020 tons
	Coconut oil	- 180 tons
	Caustic soda	- 240 tons
	Salt	- 160 tons
Toilet soap:	Extra Fancy tallow	480 tons
	Coconut oil	- 100 tons
	Caustic soda	- 100 tons
	Salt	- 30 tons

ANNEX 2

Energy: Gambia Utilities Corporation
(Electricity) Standby Generator

Equipment: One fat and oil bleaching plant, type "5G"

One batch soponification plant, type "5S"

One continuous vacuum cooling and drying plant type "C"

One pneumatic conveyor type "TPW"

One continuous, Automatic Finishing line, type "LTC"

Two foot pressers type " "5TP"

One packed steam boiler

One automatic soap wrapper

To be imported

PROFILES OF MANUFACTURING INDUSTRIES

Name of Establishment:	Cham & Secka Industries Ltd.
Physical location:	Kanifing Industrial Estate
Principal Activity:	Metal/wood manufacturing
Number of Unit:	1
Owner/Management:	- Limited Liability Co. - Private Gambian - Managed by 3 brothers - Sha eholders
Managerial:	4
Technical:	-
Clerical:	7
Skilled workers	30
Semi skilled workers	-
Unskilled workers	10
Production Capacity:	Strong dependancy on orders
Types of product:	- Metal/wood furniture for house, office and school - Door, windows - Nails - Agricultural & Construction equipment
Raw materials:	A) Metal Section - Steel bars, wires, plates - Welding electrodes - Oxy/Acityl gas B) Wood Section - Plywood - Vanish, glue, fittings
Source of Energy:	Gambia Utilities Corporation (Electricity Unit) 5,217 KW A) Metal Section - Production Equipment, Electrical and Manual for welding, bending, cutting drilling, grinding B) Metal Section - Electrical and Manual equipment for sawing, drilling, turning and grinding

[illegible]

Name of Establishment: General Paint Company

Physical location: Karifi[illegible] Industrial Estate

Principal activity: Mixing of paint

Number of unit: 1

Owner/Management

	In Season	Off Season
	Number of period Employees	
Managerial:	1	1
Technical:	1	1
Clerical:	7	7
Skilled workers	3	3
Semiskilled workers	8	8
Unskilled workers	-	-

Production Equipment

1. Dispenser (Mixing machine)
2. Storage tanks
3. Two compressors

Production capacity: 1,000 gallons per day, for the moment production on order. Car paint produced with ICI Refinery Paints Production Scheme

Types of paint: Emulson paint, Gloss paint, Car paint (Synthetic and Metalic)

Raw materials used: (All imported from UK) [illegible] G/ML; [illegible] CO. [illegible]; PMA; China Clay, Thiofine; Ammonia, Thinner, Formaldehyde, Zinc Somplex PH, Deformer, PMA, TEX[illegible]OL

Source of Energy: 45 [illegible] from own Generator

CARBONISATION OF BRIQUETTES **PROJECTS IN THE PIPELINE**

Name of Establishment:	Not known
Physical Location:	Kaur
Principal Activity:	Carbonising of Briquettes
Number of Units:	1
Ownership/Management:	
Managerial:	1
Technical:	1
Clerical:	6
Skilled:	3
Semi skilled:	8
Unskilled:	20
Total Employment:	39
Production capacity:	4,000 tons of pelletised charcoal
Raw materials:	14,000 tons of groundnut husk (locally available)
Energy:	Generator 150 KVA
Equipment:	Two kilns with feed hopper, drives and motors, furnace materials and burners, ducting, hot gas fans. Briquetting equipment comprising grinder, mixer
Estimated Investment Cost:	D4,000,000

PROFILES OF [illegible]

Name of Establishment:	Chellarams Industries Gambia Ltd. Bottling Division
Physical Location:	Kanifing Industrial Estate
Principal Activity:	Bottling of soft drinks
Number of Unit:	1
Owner/Management:	- Limited Liability Co. - Private Foreign Ownership/ Foreign Management
Managerial:	2
Technical:	1
Clerical:	-
Skilled workers	8
Semi skilled workers	2
Unskilled workers	32
Production Capacity:	Maximum 7,200 bottles per hour Use: 20 - 25% of capacity
Production (1980):	182,873 cases of 24 bottles
Raw materials used:	Sugar concentrate, co_2 crown-corks - Bottles (all imported) Stock 5-7 months products
Source of Energy:	Gambia Utilities Corporation (Electricity unit)
Types of Drink:	Standby Generator total 92.5 KVA Coca cola, Fanta and Sprite

Production Equipment

1. Syrup mixer
2. Syrup tank
3. Carborator
4. Air Compressor
5. Bottling filling machines
6. Bottle washing machine

Name of Establishment: Gambia Oilseed Breweries Ltd.

Physical location: Kanifing Industrial Estate

Principal Activity: Brewing of Beer

Number of Unit: 1

Owner/Management:
- Limited liability
- Joint-venture foreign 51% - Gambia Govt. 49% - partly foreign management assistance

Number of paid employees

	In Season	Off season
Managerial)		
Technical)	11	11
Clerical	-	-
Skilled workers	60	60
Semi skilled workers	-	-
Unskilled workers	20	20

Production capacity:
- Beer brewing 40,000 Hl per year
- Bottling: 8,000 bottles per hour
- Use of capacity: - 60% brewing
- - 40% for bottling

In 1980 - 13,384 Hl of beer
- 9,675 Hl of soft drinks

Raw materials used: Malt, sugar, essence, additives, bottles, corks, labels, cartons, stocks: 3 months

Source of Energy: 3 diesel generators total 750 KVA

Types of drinks: Beer, Stout and Soft drinks

Production Equipment BREWHOUSE
3. Kettle for producing beer
1. Hot water tank
- Cold Block
7. Ferment tanks
13. Storage tanks
5. Bottling tanks/2 yeast tanks
2. Beer-Filter 40 HL/h
1. Centrifuge 30 HL/h

Bottling Plant
Bottle washing machine
Filling machine
Pasteurizer
Labelling-Machine
Cascade
Barrel-Filler 50 barrels/h
- Steam boiler machine
- Carbon dioxide machine
- Cooling plant
- Plate-Cooler
- Sugar-Cooler & - Sirup tank

Name of Establishment: Serrnga Mineral Water Factory
Physical location: Kanifing Industrial Estate
Principal Activity: Bottling of soft drinks
Number of Unit: 1
Owner/Management: Private Gambian Entrepreneur, Managed by owner

Managerial:	1
Technical	-
Clerical	1 part time
Skilled workers	4
Semi skilled workers	
Unskilled workers	12

Production capacity: Maximum 8,400 small (25cl) or 5040 large (66cl) bottles per day in one shift

Production 1980: 16,979 cases of 48 small bottles (25cl)
3,944 " " 48 large " (66cl)

Raw materials used: Sugar (local supplies), cubic acid, essences, colours, corks, labels, CO_2 gas (all imported)
Stocks: 12 months

Source of Energy: Gambia Utilities Corporation (Electricity unit)

Production Equipment

1 syrup mixer
1 syrup tank
1 carbonator
1 air compressor
1 water treatment installation
2 bottling filling machines
2 crowncork machines
1 water filter

MANUFACTURING ESTABLISHMENTS IN THE GAMBIA

Name of Establishment:	Sonnar Stores Ltd.
Physical Location:	Manifing Industrial Estate
Principal Activity:	Manufacture of match
Number of Units:	1
Ownership/Management:	Foreign - Sonnar Stores Gambian/Foreign
Managerial:	3
Technical:	8
Clerical:	4
Skilled:	30
Semi skilled:	37
Unskilled:	134
Raw materials:	Wood (which is locally Match paper, decoration chemicals
Source of Energy.	Gambia Utilities Corpor A Standby Generator
Production:	137,500 (gross boxes) -
Total Investment Cost:	1,664,000

ANNEX 2

PROJECT IN THE PIPELINE

nto

Ltd.

available)

paper and

ation (Electricity)

250,000

Equipment: Log preparation

1. Cross cut saw
2. Debarking axe, chissel etc.
3. Log handling tolley with chain pulley block

Splint Making

1. Peeling machine
2. Splint - Chopping machine

Box making

1 & 2 above

3. Outer box pasting machine
4. Labelling machine

Chemical mixing

1. Ball mill
2. Cone grinder
3. Glue melting tanks

Material Handlings & Mis. Equipments

Annex 2

Industrial Fisheries Project — **Project in the Pipeline**

Name of Establishment:	Industrial Fisheries Corporation
Physical location:	Banjul (Bund Road)
Physical Activity:	Catching and processing of fish
Number of Unit:	1
Ownership/Management:	Local/Foreign Management
Envisaged Employment:	300 Workers
Raw Materials:	-
Source of Energy:	Gambia Utilities Corporation (Electricity Unit)
Production:	17,000 tons of fish
Total Investment cost:	D31.9 million

Salt Production

Name of Establishment:	Dasilami Salt Project
Physical location:	Dasilami - Kerewan
Physical Activity:	Production of Salt
Number of Units:	2 Darsilami & Karantaba
Ownership/Management:	Public/Local
Envisaged employment:	25
Raw materials:	Sea water
Source of Energy:	Solar Energy
Production:	500 to 600 tons
Total Investment Cost:	D300,000

Project in the Pipeline

Equipment: Centrifugal pump diesel engine, platform weighing scale, Rain Guage 2 sets of Hydrometers.

Annex 1

Fired brick manufacturing

Name of Establishment:	NOT Known
Physical Location:	Kanifing Industrial Estate
Physical Activity:	Manufacturing of Bricks
Number of Units:	1
Ownership/Management:	Public - Chinese/Gambian
Raw Materials:	Clay (locally available) Busumbala & Mandinary Clay deposit
Envisaged employment:	25
Source of Energy:	Burning of groundnut husks (locally available) Electricity(GUC)
Production:	500,000 bricks per annum
Total Investment Cost:	D500,000

Project in the Pipeline

Equipment: Mixer, Extruder, Roller stand cutting table, wheel Barrow, pallet, Iron element for kiln, p.v.c. water Hose and wooden platform.

Establishment of a Tannery

Project in the Pipeline

Name of Establishment:	Gamtan
Physical location (proposed):	Abuko
Principal Activity:	Training of hides and skins
No of Unit:	1
Employment:	1 General Manager
	1 Technical Manager
	1 Commercial/Admin./Purchasing Manager
	10 Skilled workers
	4 Clerical
	7 Semi Skilled Workers
	7 Unskilled Workers
Total Employment	31
Production:	22,000 hides per year 22,000 skins per year } available locally
Raw Materials:	Hides and skins
Equipment Recommended:	AI reconditioned machinery for the wet blue department "Serviceable" machinery only for the finishing section.
Source of Energy:	Generator, GUC if possible
Total investment:	D1.4 million

Grinding of Clinker — Project in the Pipeline

Name of Establishment:	Man Sait N'Jie Enterprise
Physical location (proposed)	Near Banjul Port
Principal Activity:	Grinding and bagging of Clinker
No. of Unit:	1
Employment:	1 General Manager
	3 Cement experts provided by Ciment d'origin
	12 Gambian Technicians
	14 " Skilled Workers
	25 Semi Skilled Workers
Total Employment	55
Production Capacity	120,000 tons per year
Annual Imports:	50,000 tons per year
Raw materials:	Clinker, Gypsum } to be imported
	Bags
Source of Energy:	GUC and a Standly Generator
Equipment:	Dedusting Dosing and bagging
Total investment:	D19.800.000

[illegible]

[illegible]

[illegible]	– [illegible]
[illegible] Pilot [illegible]	– [illegible] – [illegible]
[illegible]	– [illegible]
[illegible]	– [illegible] Govt. [illegible]
[illegible] of [illegible]	– [illegible] – [illegible] 1981/82
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