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INDUSTRIAL DEVELOPMENT PROMOTION AND PLANNING
DP/SIL/83/CO1
SIERRA LEONE

Terminal report*

Prepared for the Government of Sierra Leone
by the United Nations Industrial Development Organization,
acting as executing agency for the United Nations Development Programme

Based on the work of A.D. Monteiro,
industrial economist
and Mr. M. Raza Ali,
industrial engineer

United Nations Industrial Development Organization
Vienna

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Explanatory Note

Value of the local currency 'Leone':

1 US\$ = Leones 5.00 (June 1986)

Since July 1986 Leone is floating.

As of 18 July 1986: 1 US\$ = 24 Leones.

Abbreviations

CFTC	Commonwealth Fund for Technical Co-operation
CRS	Catholic Relief Services
CUSO	Canadian University Service Overseas
GCP	Growth Centre Programme
IDD	Industrial Development Department
IDU	Industrial Development Unit
IFC	International Finance Corporation
MTI	Ministry of Trade and Industry
NDB	National Development Bank
YWCA	Young Women's Christian Association

The project DP/SIL/83/001 - Industrial Development Promotion and Planning - was initiated in July 1983 and was scheduled to terminate in June 1986. However, the activities relating to the Growth Centre Programme emerging from the project are extended until the end of December 1986 when they will be incorporated in a new project DP/SIL/86/002 - The Growth Centre Programme.

The project was initiated and implemented at the request of the Government of Sierra Leone to assist the Government in establishing an institutional framework as well as a legal code for industrial development. During the first phase of the project lasting 18 months, an institutional framework in the form of the Industrial Development Department in the Ministry of Trade and Industry was established and the Development of Industries Act 1983, incorporating the legal and promotional aspects of industrial development, was drafted and passed into law by the National Parliament.

During the second phase of the project emphasis was placed on identification of new investment opportunities, preparation of project profiles, pre-feasibility studies, diagnostic studies and direct assistance to industries. An innovative entrepreneur development programme was conceived, formulated and initiated for implementation as a non-Governmental programme during this phase. This direct assistance activity has emerged as a new and continuing programme of assistance in the next country programme for Sierra Leone.

TABLE OF CONTENTS

	<u>Page</u>
Explanatory Notes	2
Abbreviations	2
INTRODUCTION	7
RECOMMENDATIONS	10
<u>PART I</u>	
INSTITUTIONAL AND LEGAL FRAMEWORK FOR INDUSTRIAL DEVELOPMENT	12
1. MAIN FEATURES OF THE DEVELOPMENT OF INDUSTRIES ACT 1983	12
2. THE FUNCTIONS AND RESPONSIBILITIES OF THE INDUSTRIAL DEVELOPMENT DEPARTMENT	18
3. PROPOSED DUTIES OF OFFICERS IN INDUSTRIAL DEVELOPMENT DEPARTMENT	21
4. CONCLUDING REMARKS IN RESPECT OF INSTITUTIONAL AND LEGAL FRAMEWORK	35
<u>PART II</u>	
DIRECT ASSISTANCE TO INDUSTRIES	36
1. TECHNICAL ASSISTANCE TO FIVE SELECTED INDUSTRIAL ENTERPRISES	36
2. AN OUTLINE OF THE INDUSTRIAL FINANCE REQUIREMENTS	39
3. PRE-FEASIBILITY STUDIES OR PROJECT PROFILES	40
(1) Cane Sugar	41
(2) Smoked Fish	45
(3) Urena Lobata	46
(4) Fruits and Vegetable Processing	46
(5) Agricultural Implements	48
(6) Project Profiles on Handloom and Powerlooms	51
(7)	
(8) (9) (10) Soap	53
(11) Garment Making	54
(12) Carpentry	54
(13) Jams and Marmelades	54

	<u>Page</u>
(14) Garri Making	55
(15) Paper from Agricultural Waste	55
(16) Clay Bricks	55
4. GUIDELINES FOR INVESTORS	57
5. GUIDELINES FOR PROJECT IDENTIFICATION AND AREA SURVEYS	57
6. ADVICE IN ESTABLISHING 'GROWTH CENTRES' FOR SMALL INDUSTRY EXTENSION WORK	58
7. TECHNOLOGY INFORMATION FACILITY	63

PART III

<u>THE MAIN PHASE OF DP/SIL/83/001</u>	
<u>INDUSTRIAL DEVELOPMENT PROMOTION AND PLANNING</u>	
	64
1. INCREASED CAPACITY TO PREPARE YEARLY REVIEW OF THE PROGRAMME, PROJECT PROFILES AND INVESTOR'S GUIDELINES	64
2. FIVE GROWTH CENTRES OF WHICH TWO TO BE IMPLEMENTED BY THE PROJECT AND GOVERNMENT AND THREE BY THE EUROPEAN DEVELOPMENT FUND WITH PARTIAL SUPPORT OF UNIDO'S PROJECT PERSONNEL	65
(i) WESTERN AREA GROWTH CENTRE	65
(a) Women in Industrial Development	67
(b) Tasso Island Growth Centre Activity	67
(c) Equipment and Raw Materials for the Growth Centre Programme	68
(d) Entrepreneur Promotion through the Western Area Growth Centre Programme	69

	<u>Page</u>
(ii) KPANDEBU GROWTH CENTRE - EASTERN PROVINCE	74
Examples for Entrepreneur Development in the Eastern Province	75
(iii) BINKOLO GROWTH CENTRE - NORTHERN PROVINCE	78
Examples for Entrepreneur Development Activities in the Northern Province	78
(iv) PUJEHUN GROWTH CENTRE - SOUTHERN PROVINCE	81
Examples for Entrepreneur Development Activities	81
3. DIAGNOSTIC REPORTS ON SELECTED INDUSTRIAL ENTERPRISES	85
UTILIZATION OF PROJECT RESULTS	86

ANNEXES

ANNEX 1: OUTLINE FOR AN AREA SURVEY	92
ANNEX 2: OUTLINE FOR A PREFEASIBILITY STUDY	97
ANNEX 3: OUTLINE FOR EVALUATING INDUSTRIAL PROJECTS	104

INTRODUCTION

The UNDP/UNIDO project DP/SIL/83/001 - Industrial Development Promotion and Planning - rendering assistance in industrial development to the Ministry of Trade and Industry, was initiated in July 1983 and was scheduled to terminate in June 1986. This project was preceded by two earlier projects and is a logical form of assistance following from them. The first project (SIL/78/002) which was initiated in 1978 and terminated in 1980 had achieved its main objectives of:

- (a) preparing an industrial review of Sierra Leone and highlighting the main problems faced by industries and making appropriate recommendations to overcome the problems;
- (b) preparing a legal framework in the form of a draft for an Industrial Development Act outlining the long-term industrial strategies and policies;
and
- (c) suggesting an institutional framework within the Ministry of Trade and Industry to implement the strategies outlined in the Draft Act.

The second Project in the Ministry of Trade and Industry - (SIL/80/007) - was initiated in July 1981 as a follow-up of the first Project. It was charged with the responsibility of assisting the Ministry in revising and refining the Draft Development of Industries Act and monitoring its enactment as law. This Project was also charged with the responsibility of assisting the Government in establishing the Industrial Development Department (the institutional framework suggested in SIL/78/002) to undertake industrial development activities in the country. The Project's development objective was "to initiate and sustain a process of industrial growth, mobilize resources, generate employment opportunities, contributing to a reduction of urban unemployment, contribute to foreign exchange earnings through export promotion and import substitution and develop indigenous entrepreneurship and managerial skills". Though these were laudable objectives they could not be achieved in full during the two years of the Project's duration. The Development of Industries Act was presented to the Parliament during the life of the Project but was not discussed. The preparations for establishing the Industrial Development Department were made during the period but it could only be established when the Development of Industries Act was passed as the establishment of the Department was an important element of the Act. The other major objective of the Project, of initiating and sustaining a process of industrial growth could be taken up only when the legal and institutional framework for industrial development were in place. Therefore, any future technical assistance to the industrial sector in Sierra Leone could be logically provided only if the activities undertaken since 1978 could be consolidated. The Preparatory Phase of DP/SIL/83/001 was therefore, geared to consolidating the gains of the earlier programmes of UNDP/UNIDO assistance.

The Project "Industrial Development Promotion and Planning" had two Phases. The Preparatory Phase starting from July 1983 and ending in December 1984, - a period of 18 months was meant to bring to conclusion, the activities initiated in the earlier Project (SIL/80/007) and to achieve in full its objectives. This was a necessary condition before any meaningful industrial development activities could be taken up by the UNDP/UNIDO in co-operation with the Ministry of Trade and Industry. An institutional framework as well as a legal code were considered to be the two most important **pillars** on which the future industrialization of Sierra Leone could be built. International institutions such as the World Bank and the International Labour Organisation in their Country Reports on Sierra Leone sharply focussed their attention on the absence of these two important requisites as the main causes for the lack of industrial investment activities in Sierra Leone. The UNDP/UNIDO Project therefore, adopted the specific immediate objective as "to consolidate the Ministry's structure for industrial development planning, industrial operations and small-scale industries development". The corresponding output to achieve this main objective was the "establishment of a functional Industrial Development Department to undertake initiation and assist the implementation of industrial development programme".

RECOMMENDATIONS

For the sake of convenience and appropriateness, the conclusions and recommendations have been included under each output. Here it is proposed to highlight the general conclusions and recommendations with respect to the over-all Project.

At the Tripartite Review Meeting in December 1985, it was agreed that assistance to the Ministry of Trade and Industry in institution building activities should not be continued beyond June 1986., as it would serve no useful purpose. The Industrial Development Department should be able to function on its own if it follows the advice and Operational Manual provided by the Advisers. This decision was arrived at after considerable analysis and indepth discussion. It is emphasized here again that this decision may be implemented to make the Department self-reliant and the Ministry of Trade and Industry in its own interest is recommended not to seek external assistance for this purpose.

It is recommended that future assistance in industrial development to Sierra Leone should give serious consideration in developing an aid package for small and medium-scale industries. The Growth Centre Programme, as it is emerging, ideally fits into this scheme. The decision arrived at at the TRM in December 1985 that the Growth Centre Programme will liaise with the Ministry of Trade and Industry with respect to industrial policy and with the Ministry of Finance, Development and Economic Planning in respect of technical assistance is innovative thinking in the Government in respect of implementing development programmes. This trend should be encouraged and supported.

This Growth Centre Programme is basically a programme to assist the small man at the grass-root level. This programme, as it is developing, will perhaps be a model for other African countries if it is implemented in the spirit with which it is conceived of initiating industrial development at the grass-roots.

The UNIDO Advisers have repeatedly recommended to the Government that the rules and regulations prepared for revenue collection and maintenance of law and order during the colonial days are not conducive to promote developmental activities. They have therefore to be modified to meet the new and emerging challenges and opportunities of development. In the same vein the Advisers would like to urge the concerned donor agencies to modify their rules and regulations formulated in alien situations to subserve the special requirements of the least developed among the developing countries like Sierra Leone with respect to the preconditions such as Government participation and Government support in establishing and promoting non-governmental organisations to implement development activities.

Development aid administered through old traditional regulations had resulted in the "trickle down" mechanism wherein only the crumbs reached the grass-roots, the poorest of the poor, the disabled and the neglected sections of society. Grass-root initiative and strategy as exemplified in the Growth Centre Programme needs new rules and regulations responsive to the new and emerging situations and conditions.

PART I

INSTITUTIONAL AND LEGAL FRAMEWORK
FOR INDUSTRIAL DEVELOPMENT

The Development of Industries Act which was approved by the national Parliament into law in September 1983 was a major achievement of UNDP/UNIDO assistance to the Ministry of Trade and Industry. Though the drafting of the Act was initiated under Project SIL/78/002 and further revised and refined under Project SIL/80/007, the main brunt of getting it approved was the joint responsibility of the Ministry of Trade and Industry and Project SIL/83/001.

The Development of Industries Act is a comprehensive piece of legislation on matters relating to industrial development and administration.

1. MAIN FEATURES OF THE DEVELOPMENT OF INDUSTRIES ACT 1983

The 1983 Act specifies that the following types of industries will be eligible for incentives and guarantees (Part III Section 7 of the Act):

- (a) export-oriented, resource-based industries;
- (b) resource-based industries designed to meet local requirements;
- (c) building material industries;
- (d) export-oriented partly based on imported materials and services; and
- (e) import-substitution industries, with capacity to save or earn foreign exchange and producing domestic value added measured in world market prices exceeding 30% of the finished products' value.

HIGH PRIORITY INDUSTRIES

Any industrial enterprise approved under this Act shall be fully protected and secured against nationalization except in the interest of national security and subject to the payment of prompt, fair and adequate compensation.

SUBMISSION AND APPROVAL OF PROJECTS

All applications to establish, expand or modernise industrial projects shall be submitted to the Minister of Trade and Industry for approval. An Application Form for this purpose is available with the Ministry of Trade and Industry. The application will contain a comprehensive feasibility study showing the economic viability of the proposed industrial establishment and describing the technology to be employed therein if the project involves an investment exceeding US Dollars 40,000 in machinery and equipment.

The Project Approval Committee consists of representatives from different Ministries and Public Institutions concerned with industrial development as well as representatives of the private sector.

INCENTIVES

Any project approved by the Project Approval Committee shall be entitled to the following incentives as per Part III Section 10 (a) to (e) of the Development of Industries Act 1983:-

- (a) preferential treatment with respect to the granting and processing of import licences;
- (b) partial or total exemption of customs duty payable on capital equipment, raw materials and other intermediate goods for those approved projects subject to the following conditions:-

- (i) in the case of capital equipment, if labour intensive techniques of production are not available as an alternative;
 - (ii) in the case of raw materials, if they are not available from domestic sources of supply;
 - (iii) in the case of intermediate goods, if they do not inhibit the creation of domestic value added;
- (c) relief by way of capital allowance. Capital allowances for machinery and equipment utilized in an industrial establishment will be an initial allowance of 25% and 10% thereafter per year during the tax holiday period. An investment allowance of 16% of the costs will be allowed and this will not be deductible in ascertaining the residue of the expenditure for the purposes of a balancing allowance or a balancing charge;
- (d) relief from surtax for a period not exceeding five years as may be determined by the Project Approval Committee. But the total surtax relief shall not exceed 150% of the original capital investment;
- (e) relief from income tax as determined by the Project Approval Committee for a period not exceeding five years and the total relief on this account not exceeding 150% of the original capital invested.

EXPORT PROMOTION INCENTIVES

Industries exporting an agreed percentage of their production will be eligible for:-

- (a) facilities under the Export Credit Guarantee Scheme as established by the Bank of Sierra Leone.

The Export Credit Guarantee Scheme covers all pre-shipment finance granted by credit institutions to exporters from Sierra Leone, of goods of Sierra Leone origin. Pre-shipment finance includes credit required to purchase, manufacture, process or pack goods for export.

The guarantee is issued for an amount indicated as the "Permitted Limit" which represents the outstanding limit up to which the credit institutions may grant pre-shipment finance to the exporter during the period the guarantee is in force.

In the event of the failure of an exporter to repay the guaranteed pre-shipment finance, the leading credit institutions are entitled to claim from the Export Credit Guarantee Institution a sum equivalent to 66²/₃% of the amount in default or of the "Permitted Limit" under the guarantee, whichever is less. The failure of the exporter could be either due to protracted default or insolvency.

- (b) export tariff exemptions under Customs Union arrangements if any industrial establishment registered under this Act secures such special status.

INCENTIVES TO TRAIN SIERRA LEONEANS

Industrial establishments are encouraged by the Act to train local people in the operation and management of the factories. The expenses incurred in such training are allowed to be deducted from the taxable income of the enterprises. In addition, if a foreign instructor is employed for such training in Sierra Leone, he is entitled for exemption from the Payroll Tax.

INCENTIVES FOR REGIONAL DEVELOPMENT

The Act provides incentives for industrial establishments to be located outside the Freetown area. These incentives include the preference for loan facilities from the National Development Bank, eligibility to obtain land and factory premises in the Provinces on rental basis and advisory services from the international and national agencies.

INCENTIVES TO INDIGENOUS ENTREPRENEURS

It is the policy of the Government to encourage and promote indigenous entrepreneurs. For this purpose, the Act stipulates that the Government will give preference in approving a project submitted by an indigenous entrepreneur. The foreign and expatriate employees of an indigenous enterprise will be exempted from Payroll Tax and such firms will be eligible to obtain loans from the National Development Bank up to a maximum of 75% of the cost of the project, subject to the Bank's normal appraisal and approval procedures.

GUARANTEES FOR FOREIGN CAPITAL

Industrial establishments having foreign participation with foreign capital investment will be permitted proportionate repatriation of profits or dividends every year subject to the exchange control regulations. When foreign investors liquidate their assets they will be accorded similar facilities.

ENCOURAGEMENT OF RESEARCH AND DEVELOPMENT

The expenditure incurred on research either by an enterprise or by a recognised institution on behalf of an enterprise, can be deducted from taxable income.

2. THE FUNCTIONS AND RESPONSIBILITIES OF
THE INDUSTRIAL DEVELOPMENT DEPARTMENT

As required in the Development of Industries Act 1983, the Government has established the Industrial Development Department in the Ministry of Trade and Industry and has appointed 14 key professional officers to man it. The important functions of the Department as outlined in the Act are:-

- (a) to attract and ensure local, foreign and expatriate investment in industry;
- (b) to initiate, generate and organise investment promotion activities to develop Sierra Leonean entrepreneurship;
- (c) to facilitate the growth of industry in areas outside the capital city of Freetown;
- (d) to promote, support and assist any type of industry for which incentives and guarantees are provided in this Act;
- (e) to promote and assist import substitution industries which offer higher value-added and positive balance of payment effects;
- (f) to register new or existing industrial establishments as provided for in this Act;
- (g) to create and establish a system of industrial licensing for the import of plant, machinery, raw materials and spares; and
- (h) to assist any industrial establishment registered under this Act to secure the status of a union industry under the protocols of the Mano River Union Agreement with a view to providing a larger market for its industrial products.

In a nutshell, the Department will identify new projects, assist in project preparation and implementation and monitor their progress. It will diagnose the problems faced by existing units and provide technical assistance either directly or through aid agencies to such units requesting for assistance. The Department is also assisting in the formulation of an innovative, grass-root and essentially rural based small-scale and handicraft entrepreneur development scheme through the Growth Centres implemented as a non-governmental programme.

MANUAL OF OPERATIONS FOR THE DEPARTMENT

The industrial development functions which the Department is expected to undertake are to a great extent new in the Ministry of Trade and Industry and some of them are even innovative. Therefore, the traditional industrial administrative practices are often not conducive and frequently time consuming for industrial promotion and development activities. Ideally the procedures and practices to be followed in the Department should be flexible and should be based on the concept of "Management by Objectives". However, in view of the fact that the Industrial Development Department is a part of the Ministry, the practices and procedures have to conform to certain accepted Government rules and regulations modified to meet the special requirements of development.

It was from these considerations and necessity that the UNIDO Advisers prepared a Manual of Operations for the Department and recommended it for adoption and implementation to the Ministry of Trade and Industry.

It was pointed out in the Manual that no system or procedure can be perfect. Every system of procedure needs modification and improvement in accordance with the experience gained during implementation and with the changing needs.

It must also be appreciated that no system or procedure can succeed in achieving the desired results, unless people responsible for its implementation realize its importance and its needs, and are sincere and dedicated in executing their responsibilities. After all, 'man' is the key to every programme and its success depends on the commitment, dedication and hard work of every person in the programme.

The Manual is meant to serve as a guide for the Ministry of Trade and Industry and its Industrial Development Department, which may be modified to meet the changing requirements. However, one important aspect should not be ignored and, that is, for efficient functioning of the Industrial Development Department, it is necessary for it to operate like an industrial consultancy and promotional organisation rather than as a typical government bureaucracy. It is equally important to encourage officers to take initiative and come up with new ideas rather than wait for directives from above.

The Manual emphasized that, it is imperative to maintain a close and continuous co-ordination and consultation between the Trade Division and the Industrial Development Department. In price fixation (if this practice is continued) the Planning Division and the Operations Division should be closely involved in working out realistic prices for the manufacturers rather than provide windfall profits to traders at the expense of consumers and manufacturers. In foreign exchange allocation for raw materials and in allocating import licences for consumer and manufactured goods, the Industrial Development Department should have a major responsibility for advising the Ministry.

3. PROPOSED DUTIES OF OFFICERS IN INDUSTRIAL
DEVELOPMENT DEPARTMENT

I. DIRECTOR (INDUSTRIAL DEVELOPMENT DEPARTMENT)

The Director shall be responsible to the Permanent Secretary in implementing the over-all functions of the Department. In co-operation with the Senior Deputy Director and the Deputy Directors in charge of individual Divisions, he will advise the Permanent Secretary in:-

- (a) industrial policy formulation;
- (b) industrial programme preparation and planning;
- (c) industrial promotion and development;
- (d) projects identification;
- (e) projects preparation;
- (f) projects evaluation;
- (g) projects implementation;
- (h) projects monitoring;
- (i) small and handicraft industries development;
- (j) industrial energy and materials conservation;
- (k) issuance of Development Certificates to industrial establishments;
- (l) registration of industrial establishments;
- (m) additional regulations that may be required to carry out the principles and objectives of the Development of Industries Act, 1983.

- (n) establishment of an Industrial Advisory Panel as stipulated in the Act;
- (o) liaise with the Bank of Sierra Leone and the Ministry of Finance in establishing a Stock Exchange in Sierra Leone as stipulated in the Act.

In addition to the above functions he will undertake the following:-

- review the progress of industrial projects approved by the Project Approval Committee;
- monitor the Training Programme for Sierra Leoneans in industrial establishments;
- act as Secretary to the Project Approval Committee;
- request information from Industrial Establishments as and when required;
- evaluate the performance of industrial establishments;
- promote regional industrial development and other supporting services required for industrial development in the country;
- co-ordinate regional and international organisations' activities with the Ministry (MRU, ECCWAS, UNIDO, CFTC, etc.);
- may represent the Permanent Secretary in National/Regional/International Meetings on matters relating to industrial development;

- training programme for the professional staff in the Department;
- co-ordinate the industrial development programme and projects which are in conformity with the National Development objectives with other Ministries concerned;

He will co-ordinate the functions and provide guidance and leadership to the following Divisions:-

- (i) Industrial Planning, Programming and Statistical Division;
- (ii) Small Industry Division;
- (iii) Industrial Operations Division; and
- (iv) Industrial Fuel and Material Conservation Division.

The Government has deferred the decision to establish the Industrial Fuel and Material Conservation Division to a future date.

It is important to appreciate that the Divisions in the Department are established in conformity with the Industrial Development Act 1983, on a functional basis. Therefore, the Schedule of Duties of the Officers in each Division should also reflect the functional responsibility of the Division. When more than one function is involved in an assignment, the concept of "Task Force" may be used.

II. SENIOR DEPUTY DIRECTOR

- (a) Preparation of the Development Budget for the Department;
- (b) Plan, organise and ensure logistic support (office accommodation; secretarial service, stationery, transport facilities etc.) for all personnel of the Industrial Development Department (IDD) and for short-term consultants coming for IDD's assistance from time to time.
- (c) Collection of Government notifications related to revision of rates of Customs and Excise Tariffs, Income Tax, Wages, Power, Water Currency, Protections, Concessions, Incentives, Investment and Capital Allowances, Import Policy etc. and provide copies to all Divisions of IDD for updating their reference record.
- (d) Follow-up action with other Ministries and Agencies with regards to IDD's requests for technical assistance, fellowships etc.
- (e) Follow-up action with the Establishment Secretary's Office with regard to promotions, confirmations, leave and other matters related to personnel of IDD.
- (f) Planning and organising seminars.
- (g) Organise weekly meetings of the Department.
- (h) Stand in for the Director, when the Director is on leave or out of the country.

III. DEPUTY DIRECTOR, INDUSTRIAL PLANNING DIVISION

- (a) Planning and scheduling of periodic work programme for all sections of the Planning Division, and monitoring its progress.
- (b) Guide the professional officers working under him, check and scrutinize their work.
- (c) Based on the analysis of Industrial Registration/Survey Questionnaires, data and statistics compiled by sections and in consultation with the Operations Division and the Small-Scale Industries Division, assess and recommend imported inputs required by industrial units for import licensing purposes to the Trade Division. This exercise is of utmost importance to ensure a healthy competition between local manufacturers and importers and to help avoid misuse of precious foreign exchange by the trade sector at the cost of idle capacity in the industrial sector.
- (d) On the basis of a thorough analysis of statistics, area studies, sector studies, available feasibility studies and industrial profiles and keeping the national development objectives in mind, and in consultation with the other two Divisions of the Industrial Development Department, prepare Industrial Development Plan for approval by the Ministry of Trade and Industry and submission to the Ministry of Finance, Development and Economic Planning.
- (e) Based on industrial surveys, and project implementation progress reports from Operations Division and Small-Scale Industry Division, prepare Annual Review of the performance of the industrial

sector for approval by the Ministry of Trade and Industry and submission to the Ministry of Finance, Development and Economic Planning.

Both the Development Plan and the Annual Review should indicate sector and area-wise investment involved, inter-relationship of the industrial sector to other sectors and to the national economy as a whole. They should quantify contribution to G.D.P.; employment generated, capital cost per worker, balance of payment effect, effect on Government revenue, as well as the problems faced in achieving targets and measures needed to overcome the problems.

- (f) Prepare monthly performance report for the Planning Division for submission to the Permanent Secretary, Ministry of Trade and Industry, through the Director.

The Deputy Director, Planning Division will be assisted by Senior Industrial Development Officers (SIDOs)/Industrial Development Officers (IDOs), whose specific duties and function areas follows:

1. SIDO/IDO Statistics & Market Analysis Section	2. SIDO/IDO Economic/ Financial Analysis Section	3. SIDO/IDO Industrial Planning Section
<ul style="list-style-type: none"> a) Collect/up-date statistics related to population, family incomes & household budget imports & exports (quantity & value) and local production b) Determine per capita consumption, projected demand and shortfalls. c) Collect/update: d) CIF prices of import items through independent sources, wholesale and retail prices of imported and locally produced items. e) Transportation costs per ton-mile. f) Costs of water, electric power, fuels and lubricants. g) Agricultural, Forest and Mineral Statistics (area, quantity & value prices). h) Average wage and salary scales of industrial workers and employees. i) Assist other sections/Divisions and industrial units in market studies and marketing problems. j) Explore export outlets. 	<ul style="list-style-type: none"> a) Collect/up-date Custom and Excise Tariff rates, depreciation and capital investment allowance rates prescribed by Income Tax Dept. Copies of the same to be furnished to all Divisions. b) Examine Industrial Survey/Registration Questionnaires received from industrial units & ensure all the data and information required is furnished by the units. Send copies of Questionnaires to Operations Division. c) Based on b), above determine true value added, balance of payment effect on Government revenue, employment & capital cost per worker. d) Commercial and economic evaluation of industrial projects/feasibility reports for new capacity or for expansion/diversification/balancing in existing units. 	<ul style="list-style-type: none"> a) On the basis of statistical data available, determine priorities, and prepare project profiles/pre-feasibility reports for large/medium/small scale manufacturing, processing units, determine investment estimate & expected benefits to the national economy. b) Based on a) and Area Studies, recommend categories, number of units, their locations and investment involved. c) Preparation of Government's request for the assistance for the development promotion and implementation of industrial projects, training programmes for nationals and technical assistance programmes.

SIDO = Senior Industrial Development Officer
 IDO = Industrial Development Officer

IV. DEPUTY DIRECTOR, INDUSTRIAL OPERATIONS DIVISION

- (a) Planning and scheduling periodic work programme for all sections of the Division and its progress monitoring.
- (b) Guide the professional officers working under him, check and scrutinise their work.
- (c) Based on technical/product cost analysis of the Industrial Registration Questionnaire and/or Survey, ascertain actual capacity, present utilization, optimum utilization possibilities, problems hindering optimum utilization and recommend remedial measures to be taken by (a) the unit and (b) by Government.
- (d) Depending on the rated capacity and the demand for its products, assess the genuine requirement of imported inputs, and the need for expatriate expertise if appropriate, and advise the Planning Division accordingly.
- (e) Participate in sector studies, followed by in-plant assistance programme for selected units.
- (f) In co-operation with the Planning Division, undertake detailed evaluation of project proposals/feasibility studies for new units and for expansion of existing units/or their diversification, and prepare recommendations for the Project Approval Committee.
- (g) Monitoring of project implementation schedules and assist in overcoming problems.
- (h) Monitoring the operation of the industrial protection policy - tariff rates, quota systems, quantitative import restrictions, etc. and their periodic review in co-operation with the Planning Division and the Small-Scale Industries Division.

- (i) Assist the Ministry of Trade and Industry in negotiating with local and foreign investors on selection of technology, project location, expatriate personnel requirement etc.
- (j) Explore possibilities of inter-firm co-operation and sub-contracting, to help maximizing capacity utilization, import substitution and export possibilities.
- (k) Collection and dissemination of technology information for industries, by liaising with technology development institutions abroad.
- (l) Prepare a monthly performance report of the Industrial Operations Division, reflecting actual work done, problems faced and remedial measures needed, for submission to the Director and the Permanent Secretary.

The Deputy Director, Industrial Operations Division will be assisted by Senior Industrial Engineer/Industrial Engineer and Senior Industrial Development Officer/Industrial Development Officer, whose specific duties and functions are as follows:-

1. SIE/IE Manufacturing/Processing Section	2. SIDO/IDO Cost/Accounting Section
<p>a) Based on Industrial Registration Questionnaires/Surveys, ascertain suitability and balancing of process and equipment, actual capacity/capacity utilization, genuine needs of imported inputs, power, fuel, skilled manpower etc.</p> <p>b) Explore and recommend possibilities for expansion/diversification to substitute imports.</p> <p>c) Render in-plant technical assistance in improving process/plant layout, maintenance and repair, reducing waste of inputs, increasing production and productivity and improving quality of products.</p> <p>d) Conduct sector studies.</p> <p>e) Prepare project profiles.</p> <p>f) Assist Deputy Director in project implementation monitoring.</p>	<p>a) Collect/update rates of depreciation, investment allowances; and other cost items allowed by the Income Tax Department as expenses towards manufacturing/processing, and furnish copies of the same to other Divisions for ready reference.</p> <p>b) On receipt of Questionnaires from industrial units, analyse product costs and selling prices of the products/services.</p> <p>c) Evaluation of project proposals from costing angle.</p> <p>d) Assist other Divisions and sections in costing element in project profiles/prefeasibility studies.</p> <p>e) In-plant diagnosis of product costing and cost controls.</p> <p>f) Counselling existing industries in inventory control, accounting procedures and product costing.</p>

SIE = Senior Industrial Engineer

IE = Industrial Engineer

V. DEPUTY DIRECTOR, SMALL-SCALE INDUSTRY DIVISION

- (a) Planning and scheduling of periodic work programme for all sections and its monitoring.
- (b) Guide the professional officers working under him, check and scrutinize their work.
- (c) Plan, initiate and monitor in-country training for up-grading of small-scale and handicrafts extension workers of his Division and arrange for their early placement in the Provinces. Priority of trades should be: 1. Blacksmithy (for agricultural handtools, 2. Tailoring, 3. Carpentry, 4. Soap making 5. Clay bricks and Roof tiles, 6. Sheet metal fabrication.
- (d) Rigorously follow up Ministry of Trade and Industry's request for technical and financial assistance for the Growth Centres Development and Expansion Programme.
- (e) Initiate Area Studies in co-operation with the Planning Division for the purpose of realistic planning and promotion of small-scale industries in the Provinces at the District level and Western Area. While conducting such studies, small-scale enterprises should also be registered to facilitate planning and direct assistance programmes.
- (f) Policy formulation for the small-scale and handicrafts industry development and promotion, in co-operation with Planning and Operations Divisions.
- (g) Initiate preparation of small-scale industrial profiles.
- (h) Enlist patronage of aid agencies, Government Ministries and large business houses, for the purpose of sales promotion of small-scale industry

and handicrafts products such as: agricultural handtools, grain silos and para-boilers, furniture and uniforms.

- (i) Following the registration of small-scale enterprises, organise formation of trade-wise association, to facilitate bulk import possibilities and in seeking foreign assistance for the development and promotion of small-scale sector.
- (j) Formulate concrete small-scale industry assistance projects for seeking assistance from international aid agencies and friendly countries.
- (k) Initiate in-plant assistance programme for small-scale industry enterprises.
- (l) Prepare policies and strategies for the Growth Centres Programme in the Provinces and Western Area and monitor their progress to function as NGOs.
- (m) Initiate technology adaptation in small-scale industry sector.
- (n) Prepare monthly performance report for his Division for submission to the Permanent Secretary, Ministry of Trade and Industry.

The Deputy Director Small-Scale Industry Division will be assisted by SIE/IE and SIBO/IDO, whose duties and functions will be as follows:-

1. SIE/IE Small Industry Development Section	2. SIDO/IDO Small Industry Management and Marketing Section
<ul style="list-style-type: none">a) Conduct area studies and sector studies while at the same time register small-scale enterprises.b) Analyse the registration forms and determine their genuine requirements of equipment and raw materials, technical problems.c) Prepare small-scale industry profiles, and evaluate small-scale industry project proposals.d) Design extension centres, common facility centres and small industry estates.e) Render technical assistance to small-scale entrepreneurs such as selection of technology, equipment and raw materials, factory layout and installation, equipment operation and maintenance waste reduction, and quality improvement techniques.f) Promote inter firm co-operation and sub-contracting.g) Design, implementation and monitoring of Training Programmes for extension workers and small industry craftsmen.h) Assist in adopting improved technology, better designs and new product lines.	<ul style="list-style-type: none">a) In co-operation with the Planning Division conduct area studies, prepare small industry profiles and evaluate small-scale industry projects proposals.b) In co-operation with the Development Section, analyse small industry registration forms and determine their genuine requirements of imported inputs and furnish the same to Planning Division.c) Procurement assistance of equipment and raw materials for Growth Centre Programme and assisting of their distribution through NGO.d) Design and introduce simple management, inventory control costing systems, procedures and form in small-scale enterprises and Growth Centres.e) Render in-plant assistance to small-scale enterprises in the area of management and marketing.

Having outlined the functions of each Division and responsibilities of each officer in the context of the over-all objectives of the Industrial Development Department, the advisers also laid down procedures for registering, analysis and follow-up of the problems and programmes of existing enterprises. Questionnaires were prepared for this purpose.

A Format for Issuing a Development Certificate was prepared and included in the Manual.

An Application Form incorporating the main elements of a Prefeasibility Study for prospective investors was prepared and included in the Manual.

The Manual also included (a) Outline for an Area Survey, (b) Outline for a Pre-feasibility Study and (c) Outline for Evaluating Industrial Projects. These outlines are annexed to this Report.

4. CONCLUDING REMARKS IN RESPECT OF INSTITUTIONAL AND LEGAL FRAMEWORK

Building up an institution geared to industrial development and promotion activities and drafting a legal framework to provide guarantees and incentives to investors were challenging tasks. Frustrations and disappointments were frequent companions in this exercise before reaching the final goal. The UNIDO Advisers and the Government Officers who worked with them had accepted these challenges, experienced disappointments and frustrations on the way. But at the end they have come out victorious and delivered the goods. Now it is for the Government to make this Department operational, useful and effective. A sense of dedication, commitment and hard work are basic requirements in industrial development and nation-building activities. These qualities must be generated from within the society. External assistance can only provide the initial catalysts. It is not enough to have a legal framework for industrial development on paper. Its usefulness will be judged by the way its provisions are implemented to achieve the overall developmental objective.

PART II

DIRECT ASSISTANCE TO INDUSTRIES

1. TECHNICAL ASSISTANCE TO FIVE SELECTED INDUSTRIAL ENTERPRISES

Since SIL/83/001 was implemented in two phases and its main development objectives comprised both institution building and direct assistance, this Report has treated these objectives under separate Parts. Part I summarizes the achievements of the Project in respect of institution building and formulation of a legal framework for industrial development. Part II summarizes the major activities and outputs in respect of direct assistance. Immediate objective II of the Preparatory Phase of the Project was :

"TO PROVIDE TECHNICAL ASSISTANCE TO FIVE SELECTED INDUSTRIAL ENTERPRISES HAVING WEIGHT IN THE INDUSTRIAL OUTPUT OF THEIR RESPECTIVE INDUSTRIAL SUB-SECTOR WITH A VIEW TO IMPROVE THEIR INDUSTRIAL PERFORMANCE"

The Project undertook a diagnostic analysis of the following six industrial units having productivity problems:-

- 1) Integrated Fish Meal Company
- 2) Sierra Leone Investment Co. Ltd.
- 3) Solar Salt Processing Unit at Suen
- 4) Osman Thomas & Sons Mattress Factory
- 5) Building Stones and Tiles Unit
- 6) Sierra Leone Knitting Factory

The summary of the main findings are as follows:-

- 1) Integrated Fish Meal Company is closed and is in the custody, of the National Development Bank. Its rehabilitation primarily involves relocation to a more appropriate site and using its facilities such as 1000 tons of deep freezing capacity,

- 600 KVA generator, 5000 gallons fuel tank, 40 tons chilling capacity and a well-equipped workshops etc. The National Development Bank is advised and efforts are made to find investors who are prepared to purchase these facilities.
- 2) Sierra Leone Investment Co. Ltd. producing men's garments including suits, trousers, shirts, dressing gowns etc. was running at a fraction of its capacity because of some problems in connection with its export programme. The project identified a foreign partner who had agreed to supply the fabrics and take the garments for export. A trial order was made.
 - 3) Solar Salt Processing Unit at Suen. This unit is lying almost idle for a long time. At the Project's initiative, a team of Salt Consultants were obtained through the Commonwealth Fund for Technical Co-operation. Report and their recommendations are awaited.
 - 4) The Osman Thomas Mattress Factory has stopped production both because of management problem and lack of foreign exchange to import raw materials. With respect to raw materials, the use of coconut fibre (coir) is being considered. A project proposal for coir processing is put up for CFTC financing. Management assistance will be considered when the raw material problem is solved.
 - 5) Building Stones and Flooring Tiles Unit is at an experimental stage but offers vast scope for future development. As most of the building materials are imported, the urgent development of this industry is of critical importance because of the foreign exchange situation. A project proposal to establish a commercially viable pilot project to the UNIDO could not be implemented because of financial constraints. This proposal has now been submitted to the Commonwealth Fund for Technical Co-operation.

- 6) Sierra Leone Knitting Factory was having capacity utilization problem mainly because of the raw material supply. The unit has good management as well as excellent infrastructure. A suggestion to diversify into fabrics manufacture for gara dyeing was made to the unit and was accepted in principle.

Besides the above, a full-scale investigation was done on the Mabole Fruit Factory through SIS assistance of UNIDO. The Mabole Fruit Factory was established without taking fully into account the locational and raw material supply factors. Furthermore, all the equipment needed for the processing of oranges was not supplied and it was operated by a weak management. The Factory was not able to produce products of acceptable quality and therefore made losses and closed down within a short time of opening its doors to process the fruits. The buildings, machinery and equipment are in good condition and adequate raw materials are now available for processing. The UNIDO study has recommended some new equipment to be installed and the factory re-started under a new management. It has demonstrated that the factory will be able to achieve profitability within a reasonable time. The Consultants have recommended that the National Development Bank which owns the Factory should put the Factory into operation and then offer it for sale to prospective investors. The National Development Bank has yet to react to these recommendations.

A diagnostic file for each factory proposed to be studied was prepared to facilitate **case** studies and to use as reference material for the future.

2. AN OUTLINE OF THE INDUSTRIAL FINANCE REQUIREMENTS

The Project staff had prepared a draft Development Plan for the Manufacturing Sector for the period 1981-82 to 1985-86. It was estimated that if the projects recommended in the draft Plan were to be put on stream, a total investment of Leones 233 millions would be needed over the five year period.

The total importation of raw materials and spares would have required Le116 million in foreign exchange.

But as events turned out, these estimates became theoretical as the draft Development Plan did not see the light of the day. However, the Project staff realized that the industrial financing problems of the small and medium enterprises needed urgent national attention in view of the apparent redundancy of the National Development Bank. A proposal for a new institution was presented for inclusion in the proposed Donors' Round Table Document. This proposal was also discussed by the Project personnel with the visiting World Bank staff members. This resulted in the World Bank providing US\$50,000 to prepare a Feasibility Study for the establishment of an Industrial Development and Finance Company to assist the development of small-scale and medium enterprises in the country.

The World Bank sponsored Consultants have established the need for a new institution to take care of the development and commercial aspects of the medium and small industrial enterprises. They have recommended that the proposed non-governmental organisation should have three distinct functional departments i.e., (a) Development Department, (b) Commercial Department and (c) Management Services Department. The **Development Department** will undertake non-revenue earning functions such as providing technical and advisory services, research activities and entrepreneur training programmes for industries. It will also act as an agent of the Government

to receive and manage external assistance for the development of small and medium enterprises. The Commercial Department will be the financing arm of the company and will provide short and medium term loans by way of hire-purchase or loan agreement. It will also undertake merchandising activities by either purchasing locally or importation adequate stocks of small machines, equipment and raw materials sufficient to service the needs of the priority industries. The Management Service Department will maintain the accounts of the company; control, distribute and monitor the use of aid funds and liaise with aid agencies and donor countries with respect to aid funds.

The Government is now considering the recommendations of the Consultants and it is likely that EEC assistance under Lome II and Lome III for the industrial sector will be utilized to establish the proposed non-governmental organization.

3. PRE-FEASIBILITY STUDIES OR PROJECT PROFILES

Project personnel realized that Prefeasibility Studies and Project Profiles are basic documents required by prospective investors before taking any informed decisions. Therefore, efforts were made to obtain technical assistance from other donor agencies such as the Industrial Development Unit of the Commonwealth Fund for Technical Co-operation and the Islamic Development Bank for this purpose.

The following 16 studies were completed during the period:-

1. Feasibility Study on Cane Sugar
2. Feasibility Study on Smoked Fish
3. Project Profile on Urena Lobata
4. Opportunity Study on Fruits and Vegetable Processing
5. Opportunity Study on Agricultural Implements
6. Project Profile on Powerlooms
7. Project Profile on Handlooms

(1) to (7) were initiated by the Project personnel and prepared with technical assistance from the Commonwealth Secretariat.

8. Project Profile on 25 kgs. soap per day
9. 50 kgs. soap per day
10. 90 kgs. soap per day
11. Project Profile on Garment Making
12. Project Profile on Carpentry
13. Project Profile on Jams/Marmalades
14. Prefeasibility Study on Garri Making initiated by the Project, prepared under SIS assistance
15. Project Profile on Clay Bricks
16. Paper from Agricultural Waste with assistance from Islamic Development Bank.

A brief summary of some of the important among the above studies would be relevant for record purposes.

(I) CANE SUGAR MANUFACTURE

The Report has suggested that establishment of a sugar plantation and sugar project deserve highest priority to enable the country achieve self-sufficiency in sugar at the earliest in view of the growing foreign exchange difficulties which the country is facing at present. It is significant to note that the United Nations Multi-Agency Mission which visited Sierra Leone in March 1983 has recommended a number of projects which need external assistance and of these sugar project is considered especially urgent. The project for setting up a sugar factory and plantation is estimated to cost around US\$41 million by the UN Mission.

NATIONAL REQUIREMENT FOR SUGAR

The present demand of sugar in Sierra Leone is estimated at 29,000 tonnes per year. The Magbass Sugar Company which was commissioned in 1981 was expected to reach a production level of 7,000 tonnes of sugar in April, 1983. Thus the

country will have a gap of 22,000 tonnes of sugar which will have to be met through imports. The gap is estimated to increase considerably and involve use of foreign exchange.

The shortfall of country's requirement which is estimated around 30,000 tonnes in 1995 can be met only by setting up a new sugar project (with a built-in capacity of 25,000 tonnes per annum) and increasing capacity of Magbass from 7,000 tonnes to 12,000 tonnes per annum.

The project is so planned as to avoid any displacement of people or villages. Care is taken to ensure that land which is currently utilised for growing commercial crops is not touched as far as possible for cultivating sugar cane.

The project is estimated to cost at around US\$37 million of which US\$31 million is foreign exchange. The cost includes land development, building, machinery for sugar manufacturing and the sugar plantation and the irrigation/drainage facilities required. A fairly high number of qualified expatriate staff is considered necessary for the initial years of the project and a total housing for staff is planned.

The financing pattern proposed to be assumed is loan for meeting the foreign exchange component and equity for the local currency cost; while the loan for infrastructure facilities would carry an interest rate of 5% per annum on softer basis, the rate for meeting other foreign exchange cost for machinery would be around 10% per annum.

PROPOSED SITE FOR SUGAR COMPLEX

The proposed recommended site for factory and sugar plantation is located in the Chiefdoms of either Kumrabai Mammila and Yoni (about 100 miles from Freetown) near the Pampania River which is well connected by road. The location

has been preferred after a study conducted by the Team of various regions of the country in respect of climate, soil, topography, availability of irrigation and drainage facilities and future potential development of the area, besides the cost considerations. It has been informally ascertained that a fairly flat well drained stretch of land ad-measuring about 20,000 acres is available which would not involve any displacement of present commercial crop cultivation. This would also take care of future development and capacity expansion of the sugar complex.

AVAILABILITY OF SUGAR CANE

Based on an average cane yield of 25 tonnes per acre, taking into account the plant and rotation of crops, 180,000 tonnes of sugar cane from an area of 7,200 acres will be available and sugar cane production will be increased further with expansion of cane area to meet any increase in the requirement of sugar cane by the factory.

DURATION OF OPERATION

Looking to the climatic conditions, cane crushing season between mid-November to April can be considered satisfactory. Taking into account holidays and cleaning period/plant shut-downs, out of 160 days of gross duration a period of about 140 days of actual crushing is quite feasible.

CRUSHING CAPACITY

Based on the expected duration of crushing operations, a plant having a cane crushing capacity of 1,250 tonnes cane per day or 58 tonnes of cane per hour (based on capacity of producing 18,000 tonnes of sugar annually) 22 hours working is being recommended.

Special conditions regarding lack of infrastructure and non-availability of trained personnel existing in Sierra Leone have very carefully taken into account, while selecting of the processes technology and machinery.

A significant feature of the plant is that there is an in-built capacity to increase cane crushing to a level of more than 2,000 tonnes of cane per day (producing 25,000 tonnes of sugar annually) by installing a few additional pieces of equipment.

SCHEDULE OF IMPLEMENTATION

Erection will start in the middle of project year one and finish before the dry season in the project year three. The total time taken for the completion of the project would be 3 years.

The optimal capacity of sugar produced in the 4th year of project would be 15,300 tonnes and producing 18,000 tonnes in the 5th year. This would yield revenue of Leones 27,540,000 at the assumed price of Le1,800 per tonne.

MAGBASS SUGAR COMPLEX - PROPOSAL TO INCREASE PRODUCTION

The Magbass Sugar Factory is designed to crush 400 tonnes of cane per day only. However, with improvements it produced 7,300 tonnes of sugar in 1981-82 and 6,000 tonnes in 1982-83. The present equipment puts a constraint on any further increase in the production. In the opinion of the Team it is possible to increase the production up to 10,000 tonnes of sugar per annum and particularly more so because of the available adequate land for cultivation of sugar cane and other facilities.

INSTALLATION OF ADDITIONAL MACHINERY/BALANCING EQUIPMENT

The details of the machinery/equipment to be finished would need to be checked with the technical details and plant and process performance data which could not be made available to the Team. It is proposed that an independent study should be undertaken immediately with a view to finalising the machinery and other plans for expansion of the unit. This would need technical discussions with the Chinese experts who are managing the entire complex. This proposal needs to be considered by the Government on top priority.

STATUS OF THE STUDY

The Government of Sierra Leone had informal discussions with the Government of India wherein it was informally agreed that India would provide a sugar factory on turn-key on deferred payment basis. The Commonwealth Fund for Technical Co-operation was favourably considering the possibilities of providing technical assistance in respect of training and pre-factory erection activities. The Paramount Chief and the community at Kumrabai Mammila were quite enthused by the prospects of a sugar mill in their area. But the Government of Sierra Leone has not followed up this proposal.

(2) FEASIBILITY STUDY ON SMOKED FISH

A Feasibility Study on Smoked Fish was prepared with the help of the CFTC Consultant. The Study established that there was a protein deficiency in the dietary requirements of the people in the country. This deficiency was all the more apparent in the rural areas where it was difficult to supply fish which was the main source of protein, because of the difficulties of transportation and preservation of fish. The Study has recommended the establishment of a number of modern smoked fish units with 1 ton capacity each per day. The total investment per unit was estimated at £300,000 including building and cold storage facilities.

STATUS OF THE REPORT

The Consultant with the help of the Project personnel identified two prospective investors. An investment agency in the UK had in principle agreed to provide long-term loan up to £1 million for this industry. One investor has gone ahead with a proposal to obtain the own supply of fish by securing a fleet of trawlers.

A consultant was hired to prepare a proposal for IFC financing. The other investor is still in correspondence with the consultant and the financing agency.

The Industrial Development Department should follow-up these proposals and promote the projects.

(3) PROJECT PROPOSAL ON URENA LOBATA

Urena lobata is a long-staple locally available fibre which can be a substitute for jute. The report recommended that the urena lobata plant should be locally grown on a commercial scale and the fibre initially used to produce items of domestic use and tourist attractions. Table mats, carpets, ladies handbags etc. were proposed. When the fibre could be grown on a commercial scale packaging material for cement and sugar could be considered.

STATUS OF THE REPORT

The Commonwealth Secretariat has agreed to assist the Government of Sierra Leone in putting up a Pilot Plant to produce urena lobata at Mambolo. The equipment is being ordered from Calcutta, India.

The Industrial Development Department should follow-up with the Industrial Development Unit of the CFTC for obtaining the equipment to set up the Pilot Plant and with the Mambolo Paramount Chief and the rural community to grow urena lobata on a large scale and prepare the fibre.

(4) OPPORTUNITY STUDY ON DEVELOPMENT OF FRUIT, VEGETABLE AND COFFEE PROCESSING INDUSTRIES

This report prepared in co-operation with the Consultants from the CFTC deals with a number of activities, such as:-

(a) Roast and Ground Coffee. It is stated that the market for roasted and grounded coffee in Freetown is satisfactorily catered for. But an estimated demand of 50 tons in the Eastern Province and prospective exports to Liberia may warrant two processing units of 39 and 75.5 tons each. Investments required are £22,000 and £25,000 respectively.

(b) Jams and Jellies. The report has not recommended small-scale jam manufacture for the present time.

(c) Juices Imports of fruit and vegetable juices in 1981 amounted to 236 tons. In addition, there are opportunities to substitute 80 million bottles of soft drinks with sterilized orange juices. An investment of £440,000 to produce 2.1 million 250 ml. cartons would give a return of £92,000.

While the future of Mabole Fruit Factory hangs in the balance, it may be difficult to induce investors into similar activities.

(d) Tomato Paste. Sierra Leone imports 3-4000 tons of tomato paste per year. The report recommended trials for growing different varieties of tomatoes in different parts of the country. Varieties of seeds were obtained through the CFTC and distributed for trial cultivation through the Ministry of Agriculture. Though good results were apparently obtained during the first trials, it is not known whether these trials were repeated and results tabulated. The Industrial Development Department has neither monitored nor followed up this exercise.

(e) Other Fruit Processing. The report has concluded that opportunities for processing other fruits are limited and has recommended the export of fresh pineapples.

(f) Onion Growing and Processing. Currently 5-6000 tons of onions are imported per annum. A feasibility study is recommended for growing, storing, preserving and alternatives such as kibbling and drying of onions.

STATUS OF THE REPORT

No follow-up action is initiated by the Industrial Development Department on the Fruit, Vegetable and Coffee Processing proposals presented in the CFTC Consultant's report. The Industrial Operations Division in the IDD appears to be floating aimlessly and has apparently no work programme related to its functions. This Division should undertake the follow-up activities on all proposals and projects in the pipeline.

(5) OPPORTUNITY STUDY ON AGRICULTURAL IMPLEMENTS

The study on the manufacture of agricultural implements was done by the CFTC Consultant and was initiated by the Project personnel. The main findings are as follows:-

Handtools are the predominant agricultural implements in use in Sierra Leone today and will continue to be important in the foreseeable future. Handtools can be classified with respect to usage - cultivation tools and cutting tools. Tools used primarily for cultivation such as hoes, forks and shovels of various configurations, predominate on small farms of less than 2 hectares operating at subsistence level. These tools are used entirely with manual labour for soil preparation, plating and weed control operations. The demand estimates for hand tools quoted by the author from another study are as follows:-

DEMAND ESTIMATES FOR HAND TOOLS
(000 NOS.)

<u>Implement</u>	<u>Present Stock</u> (Millions)	<u>Estimated Annual Demand</u> (000 Nos.)
Machette	1.5	117
Hoes	1.2	105
Shovels/Spades	2.5	140
Pickaxes	0.85	90
Felling Axes	0.85	45
Sickles	2.75	115
Forks	0.30	30
Rakes	0.25	30
Barrows	0.30	17

The Consultant has stated that for simetime to come Sierra Leone will continue to be dependant on village blacksmiths for vital supply of farming handtools. A case is made to organise and upgrade village forge shops of blacksmiths. For this purpose the supply of forge steel is important. It is recommended that centralized purchasing of forge steel should be made as non-availability of forge steel is the greatest constraint to the quality of the product and continuity of operation of otherwise "unorganised" village forges.

STATUS OF RECOMMENDATIONS

The Growth Centre Programme has taken note of the findings and recommendations of the Consultant and has made plans to assist 45 blacksmiths in the country with improved tools, raw materials and technical assistance as well as management extension facilities.

FOOD PROCESSING MACHINERY

The report has suggested that there is sufficient market in Sierra Leone to produce food processing machines such as:

Rice Thresher (pedal) 1000 per year

Rice Huller 500 per year

Rice Winnover 1000 per year

Cassava Grater 1000 per year

National Workshop, Raymond Garage and Tikonko Agricultural Extension Centre have all had experience in producing prototypes of such machines.

GRAIN STORAGE SYSTEMS AND DRYERS

It is estimated that grain loss in post-harvest storage is up to 30% of the grain harvested in Sierra Leone.

Grain storage methods comprise bamboo or mud constructed circular grain store built on a platform off the ground (to allow for air circulation) with grass or corrugated sheet metal roofing.

A significant factor concerning grain storage is the need to separate storage of seed grain from food grain.

There are prospects to construct metal silos and dryers. It is suggested that a production of 200 units per year would be economically viable.

OX-DRAWN FARMING IMPLEMENTS

In 1984 there were 250 pairs of trained oxen and a programme to train additional 250 oxen pairs per year. It is stated that both the National Workshop and Raymond Garage are capable of manufacturing ox-drawn implements. The Consultant has recommended that the National Workshop/ Raymond Garage should establish relationship with SISMAR a Belgian owned Company operating in Senegal and producing good quality ox-driven implements.

(6) & (7) PROJECT PROFILES ON HANDLOOMS AND POWERLOOMS

Project profiles on powerlooms and automatic handlooms were prepared with CFTC technical assistance. It was established that 20 powerlooms with all the accessories costing about \$80,000 would be a viable unit. The value added and profitability would be higher if grey fabrics were produced on these looms and gara dyed.

As a result of the recommendations of the Consultants, the CFTC, has provided four powerlooms and four automatic handlooms with adequate yarn and two technicians to initiate a textile fabrics manufacturing programme in the country. During the course of one year, the technicians have trained 14 weavers in powerloom and automatic handloom weaving. This is the first batch of weavers with this expertise in the country. 3000 yards of cloth was woven on this equipment and the sale proceeds deposited in the Western Area Growth Centre Account. The Commonwealth Secretariat has provided additional 3 tons of yarn to train the weavers for commercial production. As a result of this operation, an estimated 120,000 Leones will be saved into the Western Area Growth Centre Programme.

STATUS OF THE PROFILES

PRIVATE SECTOR INITIATIVE IN TEXTILE FABRICS

The pilot textile fabrics manufacturing activity has evoked the interest of Sayenu Textiles in deciding to put up a powerloom unit in Freetown as a diversification activity of their existing garment unit. They have been granted permission to put up the project by the Ministry of Trade and Industry.

THE SPONSORS

The sponsors of the project are Sayenu Industries Ltd. owned by Mr. & Mrs. Foday Sesay - an enthusiastic Sierra Leonean couple. They have demonstrated their capability as reliable entrepreneurs by graduating from a tailoring unit to a modern garment making unit within a short period.

The Ministry of Trade and Industry in appreciation of the potential of the firm provided assistance to the unit through UNIDO to facilitate their transition from a tailoring shop to a modern garment factory.

The sponsors are proposing to set up a fabrics manufacturing unit by establishing 20 powerlooms as per the technical feasibility study prepared by the CFTC.

The Company proposes to produce 250,000 meters of cloth per year on a two-shift basis.

INVESTMENT

The total cost of machinery and equipment is estimated at Le388,000 while the total capital investment of the project including land, building pre-operational expenses etc. will be Le1.1 million.

The greatest advantages the sponsors have are the buildings, generator, boilers, and other infrastructure facilities and therefore, the project can start within a short time.

DEMAND ESTIMATE

It is estimated that the total demand for textile fabrics for personal use in the country is around 24.5 million meters.

Roughly it is estimated that 30% of this demand is for printed and dyed cloth which works out to 7.35 million meters. The project proposed by M/S Sayenu Textiles will only produce 250,000 meters or 3.4% of the total demand for such products. Therefore, there is scope for putting up nearly 30 such units on decentralized basis in the country.

AUTOMATIC HANDLOOMS

The initiative of the Project SIL/83/001 to bring in powerlooms and handlooms in the country has generated interest among prospective investors in the country.

The Paramount Chief of Dama Chiefdom, after seeing the automatic handlooms has made a request through the Kpandebu Growth Centre Planning and Development Committee that such looms should be set up in the Growth Centre Programme Production-cum-Training Workshop in Kpandebu.

(8), (9) & (10) PROJECT PROFILES ON 25, 50 AND 90
KGS. OF LAUNDRY SOAP PER DAY

Improved designs of equipment for the above three capacities of soap were prepared by the UNIDO Industrial Engineer. They were tried and found suitable for cottage and small soap making enterprises. The technique of soap making was evolved with the help of an experienced soap maker from a well established international soap company. A local metal worker was initiated into fabricating the soap equipment. Training in the use of the new equipment and the improved techniques of soap making was provided to over 100 people during 2 years.

At the end of May 1986, over fifty sets of improved soap making equipment were provided to individual entrepreneurs. 76 new soap makers are now registered with the Small Industries Division. These entrepreneurs have either improved equipment or improved soap making techniques or both from the Project's activities.

Non-Governmental Organisations such as Plan International and CUSO have also secured the new soap equipment and trained their people in improved soap making techniques. These institutions have popularized this trade with the Women's Group and Functional Literacy Groups.

(11) PROJECT PROFILE ON GARMENT MAKING

A Project Profile on Garment Making was prepared in partnership with a prospective woman entrepreneur with poliomyelitis handicap. The woman has diversified her production activities and is employing five workers. She has also provided training to a few other women. This woman (ms. Khadijatu Conteh) was assisted under the Western Area Growth Centre Programme.

(12) PROJECT PROFILE ON CARPENTRY

The Project Profile on Carpentry was also prepared in partnership with the prospective entrepreneur Mr. Simeon Patrick, who is partially blind. This carpenter was assisted under the Western Area Growth Centre Programme. A workshop of 10 x 15 feet was erected for him. The UN Women's Association provided him with a tool kit through the Project personnel and timber worth Leones 300 (US\$60) was provided as loan under the Western Area Growth Centre Programme. At the end of May 1986, after 14 months of operation, the carpenter has set himself up well in business. He has saved enough to extend his workshop by another 300 sq. ft.; he is employing four other carpenters and has two apprentices. His clientele consist of embassies, Red Cross, Banks and others.

(13) PROJECT PROFILE ON JAMS AND MARMALADES

The Project Profile on Jams and Marmalades was also done in partnership with a woman entrepreneur, Mrs. Fenda Akiwumi. This lady has displayed tremendous ingenuity in utilizing locally available fruits to produce jams and marmalades of quality comparable to products of well established brand names. She was given some technical assistance in respect of packaging. Product diversification to cover mango pickles and ginger preserves were suggested. She has already initiated some trial production in these lines. Her products are presently sold to the tourist hotels in Freetown. It has been decided to provide her with some basic equipment under the Growth Centre Programme on a loan basis.

(14) PREFEASIBILITY STUDY ON GARRI MAKING

This Prefeasibility Study was initiated by the Project under UNIDO's SIS programme. A Consultant from Brazil, which has a well established garri industry was engaged for this purpose. The Consultant evaluated the cassava growing and garri production processes in the country and has established the need for a modern small-scale garri making pilot plant.

UNIDO has ordered US\$39,000 worth of complete garri making equipment from Brazil. It is proposed to establish this unit under private ownership within the Growth Centre Programme. It is agreed at the Tripartite Review Meeting in December 1985 that a UN Volunteer will be provided from SIL/83/001 budget to assist in the processing of cassava into garri.

(15) PAPER FROM AGRICULTURAL WASTE

The idea to prepare a Prefeasibility Study based on agricultural waste originated within the Project. The terms of reference for the Study were prepared by the Project personnel and the idea was sold to the Islamic Development Bank. This Study financed by the Bank was undertaken by SANDWELL - a reputable Canadian Firm which has established the viability of a small paper mill based on rice straw. This Study is being examined by the Government.

(16) PROJECT PROFILE ON CLAY BRICK MANUFACTURE

A brick maker, Mr. Bockarie, was trained by a VSO Volunteer at the Scarries Secondary School. The Project SIL/83/001 provided him with a brick making machine and the VSO Volunteer assisted him to produce over 10,000 bricks. The building activities in Mambolo were not large enough to produce bricks on a commercial scale. Therefore, when an expatriate Civil Engineer from the Baptist Mission suggested that Mr. Bockarie may shift his brick making activities

to Lunsar where there was more construction activity and therefore more demand for the bricks, the Project personnel in partnership with Mr. Bockarie prepared a Project Profile to establish a brick making unit in Lunsar.

A unit for brick making is established within the compound of the Lunsar Eye Hospital. The Project has lent building materials valued at 16,000 Leones to the unit under the Growth Centre Programme. The unit is making 1,500 bricks per day and is employing about 20 people. The unit has already repaid Le1,500 to the Growth Centre Account.

4. GUIDELINES FOR INVESTORS

Another output expected of the Project was the Guidelines and Code for Investors.

The Project staff in co-operation with the national counterpart officers have prepared the Guidelines For Investors and the Ministry of Trade and Industry has agreed to publish it. The main contents of the Guidelines are:

1. Welcome To Investors
2. The Land and the People
3. Incentives and Guarantees to Investors
4. Infrastructural Facilities
5. Taxation and
6. A List of Potential Projects For Investors.

GUIDELINES FOR PROJECT IDENTIFICATION AND AREA SURVEYS

The Project was also expected to prepare Guidelines to assist counterpart officers in undertaking Area Surveys and Project Identification exercises.

The main elements of the Guidelines may be seen in Annex 1.

6. ADVICE IN ESTABLISHING 'GROWTH CENTRES' FOR SMALL INDUSTRY
EXTENSION WORK

This output, perhaps, was the most important responsibility of the Project in its direct assistance programme. The rationale for this programme and its main elements are summarized in the following paragraphs:

The Manufacturing Sector in Sierra Leone accounts for about 5% of the GDP. Significantly it is the small-scale and traditional rural enterprises that contribute 55% to the GDP in the Manufacturing Sector and provide employment to about 90% of the people employed in the Sector.

The Project took note of the fact that the small-scale and handicraft industrial establishments constitute a major element in the industrial sector with respect to value added and employment. These establishments also form the seed-bed for the indigenous entrepreneur development of the country. But this vulnerable section of the society has not received the attention and assistance it deserves from the national authorities as well as bilateral and multilateral aid agencies. The main problems of these establishments are antiquated production techniques with no scope for exposure to improved designs and modern methods of production, lack of marketing outlets beyond their area of operation, absence of commercial and institutional financing facilities and lack of opportunities for training to upgrade their traditional skills through institutional net-work or extension services.

In recognition of the importance of the small-scale and artisanal enterprises, the problems they encounter and their potential role in the nation building activities, the Project recommended a "Growth Centre" programme to train, develop, and promote small-scale and artisanal enterprises in the country.

The proposed development programme is non-traditional and innovative approach to develop small-scale enterprises at the grass-root level in their own environment.

The "Growth Centre" programme is essentially a rural programme organised within the framework of traditional rural community. The representatives of the rural community will fully participate in initiating, planning and implementing their own programme. The extension personnel will operate as catalysts to transmit new ideas, new designs, appropriate technology, relevant management practices and knowledge of new marketing outlets etc.

The Project took note of the fact that there is a general disillusionment about the "trickle down" mechanism of external assistance and the failure of aid programmes to reach the remotest villages, the smallest farmers and the unemployed artisans at the very grass-root level. After discussing this problem with the rural people, the elders, the chiefs and artisans, a small industry programme was outlined incorporating the new concept of grass-root initiatives and strategy. The advisers were keen to design an operational mechanism that could ensure continuity, self-reliance, self-sustenance and growth within the shortest period when technical assistance and material support is withdrawn.

Each proposed "Growth Centre" will cover several villages selected with an objective criteria. A Growth Centre Planning and Development Committee consisting of representatives of villages, artisans and elders assisted by a Stimulator will draw up realistic industrial development programmes/projects for the area taking into consideration the local demand, availability of local raw materials and skills. The programme will involve the construction of a workshop building at each Growth Centre Headquarters in the rural area wherein the major activities selected for the area will be established for commercial production as well as for training rural entrepreneurs. The surplus from these

operations will be used as a Revolving Fund by the Growth Centre Planning and Development Committee for assisting new rural entrepreneurs. Therefore, the initial resources input will have continuing and multiplier development effect on the rural community if properly implemented and monitored.

The rural entrepreneurs will be trained by the extension workers and the Growth Centre employees either at the Growth Centre Production-cum-Training Workshops or in the respective villages as is ~~reasonable and practicable~~. The objective is to train and develop entrepreneurs without up-rooting them from their surroundings and without disrupting their family life.

The trainees who show aptitude for the activities they are trained in, may be assisted with equipment and raw materials if they display entrepreneurial capabilities and potential. The equipment and initial raw materials will be lent through the Growth Centre Planning and Development Committee on a deferred payment basis. The entrepreneurs thus selected, trained and equipped will be monitored by the Growth Centre Planning and Development Committee and the extension workers till the time they are able to stand on their own.

The Committee will recover the cost of equipment and the initial supply of raw materials in pre-determined instalments. The amounts so recovered will be put in a bank account with the Stimulator as a joint signatory as is appropriate with one or two other members of the Committee. These amounts will be used as a Revolving Fund for further industrial development activities.

Typical projects proposed to be promoted and implemented in the Growth Centre Programme are:- palm oil extraction, palm kernel oil extraction, other oil seeds extraction such as groundnuts, soya beans, sunflower etc.; cassava processing i.e. garri making, handloom and

powerloom weaving and processing of fabrics into gara i.e., tie and dye; ceramics using local clay; carpentry, soap making; blacksmithy and simple agricultural implements; post-harvest storage requirements such as mini silos; garment making; knitting; basket making; brush making; coir processing; fish smoking and any other projects as may be identified in each Growth Centre area based on local needs, local raw material availability and local expertise.

A number of projects from among the above are specially prepared for women for whom a special training programme and extension assistance is designed. However, women are also given equal opportunities in all other projects.

An important characteristic of this programme is that minimum expenditure will be incurred in institutional framework and maximum outlay will be channelled towards development activities such as workshops, equipment, raw materials and extension services. It is a direct assistance programme to individual small-scale and rural existing and potential entrepreneurs.

The Growth Centre Programme as developed in Sierra Leone has taken care of the vulnerable sections of the population such as handicapped persons and the orphans by providing them sustainable income generating opportunities and means.

Once the technical viability and appropriate management practices of the programme are established in the pilot areas, it is proposed to formalize the programme on a nationwide scale. A new non-governmental national institution to undertake both the development and commercial activities of the programme is proposed to be established. A Team of Consultants, sponsored by the World Bank have recommended that an Industrial Development and Finance Company may be established as a non-governmental organisation to implement the Growth Centre Programme on a nation-wide scale. It is recommended that this institution will have both a Development and a Commercial Window. The Development Window, supported by

development funds including aid funds, will undertake the financing of development activities such as Production-cum-Training Facilities in the rural areas, training of entrepreneurs, provision of extension facilities and monitoring the production activities of the newly graduated as well as the established entrepreneurs. The Commercial Window, with funding from participating commercial banks, insurance and finance companies, will provide long-term and short-term commercial funding in terms of equipment and raw materials to selected entrepreneurs graduated from the Production-cum-Training Centres as well as those already in operation. The terms of these loans will be commercial. In this way, both the developmental and commercial activities of the programme will be undertaken by one organisation.

7. "TECHNOLOGICAL INFORMATION FACILITY"

The creation of a technological information facility is one of the outputs of the Project. The Ministry of Trade and Industry maintains a filing system basically geared to administration and controls. The technical aspects of industrialization if at all filed, are intermingled with the files. This has created a lot of confusion with respect to analytical requirements for industrial development. Therefore, there is a need for a technological information facility or system within the Ministry.

STATUS OF THE OUTPUT

Recognising the importance of reference material for various activities related to industrial development, the Project personnel developed a filing system within the ISIC classification. Forty three files have been built up under this classification. Another 45 files have been built up on specific subjects relating to industrial development such as industrial planning, industrial finance, women in development, man-power training, new international economic order etc.

The Ministry of Trade and Industry has also initiated a Technical and Trade Information Facility. This is situated at the Ground Floor of the Ministerial Building. An Officer, Mr. Benda, from the Ministry trained in Technical Information System at the Small Industry Extension Training Centre at Hyderabad, India, is in charge of this Facility. Several publications have been collected for this purpose. The Ministry of Trade and Industry has requested assistance from the International Trade Centre to augment this facility to strengthen the Export Promotion Council. UNDP/UNIDO has provided 39 reference books on engineering/technology, project planning, project management and training. The total value of these books is \$2,200/-.

PART III

THE MAIN PHASE OF DP/SIL/83/001
INDUSTRIAL DEVELOPMENT PROMOTION AND PLANNING

The Main Phase of Project SIL/83/001 which began in January 1985 was expected to produce the following three outputs:-

1. Increased capacity to prepare Yearly Review of the programme, Project Profiles and Investors' Guidelines.
2. Five Growth Centres of which two to be implemented by the Project and Government and three by the European Development Fund with partial support of UNIDO's project personnel.
3. Three Diagnostic Reports on Selected Industrial Enterprises.

The achievements in respect of the above outputs are summarized in the following paragraphs.

1. INCREASED CAPACITY TO PREPARE YEARLY REVIEW OF THE PROGRAMME, PROJECT PROFILES AND INVESTORS' GUIDELINES

The Planning Division prepared a review of the implementation of the Draft Chapter on the Plan for the Manufacturing Sector adopted by the Ministry of Trade and Industry. The Operations Division and the Planning Division co-operatively prepared the Guidelines For Investors. Therefore, the capacity of the counterpart Government officers to undertake such activities in the future has increased.

The Project personnel have been involved in the preparation of Prefeasibility Studies and Project Profiles as indicated earlier in this Report. The counterpart officers have participated in the field investigations, data collection and discussions leading to the preparation of these pre-investment studies. However, regrettably, it was not

possible to induce these officers to prepare either Prefeasibility Studies or Project Profiles.

- (2) FIVE GROWTH CENTRES OF WHICH TWO TO BE IMPLEMENTED BY THE PROJECT AND GOVERNMENT AND THREE BY THE EUROPEAN DEVELOPMENT FUND WITH PARTIAL SUPPORT OF UNIDO'S PROJECT PERSONNEL

When the Project Document was prepared, it was assumed that the European Development Fund would release US\$ one million requested by the Government as aid under Lome II to implement the Growth Centre Programme. But there has been a delay in the finalization of the formalities leading to the approval of this aid earmarked under Lome II for this purpose.

STATUS OF THE OUTPUT

The status of the Growth Centre Programme as implemented by the Project personnel from UNDP funding is as follows:-

Four Growth Centres are established, three in the Provinces and one in Freetown in the Western Area. Growth Centre related activities have been initiated with the physically handicapped persons at Moyamba in blacksmithy, with a women group in garment making in Kabala and construction of a Production-cum-Training Workshop at the Tasso Island, which is one of the most under-developed islands in the Western Area.

i. WESTERN AREA GROWTH CENTRE

In the Western Area, Production-cum-Training Facilities are established in a Government owned building at Tower Hill. Four powerlooms and four automatic handlooms provided by the Commonwealth Fund for Technical Co-operation have been used for over one year to upgrade the traditional weaving techniques of about 11 local weavers. Over 2000 yards of cloth has been

produced on these looms. Additional yarn to produce about 12,000 yards of cloth and to train more people is provided by the Commonwealth Fund for Technical Co-operation.

A soap making section has trained nearly 30 traditional soap makers to upgrade their soap making techniques. Over 50 sets of improved soap making equipment have been fabricated and supplied to small-scale soap makers all over the country by the metal working section in the Production-cum-Training Facility and a local metal worker upgraded through the Growth Centre activities.

The carpentry section has fabricated several fly-shuttle handlooms for the Provincial Growth Centres.

A Growth Centre Planning and Development Committee consisting some eminent citizens, namely - Mrs. Gladys Jusu-Sheriff Chairperson, Mr. Taylor-Morgan, former Chairman of the Chamber of Commerce and representatives from different industrial occupations has been established. This has given them easy accessibility to the Government officers.

However, the Production-cum-Training Facility is in the premises owned by the Government, the weavers, carpenters, metal workers, soap makers etc. involved in the various activities are Government employees. The supervisor is a Government officer.

The UNIDO experts have advised the Ministry of Trade and Industry that either the ownership of the building and equipment should be transferred to the non-Governmental Growth Centre Programme or they should be leased to the Growth Centre Programme for a nominal fee and that the Government employees who have the potential to be useful to the programme should be taken on secondment by the Growth Centre Programme and remunerated by it.

Though the Permanent Secretary has in principle agreed to these suggestions, it may take considerable time before they are implemented. In the meantime, inefficiency and lack of discipline among the employees and absence of maintenance and repair of the building and equipment are likely to continue.

(a) WOMEN IN INDUSTRIAL DEVELOPMENT

The Western Area Growth Centre Programme has initiated a training programme to facilitate women's entry into industry. With the help of Mrs. Mary Tholley, a Sierra Leonean social worker, a few women have been trained in sewing, garment dyeing and doll making. A sewing machine (Singer brand) fabrics and other material were provided by the Project. But the space in the premises is a major constraint to expand this programme. The chairperson of the Growth Centre Committee, Mrs. G. Jusu-Sheriff has taken personal interest in this programme. She has identified a building owned by the Blind Welfare Society of Sierra Leone for the use of the Women's Programme. The building is in a central location and has adequate space for training-cum-production activities by women, office space and a sales emporium. The rent quoted is Leones 7,500 per year. But the building needs some modifications and renovation. The advisers recommend that these premises may be hired and the Women's Programme expanded without delay.

The equipment and materials needed for initiating a programme for integrating women in industries by training and promoting them as small entrepreneurs has been purchased and is in stock at the Project Store in Wilkinson Road.

(b) TASSO ISLAND GROWTH CENTRE ACTIVITY

Tasso Island is located at the mouth of River Rokel and is within the Western Area Growth Centre. It is extremely underdeveloped and the main activity is small scale fishing. People are poor and there is not even a bicycle on the Island.

The condition of drinking water is pathetic. A visit to this Island was organised by His Worship the Mayor of Freetown along with the Member of Parliament for the area, the Resident Representative of the UNDP and the Deputy, along with the CTA of SIL/83/001. After touring the Island it was suggested that a Production-cum-Training Centre (300 sq. ft.) with blacksmithy, carpentry, handloom weaving and soap making may be initiated in the Island. Building materials to construct the workshop. have already been supplied to the community and prospective candidates for blacksmithy, carpentry, weaving and soap making have been trained at Tower Hill.

It is necessary to follow up this activity with the Mayor, the Deputy Director, Mr. M. A. Tunis in the Ministry of Trade and Industry and the Member of Parliament for the area. The equipment for the programme has to be provided from the Western Area Growth Centre allocation.

The UNDP may consider making a special effort to dig a few drinking water wells through the well water programme or at least provide facilities to harvest and store rain water for drinking in the Tasso Island.

(c) EQUIPMENT AND RAW MATERIALS FOR THE GROWTH CENTRE PROGRAMME

Building materials equipment and raw materials worth about US\$350,000 to implement the Growth Centre Programme are provided under the Project budget. The building materials are to be used for the construction of the Production-cum-Training workshops as well as to assist the construction of some workshops for selected entrepreneurs. Equipment and raw materials are meant for the Production-cum-Training Centres to train potential entrepreneurs and to build up revolving funds for the Growth Centre Programme. They are also meant to assist individual entrepreneurs to set up their own businesses and repay into the Revolving Funds of the Growth Centre Programme.

The equipment and raw materials included in Budget Lines 41 and 42 of the Project were ordered through the Purchase and Contract Section of UNIDO Headquarters in Vienna. The procedure of obtaining competitive biddings, selection of bidders, placing orders and delivery to Freetown is time consuming.

The Chief Technical Adviser and the Senior Industrial Engineer from UNIDO will be leaving the country on completion of their assignments by the end of June 1986. The equipment and raw materials is now in the process of being delivered and some of it ^{are} already in the docks. Had this equipment been delivered 3 to 4 months earlier, the implementation of the Growth Centre Programme would have been much more impressive by the time the UNIDO Advisers left the country. However, the Senior Industrial Engineer has classified the equipment and raw materials and has made detailed plans for its distribution as per the "Implementation Plan for the Growth Centre Programme".

(d) ENTREPRENEUR PROMOTION THROUGH THE WESTERN AREA GROWTH CENTRE PROGRAMME

1. Carpenter

A promising partially blind carpenter Mr. Simeon Patrick was identified, tested and selected for promotion. He was assisted by the Growth Centre to put up a 4.6 x 3 meter workshop at 66 Regent Road, Lumley. The UN Women's Association at the request of the Project provided him with a set of carpentry tools. Timber valued at Leones 300 was loaned by the Growth Centre Programme. The workshop was opened in March, 1985. At the end of February, 1986 this carpenter has done extremely well. He is employing four other carpenters and has two apprentices. He has ploughed back his profits and has extended his shed by a further 28 square meters. He has built up his clientele among the American Embassy, the Peace Corps, UNDP, the Commercial Banks and the Red Cross Society. He is maintaining a bank account, follows a system of costing

and manages his business reasonably well. His progress is periodically monitored. He is a member of the Western Area Growth Centre Committee.

2. Woman Garment Maker

A partially handicapped but well trained woman Miss Khadijatu Conteh was identified. She was trained in garment making in Germany. She had expertise but needed equipment and fabrics to run her business in a meaningful way. Two sewing machines were provided as donation through the Growth Centre Programme intervention. She was initiated to simple costing and accounting practices. She was loaned fabrics worth over Leones 3000. The woman is doing good business, and, is employing 3 to 4 other persons. She has at least doubled her net income. She is a member of the Western Area Growth Centre Committee.

3. Metal Fabricator

A good metal fabricator Mr. Alphas During was identified in a school exhibition where he had exhibited a prototype energy saving charcoal stove. The design of the stove was evaluated and modified to make it commercially attractive and acceptable. He was assisted to prepare a project profile to determine the cost of production, likely selling price and the margin of profit. He was provided on loan C.I. sheets and other required materials to produce a few stoves to test in the market. A handout describing its operation and advantages was prepared and printed. An advertisement was put in the local newspapers and announcements were made in the radio simultaneously as the new stoves were put on the shelves of the supermarkets. Within the first fortnight all the fifty units were sold and orders were placed for more. The entrepreneur is employing four people on a full-time basis, though he himself is a full-time maintenance engineer in a multi-national company. The prospects of his full devotion to metal fabrication are being discussed with him.

It is suggested that he should take up the production of stoves, garri making equipment, palm oil equipment, rice para-boiling equipment, storage bins for grains and 44 gallons oil drums. This entrepreneur has excellent potential to grow, if he is provided a bit more sustained support for some time more. He is also a member of the Western Area Growth Centre Committee.

4. Soap Maker (1)

This is the most highly educated small entrepreneur (Dr. L. F. Elliott) producing soap in the country with a Ph.D. Degree in Engineering from a British University. He was engaged as a Local Consultant Industrial Engineer in the UNIDO Project in the Ministry of Trade and Industry. During his one year in the Project, he mastered the soap making technique and is now producing excellent quality laundry soap on a full time basis. Though no direct technical or material assistance was provided to him from the Project he derived indirect benefit in respect of the concept and the production techniques.

5. Soap Maker (2)

This soap maker, Mr. Lahai, wanted assistance to supplement his income. He was advised on the technique of laundry soap making as well as in the fabrication of his equipment. Initial oil and caustic soda were supplied. The gentleman makes soap in his spare time with the help of his family members and sends it for sale to the rural areas. He is reported to be earning about 500 Leones a month which is about 50% of his income from full-time employment.

6. Soap Maker (3)

This was an educated foreign trained unemployed youth (Mr. Clay). The youth was given training in soap making and on the basis of his initial display of enthusiasm, was provided with soap equipment on loan, while another person

assisted him with palm kernel oil and caustic soda. After producing a few successful batches of soap, this youth borrowed money from local offices of donor agencies and decided to purchase a vehicle for his business. It appears that he lost the advance he paid for the vehicle as well as failed to get the vehicle. Several attempts were made to re-orient him to his original plans but were not successful. This is an example of a failed attempt and perhaps misplaced trust.

7. Soap Maker (Plan International)

This International Agency sent a group of women for training in soap making. After successful completion of their training, the Agency ordered for six sets of soap making units which are now being utilized for soap making in the rural areas of the Western Area Growth Centre for groups of women.

8. Modern Packaging Enterprise

A young, educated and foreign trained, Sierra Leonean, Mr. Christian Blake, had initiated the designing of a small waste-paper recycling unit to produce egg trays packaging material and partitioning or ceiling boards. He was identified by the Project personnel and the UNIDO Industrial Engineer had several sessions with him. Some modifications in his original design were made to realize his product-mix. He was assisted to prepare a market survey and a project profile. His drawings were examined by the National Workshop, which agreed to fabricate the equipment. He was provided, on deferred payment, with material to fabricate the equipment locally at the National Workshop. He has recently set up his workshop at Kalaba Town, four or five kilometers from the Wellington Industrial Area near Freetown and is employing three workers.

9. Mrs. Marianne Sannoh (Garment Maker)

Mrs. Marianne Sannoh, an enthusiastic housewife wanted to contribute to the family's earning by taking up sewing. She was identified by Mrs. Naomi Robinson, the Project's Volunteer. Mrs. Sannoh was sent to YWCA for training in tailoring and, her progress was monitored. After 4 months' training at the YWCA, she was attached to a tailor for practical orientation. She was provided with sewing machine by a private donour. She will be promoted as an entrepreneur under the Women's Programme.

10. Welder (mr. Buck Williams)

Mr. Buck Williams, a welder was recommended by Mrs. Fanny Kakonge, the chairperson of the UN Women's Association. Mr. Buck Williams had a welding machine and the equipment needed for welding. He had also orders to make windows and grills. But he had no roof over his workshop and therefore, could not work outdoor in the rainy season, which lasts nearly 6 months in Freetown. The Project provided him on loan roofing sheets, which, it is hoped will help him to work for 6 months more in a year and perhaps double his income. His workshop is located on the Aberdeen Road in Freetown (Binkolo Metal Working Unit).

ii. KPANDEBU GROWTH CENTRE - EASTERN PROVINCE

The Growth Centre concept was initially experimented in Kpandebu village in the Kenema District. The village community provided a shed and the UNIDO Project in the Ministry of Trade and Industry provided handlooms, soap, equipment, carpentry tools and appropriate raw materials. A Canadian Volunteer supported by the Pastoral and Social Development Centre in Kenema organised the community, the members of which have displayed remarkable interest in the Growth Centre Programme. One small shed was later built by the National Authorising Office from EEC funds. They also provided some quantities of yarn for handlooms and caustic soda for soap.

Extension workers from the Small Industries Division in the Ministry of Trade and Industry assisted in training the village artisans in handloom weaving and soap making. The village has two adequately trained carpenters. The UNDP/UNIDO later recruited the Canadian Volunteer who had initiated the implementation of the programme in Kpandebu as a UN Volunteer.

In Kpandebu a Growth Centre Planning and Development Committee has been established. Eight weavers have been trained and handloom cloth is being produced for training and sale as and when yarn is available. Soap is produced by women. Artisans workers are paid piece meal rate wages. A Growth Centre Account has been opened and is operated by the Committee and the UN Volunteer.

A new Production-cum-Training Workshop admeasuring 100 square meters has just been constructed with community participation. It is proposed to establish all the production activities in this workshop. The activities to be started in the workshop are - blacksmithy, carpentry, sheet metal work, weaving, tailoring and soap making.

EXAMPLES FOR ENTREPRENEUR DEVELOPMENT IN THE EASTERN PROVINCE

1. Blacksmith in Kpandebu

The blacksmith in Kpandebu had rudimentary tools which affected the quality of his end-products. The Growth Centre Programme assisted him with some improved tools which were available in the local market. As a result of this assistance, the blacksmith is now making much better products. However, when the imported tool kits arrive he will be assisted with a complete tool set and reasonable quantity of raw materials on loan to facilitate the production of simple farm implements and cutting tools.

2. Carpenter in Kpandebu

This carpenter had worked in the Forest Industries Corporation and had reasonably good expertise. But he had neither the tools nor any timber to work with. The Growth Centre Programme provided him with a set of tools and some timber. He has produced handlooms for the Growth Centre and is producing household furniture for the neighbouring villages. He has three helpers and is in charge of all the woodwork in the construction activity of the Kpandebu Growth Centre Workshop.

3. Mr. Musa Kamara, Kabala

During a visit to Kabala by Mr. M. R. Ali, Senior Industrial Engineer, UNIDO, and Messrs. Tunis and Kamara, Deputy Directors, Industrial Development Department, this metal worker was identified and was assisted. The local Paramount Chief was involved in this exercise.

4. Mr. Mohammed Bailor, Kabala

This blacksmith was also assisted as a result of the visit referred to above, with improved blacksmithy equipment.

5. Mr. Abubaker Garbo, Kabala

This was a carpenter trained in a technical school but was unemployed. He was assisted with a set of carpentry tools with an understanding that he would take two apprentices.

It has not been possible to regularly monitor the activities of the above three entrepreneurs in Kabala through the Growth Centre Programme personnel. But the Paramount Chief of the area had agreed to do so on behalf of the Growth Centre Programme.

6. Women's Group in Kabala

A group of women in Kabala had organised themselves into a self-help project and had undertaken training-cum-production activities in garments. They had secured an order to make school uniforms for a local school. They had only one sewing machine but needed three more, and, also wanted assistance to procure fabrics. The CUSO Organisation (Canadian University Service Overseas) approached the Project suggesting that CUSO could provide the fabrics needed for the programme if the women could obtain sewing machines. The Project personnel requested Sayenu Industries (a local garment maker) to provide two sewing machines for the group and succeeded in obtaining them. The UN Women's Association was also approached for assistance and it responded with a sewing machine. The Project UN Volunteer assisted CUSO in preparing a Project Profile on garments. The CUSO is providing extension assistance and monitoring the activities of the Women's Group. It is reported that it is operating successfully.

7. Kambama Soap Factory, Mattru

This soap unit, 90 kgs. per shift is established by an enterprising farmer Mr. Hilton, in Kambama, in the Eastern Province. The extension worker from the Western Area Growth Centre Programme trained the workers in Kambama and the Project

assisted in providing the equipment and initial caustic soda on loan basis. The unit is making excellent laundry soap which is being sold in the Kenema township.

iii. BINKOLO GROWTH CENTRE - NORTHERN PROVINCE

A Production-cum-Training Workshop (111 m2) has been constructed at Binkolo in the Northern Province. Growth Centre Planning and Development Committee has been established. Training-cum-Production activities have been initiated in 1) blacksmithy, 2) carpentry, 3) tailoring and 4) soap making. Other activities such as weaving, sheet metal, palm oil extraction, gara dyeing will be initiated by the middle of July, 1986 when the imported equipment will be delivered to the Workshop.

EXAMPLES FOR ENTREPRENEUR DEVELOPMENT ACTIVITIES IN THE NORTHERN PROVINCE

1. Adult Literacy Programme, Masongbo

The physical facilities available at the Adult Literacy premises sponsored by CUSO have been utilized by the Project to introduce income generating activities and to popularize the concept of small industry development. Equipment in soap making, weaving, carpentry and blacksmithy along with initial raw materials were provided by the Project. It was also found out that six sewing machines provided by Plan International were not being used for want of fabrics and other inputs. The Project provided these requirements to initiate a training programme for women. The wife of the local Paramount Chief is in charge of the Women's Programme. All the activities initiated by the Project are in operation at Masongbo.

2. Bockman's Brick Factory, Lunsar

The Growth Centre Programme has provided some assistance to Mr. Bockarie - a brick maker at Mambolo. This brick maker was trained in brick making by a Volunteer from the Scarries Secondary School. The brick maker made about 15,000 bricks in Mambolo but could not sell them as the construction activity in the area was depressed. However, a civil engineer attached to the Baptist Mission examined the bricks and found them to be good quality. He agreed to utilize these bricks

in his construction activities in the Makeni area. But the transportation of bricks from Mambolo to Makeni was a problem. Therefore, it was decided to shift the brick making activity to Lunsar in the Bombali District. The Baptist Mission agreed to provide land to build a workshop for brick making within the Lunsar Eye Hospital compound. A plot of land containing good clay deposit was leased from the local Paramount Chief. The Growth Centre provided on loan some building materials and two brick making machines. The workshed is being completed with pillars made of bricks. The entrepreneur is employing over 20 persons on an average for clay mining, transportation and brick making. The Growth Centre Programme will provide extension services to build up sound management principles. Technical assistance to establish good firing techniques as well as to assist in the manufacture of clay roofing tiles are being sought from the Industrial Development Unit of the Commonwealth Fund for Technical Co-operation.

The total cost of building materials and brick making machines lent to Mr. Bockarie was Leones 16,000 of which Leones 1,450 is already repaid.

The Growth Centre Production-cum-Training workshop at Binkolo was constructed with Bockarie's bricks which are becoming increasingly popular in the Northern Province.

3. Carpenters (3)

Three carpenters were recommended for promotion as entrepreneurs by the Technical Institute at Lunsar. The Director of the Institute undertook the responsibility to supervise and monitor their activities. They have been loaned with one set of carpentry tools and the possibility of building a workshed is being investigated. In the meanwhile, these carpenters are reported to have secured adequate carpentry work and are saving part of their earnings to put into the business.

4. Garri Making

Garri making on a small scale with one tonne cassava input capacity per day is planned to be established in Magburaka. This was the result of a study undertaken by a UNIDO Consultant under the SIS Assistance Programme. Brazilian equipment and technology will be used and a Volunteer from Brazil will be recruited through UNDP to train local people in this new technology. Equipment valued at about US\$39,000 has been ordered by UNIDO and will be delivered and monitored through the Growth Centre Programme.

The pilot unit is proposed to be set up under the sponsorship of the Paramount Chief of Magburaka who himself has a cassava plantation of about 150 acres. It is presumed that the Paramount Chief will provide the land and buildings for this purpose as well as meet other obligations. The pilot plant will be used for commercial production and demonstration. The cassava farmers in the area will be co-owners of the pilot plant with the Paramount Chief. Its cost will be recovered through the Growth Centre Programme into the Revolving Fund for small entrepreneurs development.

PORT LOKO: Women's Programme

A women's programme has been initiated at Port Loko initially with soap making. Equipment for making 25 kgs. soap per shift and 50 kgs. of caustic soda has been provided by the Project to initiate the programme. The women of the area have collected adequate savings to purchase local oil for soap. Dr. Rama Rao Vellanki, CTA of the UNDP Project on Reduction of Post-Harvest Losses Project in Port Loko and the Associate Expert attached to the Project have agreed to monitor the women's programme.

iv. PUJEHUN GROWTH CENTRE - SOUTHERN PROVINCE

Production-cum-Training Workshop (111 m²) has been constructed at Pujehun and 3 to 4 bandas (traditional buildings) are planned in the plot provided by the community for the Growth Centre Programme. Weaving, soap making, tailoring and carpentry activities have already been started. A Growth Centre Planning and Development Committee has been established.

EXAMPLES FOR ENTREPRENEUR DEVELOPMENT ACTIVITIES

The small entrepreneur development programme in Pujehun was initiated with the help of an expatriate woman teacher Mrs. Naomi Robinson. This lady had initiated a programme for assisting women in income generating activities when she was identified by the Growth Centre personnel. She agreed to work in conformity with the Growth Centre principles of training women and assisting them to be independent entrepreneurs. She was provided with fabrics worth about Leones 3,000 on loan to start training activities.

Sewing machines from the area were hired for this purpose and a few ladies were selected for training. Initially it was decided to concentrate on under-garments for which there was sufficient demand both locally as well as from Liberia. The principle adopted was to pay Le2 as wages for every under-garment produced, withhold 50% of the wages till such time that each worker was able to buy a sewing machine of her own.

The progress of these activities during the last 10 months is as follows:-

(1) Trainee Mrs. Sarah Rogers

Has earned wages of Le1,873 and has saved Le800 for a machine. She is reported to have developed techniques for excellent workmanship on garments.

(2) Trainee Mrs. Nasu Musa

This lady earned a total of Leones 1226 till the end of November, 1985. She saved all her earnings and bought a second-hand zig-zag sewing machine for Le1000 and started her own enterprise. She borrowed Le1000 from the Volunteer to purchase fabrics and has been repaying this amount at the rate of Le250 per month. She has one trainee.

(3) Trainee Mrs. Esther Tucker

An amount of Leones 1431 was saved by this lady in six months. She also bought a second-hand zig-zag machine. The Volunteer provided her fabrics worth Le800 which amount has already been recovered.

(4) Trainee Mrs. Hawa Mohamed

This lady saved Le634 between June and October, 1985 and started her own business with a rented machine. Initially, she bought small quantities of fabrics on a cash basis. After some time she bought a second-hand machine for Le600. She is training two girls.

(5) Trainee Mrs. Josephine Gbonda

This lady saved Le1375 in six months and is ready to buy a sewing machine on her own. At the moment she is managing a tailoring project on behalf of the Commission of Churches for Development (CCD). She is training two girls.

(6) Trainee Mrs. Teresa Kpaka

This lady started training in November, 1985 and is progressing well. She had saved Le222 in two months.

(7) Trainee Mrs. Juliet Navo

She was trained for two months, after which she started her own business at Bo.

(8) Trainee Mr. Le Siga Kamara

He owns his own machine and prepares men's undergarments. He is making a net profit of Le1000 per month and has one trainee.

(9) Trainee Mr. David Musa Cole

He got training for 3 months and has a sewing machine of his own.

(10) Trainee Mrs. Musu Kebbie

She started training during the middle of December, 1985.

(11) Trainee Mrs. Estella Koroma

This lady started training during the middle of December, 1985.

With an initial outlay of Leones 3000 of fabrics, the Volunteer in Pujehun has helped 11 persons into a new income earning profession. In the course of six months, these persons have saved over Le7000. Seven of them have started their own business, while the Volunteer still has the stock of fabrics worth Leones 3000. It is interesting to note that while the original investment is still intact, it has created a number of new jobs, produced new goods and generated new incomes.

The expatriate woman Volunteer, Mrs. Naomi Robinson in Pujehun is recruited as a UN Volunteer for the Growth Centre Programme.

(12) Blacksmiths at Moyamba - A Programme to Provide Income Generating Opportunities To The Handicapped Persons

The story of a team of disabled persons working as blacksmiths was brought to the notice of the Growth Centre personnel by a lady Peace Corps Volunteer Miss Gen Stewart, assisting them at Moyamba. These blacksmiths are organised

as a Training-cum-Production group by Mr. Mustapha who himself is a poliomyelitis victim. Mr. Mustapha is a master blacksmith who trains disabled blacksmiths in his workshop and provides them with board and lodging. The workshop building and the dormitory were provided under an aid programme by the Catholic Relief Services (CRS). Though the workshop is inadequately equipped, these blacksmiths produce a variety of agricultural handtools of good quality and are not able to meet the prevailing demand.

This workshop is proposed to be upgraded with new blacksmithy tools to provide better training and production facilities for the existing and new disabled persons.

Appropriate types of tools needed for the disabled persons have been ordered. It is proposed to rehabilitate some of the trained persons from among the group in their own native villages. Mr. Mustapha's enterprise will be assisted to operate as a commercial workshop by introducing costing, accounting and appropriate management systems. The disabled blacksmithy entrepreneurs will be assisted like other Groth Centre entrepreneurs under the Southern Province Growth Centre Programme.

(13) Soap Unit For Community at Moyamba

At the persistent request of an enthusiastic young Chemical Engineer Mr. Chris Squire, a set of soap equipment to make 25 kgs. of soap per shift, 25 kgs, of caustic soda and 44 gallons of palm kernel oil was provided for a community programme involving women and school leavers in Moyamba. Mr. Squire is a Chemical Engineer from Moyamba trained in the U.K. He has displayed considerable enthusiasm and initiative in community development activities and was assisted by the CRS and the UNDP Post-Harvest Project.

3. DIAGNOSTIC REPORTS ON SELECTED INDUSTRIAL ENTERPRISES

The following diagnostic studies were made and units assisted to implement the recommendations:

1. Alphas Products Manufacturing Co.. This unit's design for energy saving charcoal stove was improved and the unit assisted to commercialize production. Diversification to produce soap equipment was encouraged. The unit planned to assist the unit to go in for other metal working activities.
2. Khadijatu Conteh's Garment Unit was diagnosed and assisted to diversify and keep accounts.
3. Blake's Paper Recycling Unit. Its problems were identified, the entrepreneur was sent to a Young Investor's Symposium, was encouraged to design and locally fabricate equipment to produce ceiling material from waste paper.
4. Bush and Town Furniture Co.. Its problems were studied and proposals prepared for SIS assistance from UNIDO.

UTILIZATION OF PROJECT RESULTS

MAIN ISSUES FOR CONSIDERATION

The Terminal Report on Project SIL/83/001 is prepared at great descriptive level in order to facilitate follow-up action both by the Government and the donors. It is hoped that this Report will help in correcting the shortcomings, if any, in the implementation of the programme and to build on the achievements. Any efforts in going through the ground again may result in duplicating efforts and waste of resources.

The details of promotional activities in respect of individual entrepreneurs are given to emphasize the fact that the Growth Centre Programme is basically a human development programme and as the strength and wealth of a forest lies in the quality of individual trees so also the strength of the economic and social development of a nation lies in the wealth, prosperity and the quality of individuals and their families comprising the nation.

A reflection on the UNDP/UNIDO programme of assistance in industrial development in Sierra Leone will bring into focus four important, logical and related activities or phases. They are:-

- 1) the problems identification phase;
- 2) the legal framework creation phase;
- 3) the institution building phase; and
- 4) direct assistance to industries phase.

The problems identification phase, which resulted in the preparation and publication of an Industrial Review of Sierra Leone, though an easy and straightforward exercise was an important base for the future line of action.

THE LEGAL FRAMEWORK

The creation of a legal framework in the form of Development of Industries Act 1983 was both a time consuming and frustrating exercise. It took considerable time and effort from the UNIDO Advisers, the UNDP Resident Representative and the Senior Industrial Development Field Adviser, to impress upon three successive Permanent Secretaries and two successive Ministers of Trade and Industry to finalize the draft, submit it to the Parliament and get it approved.

Sierra Leone is a trade oriented economy with hardly any industrial tradition. People with money be they local or expatriate, prefer to invest in the trade of precious metals such as diamonds and gold and use the foreign exchange earned in such activities to import and sell consumer goods. The problems of guarantees and incentives for industrial development were perhaps never effectively felt in the investor community. But it is likely that the donor agencies thought that the lack of effective guarantees and incentives as compared to other industrializing countries of the Third World were the main reasons for lack of industrial investment activities in Sierra Leone. The Development of Industries Act 1983 offers attractive incentives and guarantees to investors. The UNDP/UNIDO Project has identified several investment opportunities and a number of project proposals in the form of Feasibility Studies, Pre-feasibility Studies, Project Profiles etc. These are now available to potential investors. But the industrial investment activity has not picked up in the country. Therefore, the absence of a legal framework was not the only cause for the sluggish industrial activity in the country.

INSTITUTIONAL FRAMEWORK

When UNDP/UNIDO Project was initiated in the Ministry of Trade and Industry, the industrial activities in the Ministry were the responsibility of the Principal Industrial Development Office assisted by a Senior Industrial Development Officer and an Assistant Industrial Development Officer. The Small Industries Division was autonomous and was headed by the Small Industries Officer, an acting Assistant Small Industries Officer and about 50 temporary workers. Both the Divisions did not have any work programme and they were not familiar with the various aspects of industrial development activities. They were mostly engaged in routine administration and often assisted the Trade Division in activities relating to importation and distribution of petroleum and related products.

When the UNIDO Advisers put up proposals for the establishment of the Industrial Development Department, upgrading the posts and creating new posts, the existing staff members and those transferred from other Ministries co-operated with the advisers with respect to activities relating to the work programme, weekly meetings etc. But once the Department was established and the officers assured of their promotion, they withdrew themselves from the mainstream of development activities, (with the exception of one officer), stopped the weekly meetings and are now getting increasingly involved in trade administration activities.

The Advisers have prepared a detailed Operational Manual for Industrial Development activities in the Ministry of Trade and Industry. But this has yet to be adopted by the Ministry. The 14 professional officers in the Industrial Development Department will be a deadweight on the Ministry of Trade and Industry unless they are properly motivated, a work programme is prepared for them by themselves and their work monitored. Apart from the Director the Permanent Secretary and the Hon. Minister should be

able to devote at least 50% of their time to industrial development activities, if Industrial Development is to make any meaningful contribution to the nation building activities.

During the last five years, the Ministry of Trade and Industry had four Ministers and five Permanent Secretaries. Such a high turnover is not conducive to acquire and sustain interest in developmental activities. The UNIDO Advisers had to spend considerable time and energy in briefing the top persons in the Ministry of Trade and Industry and establishing working relationship with them every time changes were made at the top level.

DIRECT ASSISTANCE TO INDUSTRIES

Project's activities in relation to direct assistance to industries may be broadly classified under the following headings:

- a) Preparation of Feasibility Studies, Prefeasibility and Project Profiles.
- b) Diagnostic studies in respect of units having capacity utilization or productivity problems.
- c) Assistance to promote small scale and rural industries through the mechanism of non-governmental Growth Centre Programme.

(a) Feasibility Studies, Prefeasibility studies and Project Profiles are important documents needed by prospective investors to take informed decisions on investments. Considerable time was spent in preparing these documents. Assistance was also sought from other donor agencies and the Project personnel participated with Consultants provided by other agencies in the preparation of these reports. But these have not

induced prospective investors to come up with any meaningful investment proposals. This does not mean that such opportunity studies are not useful but only underlines the fact in a sluggish economy when the value of the currency is eroding everyday, pre-investment studies will be useful only if a programme for re-structuring the economy is undertaken and the faith in its future prosperity is re-established.

(b) Diagnostic studies were undertaken both in respect of some medium industrial units and some small-scale units. Among the medium units, some were in the public sector and some in the private sector. Studies in respect of the public sector units could not be taken to the implementation stage mainly because of the paralysis in the decision taking apparatus.

The problems in the units studied in the private sector were intermingled with the national problems of foreign exchange scarcity. Unless this critical input is taken care of, suggestions regarding management re-organisation, product diversification, remuneration based on productivity etc. will only remain on paper.

Diagnostic studies on small industrial units were more productive. The owners of these units fully participated both in identifying and solving the problems. These units needed some additional locally fabricated equipment or locally available raw materials. They needed modifications in the design of their products or equipment and application of simple costing and management principles. Fortunately, the Project was able to provide some of these inputs from its own resources and rendered the small industrial units operationally more efficient.

The lesson to be drawn from this experience is that in Sierra Leone which is a L.D.C. with a low level of industrial experience, it is not enough to diagnose the problems and make recommendations. These should be supplemented with follow-up

action and material inputs. The urgent need therefore, to establish the proposed Industrial Development and Finance Company, as recommended by the World Bank sponsored Consultants to assist small and medium enterprises in the country is evident.

(c) Assistance to small-scale and rural industries through an innovative non-governmental Growth Centre Programme was **strikingly** more successful, perhaps because of its immediate and effective responsiveness to felt needs of the small people. The experience so far gained points to the direction in which future assistance to the industrial sector may be, largely geared to. But since this is a 'people-oriented' programme, it is important to pursue it with great caution by carefully analysing each situation and building on what the community already has. A lesson to be drawn from this programme can be summarized in the following quotation:

"Go to the People,
Live among Them,
Learn from Them,
Start with what they Know,
Build on what they Have,

And of the best of Leaders,
When their task is done,
Their work completed,
The people will say,
We have done it ourselves"

Every rural community has its own traditions, customs and modes of behaviour. The Growth Centre Programme will function as a catalyst to bring in industrial growth in these communities with their own cultural ethos as the base.

CUTLINE FOR AN AREA SURVEY

I. INTRODUCTION

- (a) Objectives and scope of survey, methodology of survey and analysis.
- (b) Brief description of area, including physical and geographical features.

II. STRUCTURE OF EXISTING INDUSTRIES

A brief analysis of information on existing industries in the area. The data for each industry should include number of units, capacity, production, capital investment, employment, technology (traditional or modern), size (small, medium or large); the role of manufacturing industry in the economy of the area, its present contribution to employment, national income and growth should be analysed.

III. RESOURCE ANALYSIS

- (a) Human resources
 - (i) Occupational distribution and employment characteristics of the population.
 - (ii) Unemployment, underemployment, migration to urban areas.
 - (iii) Quantity and quality of labour - unskilled, skilled, technical and supervisory.
 - (iv) Education and literacy, technical skills.

- (b) Material resources, developed and under-developed.
 - (i) Agricultural, forestry and fishery products - foodstuffs, fibres, fuels, industrial raw materials.
 - (ii) Animals and animal products.
 - (iii) Minerals, metals, fuels, construction materials, other industrial raw materials.
 - (iv) Other resources.

The analysis of human and material resources should be related to the major objective of the survey, that is, industrial development. A brief analysis of the present pattern of utilization of resources will be useful. Resources not significant for industrial utilization need not be dilated upon.

IV. INDUSTRIAL CLIMATE, ECONOMIC FACILITIES AND SOCIAL SERVICES

- (a) General industrial climate, including Government policies and programmes, chiefdom rules and regulations.
- (b) Transportation facilities and services - highways; road, water and air transport.
- (c) Communications - telephone, telegraph, radio, post.
- (d) Power, water, sanitary services and other utilities.
- (e) Industrial accommodation - land and buildings; industrial areas and industrial estates.

- (f) Educational, medical and other community services.
- (g) Capital and credit sources and availability - private, institutional, governmental.
- (i) Trade associations, co-operatives, other industrial and commercial organizations.
- (j) Training facilities for different trades, supervisors, managerial personnel.

This chapter should analyse the general facilities available and required without which industrial enterprises cannot prosper even if there are resources to be tapped and demands to be catered to. The analysis should be directly relevant to the industrial opportunities for the area.

V. DEMAND AND MARKET ANALYSIS

- (a) Living standards and consuming ability, demand analysis, of typical products of local usage.
- (b) Markets and consumption patterns.
 - (i) Within area - local production exported, competition and source.
 - (ii) Outside area - local production exported, consumption in "export" markets.
 - (iii) Distribution channels and costs.

This chapter should give a brief picture of the demand in the area and indicate the candidate industries by studying the products which are now consumed or likely to be consumed in the area in quantities sufficient to justify the establishment of new manufacturing enterprises. The following information might be analysed: population characteristics

relevant to markets for products, income trends of the population and purchasing power of different income groups, exports from and imports into the area, sales trends of a sample of dealers in producer and consumer goods, demand for component parts by large factories, pattern of distribution of manufacturers and analysis of difference between ex-factory price and final retail price of products.

VI. NEW INDUSTRIAL OPPORTUNITIES

A detailed survey of prospects and requirements, industry by industry, for each industry recommended on the basis of the **preceding** analysis (especially emerging from sections III and V), including existing industries recommended for expansion:

- (a) Estimated demand
- (b) Competitive outlook
- (c) Markets
- (d) Favourable locations
- (e) Number of units, size and technology
- (f) Requirements for and sources of land and buildings, capital, machinery and raw materials.
- (g) Profitability analysis.

Selection of industries might be based on existing accessible resources, new demands for consumer and producer goods and components, and additional resources anticipated from technically feasible resource development. Phasing of establishment of certain new industrial enterprises to co-ordinate with establishment of facilities or development of resources should be considered. For the suggested new industries, detailed information on size of unit, requirements

of capital, machinery, materials, labour, skills, etc., and anticipated profitability are important for entrepreneurs as well as for development agencies. If the industry analysis is not considered to be sufficiently comprehensive to justify unqualified conclusions and recommendations, the report should indicate additional studies necessary before firm decisions are warranted.

(e) OUTLINE FOR A PREFEASIBILITY STUDY

A Prefeasibility Study should only be undertaken after establishing a prima facie case for investment opportunities for the manufacture of products selected for Prefeasibility Study. An opportunity analysis should take into account the following:-

1. Natural resources with potential for processing and manufacture such as timber for wood-based industries.
2. The existing agricultural pattern that serves as a basis for agro-based industries.
3. The future demand for certain consumer items that have growth potential as a result of increased population or purchasing power or for newly developed goods such as synthetic fabrics or domestic electrical products.
4. Import pattern in order to identify areas of import substitution.
5. Manufacturing sectors successful in other countries with similar levels of development, capital, labour, natural resources and economic background.
6. Possible inter-linkage with other industries, indigenous or international.
7. Possible extension of existing lines of manufacture by backward or forward integration such as downstream of petro-chemical industry for a refinery, margarine for a vegetable oil extraction unit, garment dyeing for a weaving unit etc.

8. Possibilities for diversification such as a pharmaceutical industry for a petro-chemical complex.
9. Possible expansion of existing industrial capacity to attain economies of scale.
10. General investment climate in the country.
11. Industrial policies.
12. Cost and availability of production factors.
13. Export possibilities.

The following is an outline of a Prefeasibility Study based on the now widely accepted UNIDO publication "Manual For The Preparation of Industrial Feasibility Studies" 1978.

1. Executive summary - a synoptic review of all the essential findings of each chapter.
2. Project background and history:
 - (a) Project sponsor(s);
 - (b) Project history;
 - (c) Cost of studies and/or investigations already performed.
3. Market and plant capacity.
 - (a) Demand and market
 - (i) The estimated existing size and capacities of the industry (specifying market leaders), its past growth, the estimated future growth (specifying major programmes of development), the local dispersal of industry, its major problems and prospects, general quality of goods;

- (ii) Past import and their future trends, volume and prices;
 - (iii) The role of the industry in the national economy and the national policies, priorities and targets related or assigned to the industry;
 - (iv) The approximate present size of demand, its past growth, major determinants and indicators;
- (b) Sales forecast and marketing
- (i) Anticipated competition for the project from existing and potential local and foreign producers and supplies;
 - (ii) Localization of market(s);
 - (iii) Sales programme;
 - (iv) Estimated annual sales revenues from products and by-products (local/foreign);
 - (v) Estimated annual costs of sales promotion and marketing;
- (c) Production programme (approximate)
- (i) Products;
By-products;
 - (iii) Wastes (estimated annual cost of waste-disposal);

- (d) Determination of plant capacity:
 - (i) Feasible normal plant capacity;
 - (ii) Quantitative relationship between sales, plant capacity and material inputs.

- 4. Material inputs (approximate input requirements, their present and potential supply positions, and a rough estimate of annual costs of local and foreign material inputs);
 - (a) Raw materials;
 - (b) Processed industrial materials;
 - (c) Components;
 - (d) Auxiliary materials;
 - (e) Factory supplies;
 - (f) Utilities, especially power.

- 5. Location and site (preselection, including, if appropriate, an estimate of the cost of land).

- 6. Project engineering:
 - (a) Preliminary determination of scope of project;
 - (b) Technology(ies) and equipment:
 - (i) Technologies and processes that can be adopted, given in relation to capacity size;
 - (ii) Rough estimate of costs of local and foreign technology;
 - (iii) Rough layout of proposed equipment (major components):

- a. Production equipment;
- b. Auxiliary equipment;
- c. Service equipment;
- d. Spare parts, wear and tear parts, tools;

(iv) Rough estimate of investment cost of equipment (local/foreign), classified as above;

(c) Civil engineering works:

(i) Rough layout of civil engineering works, arrangement of buildings, short description of construction materials to be used:

- a. Site preparation and development;
- b. Buildings and special civil works;
- c. Outdoor works;

(ii) Rough estimate of investment cost of civil engineering works (local/foreign), classified as above.

7. Plant organization and overhead costs:

(a) Rough organization layout:

- (i) Production;
- (ii) Sales;
- (iii) Administration;
- (iv) Estimated overhead cost;

(b) Estimated overhead costs

- (i) Factory
- (ii) Administrative;
- (iii) Financial

8. Manpower:
 - (a) Estimated manpower requirements, broken down into labour and staff, and into major categories of skills (local/foreign);
 - (b) Estimated annual manpower costs, classified as above, including overheads on wages and salaries.

9. Implementation scheduling:
 - (a) Proposed rough implementation time schedule;
 - (b) Estimated implementation costs given the implementation programme.

10. Financial and economic evaluation:
 - (a) Total investigation costs:
 - (i) Rough estimate of working capital requirements;
 - (ii) Estimated fixed assets;
 - (iii) Total investment costs, obtained by summing the estimated investment cost items from chapters II-X.

 - (b) Project financing:
 - (i) Proposed capital structure and proposed financing (local/foreign);
 - (ii) Interest.

- (c) Production cost (summary of estimated production costs from chapters II-X, classified by fixed and variable costs).
- (d) Financial evaluation based on above estimated value:
 - (i) Pay-off period;
 - (ii) Simple rate of return;
 - (iii) Break-even point;
 - (iv) Internal rate of return;
- (e) National economic evaluation:
 - (i) Preliminary tests:
 - a. Project exchange rate;
 - b. Effective protection;
 - (ii) Approximate cost-benefit analysis, using estimated weights and shadow-prices (foreign exchange, labour, capital);
 - (iii) Economic industrial diversification;
 - (iv) Estimate of employment-creation effect;
 - (v) Estimate of foreign exchange savings.

(f) CUTLINE FOR EVALUATING INDUSTRIAL PROJECTS

The main objectives of evaluating industrial projects are to help improve decision making capability with respect to (a) the selection, (b) modification and (c) rejection of industrial investment proposals. The following is an outline of the main elements in evaluating industrial projects. The detailed methodology on each of the main elements may be found from the Project Evaluation Manuals published by UNIDO.

MARKET EVALUATION

1. Review the present and future market analysis of the Feasibility Study. Examine whether the assumptions are reasonable and the market estimates justifiable -

- (a) recheck the data for market estimation;
- (b) rework the figures using actual or estimated figures of local consumptions; domestic imports and exports, extrapolation trends, technical coefficients, consumption and family budget surveys, if available, etc.

TECHNICAL EVALUATION

2. Make a technical evaluation of the processes available as well as the process and technology proposed by the project sponsors to ensure that Sierra Leone is not made an 'experimental field' for commercially untried technologies by machinery sellers.

3. Examine whether the inventory of plant, equipment and supplies provided in the Feasibility Study is exhaustive and complete. Check this against the following broad categories of equipment for:-

- (a) site preparation;
- (b) construction;
- (c) machinery
- (d) machinery foundation
- (e) machinery installation;
- (f) machinery testing and running in;
- (g) motors;
- (h) electric lines and wiring;
- (i) electric fixtures;
- (j) vehicles and transportation equipment;
- (k) office equipment;
- (l) residential equipment and furniture;
- (m) spare parts.

4. Examine whether the selection of site for the project is appropriate so as to minimize the operating costs of the project.

5. Examine whether raw materials of appropriate quality and inadequate quantities will be available, seasonal and climatic risks have to be evaluated.

6. Ensure that adequate means of transportation are provided.

Technical evaluation is a crucial responsibility which should be done by the Operations Division in consultation with experienced engineers.

FINANCIAL EVALUATION

Commercial profitability of a project is the first step in the economic appraisal. It is concerned with assessing the feasibility of a new project from the point of view of

its financial results. No private entrepreneur would go in for a project if it does not promise adequate returns on his investment. The project's direct benefits and costs should therefore be worked out in money terms. The commercial profitability analysis should comprise.

Return on capital i.e., the return on the capital invested, no matter what the sources of financing are. Investment profitability analysis is an assesment of the potential earning power of the resources committed to a project without taking into account the financial transactions recurring during the project's life.

The methods used for assessing the profitability of a project are:-

- (a) simple rate of return;
- (b) pay-back period;
- (c) net present value;
- (d) internal rate of return.

Methods (a) and (b) are static and simple and normally rely on year to year basis. While methods (c) and (d) are dynamic as they take into considerations the entire life of a project, and the time factor by discounting the future inflows and outflows to their present values.

Balance sheet examination and ratio analysis is a ready reckoner to understand the weak and strong points of the project. Some of the important ratios are:-

(a) Current ratio:

This ratio is obtained by dividing the current assets by current liabilities.

(b) Debt-Equity Ratio:

This ratio is obtained by dividing the total amount of term debt by the stockholders equity.

(c) Debt Coverage Ratio:

This ratio shows the number of times the company's earnings cover the payment of interest and repayment of principal on long-term debt.

= profits before tax and interest
adjusted interest and principal repayment.

NATIONAL PROFITABILITY

While commercial profitability is used from the point of view of the investor, a project's contribution to the national economy has to be judged by applying the national profitability analysis. Investments taken on behalf of the society should be justified by a national profitability analysis.

An important objective of national development policies is to raise the standard of living of the people. Increase in national income is the only way to raise the living standards. The level of national income is therefore considered as a yardstick to the level of national welfare in a country. National income translated at the project level is the net value added by the project. A project's value added fits easily into common planning practice as national and sectoral targets are also expressed in terms of increments to national income.

One important difference between commercial profitability and national profitability had to be stressed. Commercial profitability for an investor comprises only net profit. But from the national point of view, a project's national value added over its life time comprises of wages and salaries, rent, interest, taxes and net profits. The question often needs to be answered is whether a sound project in terms of value added should be encouraged if its profitability is marginal and if it needs a subsidy.