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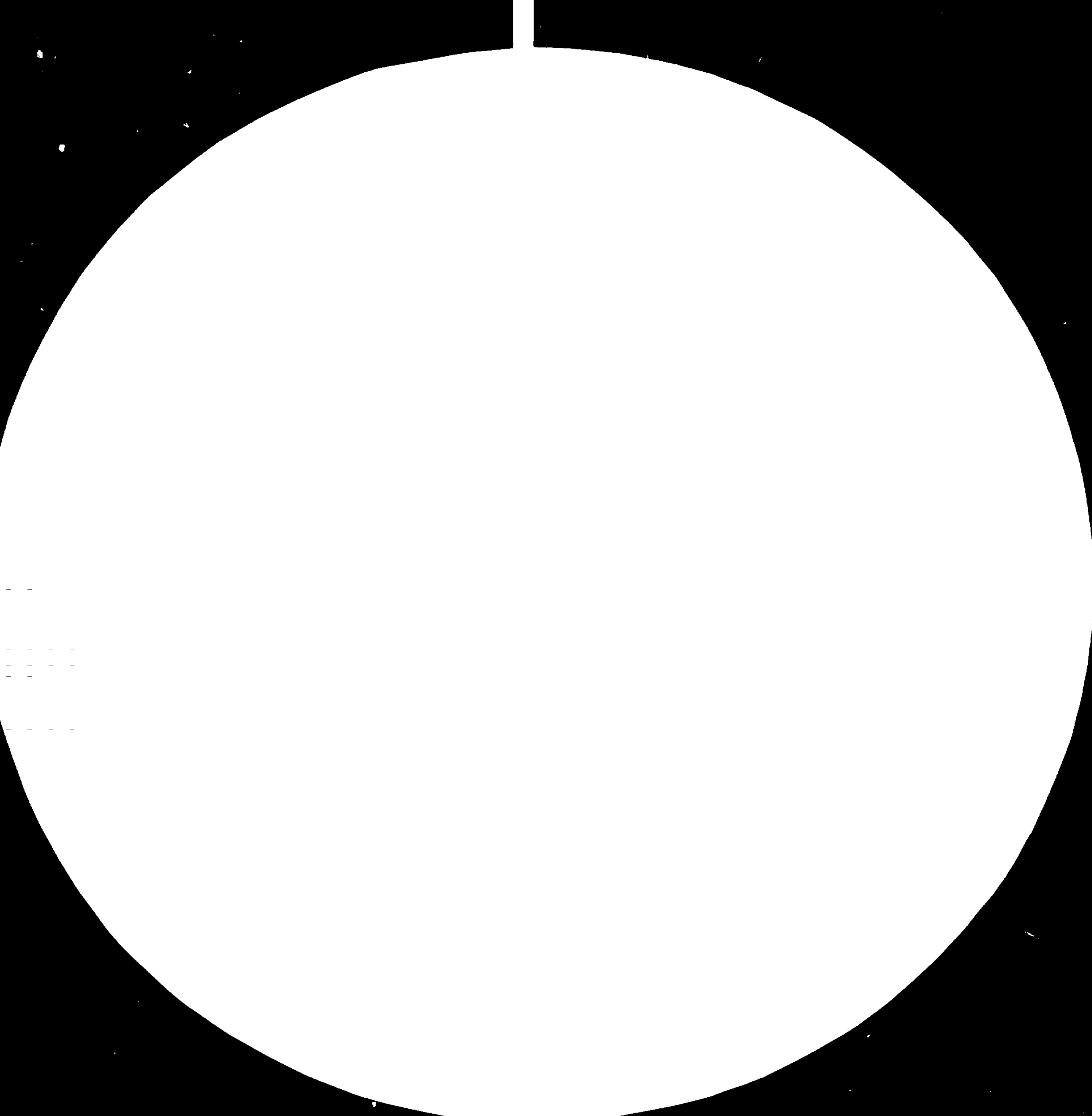

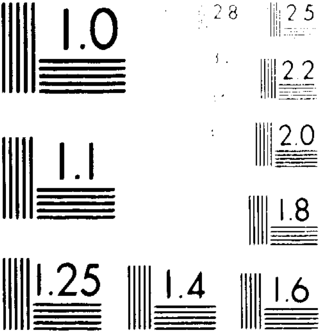
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The United Nations Industrial Development Organization
Government of Ghana

Management Assistance to the Ghana Industrial Holding Corporation

Unido Contract No. 79/54
Project No. DP/GHA/74/002
Final Report

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1980

P-E International Operations Ltd

A member of the P-E Consulting Group

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The P-E Consulting Group

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December 1980

THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
GOVERNMENT OF GHANA

MANAGEMENT ASSISTANCE TO THE GHANA INDUSTRIAL HOLDING CORPORATION

UNIDO CONTRACT NO. 79/54
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FINAL REPORT

CONTENTS Page

CONTENTS

CONTENTS

Page

APPENDICES

THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
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FINAL REPORT

1. INTRODUCTION

This report has been prepared by The P-E Consulting Group (P-E) as sub-contractor under the UNDP/UNIDO project DPA/GHA/74/002. From 1975 to 1977 the main technical assistance programme was implemented in GIHOC by P-E; the most important aspects of the programme were:

- introduction of accounting and management information systems
- assistance to top management
- training programmes for senior managers
- operational assistance at several production sites
- introduction of preventive maintenance systems
- introduction of stock control for spare parts and raw materials.

Three years after the completion of this main assistance programme we, in P-E, were appointed to analyse the present position in GIHOC. As a result of this study we suggest two forms of action, namely:

- urgent attention by the management of GIHOC on specific areas
- future UNDP/UNIDO technical assistance to GIHOC complementary to the earlier work in this project.

The main areas where we suggest GIHOC attention is required are the redefinition of the aims of GIHOC in the light of new conditions, the restructuring of its financial base and a revision of the present capital investment programmes.

Under technical assistance, we recommend a programme to implement performance improvement plans in the individual divisions. This includes the establishment of a new centre within GIHOC for training of supervisors and junior managers, and advice on pay structure and use of incentives.

The following report describes the study which we made in September/October 1980. Our findings in the various operational areas are the bases of our conclusions and recommendations.

1.1 Terms of Reference

The terms of reference were prepared by United Nations Industrial Development Organization (UNIDO) with the objective of arranging a review of the present activities of GIHOC as a basis for determining how best external aid might be used to assist GIHOC in achieving effective, commercially viable, operation. For ease of reference the text of the agreed terms of reference is shown in Appendix 1 to this report.

P-E was appointed to undertake the study. In accordance with this latest contract, the team comprised experts previously involved on a long-term basis with assistance to GIHOC in the earlier stages of this project, namely Mr K J Kempster (Team Leader) and Mr C J S Baker (Financial Analyst/Accountant).

1.2 Conduct of the Study

Preparatory work was started at the end of August 1980 in UK on the development of work programmes and checklists. Fieldwork started on 15th September, with the arrival in Accra of our Regional Director for West Africa, Mr D J Weeks (also a former long-term member of the earlier stage of the project).

Arrangements were made by Mr Weeks for office accommodation and transport and for the necessary series of introductory meetings with UNDP, GIHOC and the Ministry of Industry, Science and Technology (MININDST). As a result, when the rest of the team arrived on 21st September work was started immediately. Three major meetings were completed on the first day when the visit programme, shown in Appendix 2, was prepared and agreed with all concerned.

Although the terms of reference called for ten GIHOC production divisions to be visited, we were asked to extend the coverage and agreed to try to do so up to a maximum of 14 of the 17 organizations. In the event 14 were visited although some branch operations in the North had to be omitted due to cancellation of flights on the days planned for visits. Special thanks are due to GIHOC who, in spite of critical transport shortages of their own, were able to provide a vehicle for every day of the study and delays from that source were minimal.

With regard to counterparts, it was agreed at the initial meetings that one would be provided by MININDST and one by GIHOC. In the event, the counterpart from MININDST was unable to join us on any of the visits. However we were glad to have Mr K Kessie, Industrial Relations Officer, from GIHOC with us on all the visits. His contribution to this report in terms of gathering information on staff matters is also greatly appreciated.

Having completed the visit programme to schedule, a preliminary draft of the report was prepared as a basis for discussion. The present text reflects the comments and suggestions we received during the final discussions with officials from UNDP/UNIDO, and MININDST. We are grateful to all the individuals concerned for their interest and helpful comments.

During the assignment we submitted the two summary progress reports, as required by the terms of reference, to UNDP, Accra, in ten copies. We also submitted an additional interim report at the request of the Resident Representative, UNDP, giving our preliminary findings to provide a basis for discussions with a visiting team from UNDP Headquarters, New York.

1.3 Report Structure

For easy reference, we have provided in the next section a summary of findings and recommendations arranged in the sequence in which they appear, in more detail, later in the report.

Thereafter, in Sections 3 to 10 we describe the current situation within GIHOC as follows:

Section 3 Products and Markets

4 Production Resources

5 Raw Materials Availability

6 Foreign Exchange Constraints

7 Personnel and Training

8 Organization Structure and Management Information Systems

9 Financial Results

10 Capital Projects in Hand.

In Section 11 we summarize the main problem areas to be resolved and suggest action programmes for dealing with the main issues. We have also included action programmes for some individual divisions as required by the terms of reference.

Section 12 deals with the suggested forms of technical assistance to help GIHOC to deal with the main problems and to implement the projects proposed.

It should be mentioned that GIHOC divisions are now designated limited liability companies. For ease of reference hereafter in this report we refer to these as "the companies" and to GIHOC Head Office as "the holding company". Individual companies are referred to by the product description in the company title (eg "Fibre Products") for the sake of brevity.

2. SUMMARY OF FINDINGS AND RECOMMENDATIONS

2.1 Products and Markets

- The majority of GIHOC products necessitate imports of materials, components and spare parts.
- The retention of so much of the original product range, even at low output levels, is commendable considering the constraints on imports.
- Many GIHOC products are dominant in the local market but a significant proportion face competition from other manufacturers.
- Product development is stimulated by the substitution of local raw materials for imported ones.
- Products currently in development in this way include wooden boats less engine and fittings (for export), canned palm nut soup (for export), footwear using hessian, paints using local clay and glass using felspar, dolomite and calcium carbonate.
- Prices of most of GIHOC products are subject to approval by the Prices and Incomes Board (PIB)
- The PIB appears inconsistent in the acceptance of overhead costs for under-utilized plants and authorization of increased prices are often subject to delay.
- Price control operates on ex-factory prices and for consumer products the price paid by the ultimate customer bears little relationship to the controlled ex-factory price.
- The sales function is primarily concerned with order-taking and allocation.
- The Headquarters Marketing Unit set up in 1975 is no longer in operation due to staffing difficulties.
- GIHOC enterprises were set up to supply the local market and very little official exporting has occurred.
- Currently, efforts are being made to achieve some export business in wooden hulls, plam nut soup and air conditioners (contract assembly).

2.2 Production Resources

2.2.1 Plant utilization

- Stoppages of production for external constraints are at an alarming level.

- Typically, for about 60% of the time, plants are either not running at all or are running intermittently.

- Shortages of imported items are the main cause and local materials shortages account for only one third of the stoppage time.

- Overall the output of plants is only about 40% of single-shift capacity (equivalent to 20% of potential two-shift capacity).

2.2.2 Age and condition of plant

- Excluding Glass Manufacturing and Steelworks, where major capital projects are in progress, approximately one third of the present plant (at cost) is under 13 years old.

- The rest of the production plant is between 13 and 20 years old, comes from many different sources and spare parts are difficult to obtain for such old plant.

- Current plant installation projects include cold rooms (Meat Products), slipway and cradle (Boatyards), new production plant and buildings (Pharmaceuticals), Tema foundry (Steelworks) and reconstruction of Glass Manufacturing.

2.2.3 Maintenance and spare parts procedures

- Maintenance routines installed earlier in the project are still in use at most of the plants.

- Some of the maintenance procedures cannot be applied to full due to lack of spare parts.

- The Head of Maintenance Engineering is providing useful support to the maintenance sections.

- Spare parts stock control procedures are also still in use but, because of reduced availability of foreign exchange, more attention is needed to the selection of parts to be ordered.

2.2.4 Production management

- The organization structures of the subsidiary companies are all different, particularly serious is the spread of responsibility for production, maintenance and stores.

- A single head for these functions in subsidiary companies would facilitate the interworking between them.

- More constructive use could be made of labour available during shut-downs (eg factory cleaning and painting, attendance for training).

- Systematic records of plant stopped time showing duration and cause are kept by only a few plants.

- Better analysis of stopped time would enable production management to implement improvements in plant availability.

2.3 Raw Materials Availability

2.3.1 Local materials

- Only a small proportion of GIHOC products use local raw materials.

- Agricultural inputs (fruit, copra and groundnuts) are all subject to price problems (eg farm-gate prices are incompatible with controlled ex-factory prices).

- Availability of agricultural inputs is irregular.

- Local cattle are virtually unobtainable by GIHOC due to limited supply and high prices.

2.3.2 Imported materials

- These are restricted by lack of foreign exchange.

2.3.3 Control of stocks and wastage

- The importance of maintaining balanced stocks is recognized and raw material stock cards installed earlier are still in use as a basis for procurement.

- Physical custody of materials needs attention, particularly for imported items, to avoid losses in storage and production.

- Scrap records installed previously are in use at Paper Conversion and scrap is currently being held to the 10% achieved following the introduction of the systems 3 years ago.

2.4 Foreign Exchange Constraints

- Foreign exchange for imports by GIHOC in 1979 and 1980 is equivalent to half the corresponding figures in 1977 and 1978, after allowing for devaluation.

- Prospects for early improvement are not encouraging although there are signs that economic conditions are being stabilized.

2.5 Personnel and Training

2.5.1 Staffing levels

- The total staff in GIHOC is approximately 7,200 and has fallen from about 8,200 since 1977.

- GIHOC Head Office, ie the holding company, accounts for 2.9% of total staffing which does not appear excessive.

2.5.2 Conditions of employment

- Conditions of employment for senior staff in GIHOC compare unfavourably with other local organizations except as regards job security.

- Turnover figures are not readily available and are needed to keep conditions of employment under review.

2.5.3 Training

- Training in GIHOC is concerned almost entirely with attendance of staff on external courses.

- GIHOC should do more about internal training to reinforce external courses and give instruction in GIHOC procedures and regulations.

- Particular attention to supervisor development is required.

- Due to the suspension of courses planned for senior management there is a serious gap in management development.

- The formation of limited liability companies has widened this gap and there is a need for on-the-job development of management to undertake the new wider responsibilities.

- Staff development is needed at all levels and support from a central training function will still be needed.

- GIHOC should have an internal training centre and a suitable building is likely to become available in 1981.

2.6 Organization Structure and Management Information Systems

2.6.1 Corporate and subsidiary company organization

- GIHOC was set up under NLC Decree 207 as a central organization to take over a number of public enterprises most of which had accumulated heavy losses and were deficient in management and finance.

- Corporate management in 1978 was promoting the view that the divisions should be converted to limited liability companies.

- In September, 1979 the erstwhile AFRC directed that the divisions be re-constituted into limited liability companies.

- Under the new Constitution, GIHOC, as a public corporation established by decree, is required to be re-established by Act of Parliament; regulations covering the operations of GIHOC must be included in this Act.

- Under a draft bill incorporating the proposed regulations, the governing body of GIHOC will supervise the activities of the Subsidiary Boards through various committees and representatives. The ex-officio members of the Corporate Board will be the Chairman of the Subsidiary Boards.

2.6.2 Corporate planning and control

- Such formalized planning as is currently undertaken is primarily concerned with the short-term, eg budgets. Longer-term planning has essentially been of an intermittent nature with emphasis on capital expenditure programmes.

- Under the terms of its establishing decree, it is the duty of GIHOC to conduct its affairs on sound commercial lines and produce a reasonable return on the fair value of its assets. Standards of performance were not quantified in the decree.

- There is an urgent need to review and quantify where possible the aims of GIHOC as a whole to aid formulation of the policies and strategies of the Corporate Board towards the subsidiaries and to assist in discussions on the draft bill to re-establish GIHOC by Act of Parliament.

2.6.3 Budgeting and budgetary control

- GIHOC is endowed with a well established budgeting and budgetary control system.

- The major unknown during budget preparation is the quantity and timing of delivery of imported materials. Few of the companies re-budget when this information is known. Management is thus uncertain of the outcome for the year until preparation of the draft annual accounts.

- Budgetary control and corporate cash flow planning are hampered by the arrears in the preparation of monthly operating statements.

- With the introduction of the Subsidiary Boards, budgeting and budgetary control is expected to become more effective.

2.6.4 Financial systems

- A major component of the UNIDO project between 1975 and 1977 was the upgrading and development of the financial systems at both divisional and corporate levels; our findings during our visit programme were encouraging in that most of the systems were in operation even though there is currently a shortage of appropriately qualified and trained senior accounting staff throughout GIHOC.

- These systems together with the supporting books of account, continue to provide GIHOC with a sound basis for maintaining records of its resources and for providing management information.

- The currently interrupted programme of visits to each of the companies by the systems accountants based at the holding company should be resumed. Emphasis should be placed on ensuring that all records and operating statements are brought up to date.

2.7 Financial Results

- GIHOC has shown profits before tax of between 7% and 12% on sales for each of the years 1977, 1978 and 1979.

- This profit is overstated because of the effects of inflation, and adjustments for replacement costs would probably turn the profit into a substantial loss.

- The companies which generate sufficient profits to provide internally generated cash flow available to GIHOC as a whole are Cannery, Paint, Paper Conversion and Pharmaceutical and, potentially, Electronics and Meat Products.

- The larger loss-making companies include Boatyards, Fibre Products, Footwear and Vegetable Oil Mills.

- Without the support of the holding company these loss-making companies could be regarded as insolvent.

- As a matter of urgency the funding of GIHOC and its subsidiary companies must be restructured.

2.8 Capital Projects in Hand

- The total estimated cost of projects underway at Boatyards, Glass Manufacturing Phase 1, Meat Products and Steelworks is over ¢86 million.

- Of this over ¢43 million is not yet funded and the position is aggravated by difficulties in obtaining foreign exchange.

- GIHOC cannot currently generate sufficient funds internally for projects of this scale.

- Clarification and re-appraisal of GIHOC's capital investment programme is urgently required.

2.9 Problem Areas - Action Programmes

- We recommend the following three action programmes:

  1. Corporate and Individual Company Action Plans
  2. Company Performance Improvement Programme
  3. Rehabilitation of Brick and Tile

- The first action programme, which we recommend that GIHOC should undertake without technical assistance, comprises the following action plans for early attention:

  - definition of corporate aims to provide a basis for planning and performance assessment

  - restructuring of debt and equity capital to provide sufficient and appropriate funding for operations and capital investment

  - revision of capital investment programmes to ensure early completion of viable projects

  - examination of operations of Farms and resolution of raw material supply for Cannery and Vegetable Oil Mills

  - market study for Boatyards of prospects for export of hulls.

2.10 Technical Assistance Projects

- For the other two action programmes, technical assistance is considered desirable:

  - In view of the new status and responsibilities of the subsidiaries technical assistance should be sought for an integrated programme dealing with the many factors which affect company performance improvement including supervisor development and conditions of service. Priority should be given to companies with the most serious financial and operating problems.

  - As an immediate short term requirement, external assistance should be sought for the rehabilitation of Brick and Tile which would include the import of the balancing plant, technical assistance and spare parts.

3. PRODUCTS AND MARKETS

3.1 Historic Development

GIHOC was set up by decree in 1967 to take over the management of industrial enterprises set up or acquired by the state since independence. These enterprises became initially divisions of GIHOC. By 1980, GIHOC consisted of 16 divisions, several wholly-owned subsidiaries and interests in joint ventures. As at January 1980 the divisions were given wholly-owned subsidiary company status. A further subsidiary, Farms, had been established in 1978 to take over GIHOC's farming interests from the other enterprises. In this study we have been concerned only with the subsidiaries which were formerly GIHOC divisions, and with Farms.

The enterprises taken over by GIHOC already had their own established product ranges and markets. The available range of products was primarily restricted to the capabilities of the installed plant and equipment. Thus any major product development usually required the introduction of new techniques and prior capital expenditure on the appropriate plant and equipment.

The majority of the established products necessitate imported raw materials and/or components and imported spare parts for production plant and equipment. Given the restraints on importation by the limited quantity of foreign exchange available to GIHOC, it is commendable that much of the product range has been maintained, albeit at low output levels and varying mix.

Certain products and services have been withdrawn:

- furniture manufacture at Boatyards due to lack of competitiveness
- roofing tiles and sun-screen blocks at Brick & Tile because they were excessively unprofitable
- welted boots and shoes at Footwear due to deterioration of production equipment and introduction of equipment for injection moulded soles
- glass holloware at Glass Manufacturing whilst the factory is rehabilitated.

Slaughterhouse services at Meat Products have been grossly under-utilized due to lack of animals for slaughter.

New product introductions during the last decade appear to have been initiated primarily by customer special orders and depended on the availability of appropriate plant and equipment. Products introduced by GIHOC include:

- special order boats at Boatyards

- special order bricks and earthenware pottery at Brick and Tile
- special order plastic mouldings at Electronics
- injection moulded soles for boots and shoes and various style changes at Footwear
- pre-cast kitchen sinks at Marble Works
- corrugated roofing sheets and tubular steel garden furniture at Metal Industries
- toilet roll and plastic bag manufacture at Paper Conversion.

Further emphasis has been given to crop production with the establishment of Farms.

3.2 Current Products, Competition and Trends

A list of products currently and potentially available from GIHOC is given in Appendix 3.

Listed below are examples of recent output performance:

Company	Units	Production Capacity	Sales Volumes 1979	Sales Volumes ½ year June 1980
Boatyards	completed hulls	30	8	not available
Fibre Products	million bags	12	Nil	1
Footwear	thousand pairs	504	139	69
Metal Industries	thousand tonnes	4.7	0.45	0.30
Paint	thousand tonnes	4.5	1.4	0.4
Paper Conversion	thousand tonnes	12.6	2.9	1.1
Steelworks	thousand tonnes	30	3.7	2

Sales volumes thus continue to remain at a fraction of the production capacities. Production capacity utilization is discussed in more detail in Section 4.

A significant proportion of GIHOC products is dominant in the local market, even allowing for imports, and has little or no competition from similar products manufactured locally. These products include:

- branded alcoholic beverages from Cannery and Distilleries
- marble tombstones and pre-cast sinks from Marble Works

- corned beef from Meat Products
- corrugated cardboard cartons and paper bags from Paper Conversion
- certain formulations from Pharmaceutical
- steel reinforcing rods from Steelworks.

Other products face established competition from similar or substitute products. The products are typically manufactured by private firms and these individual firms are often on a very small scale. Examples include:

- boatyards at Tema, Accra and Elmina
- concrete block manufacturers
- major breweries and village brewing enterprises
- craft footwear manufacturers
- terrazzo floor laying contractors
- metal and wooden furniture manufacturers
- nail manufacturers
- village vegetable oil mills.

The increasing use of local materials both for new products and as a substitute for imported materials, is a present stimulus for product development. Current projects include:

- at Cannery: export of canned palm nut soup
- at Footwear: use of hessian from Fibre Products in shoe manufacture
- at Glass Manufacturing: proposed local raw material processing plant
- at Paint: use of local clays.

3.3 Pricing

Prices are normally set on a cost plus basis. GIHOC profit margins on sales are typically below 20%. Price increases for most GIHOC products are subject to approval by the Prices and Incomes Board (PIB). The exceptions include the products of:

- Boatyards
- Brick and Tile
- Marble Works

- Paint (minor products)
- Paper Conversion (minor products).

Cost structures submitted to the PIB are usually one-off calculations based on the prices of recent deliveries of imported materials and of newly harvested crops.

However, the elapsed time between submission of a price increase application to the PIB and receipt of an approval can be several months. Thus an applicant, eg Steelworks, can be required to sell at price appropriate to the previous year whilst awaiting approval. We noted that during 1980 Paper Conversion had been supplying its customers against their substantial cash deposits without invoicing them until the requested price increases had been approved.

The GIHOC companies are not permitted to shed labour when running below capacity or shut down. Each company operating much below capacity will carry an overhead burden related to its capacity but which is further increased by the unproductive time of the direct labour. The PIB is inconsistent in its acceptance of overhead recovery. Some companies, eg Metal Industries, are able to set prices which enable them, even at low output levels, to recover their annual overhead burden whilst other companies are less fortunate. Further, Vegetable Oil Mills has been required by the PIB to price oil at a level which cannot cover the overheads because the farm-gate price of copra, which is not controlled, has been so high.

It should be noted that price control in the markets is far less effective than at the factory gates. For consumer products the price paid by the final consumer will bear little relationship to the controlled ex-factory price.

3.4 Marketing and Distribution

With the emphasis on the maintenance of existing products, little marketing is undertaken.

The sales function is solely concerned with order-taking and allocation. Formal market research is almost non-existent. In Footwear, Cannery and Metal Industries some market intelligence has been gathered and has resulted in some product development.

The Headquarters Marketing Unit established in 1975 at the beginning of the UNIDO project no longer exists. Whilst operating, this Unit had undertaken local market studies on behalf of several of the companies and also commissioned an export marketing study for canned pineapple. The head of the Unit was not provided with support staff and when he was appointed managing director of a GIHOC subsidiary his successor moved to another post after only a few months in the Unit.

The majority of non-consumer goods are sold direct to the end-users, eg jute bags to the Cocoa Marketing Board, building materials to the State Housing Corporation and branded cartons to the grocery suppliers. Consumer goods are distributed through almost all available channels. The use by the companies of their own regional depots and shops has almost stopped and customers are generally required to provide transport for delivery of their goods, GIHOC's vehicle fleet being much depleted.

To ensure allocation, it is common practice for prospective customers, including state organizations, to make substantial cash deposits.

3.5 Exports

The GIHOC enterprises were set up to supply to the local market. They have never been able to satisfy this demand fully.

Whilst many GIHOC products appear in the shops of adjacent countries, few of these products have been officially exported. The cedi has been persistently over-valued which negates the opportunities for exporting at the official exchange rate, even for the products in which Ghana should have a comparative advantage.

In 1977 the Headquarters Marketing Unit commissioned a study of the export market for canned pineapple. This study indicated that, for acceptance in Europe, the product must be made available at a competitive price with guaranteed quantity, quality and delivery. It was considered most unlikely that GIHOC could satisfy any of these conditions.

Boatyards have exported hulls, notably to Eire, and Vegetable Oil Mills have exported copra cake to Germany. However these exports have ceased, in part due to the exchange rate and in part due to poor delivery performance.

However, GIHOC company managements are still attempting to initiate some foreign exchange earnings. Current developments include:

- sales drive in adjacent countries for hulls without machinery by Boatyards
- development of canned palm nut soup specifically for export by Cannery
- discussions for the assembly of imported component kits of air conditioners for foreign markets by Electronics.

4. PRODUCTION RESOURCES

4.1 Plant Utilization

The most disturbing fact about the utilization of production resources in GIHOC is the alarming proportion of time when factories, or individual product lines, are unable to operate at all because of external constraints.

Wherever possible during our visits we obtained approximate data to quantify the problem, recognising that sometimes there may be more than one reason for the stoppage. Furthermore there are occasions when plants are run at less than full capacity, for example when raw materials are in short supply, and the plant may be less likely to break down if run slowly.

We show some examples of the extent of stoppages in Appendix 4. We selected those companies and products where the identification of stoppages was reasonably clear, and, for eight companies which we were able to analyse, the stoppages were as follows in the 20 month period to August 1980.

		Production months of		
Company	**Product**	**Total stoppage**	**Partial stoppage**	**Running**
Brick & Tile	Bricks	-	20	-
Cannery	Jam/Marmalade	5		15
	Juices	8		12
	Lime cordial	13		7
Fibre Products	Fibre bags	14		6
Footwear	Footwear	1		19
Marble Works	Chippings	6	14	
	Terrazzo tiles		20	
Meat Products	Corned beef	12		8
Metal Industries	Nails	7	1	12
Paper Conversion	Board/Boxes	8		12
		74	55	91

Hence, for about 60% of the time, the plants making these products were either not running at all or were running intermittently. Companies not included in this list (eg Boatyards, Vegetable Oil Mills, Paint, Steelworks) were subject to production stoppages of similar types.

The main reasons for total stoppages in the above sample are as follows:

			Months of stoppage - total
Lack of Raw Material	-	Imported	42
	-	Local	18
Lack of Containers	-	Imported	8
Lack of Spares	-	Imported	6
			74

Of this total, local materials shortages account for only 24% and the balance of the items is concerned with imports and hence with foreign exchange shortages (as discussed later in Section 6).

With regard to intermittent and partial stoppages, the exact reasons are difficult to obtain and the extent of delays from each cause is not readily identifiable. A particularly bad case of intermittent running occurs at Brick and Tile. Here the plant is old and spare parts are difficult to obtain (eg conveyor belts and V-belts). During the rainy periods the pits under the machines flood and the plant has to wait while water is removed (using buckets as no suitable pump is yet available). There are also electricity failures in the area during rains and the locomotive for hauling green bricks to drying sheds is also sensitive to wet weather. The mixing plant has no means of extracting stones and metal objects from the mix and hence there are frequent stoppages at the extruders to remove the objects and to throw away the resultant damaged output.

We have dealt with this example at some length to show the type of intermittent production which can occur. On the same plant there is further loss of utilization as the two extruders are run with a double-shift (16 hours) on one and only a single-shift (8) on the other. We were told that double shifts on both would only add to risk of further breakdown and increase the total amount of idle labour time. In the circumstances we can sympathize with the philosophy but the company needs all the saleable output it can achieve.

Where plants were shown to be running continuously we found a number of examples of deliberate operation at about half capacity (eg corned beef at Meat Products, Bolgatanga, and at Paint). The principle behind this is to stretch out scarce material, avoid being seen to have large finished stocks, and to provide longer periods of factory activity rather than having to send workers home so soon after restarting the factory. There is no doubt that workers' morale suffers during long periods at home, even on full pay, and a good example of the difficulties of restarting after a long closure is Fibre Products which was closed for over a year. Production has been at half the previous rate since it was resumed earlier this year even though ample raw material is now assured for some months.

As an overall assessment of plant utilization, if we take intermittent running as equivalent to 50% utilization and continuous running at say 75%, the figures from the earlier sample become:

	Total stoppage	Partial stoppage (Intermittent)	Running (Continuous)
Months in sample	74	55	91
Effectiveness assessed as % of capacity	Nil	50%	75%
Equivalent at full capacity (months)	Nil	27.5	68.25

Total equivalent 27.5 + 68.25	= 95.75 months
Total months in sample	= 220 months
Overall utilization of plant	= 44% of single-shift capacity (equivalent to 22% of two-shift capacity)

4.2 Age and Condition of Plant

Much of the production plant and machinery currently in use was taken over from previous enterprises when GIHOC began operating in 1968. On average, such plant is now between 13 and 20 years old and comes from a wide variety of different countries. We found many instances where spare parts for these older machines are virtually impossible to obtain, eg for the Czech machines at Metal Industries and at Footwear. As a result, for machines in this category, spares have to be manufactured locally using improvised methods and materials. Such spares have limited life and, although a creditable effort has been made to keep machines running, their use contributes to much of the intermittent production problems.

Some companies however have had new machinery installed, either to replace or supplement old machinery. We made a broad analysis of the increases in plant and machinery during the period 1968 to 1978. This indicated that excluding Steelworks and Glass Manufacturing, the companies have only approximately one third of their plant (by cost value) less than 12 years old, ie plant installed after the formation of GIHOC.

Currently, there are projects of plant development at the following locations:

Glass Manufacturing, Aboso	Major rehabilitation
Steelworks, Tema	New foundry
	New oxygen plant
	New continuous casting plant
Steelworks, Kumasi	New rolling mill

Meat Products, Tema	New cold-rooms
Boatyards, Tema	Rehabilitation of slipway and new cradle
Pharmaceutical, Accra	New production building and equipment

The status of these current projects is described in Section 10 of this report.

4.3 Maintenance and Spare Parts Procedures

We examined the operation of the plant maintenance sections at many of the plants which we visited and, in particular, noted the use being made of the planning maintenance routines installed under this project some 3 to 4 years ago.

We found that, in general, good use was being made of these procedures. Some of the maintenance sections were clearly aware of the benefits of the systems and operated them fully. Others, particularly where there had been staff changes, had limited the planned maintenance work to servicing and lubrication on the grounds that plant inspection, involving stripping or removing covers for the purpose of examining wearing parts, could itself create a need for spare parts such as gaskets.

At several plants we found that visits by the Head of Maintenance Engineering (a counterpart in the previous UNIDO project) have been extremely useful not only in checking the operation of the maintenance systems but also in assisting with local manufacture of much needed spare parts. We discussed the overall position on maintenance with this officer and he confirmed that there were only two of the 16 companies in which maintenance procedures were in need of immediate attention. Elsewhere, in the circumstances of spare and material shortages, an adequate standard was being achieved. Its continuance depends of course on the continued monitoring and supervision by the Head of Maintenance Engineering and local management respectively. We are concerned that shortage of transport is restricting the number of visits that the former can make.

With regard to spare parts we inspected a number of the installations of stock control records carried out during the earlier stages of the project. In all cases the stock records were available although in some instances there were arrears of postings. Again, changes and shortages of staff were given as the reason together with, in some cases, disappointment that spares were not forthcoming. We stressed the need to bring records up-to-date (not a major task as all the cards are available) in order to have the latest information on which to base the re-ordering process.

The lack of foreign exchange has become even more acute, as discussed in Section 6 below, with the result that the ordering of spare parts needs even greater skill in making the best use of funds available.

We found a number of instances, for example, where the quantities of an item which had been ordered represented many years' supply at present consumption rate. If it had been possible to reduce the quantities it would have enabled foreign exchange to be spread more usefully over a wider range of parts. Further, there is no indication of priority for individual items. Where a critical machine is stopped for want of a spare part which cannot be produced locally (even one which will keep the machine running for only a short time) priority for ordering needs to be recognised. Parts for which a local substitute can be made can take lower priority.

It will be appreciated that the decision as to which spares to order involves several different departments, eg maintenance, stores, production, commercial and procurement. We found that there is a tendency for these to operate independently in setting up the reorder list for spares. For example, at Paper Conversion, production wanted a particular machine to be restored to running order whereas the spares which had been ordered were for another machine, less important to production.

The present method of allocation of licences for foreign exchange creates an annual reordering process. It did not appear that sufficient attention was being given by General Managers to coordinate the process and ensure that the optimum annual order for spares (inevitably a compromise in present conditions) is made. As a starting point for this operation, up-to-date stores stock control cards showing usages, order levels, order quantities and part orders are essential.

We discussed the above situation with the Head of Production Services who has the responsibility of monitoring the operation of spare parts stock control, amongst other things. Three years ago we set up a programme of system audits and these were continued until last year but have now lapsed. Again transport difficulties were quoted as a reason. We urged that the audit programme is revived as a matter of priority.

4.4 Production Management

Under this heading we review the problems of managing the production activities of GIHOC in the circumstances of materials and spare parts shortages, intermittent production and periods of total plant closures.

Virtually every company we visited had a different internal organization structure with corresponding variations in the distribution of functions between the departmental managers. In every case we found an individual with a title of Production Manager (or equivalent) but in only 3 of the companies does this individual have responsibility for plant maintenance and none of them have direct control of raw material stores or spare parts stores. In most cases, maintenance is a separate function responsible through a maintenance engineer (or equivalent) to the General Manager. Stores are frequently part of the Accounts Department or, occasionally, are the responsibility of the Commercial Manager.

We mentioned above the impact of this fragmentation on the handling of spare parts ordering. It can clearly affect raw materials supply in the same way. Equally, in personnel matters, a single head for production, maintenance and stores staff facilitates interworking between these activities, both in longer-term planning and short-term working.

We appreciate that, in the event, the final choice of organization will depend a great deal on the skills and experience of the personnel available. However, there are clearly difficulties to be overcome in making the most of production resources and, with the present organizations, the intervention of the General Managers would appear to be needed in many detailed production matters.

On a general point regarding the use of labour resources, plant shutdowns account now, on average, for some 40% of each year. In these circumstances we would have expected to find more constructive use being made of this idle time, not only in staff training, factory cleaning and painting, but also, possibly in other productive operations, (eg building of stores racking which is much needed in, for example, Electronics).

With regard to management of production where inputs are available, we found many examples of well-kept records of production output and of labour attendance time, but in most cases there were few systematic records of plant stopped time showing duration and cause of each stoppage. This made it impossible to evaluate the extent of stoppages for, say, power supply failures or plant breakdown.

At Brick and Tile, however, we found such an analysis showing the total factory hours lost each month for various causes. Unfortunately, the headings for recording time lost are too general. Grouped together under one heading we found such diverse causes as emptying water from machine pits and foreign matter in the clay. Certainly these records enabled us to discuss production problems with the Production Manager and if a revised set of headings were introduced, here and at other plants, it would enable production management to monitor stopped time more closely. They could then evaluate the causes, implement cures and check that the desired improvements have been obtained. Again Brick and Tile is a good example; provision of pumps to empty the pits would increase production but by how much? Is the benefit sufficient to justify the installation of pumps?

5. RAW MATERIALS AVAILABILITY

5.1 Local Materials

For certain GIHOC products, the raw material is locally available, for example, clay for bricks, fruits for canning and copra and groundnuts for vegetable oils. For other products such as glass, the finished product depends on mixing local materials with imported ones. Similarly even the wooden hull of a fishing boat requires imported copper nails and a complete boat with engine, winch and fittings has a substantial imported content. Other companies depend heavily on imported materials.

Hence, there are only small proportions of the companies' total output which are using local raw materials. Even so, the availability of such materials to GIHOC is by no means assured.

Clay for brick making is a reasonably straightforward extraction process from pits on the brickworks site, and the only problem arising is an increasing contamination from sea water which may require an imported chemical to counteract the salt.

Agricultural products, such as fruits, copra and groundnuts, are all subject to price problems when GIHOC is buying from farmers in competition with local markets. The constraint arises chiefly from the fact that GIHOC products of this kind are themselves subject to Government price regulation ex-factory, and the prices that GIHOC can pay for inputs are correspondingly limited. Currently, for example, both the GIHOC oil mills processing groundnuts are closed as the farm-gate price per 50 kg bag of nuts is reported to have reached ¢600 compared with about half that price 6 months ago. The decision to cease production of oil is understandable although further cost investigations are being made as to the implications of paying the input price as asked and selling at a loss, compared with the ongoing costs of paying full wages to employees, and other continuing plant costs, during the shutdown.

Similar problems have occurred in the past with tomatoes and fruits and, to date, no satisfactory arrangement has been reached which assures the GIHOC plants concerned a consistent supply of agricultural products. GIHOC Farms was created two years ago to overcome this situation but, for various reasons, has still not solved the problem. In Section 11 we suggest an action plan to improve the position.

Further problems arise from difficulties in transporting agricultural inputs to the processing plants. In particular copra has to be transported to Esiama in the Western Region through areas where heavy rainfall and road deterioration had reduced supply to the oil mill drastically. The company concerned has recently bought new trucks and, while we were there, the local management reported a marked improvement in supplies.

A local raw material which is virtually unobtainable by GIHOC is meat. The factory at Bolgatanga for canning corned beef was planned to slaughter local cattle but limited supply and high prices have put an end to this. Meat for canning now has to be imported via Tema and transported to Bolgatanga. The product then is transported back to the South where the main market exists.

Other local raw materials are less difficult to obtain although prices, quality and transport resources are occasionally creating problems. This applies particularly to timber for Boatyards.

5.2 Imported Materials

The availability of imported materials is almost entirely dependent on import licensing and the subsequent stages of obtaining suppliers' pro-forma invoices, establishing letters of credit and obtaining delivery.

This cycle is an annual one. The timing of the initial licence and delays in subsequent stages can become critical as goods must be shipped within the year for which the licence is issued. We examined examples of the timing of the process in the current year and it appears that Government has alleviated some of the previous problems by issuing licences only to the extent of foreign exchange known to be available. This has removed the previous difficulty where letters of credit could not be established for the full amount of licences and were often too late to obtain delivery of material within the calendar year.

The figures of import licences granted to individual GIHOC companies are shown in Appendix 5 where it will be seen that, in total, and allowing for the cedi devaluation in 1978, the present level of actual imports is about half the level obtained in 1977 and 1978. The overall problem of foreign exchange availability is discussed in Section 6 below.

5.3 Control of Stocks and Wastage

Raw material imports are critical to most of GIHOC companies. As the availability falls, the proper control of ordering, physical stocks and wastage becomes increasingly important not only from the point of view of cost reduction but also in obtaining maximum output from the limited inputs available.

The importance of balancing stocks of raw materials is being recognised so that, at the end of a production run, all the ingredients or components of a product run out as nearly as possible at the same time. In this way the maximum amount of the imported materials go out of the factory in finished products rather than remaining as dead stock which cannot be used until further imports are obtained the following year. We were encouraged to find raw materials stocks cards installed in the earlier stages of this project were still in use and that the information on them was being made available to procurement at the appropriate times.

With regard to control of usage of materials, we examined current operation of stock control and scrap control at various companies. At Electronics, for example, we checked the material left at the end of a production run of 2,500 telephone sets. We found the entries on the stock cards and kit control cards were being kept as we had recommended in our earlier preliminary work at the company. However, physical custody of components needs improvement, not only to ensure components can be found when needed but also to prevent damage; even one small component mislaid or scrapped can prevent the manufacture of a whole radio, for example. We were concerned that there are some 8,000 radio kits in stock which cannot be assembled until a few individual missing items are obtained. We were advised that the overseas supplier is requiring that further kits are delivered against this year's import licence before he will supply individual components to make up existing kits.

We also discussed material scrap rates at Metal Industries and at Paper Conversion and found production management very conscious of the need for control of scrap. In particular at Paper Conversion the scrap recording procedure which we installed three years ago was in full operation and showed scrap being held to 10%, the level to which it was reduced during our previous work. Even so we suggested that, when the factory reopens next month, a further critical examination of the sources of scrap be made in view of the critical shortage of imported material. The existence of the scrap control routines will ensure that progress of such an exercise can be properly monitored. At Metal Industries we were advised that the production department had a system for control of material usage but data was not readily available at the time of our visit. Other companies could, with advantage, review their methods of control of materials in store and in production.

6. FOREIGN EXCHANGE CONSTRAINTS

6.1 Review of Availability

We have already referred in previous sections to the overwhelming effect of foreign exchange on the operation of Ghanian manufacturers in general and GIHOC in particular.

Referring again to Appendix 5, it will be seen that the total foreign exchange availability to GIHOC over the last 4 years can be summarized as follows:

	Total licences granted ¢ million	Total utilized ¢ million	% of licence utilized
1977	43.7	17.4	40%
1978	80.4	17.7	22%
Devaluation			
1979	91.8	27.7	30%
1980	31.7	24.1	76%

Devaluation of the cedi in 1978 effectively reduced its external purchasing power by about two-thirds at official rates of exchange. The amounts of licences utilized in 1979 and 1980 are therefore equivalent in real terms to approximately ¢ 9.2 million and ¢ 8.0 million respectively or about half of the equivalent imports in 1977 and 1978. Recognising that, during these years, world prices have risen substantially the downward trend of materials and spares available to GIHOC is a matter for extreme concern.

We visited the Chief Industrial Promotions Officer at the Ministry of Industry, Science and Technology (MININDST) and discussed the methods of arriving at the amount of licences for individual companies. He explained that the basis was, unlike previous years, to limit total licensing for all sectors to foreign exchange likely to be available. The total is then allocated to sectors by Government and, within the manufacturing sector, the total available is allocated to products as a broad priority basis. Where more than one company manufactures the product, the foreign exchange is distributed between the manufacturers in proportion to production capacity.

In this way GIHOC companies receive their import licences direct from MININDST and not through the holding company. We considered whether there would be any advantages in terms of better use of foreign exchange if the holding company were to be given the total allocation with the option to make minor redistributions within the group compared with initial allocations.

We concluded that it would cut across MININDST policy of allocation by products but suggest that a small reserve be created for allocation to GIHOC so that it can be distributed to companies able to make the best use of it to improve factory and labour utilization.

There is clearly a need to ensure that application of foreign exchange is carried out effectively by all the companies because of the impact on company performance and profit. We further conclude therefore, that companies should seek advice from the holding company on procedures for stock control, reordering, procurement, stores custody, and scrap control of all imported items. Internally all companies should review the subject at regular intervals.

6.2 Future Prospects

Because of the importance of foreign exchange to the performance of GIHOC companies, we have sought locally for any indicators as to how the Ghanaian economy might move next year.

We found firstly, a general feeling amongst senior executives locally that the economic difficulties are "bottoming out" and that, although there is no prospect of early improvement, a measure of stabilization is being achieved. In support of this view, the recent announcement by the Government of Ghana that the country's short-term debt is being progressively reduced is encouraging.

7. PERSONNEL AND TRAINING

7.1 Staffing Levels

In Appendix 6 we show the total staffing of each of the companies and the holding company. The latest complete figures readily available were for February 1980 and we have shown a comparison of these with the figures for 1979 and 1978 using the nearest comparable data available. We also selected from earlier years the total staffing figures for GIHOC from 1974 to 1980.

They show that after rising to a peak of over 8,000 in 1977 the staffing level had fallen by about 1,000 by early 1980. Since then there has been a major strike in June 1980 by GIHOC junior staff workers, which led to total dismissal and selective re-engagement of the staff concerned. We have no comparative information on the resultant staffing levels but it is likely that further reductions will have occured. With the existing low levels of plant utilization, the productivity of labour is low and overmanning persists in individual companies.

During our visits we attempted to extract staff turnover figures as an indication of the volumes of leavers and joiners. Although a monthly return is produced by each company, many are not up-to-date (hence the problems above with identifying total staffing levels). Even locally, we found no instances of systematic turnover records on which to control staffing levels (eg by not replacing leavers where surpluses exist) and to detect adverse trends which need attention. Local personnel managers could, with advantage, be introduced to such systems as, in future, their companies will have greater operating flexibility and their expert advice will be needed. This also applies to subjects such as negotiations and establishment of workers' councils which are likely to become local matters in future.

A point to note on staffing levels is that Head Office, ie holding company staff, represents only 2.9% of the total. Considering the Head Office figure includes services such as legal, secretarial, public relations and development which do not occur at company level, the overhead does not appear in any way excessive.

7.2 Conditions of Employment

Staff in GIHOC are categorized into two main groups, namely, senior staff comprising managerial, technical and professional staff; and junior staff who include factory and office supervisors and all the grades reporting to them.

The junior staff conditions of employment are negotiated by GIHOC management with GIHOC Workers Council and any agreements reached have subsequently to be ratified by the Prices and Incomes Board. A new agreement was reached in February 1980, but subsequently became the subject of the major GIHOC strike in June 1980. The strike was precipitated by the workers' concern at the delay in confirming the agreement. Since then scales have been agreed and a further revision of the minimum wage is expected shortly. For junior staff, there are no data readily available to enable comparison of GIHOC conditions with those for other organizations.

For senior staff a study was made by GIHOC in October 1979 in which the following comparison of annual salaries for professional engineers was made:

Grade	**Electricity Corporation of Ghana (ECG) cedis**	**GIHOC cedis**
Assistant Engineer	6096 - 7512	5646 - 6246
Engineer	7900 - 9462	6420 - 8328
Senior Engineer	9908 -10980	7710 - 9708
Principal Engineer	10716 -11796	-
Assistant Chief Engineer	10986 -12384	-
Deputy Chief Engineer	12092 -13266	9462 -10446
Chief Engineer	12972 -14538	10716 -11526

Overall this indicates that ECG starting salaries are between 8% and 28% better than GIHOC. We were informed that these figures still apply.

With regard to the private sector the gap is even wider. From a recent analysis by the Industrial Relations Officer of GIHOC it appears that, grade for grade, private sector gross salaries are between 50% and 75% higher than GIHOC (including cost of living and housing allowances).

General opinion in GIHOC suggests that professional accountants and engineers are liable to high staff turnover rates, but that other staff are less likely to leave for other jobs. GIHOC probably gives more job security than in the private sector which could offset the attractions of higher pay.

It is important to evaluate the effect of relative conditions of service, and staff turnover is an important indicator. We again suggest that a survey of turnover is made by GIHOC of both senior and junior staff to show the present position. If the results for any grade are exceptionally high, a sub-analysis by length of service will probably localize main areas of high turnover which can be further investigated in search of reasons and a cure.

Regular monitoring of turnover is recommended, as an important starting point for manpower planning as well as for keeping staff conditions under review. We found that manpower planning in GIHOC is currently confined almost entirely to identifying individual training needs for members of

GIHOC senior staff grades. It could with advantage be extended to include the normal activities of this function, namely, quantification of future manpower needs overall and identification of the means of satisfying them. This would provide a basis for internal staff development with the object of improving staff opportunities and reducing turnover.

7.3 Training

The Training Section in GIHOC consists of one Training Officer who works under the Manpower Planning Manager. There are no full-time instructors in the section nor are there any permanent facilities for running internal training programmes.

The Training Section is at present entirely concerned with the attendance of GIHOC staff on external courses. In this context, the work of the Training Officer consists of:

- collection of data on courses available
- identification of courses suitable for GIHOC staff
- liaison with the companies to identify candidates
- administration of course reservations
- administration of clearance formalities for staff going on overseas training.

The main sources of local courses are as follows:

- Ghana Institute of Management and Public Administration
  - courses for senior executives in general management and administration.
- Management Development and Productivity Institute
  - middle management courses including training in management techniques (eg planned maintenance, quality control)
  - courses in basic supervision for first-level supervision.
- National Vocational Training Institute
  - mainly used by GIHOC for training accounts and clerical staff in their basic skills.

We have discussed the results being obtained from these local courses, not only with the Training Officer but also with various levels of management in the individual companies. We found general agreement that the courses run by these organizations fulfil their objectives. However, in most cases, replies were qualified by statements such as "when they come back from courses they still need further training in GIHOC methods" and "some supervisors take on more responsibility after a course, others drop back into their old ways, particularly if they are not promoted quickly".

There were views that GIHOC itself needed to do more internal training, so as to reinforce the broader instruction received on external courses, by providing training in the application of the general principles to GIHOC procedures and organization. Particular emphasis was placed on the development of first-line supervision as members of junior management.

On external training overseas, the problem of foreign exchange has limited the range and scale of courses and fellowships which GIHOC can provide by itself. Assistance is therefore sought from aid agencies and from bilateral aid to support training of this type. In each of the last 3 years an average of 8 members of GIHOC staff have received overseas training courses and fellowships, ranging from courses of 4 weeks to programmes lasting up to 2 years, the latter usually for technical and professional staff. Of particular interest, in the context of training, are a recent 4 week course for the Manpower Planning Manager on "Manpower Planning in Public Enterprises" held in Yugoslavia and a study programme for the Training Officer of 6 weeks duration, both sponsored by UNIDO.

At senior management level, mention must be made of the fellowship programme which formed part of the earlier stages of this project. The programme dealt initially with individual training needs by providing a tailor-made series of courses and attachments in UK for each individual. Thereafter the programme was extended to provision of management development courses in the UK for senior members of GIHOC companies. These programmes were planned and executed by P-E so that, with our extensive knowledge of GIHOC, the course material was wholly relevant. For example, a special 2 week course was designed to introduce non-financial managers to finance and accounting, in which the main exercises used GIHOC forms and procedures.

Unfortunately this series of courses had to be suspended in mid 1978 when a ban was imposed by the Government of Ghana on overseas travel by government officers. P-E were subsequently commissioned by UNIDO to bring these senior management courses to Ghana but unfortunately the political situation in Ghana last year prevented our coming to Ghana to run the courses. No alternative programme has been put in effect.

As a result, there is a gap in GIHOC in the area of senior management development. The present situation where greater responsibilities are being devolved into the individual companies has widened the gap further. The need now is not only to develop GIHOC company managers in the short-term operation of their departments and companies but also in how to form effective working relationships with local boards of directors, newly appointed. There is also the question of longer-term planning of each company becoming a matter for the local management team. This extends the scope of the management development and training required. We discuss the question of longer-term planning in Section 8 below.

Overall, there is a need for GIHOC to provide the companies with better staff development and training at all levels in order to improve company

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development and operational performance. The need is not merely for more courses but also for the promotion of real staff development on-the-job by management at all levels, recognizing their responsibility for the development of staff working for them. This requires, initially, the training of managers in the approach to staff development and the methods of setting up and continuing an appropriate programme of courses, counselling, seminars, group training projects and checking that results are being obtained as planned.

Support from a central training function will still be needed and we were glad to hear that, in 1981, GIHOC is likely to have a suitable building to form an internal training centre. This will facilitate the running of internal courses and seminars where participants come from a number different GIHOC companies and also for sessions run for individual companies.

We feel strongly that the present under-utilization of factories presents an exceptional opportunity to implement staff development programmes. Not only would the staff idle time be put to good use but the effect on staff morale could be substantial.

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8. ORGANIZATION STRUCTURE AND MANAGEMENT INFORMATION SYSTEMS

8.1 Corporate and Subsidiary Company Organization

GIHOC was set up under the National Liberation Council (NLC) Decree 207 of 1967 as a central organization to take over a number of public enterprises, most of which had accumulated heavy losses and were deficient in management and finance. The individual enterprises lost their identities as separate legal entities and became subordinated to GIHOC as divisions. The early years of GIHOC were spent in remedial operations and consolidation coupled with rationalization of procedures and systems and the establishment of a centralized organization to undertake the necessary supervisory and control functions. Within this period there was a degree of centralization in running the divisions although corporate management has consistently sought to delegate responsibility to the divisions to the fullest extent possible.

Divisional management has had full responsibility in all essential functional areas. Each division has had its own separate accounts subject to independent audit and has been responsible for initiating its own annual budget and capital expenditure programmes. The General Manager of each division has been assisted by a divisional management team of functional heads of departments.

GIHOC corporate management has reserved certain areas of central control and responsibility which have included approval of divisional annual operating plans, budgets and capital expenditure programmes; evaluation of performance; appointment, remuneration and development of senior and technical staff and long-term investment and financial planning. In addition, certain services such as engineering, insurance, internal audit and public relations have been provided centrally.

Under the NLC Decree 207, the governing body of GIHOC is the Board of Directors the members of which have all been appointed by the Government. GIHOC corporate management is headed by a Managing Director who is assisted by two Deputy Managing Directors (Administration and Operations respectively) and functional executive directors.

Corporate management has initiated, as a necessary condition for the long-term viability of the former divisions, programmes in two areas; management improvement including management information systems, and plant and equipment improvement in selected divisions.

With completion of the initial two-year management improvement programme of UNIDO technical assistance, corporate management in 1978 was promoting the view that the divisions should be converted to limited liability companies. A committee was set up to prepare a paper on restructuring GIHOC. This paper, which contained proposals on the organization and structure of GIHOC was examined by groups within and outside GIHOC and approved by the GIHOC Board of Directors in 1978. These proposals were considered to comply with NLC Decree 207 and meet the objectives of the Five-Year Development Plan, 1975 - 1980, which envisaged the promotion of industrial competition by allowing firms greater freedom in managerial and entrepreneurial decision making.

These developments were overtaken by political events. We understand that the erstwhile AFRC initially wished to dismember GIHOC. However the eventual outcome was a decree issued in September 1979 directing that the divisions be re-constituted into limited liability companies whose equity was to be wholly owned by GIHOC.

By January 1980 the companies had been incorporated and were certficated to commence business. Legislation governing the operation of companies is covered by the Companies Code 1963 which contains pro-forma operating regulations which may be varied to suit an individual company's needs.

However, under Article 159 of the new Constitution, GIHOC as a public corporation established by decree, is required to be re-established by Act of Parliament. A draft bill has been prepared by the Director of Legal Services, based on the NLC Decree 207 and its subsequent amendments, which embraces the Board's 1978 proposals on the future organization and structure of GIHOC. This bill is due to be discussed shortly with the Attorney-General's Office, the Ministry of Industries, Science and Technology and the State Enterprises Commission. The proposed regulations as they relate to board structure and functions are summarized in Appendix 7.

The main advantages of the new structure are promoted as being:

- faster and more informed decision-making closer to the operational level

- enhancement of the tapping of managerial skills which may have been hidden under the former structure

- identification of the Corporate Board as a policy maker and authority.

Further, company status provides a mechanism for equity participation and for further funding.

Currently, in anticipation of the bill's enactment, the Subsidiary Boards are being established. A Central Fund is being set up which will provide a means for utilizing the surplus funds of the more liquid companies in the most effective manner, eg possibly in funding unprofitable subsidiary companies and in outside investments.

We believe that the new structure is a logical evolution following the example of other multi-industry corporations. The insertion of the Subsidiary Boards reduces the span of control without reducing the impact of policy coordination, guidance and assistance from the centre. At the same time local initiative is encouraged and given opportunity to demonstrate its effectiveness. We are satisfied that the proposed appointment of the ex-officio Corporate Board members as Subsidiary Board Chairmen and the proposed establishment of Corporate Board Committees provides an appropriate channel for liaison, coordination and control.

8.2 Corporate Planning and Control

Such systematic planning and control as is currently undertaken within GIHOC and its companies is primarily concerned with the short-term, ie budgeting and budgetary control. Longer-term planning within GIHOC has essentially been intermittent with emphasis on capital investment programmes. We are concerned that this limited use of systematic planning is jeopardising the potential development of GIHOC. A good example of the need for longer-term planning is product development. In the current environment of shortages of foreign exchange, likely to be persistent, a major aim should be the reduction of the imported content of production, both in raw materials and spare parts. A programme to effect this aim can involve product redesign, increased use of local material and resources and re-education of the market to accept the new product.

It is a prerequisite of successful planning, whether short or long-term, that the aims of the organization are known. For a commercial venture with public funding, such as GIHOC, this primarily will mean the satisfying of specified economic requirements and particularly in achieving a target level for financial performance. Additionally, social aims can include the acceptance of certain responsibilities to society, eg provision and funding of medical services, and of imposed constraints, eg provision of continuity of employment. It is desirable that these aims are quantified, not only to give them some concrete meaning, but to provide a standard against which performance can be assessed. Further, this approach can assist not only to counter ill-informed criticism but also to provide a sound basis for promoting achievement.

The operations of GIHOC are governed by its establishing decree extracts of which are given in Appendix 8. This decree states that: "It shall be the duty of the Corporation to conduct its affairs on sound commercial lines ...... to produce on the fair value of its assets a reasonable return." Whilst this decree provides guidance in determining the method of assessing the return, it does not quantify this or any other standard of performance. Outside the decree there are no current specific targets for performance levels.

As discussed in the previous section, the former divisions have been given company status with their own Subsidiary Boards. Whilst the Subsidiary Boards will be vested with the management of the companies, their powers will be restricted within the limits and scope of the overall and broad policies and strategies of the Corporate Board. The policies and strategies of the Corporate Board towards the subsidiaries should only be formulated once the aims of GIHOC as a whole have been clarified. For example it is essential that a subsidiary company shall know whether its profits are available for its own development or for supporting a central GIHOC fund. Similarly it is important to specify in advance whether a common level of financial performance is expected from each subsidiary. We urge that the aims of GIHOC as a whole are reviewed and quantified where possible. This consideration and definition of aims should be treated as a matter of urgency and to this end we have included it in an action programme given in Section 11 as the item of highest priority for GIHOC itself to undertake.

As noted in the previous section, discussion is due shortly on the draft bill to re-establish GIHOC by Act of Parliament. We believe that it would be to GIHOC's advantage if the Corporate Board presents a paper on the corporate aims of GIHOC prior to these discussions.

8.3 Budgeting and Budgetary Control

GIHOC is endowed with a well established budgeting and budgetary control system. Standardized format documentation, covering revenue and both capital and operating expenditure, is used for budget preparation and for reporting actual results against budget on monthly operating statements. The financial systems, notably the trial balance and cost centre analyses, provide much of the data base and are in compatible format. The budgets cover the GIHOC operating year, January to December. Budgets have been prepared for each enterprise and have been vetted and approved individually by the previous year-end prior to consolidation at GIHOC Head Office. For the 1981 budgets, the Subsidiary Boards will, for the first time, be responsible for vetting and approving the individual budgets in the context of the overall policy guidelines of the Corporate Board.

In planning for the forthcoming budget period, the major unknown is the quantity and timing of available import licences and thus of delivery of imported materials. Usually this information is not known with any certainty until well into the budget period. Thus, due to foreign currency shortage and resulting late allocation, even an approved budget can be regarded only as a tentative document until the imported materials are actually received. This situation appears to have reduced the impact of the budgetary control concept.

Few of the companies re-budget when the availability of materials is known. Thus management of the majority of these companies will only be certain of the likely outcome for the year when the draft annual accounts are prepared. We are most concerned by this lapse. A substantial proportion of operating costs are fixed, ie do not vary significantly with production level. The flexing of the company budgets to accommodate the varying availability of materials is not an onerous task, nor is the re-consolidation of these budgets as they arise at the corporate level. The budgets should always be re-issued under the situation outlined above, and also to cater for any other major factor impinging on performance.

Further, we urge that management should place greater emphasis on contingency planning for the budget period. Problems need to be anticipated and solutions formulated even if only partially. Some managers have used the uncertainties inherent in Ghana's present economic problems as a reason for justifying only limited consideration of the future. It is our opinion that it is precisely because of the need to anticipate these uncertainties that management should have outline contingency plans.

The use of budgets for effective control requires that the monthly operating statements recording the actual results are prepared and interpreted very soon after the month to which they relate. We are most concerned that currently the operating statements throughout GIHOC are in arrears by two to three months. This is due in part to the dismissal of a significant number of experienced junior accounting staff throughout GIHOC, following a period of industrial unrest in June 1980. Newly recruited replacements are undergoing training and management expect that these arrears will be reduced as the staff become more experienced and proficient.

A further application of the budgetary control system is the reporting by each company of its forecasts of its cash flow for the next few months. Consolidation of these forecasts at the corporate level alerts corporate management to group sources of, and demands for, funds. Overcoming the delays in the preparation of the operating statements, on which these forecasts are recorded, will also make the information on cash flow more meaningful.

We have discussed our findings with the Director of Finance. He recognises the defects noted above but is confident that, under the proposed corporate structure, the demands of the new Subsidiary Boards will ensure that budgeting and budgetary control will become more effective as a source of necessary control information.

8.4 Financial Systems

GIHOC financial systems are geared to the conventional monthly accounting cycle with the exception that Farms has a quarterly cycle.

Between 1975 and 1977 a major component of the UNIDO project was the upgrading and development of the financial systems at both divisional and at corporate level. The work included:

- introduction of a standardized but comprehensive trial balance format in place of the existing ad-hoc formats
- introduction of a standardized fixed assets register card and a capital expenditure reporting system in place of the existing ad-hoc systems
- introduction of appropriate stores accounting systems in divisions not so equipped

- upgrading of cost centre analyses or introduction in divisions not so equipped

- upgrading of costing systems or introduction in those divisions not so equipped.

Two counterparts contributed to this work in order to provide them with the experience and credibility to continue in the roles of systems accountants based at the holding company.

During our recent visit programme we inspected the financial systems although in the short time available we were not able to test the data recorded in detail.

In two companies, namely Farms and Meat Products, financial systems have clearly been unsatisfactory until recently. Adequate financial systems were not provided to Farms when operations commenced but this situation is now being remedied by the work of one of the systems accountants. Further, the records of assets handed over to Farms from the other subsidiary companies have not been properly verified. At Meat Products there was a complete collapse of the financial systems but remedial work is in hand.

However our findings on the systems in general are most encouraging and are summarized below:

Standardized trial balance:	in use throughout GIHOC
Standardized fixed assets register:	in use in all companies except Boatyards, Brick and Tile, Electronics and Farms
Stores accounting:	in use in all companies except Metal Industries and Farms
Cost centre analysis:	in use in all companies except Boatyards, Electronics, Vegetable Oil Mills and Farms
Costing:	emphasis on one-off costing for making price increase applications to the PIB

These systems together with the supporting books of account continue to provide GIHOC with a sound basis for maintaining records of its resources and for providing financial management information. The importance of the standardized trial balance and the significance of its wholesale use within GIHOC must not be underestimated. This trial balance format is sufficiently comprehensive to cover the needs of each company and is compatible with the documents for budget preparation and budgetary control. Standardization clarifies the reconciliation of the inter-subsidiary company current accounts and greatly simplifies consolidation of group accounts.

Whilst Brick and Tile and Electronics were mentioned above as not having the standardized fixed assets register cards, they do have adequate records in other formats. However, certain companies have reported problems with fixed asset identification. The situation at Farms has been mentioned above. At Steelworks there has been a lack of detail covering the original facilities and this situation has arisen again with plant recently installed on a turn-key basis.

The cost centre analyses give a breakdown of direct and indirect costs of production allocated between cost centres specific to the operations of an individual company. The information is being used by the companies in their applications for price increases to the PIB, particularly when determining overhead recovery rates. Further, these analyses aid the identification of operating costs with the managers responsible for each cost centre.

In the current situation of dramatically fluctuating levels of production, there is little incentive to operate formalised costing systems. Those systems that are in operation, eg process costing at Fibre Products and Steelworks, are integral with financial accounts and therefore continue automatically. However unit cost figures produced show substantial variations due to changes in volume.

Elsewhere we designed and installed various simple batch and standard costing systems. In most of the subsidiaries we have visited such systems are in abeyance. The main reason is the current shortage of appropriately qualified and trained senior accountants throughout GIHOC. The systems remain available and should be restarted when this staffing problem has been resolved.

In our discussions with the Director of Finance, he confirms the difficulties of retaining senior accounting staff and recruiting replacements. Further, he highlighted the problems of monitoring the systems and operating statement preparation from the holding company with the current difficulties of transport and communication.

We urged that the currently discontinued programme of visits to the companies by the systems accountants based at the holding company should be resumed. Emphasis should be placed on ensuring that all records and operating statements are brought up-to-date. Under the current circumstances, resuscitation of the formalised costing systems can receive lower priority initially.

9. FINANCIAL RESULTS

The consolidated results of the 16 former divisions, GIHOC Head Office and Farms are summarized below:

	1977	1978	1979
¢ million	**Audited**	**Draft**	**Estimate**
Sales	90.7	100.9	117.3
Net Profit before Tax	6.4	11.1	13.8
Net Profit on Sales %	7%	11%	12%

These results were calculated on a historic cost basis. Because of the effects of inflation, the profit is greatly overstated. If the results were to be adjusted for the replacement costs of both raw materials consumed and of the plant and equipment, then it is likely that a substantial "real" loss would be disclosed. Without "real" profits, GIHOC as a whole cannot internally generate sufficient cash flows to finance plant and equipment replacement, let alone major new projects, without recourse to external funding.

An original goal of GIHOC was to operate a portfolio of enterprises to provide an overall reasonable return, thus allowing that some enterprises could be financially less successful than others. Analyses of the results of the individual companies given in Appendix 9 indicate that a few successful companies are supporting the many others.

We summarize below the performance of the former divisions and Farms in terms of sales and profit margins during the period 1977 to 1979. In recognition of the major constraints outside managements' control we have shown the best results during the period, based on highest profit margin achieved:

Company	Best Year	Sales		Net Profit Before Tax	
		¢ million	% Group Sales	¢ million	% Sales
Boatyards	1978	5.7	6%	(0.2)	-
Brick and Tile	1979	0.3	-	(0.4)	-
Cannery	1979	25.7	22%	11.1	43%
Distilleries	1978	6.4	6%	1.4	22%
Electronics	1978	6.5	6%	2.9	45%
Farms	1979	0.5	-	(0.5)	-
Fibre Products	1977	6.4	7%	(1.5)	-
Footwear	1978	5.2	5%	(0.6)	-
Glass Manufacturing	Ciosed for rehabilitation since July 1977				
Marble Works	1977	0.6	1%	(0.2)	-
Meat Products	1979	11.7	10%	2.2	19%
Metal Industries	1977	4.8	5%	1.1	23%
Paint	1979	8.3	7%	2.7	33%
Paper Conversion	1978	13.4	13%	4.6	34%
Pharmaceutical	1978	20.7	21%	8.0	39%
Steelworks	1979	7.9	7%	1.0	13%
Vegetable Oil Mills	1977	9.4	10%	0.2	2%

Notes:

1. Farms as a separate entity only has draft accounts for 1979 and these cover operations for 18 months.

2. Fibre Products was closed throughout 1979

This summary, whilst showing that more than half of the former divisions have been profitable, indicates that only a few, eg Cannery, Paint, Paper Conversion and Pharmaceutical and potentially Electronics and Meat Products, are generating sufficient profits to provide internally generated cash flow available for GIHOC as a whole.

Of the larger companies which are loss-making, those causing most concern are Boatyards, Fibre Products, Footwear and Vegetable Oil Mills.

Thus approximately half of the companies have been, and continue to be, in financial difficulties and require funding. To ensure survival of these companies, the holding company has been channelling funds to them from the most profitable companies. This funding has been mainly carried out by offering short-term loans through their current accounts with the holding company. Other short-term funding has been obtained by guaranteed bank overdrafts, the taking of deposits from customers to pre-finance production and the non-payment of creditors including the statutory debts, eg tax and social security deductions.

In effect, short-term debt and creditors are being used to fund the survival of the unprofitable and less profitable companies and without the support of the holding company, these companies could be regarded as insolvent. The plight of these companies is shown by the relationship of their current assets and current liabilities. Prudent commercial practice indicates that current assets should exceed current liabilities by a factor, the current ratio, of approximately 1.5. Reduction of this ratio for a manufacturing company towards and below 1, ie to the extent to which current liabilities equal then exceed current assets, is a danger signal which should alert management to the lack of financial viability. Those companies which reported current liabilities as exceeding current assets for the year-end 1979 are as follows:-

Brick and Tile

Fibre Products

Footwear

Marble Works

Meat Products

Steelworks

Vegetable Oil Mills.

It should be noted that the more profitable companies have current assets far exceeding their current liabilities. The net effect is that on consolidation, the current ratio for GIHOC as a whole is approximately 1.6, ie follows prudent commercial practice.

An implication of this result is that GIHOC as a whole has adequate short-term funding available to it at its current level of activity.

However, few companies have any medium or long-term debt as can be seen from the table below:

Medium and Long-term Loans 1979

Company	¢ million	Sources
Boatyards	2.0	ADB/IDA
Farms	1.0	Ghana Government
Fibre Products	2.7	UK Government
Footwear	2.0	Ghana Government
Glass Manufacturing	10.0	ADB/Ghana Government
Steelworks	7.6	EEC/Ghana Government/GIHOC
Vegetable Oil Mills	2.5	Ghana Government

These loans have been provided primarily for specific items of capital expenditure and not to provide a contribution towards working capital requirements. On consolidation the relationship between medium and long-term debt to equity, the debt equity ratio for GIHOC as a whole is approximately 30:70. The norm for a successful commercial enterprise is approximately 60:40. There is thus ample scope to justify a substantial increase of the medium and long-term debt for GIHOC as a whole to provide the additional funding the Corporation clearly needs for development as shown in Section 10.

As a matter of urgency the debt and equity capital of GIHOC and its companies must be reviewed and restructured. GIHOC as a whole can support additional medium and long-term debt. The debt of the companies needs to be restructured and, as a starting point, much of the current account funding of the companies provided by the holding company needs to be converted into long-term debt or equity.

10. CAPITAL PROJECTS IN HAND

The major projects in hand, including the latest estimate of total project costs and costs to date, and their status are listed below:

Company	Project	Latest Estimate Project Total Cost ¢ million	Project Cost to Date ¢ million	Status
Boatyards	new slipways at Tema and Takoradi	6.0+	0.5	equipment on order
	sawmill at Takoradi	3.5+	1.1	machinery at site
Glass Manufacturing	Phase 1, expansion and rehabilitation	41.0	26.7	70% plant on site, project 2½ years behind schedule
	Phase II, local raw materials processing plant	12.0	nil	not started, negotiating for funding
Meat Products	cold-rooms	6.9	3.6	plant on site, building 60% complete, negotiating for funding
Pharmaceutical	expansion of production facility	58	nil	planned, negotiating for funding
Steelworks	Tema foundry project	28.6	10.5	65% plant on site
	Concast project	2.0	1.8	completed 1978 not yet commissioned - dispute with supplier
Kumasi Steel	complete rolling mill	n.a.	n.a.	30% machinery on site, project initiated and funded by Government, recently passed to GIHOC to manage

n.a. not available

In the short time available to us, we have not attempted to review the viability of the GIHOC projects currently in hand but have concerned ourselves with the major constraints on their completion.

Management of these capital investment projects is allocated within GIHOC to a Corporate Board director, the Director of Development. Supporting him is a small development team supplemented by external consultants. The Director of Development in a recent board paper identified the following areas of concern:

(1) availability of foreign exchange

(2) availability of local inputs and finance

(3) GIHOC competence in project coordination and supervision

(4) GIHOC investment policy and need for project re-appraisal.

The lack of foreign exchange adversely affects progress on all ongoing projects. Glass Manufacturing Phase 1 is 2½ years behind schedule and in the intervening period there have been substantial rises in foreign suppliers' prices and the cedi devaluation so that a further ¢9.0 million of foreign exchange is required to enable completion. It is estimated that at least ¢10 million of foreign exchange is required to complete the Tema foundry project. The delays in these projects also imply higher levels of local costs, eg for civil works and buildings, due to local price rises.

There is currently also a national cement shortage which has slowed, if not halted, progress on civil works and buildings.

In Appendix 10 is given a schedule of the capital cost implications of projects underway and planned. We are most concerned that, of the GIHOC projects currently underway, with the exception of the Concast project at Steelworks, none have fully committed funding as summarized below:

Company	**Latest Estimate Total Project Cost ¢ million**	**Project Cost Not Funded ¢ million**
Boatyards	9.5+	7.9+
Glass Manufacturing : Phase I	41.0	13.5
Meat Products	6.9	3.3
Steelworks: Tema foundry project	28.6	18.2
Totals	86+	43+

Thus only 50% of the total costs of GIHOC projects currently underway are covered by committed funds. A financing plan for the Boatyards projects is not available but internal funding could never have been a viable option due to the absence of profits. The additional requirements of Glass Manufacturing and Steelworks projects for foreign exchange and for local costs have been mentioned above. The Meat Products cold-rooms were due to be funded out of internally generated cash flows which have not materialized.

The GIHOC capital projects underway have been implemented during a period of political and economic instability. The problems that have arisen would tax the most proficient of project managements and, given the resources at its disposal, GIHOC has progressed these projects with determination. However, we are not convinced that responsibility within GIHOC for capital expenditure in general and these projects in particular has been fully clarified.

We agree with the Director of Development's view that GIHOC investment policy needs to be reviewed and projects in hand need to be re-appraised. As noted in Section 9, GIHOC as a whole cannot currently generate from its profits sufficient funds for plant and equipment replacement let alone major new projects.

The re-appraisal of the capital projects is thus an urgent matter and should be undertaken before dealing with the financial restructuring of GIHOC recommended in Section 9.

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11. PROBLEM AREAS - ACTION PROGRAMMES

In order to focus onto the areas where action is recommended, we have brought together in this section a summary of the three action programmes which we recommend. These are as follows:

1. Corporate and Individual Company Action Plans
2. Company Performance Improvement Programme
3. Rehabilitation of Brick and Tile.

The first action programme, which we recommend that GIHOC undertake without technical assistance, comprises two groups of action plans:

Corporate action plans

- definition of corporate aims to provide a basis for planning and performance assessment
- restructuring of debt and equity capital to provide sufficient and appropriate funding for operations and capital investment
- revision of capital investment programmes to ensure early completion of viable projects in hand

Individual action plans affecting particular companies

- examination of operations of Farms and resolution of raw material supply for Cannery and Vegetable Oil Mills
- market study for Boatyards of prospects for export of hulls

Details of the action plans are given in Appendix 11 (A to E).

The corporate action plans are needed urgently in view of the financial problems of GIHOC as a whole. In order to attract the much-needed external investment it is vital that firm decisions are taken on the future aims of GIHOC with particular reference to the retention of funds generated by individual companies as compared with the use of such funds to assist the loss-making companies.

We suggest that GIHOC should make use of the two financial counterparts from the earlier stage of the project to undertake the financial aspects of the corporate action plans. The revision of the capital investment programmes would, we visualize, be undertaken by the Development Department in the light of findings and decisions arising from the action plans on aims and financial structure.

The individual action plans affecting particular companies have been included to deal with current items affecting company performances and requiring short-term action. The outcome of any action taken would be reflected in the subsequent review of the companies concerned when the company performance improvement programme, discussed below, is put into effect.

For the other two action programmes, external assistance is considered desirable as follows:

Company Performance Improvement Programme

Within this integrated programme we have included a comprehensive project for performance improvement within individual companies together with the introduction of central facilities for improved supervisor training and a small but critical study of conditions of employment.

The content of this project and the resources required to implement it are described in Section 12.

Rehabilitation of Brick and Tile

The problems of this small company are numerous but we consider that many of them could be overcome, and output substantially increased, by external assistance. This would take the form of supply and commissioning of additional production equipment. Again fuller details are given in Section 12.

These two programmes requiring external assistance are independent of one another as regards starting the work, and they should therefore be treated separately. The Brick and Tile rehabilitation will materially change the level of output and financial performance of the company. Such changes will be evaluated later as part of the overall company performance improvement project. The management of GIHOC should ensure that between the two programmes there is proper exchange of information and, if appropriate, that arrangements are made for sharing the tasks of performance improvement in Brick and Tile.

12. TECHNICAL ASSISTANCE PROJECTS

In the previous section we identified a need for assistance to set up and start implementation of an overall Company Performance Improvement Programme. This has three components namely:

- company performance improvement
- supervisor development
- conditions of employment

These components are inter-related and would be best undertaken as an integrated technical assistance project. Descriptions of the three components are given under separate headings, in sections 12.1 to 12.3 below.

Additionally, we identified the need for external assistance at Brick and Tile and an outline of the rehabilitation programme for this company is given in section 12.4.

12.1 Company Performance Improvement

The first stage of this project component would consist of a detailed study of each GIHOC company and the evaluation of:

- existing resources
  - products
  - markets
  - plant and buildings
  - finance
  - personnel (number, experience and skills)
- the impact of the change of GIHOC organizational structure
- existing strengths, weaknesses and problems
- future opportunities.

This would produce a profile of each company and the areas in which it should develop. The studies will be facilitated by the management information available from the procedures in finance, accounting, costing, stock control and maintenance installed during the earlier phases of the project DP/GHA/74/002 (1975-1977). These enable all the essential facts about company operation to be readily assembled and will form the basis of evaluating existing performance in detail and of constructing realistic plans for future development.

We suggest that these studies should start with those companies making the greatest losses and/or having other problems requiring urgent attention and decisions. Each study would require approximately one week's attention by the study team. Within two months from the start of the project, the first individual company improvement plans would be issued and there would be a sufficient number completed to evaluate and start resolving the policy issues affecting all companies, eg appropriation of profits, funding of losses and personnel policies.

Each study and the preparation of the company improvement plan would be undertaken by a specialist team covering finance/accounting, marketing and production. The team should also include say two members of GIHOC staff to work as project team members for the duration of the project. The experience they will gain in evaluating performance and selecting courses of action will be invaluable to individuals likely to take a general management post in the future. The studies and the preparation of each improvement plan would be undertaken jointly with the management team of each company to identify and agree priorities and ensure commitment and involvement in the implementation stages which follow.

It will be important that, once a company plan is prepared and agreed, implementation should start without delay and this work should be underway in the first companies within say three months of the start of the project. To coordinate this work we visualize that the team leader would personally lead the implementation work in the first two or three companies whilst the rest of the team completed the studies in the other remaining companies.

Within each company, implementation would be the responsibility of the company management team who would have available to them the experience and advice of the team leader and his colleagues. Each company will, of course, have its own particular problems and specific solutions to be put into effect so no two improvement plans will necessarily contain the same elements. Some of the changes might be:

- revision of internal management structure to improve control
- development of internal management skills in:
  - control of working capital
  - cash flow planning and control
  - cost control and use of costing data
  - improved utilization of labour, plant and equipment
  - coordination of use of foreign exchange licences
  - recognition and satisfaction of training needs of junior staff (the second of the three main project components, see 12.2 below)
  - use of management information
- market research
- development and testing of new products
- revision of capital structure and funding

- installation of improved facilities in production and storage areas to reduce losses of material

- identification of local substitutes for imported materials

- early implementation of selected capital projects and deferral of others

- introduction of local staff conditions of service (possibly including profit sharing).

Each of the changes would have a firm time-table for implementation and, wherever possible, criteria would be set for judging success in each case.

We visualize that all the initial studies would be completed in the first six months of the project. Thereafter selected implementation plans would be well under way in at least half the companies by the end of two years' detailed assistance. Before the end of this period, the GIHOC members of the project team would be sufficiently experienced to take responsibility for advising and guiding implementation in any of the remaining companies requiring such assistance.

The estimated inputs for setting up and conducting the initial studies, training of GIHOC team members, coordination of overall programme and assistance in detailed implementation over the proposed two year period is as follows:

	Man Months
Team Leader	24
Deputy	24
Other management specialists (primarily for initial study period)	6
	54
Technical (short-term) Experts	12

The Team Leader and the Deputy Team Leader would have complementary skills so that, between them, they would provide depth experience in finance and accounts, production, material control and marketing. They would both have experience of working at general management level in manufacturing organizations.

The Technical Experts will be required to deal, as necessary, with such matters as specialist plant design and operation and possibly with product design and development. Their individual inputs will be as short-term experts to advise the Team Leader on specific technical matters.

12.2 Supervisor Development

In order to provide resources within GIHOC for the necessary uplifting of skills at supervisor and junior mnagement levels. we recommend a further project component to assist GIHOC in the development of its own training centre.

This recommendation is based on the following considerations:

- there are approximately 700 supervisors in GIHOC companies
- only a limited number of these have attended courses in supervision
- supervisor development needs to be accelerated to improve performance in planning and control of the work of junior staff in production and administration
- senior and middle management will be encouraged to support supervisor development as part of company improvement programmes
- additional resources are required to meet this demand for supervisor development with internal courses which are related specifically to GIHOC organization and procedures
- these resources can best be provided by creating a central training centre within GIHOC to serve GIHOC companies
- there is a prospect of a building already owned by GIHOC becoming available in mid 1981
- the training staff of GIHOC currently consists only of a Training Officer under the direction of the Manpower Planning Manager.

Assistance is therefore required firstly in the assessment of needs and scale of operation of the training centre. As a first indication, for example, the provision of one week courses for 700 supervisors with, say, 12 in each group would require 1.2 training rooms for a 48-week year. There are a variety of subjects specific to GIHOC which such courses would cover such as:

- supervisory duties and procedures
- office and accounting procedures
- personnel procedures and labour relations
- maintenance and stores procedures
- orientation for those promoted from junior to senior staff.

Hence, to provide any significant number of the GIHOC supervisors with, say, one to two weeks of training a year, the centre will need at least two training rooms with associated audio-visual equipment, together with administration, catering and probably residential facilities. Specification of the nature and duration of courses, followed by the confirmation of facilities required at the centre, is therefore the first task.

Whilst the physical facilities are being created, hopefully with minimal structural alterations to the proposed building, work would proceed on the development of course material and training of trainers. Some of the courses would consist of readily available material. Others will require detailed study within individual companies in order to determine training needs and to gather material which will ensure that the instruction is seen to relate to real life situations. An example of this type of specialized course would be the use of improved work planning routines in controlling the work of a particular factory maintenance section.

Finally, there is a need for assistance in the coaching of instructors, not only in the gathering and presentation of material but also in evaluation of results. This should include the normal end-of-course review with the students and also a series of subsequent visits to companies to check how the student has changed his approach to his job as a result of the course. The development of close collaboration between instructors and the middle managements to whom supervisors report is an important part of the evaluation process.

The inputs for this project, required to assist in the development of the centre and its instructors, are estimated to be as follows, spread over a twelve months elapsed time:

	Man Months
Project Leader	12
Course Design Specialist	9
	21 man months

From GIHOC the Training Officer would become a member of the project team and up to four full time instructors are likely to be needed eventually.

With regard to timing, this project should run in parallel with the company performance improvement project so that central training courses in GIHOC are available to companies requiring these as an important component of implementing improvement programmes.

12.3 Conditions of Employment

The GIHOC companies already have the status of limited liability companies and, subject to recognizing guidelines by the holding company on conditions of employment, are at liberty to negotiate changes in pay and conditions independently.

This could become an important factor in the morale, staff development and, hence, overall performance in GIHOC companies. We therefore suggest that the holding company should undertake a further review of conditions of employment in GIHOC, compared with other local companies and update the information annually and whenever a major change in national pay scales occurs. This will assist in preparation, at intervals, of realistic guidelines to the companies.

Before such guidelines on pay and conditions are issued by the holding company, we also suggest that advice is obtained on pay structures particularly as regards the practical implications of introducing any form of payment-by-results scheme which may well be demanded in negotiations. Such schemes need particular care in design and implementation to ensure that payments really are related to results and that total pay remains within the planned limits.

To assist in the preparation of initial guidelines on pay structure and to examine and advise on the use of payment-by-results schemes we recommend a technical assistance input of approximately three man-months. This forms the third component of the company performance improvement programme. Although the input is small, the work is critical in ensuring the proper guidance to companies on establishing conditions of service which encourage a high level of morale and performance within the companies.

The timing of this input should be as early as possible during the programme as, once the subsidiary companies have had their initial board meetings and start to operate fully as limited liability companies, the question of conditions of employment is likely to be raised and will need to be dealt with fully and promptly.

12.4 Rehabilitation of Brick and Tile

Earlier in the report we described some of the problems of Brick and Tile and it is evident that, using existing machinery, the company will continue to have difficulties in achieving any significant level of output. On the site there is a further production unit for green bricks but in crates and incomplete. If this were brought up to operational standard by the import of missing items, installed and commissioned, the potential output of bricks could be increased up to five times the present level. The local market for bricks is unsatisfied and considered likely to be able to absorb the higher output level.

We reviewed this company with the representative from UNIDO and assisted in preparing the financial forecast shown in Appendix 12. This indicates a very substantial potential return from this programme and we support the proposal that external assistance should be obtained for import of the balancing plant, technical assistance and spare parts.

12.5 Benefits from Projects

The integrated project for company performance improvement is likely to require foreign currency of the order of US$ 1.2 million over a two year period. Benefits from reduced operating costs, and possibly some increased output, would result even if foreign exchange allocations remain unchanged. Benefits of the order of ¢2.0 million per annum are a conservative forecast giving a payback period of two years at most. It is perhaps significant that GIHOC was showing markedly improved profit on sales by the end of the previous UNIDO project and in the three years since then 1977-1979.

The foreign currency cost of the rehabilitation of Brick and Tile is estimated at US$ 0.5 million. This would produce break-even operation within a few months of commissioning (compared with existing heavy losses) and a payback of capital in less than two years. We recommend that external assistance is sought for this programme.

13. CONCLUSION

We much appreciated the opportunity, after an absence of over three years, to see at close quarters the way in which GIHOC is dealing with its many problems both at company and at corporate level.

We have presented our findings frankly in order to be positive and constructive in our recommendations for improvements. However the overall conclusion to be drawn from our study is that GIHOC has a number of detailed matters requiring attention but has taken full advantage of earlier assistance within the limits of the external constraints such as foreign exchange availability. GIHOC is ready and able now to move further ahead.

We found external views about GIHOC are sometimes unfavourable and clearly do not recognize the positive achievements of GIHOC management. GIHOC has much to be commended in its management and organization and has maintained a creditable performance in the prevailing conditions.

We have had every possible assistance from the management and staff of GIHOC in carrying out this study. It is no mere formality that we conclude by offering to all concerned our most grateful thanks.

Submitted for P-E International Operations Ltd
by

K J Kempster
Team Leader

C J S Baker
Financial Analyst/Accountant

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TERMS OF REFERENCE

BACKGROUND

The Ghana Industrial Holding Corporation (GIHOC) was founded late 1967 and began operating in 1968. GIHOC attempted to improve the then unsatisfactory operational performance of various state industrial enterprises, partly through pooling of skills and resources which were scarce in the country.

At present, GIHOC is responsible for the operation and development of 22 industrial plants covering 16 diversified industrial activities (see Annex 1). GIHOC employs about 7,500 persons or approximately 12% of total employment in Ghana's larger scale industry. GIHOC's industrial plants are located all over Ghana as shown in Annex 2.

During 1975-1977, GIHOC received large-scale technical assistance from UNDP/UNIDO which covered the three main areas 1) finance, (2) production management, and (3) marketing. The two main objectives of this assistance were to strengthen the coordination and control functions of GIHOC's head office and to improve the operational performance of the individual production divisions. These activities were very successful and comprised assistance in numerous fields and for most of GIHOC's entities (see Annex 3).

Since the UNDP/UNIDO technical assistance terminated, many of GIHOC's industrial production plants suffered from increasing shortage of foreign currency for the import of raw material and of spare parts and equipment for replacement investments. Moreover, there are indications on several changes in the management of GIHOC Headquarters and in individual production plants.

During the last years, the financial and economic conditions of Ghana were seriously damaged. The Ministry of Industry, Science and Technology (MININDST) is now with the direct and paramount responsibility on GIHOC. MININDST is concentrating the efforts in the rehabilitation and improved utilization of existing industrial capacity. This is particularly true for industrial capacity under the umbrella of GIHOC. The industrial plants processing agricultural products and food are of priority.

Since the Government faces a scarcity of resources, applying these resources must be rationalized and optimized. The Government therefore expects expert advice on the best utilization of US $250,000 technical assistance in convertible currency out of UNDP/IPF financing during the next few years.

The proposed measures should be outlined together with possibly other required inputs such as local and/or foreign (bilateral) financing, management, partnership and/or further technical assistance including training and/or study tours where applicable.

ACTIVITIES

The tentative scope of work of this survey will start with the initial briefing of the foreign experts by MININDST and with the subsequent initial assessment of the situation and the information available in GIHOC Headquarters.

Together with two qualified counterparts from MININDST, ten priority production divisions will be selected by the Government together with the foreign experts for an analysis of the present situation during visits to the individual production plants.

This analysis will cover the availability of local as well as imported raw- and auxiliary materials, of appropriate spares, of skilled personnel at all levels, of operational production equipment and of suitable transport means for carrying raw materials and finished products.

The general working conditions including facilities for career development and training should be reviewed and compared with the prevailing working conditions in other, public and private industrial enterprises.

Finally, the existing organization and available (management information) systems should be analysed in view of assessing their general and/or specific appropriate development. This analysis should also cover possible other factors which may have to be considered constraints towards achieving effective, commercially viable operation.

Based on the above findings, an action programme should be prepared for improving the performance of several GIHOC production divisions in the most cost- and resource-effective manner.

This task will be executed in collaboration with the available plant executives and will continuously be coordinated with the GIHOC management bearing in mind that for the subsequent technical assistance only US $250,000 equivalent in convertible currency will be made available from UNDP/IPF resources.

Before the preparation of a final report on the results and recommendations of the appraisal, the findings will be discussed with officials from UNDP/UNIDO, MININDST. The agreed technical assistance programme to GIHOC will be subsequently outlined in a project document to be prepared by UNDP/UNIDO according to the UNDP-guidelines.

GENERAL

MININDST will provide all available information and will also arrange that all necessary available information in GIHOC and its plants will be offered to the mission. Two qualified counterparts will be attached to the experts. Suitable office space, secretary facilities, office material/stationary as well as transport within Ghana will be provided by the Government.

It is estimated that the subcontractor will require for this survey a total of four man-months for the field work to be shared between one expert in production management/organization and engineering and one financial analyst/accountant. Both experts must have previously been involved on a long-term basis in the technical assistance under the first and/or second phase of the UNDP/UNIDO project DP/GHA/74/002.

The preparation of the final report on this survey should not require more than one month.

The Government recognizes the exploratory capacity of this survey and the needs for further, more important contributions from UNDP/UNIDO. This future assistance may not only consist of an overall coordination and programming of available support and resources of both, local and international origin but also and above all - of putting into practice the measures proposed, agreed upon and subsequently taken vis-a-vis selected - individual GIHOC enterprises.

REPORTS

During the implementation of the field work, the subcontractor will prepare and submit to UNDP/Accra and to UNIDO/Vienna the following summary progress reports (ten copies in total, five of which to UNIDO Headquarters in Vienna).

1. **Progress Report**

   After the first initial week of introduction in Ghana, the Team Leader of the subcontractor will prepare a detailed work plan including a travel schedule for the field work of the entire team.

2. **Progress Report**

   A preliminary summary report will be prepared on the findings of the survey mission during their field work before the meeting with officials of UNDP/UNIDO and of MININDST in Ghana.

A draft final report (five copies) should be submitted to UNIDO/Vienna not later than six weeks after completion of the field work.

Comments on the draft final report will be collected and passed on to the subcontractor by UNIDO. The final report should be submitted (20 copies) and not later than four weeks after UNIDO's comments.

OTHER CONDITIONS

The working and reporting language is English; the amount allocated for this project is US $39,625.

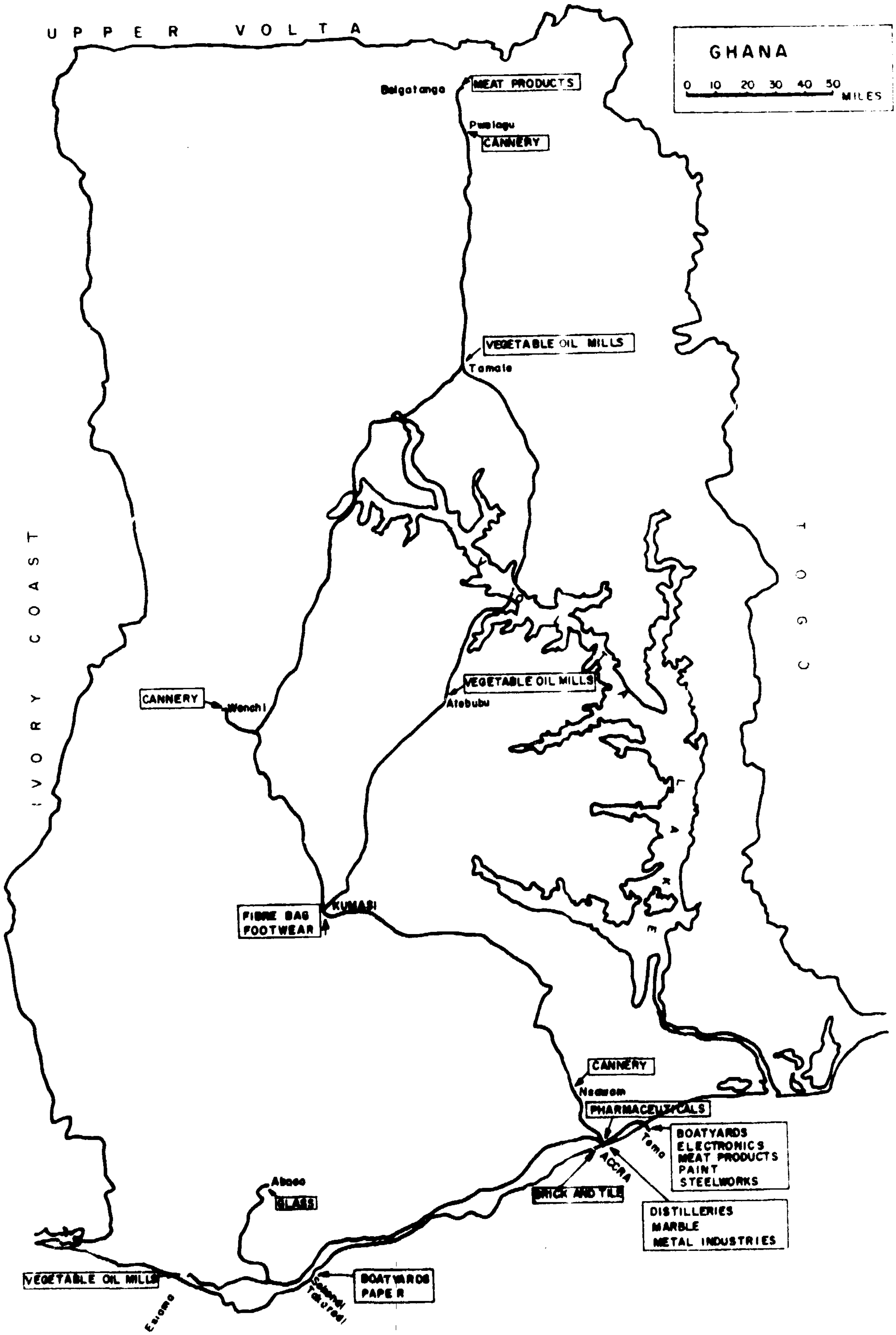
PF

LIST OF GIHOC'S INDUSTRIAL ACTIVITIES AND PLANTS

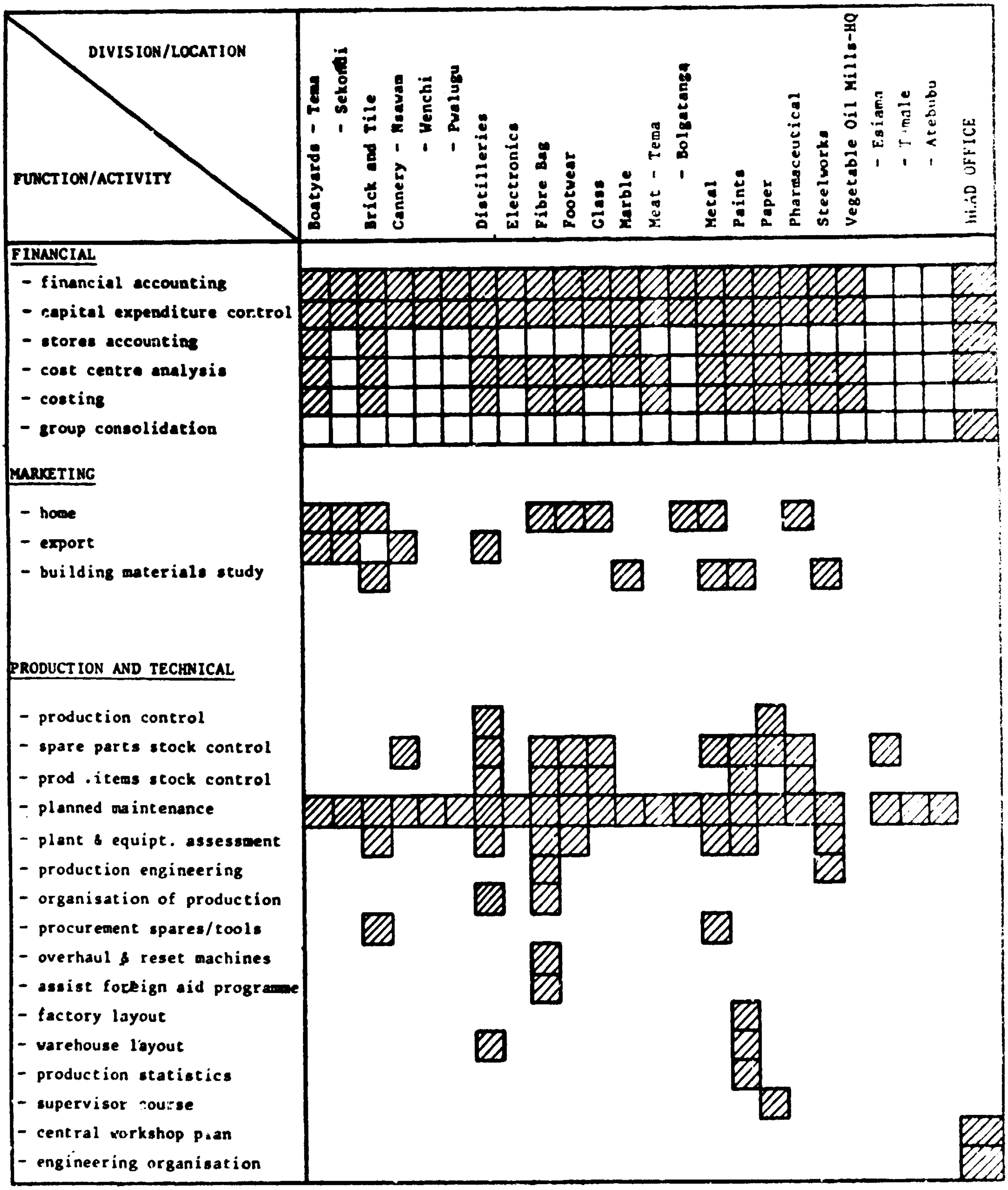
1.	Boat yards	2 plants - (1) in Tema, (2) in Sekondi - 300 employees *)
2.	Brick and Tiles	1 plant Accra - 100 employees
3.	Food Canning	3 plants - (1) Nsawam, (2) Wenchi, (3) Pwalagu - 400 employees
4.	Distilleries	1 plant in Accra - 300 employees
5.	Electronics	1 plant in Tema - 300 employees
6.	Fibre Bags	1 plant in Kumasi - 1500 employees
7.	Footwear	1 plant in Kumasi - 600 employees
8.	Glass	1 plant in Aboso - 700 employees
9.	Marble	1 plant in Accra - 100 employees
10.	Meat Products	2 plants - (1) Tema, (2) Bolgatanga - 300 employees
11.	Metal	1 plant in Accra - 300 employees
12.	Paint	1 plant in Tema - 200 employees
13.	Paper Conversion	1 plant in Takoradi - 600 employees
14.	Pharmaceuticals	1 plant in Accra - 500 employees
15.	Steelworks	1 plant in Tema - 1000 employees
16.	Vegetable Oil Mills	3 plants - (1) Esiama, (2) Tamale, (3) Atebubu - 500 employees

*) The figures are estimates based on historical information

LOCATION OF GIHOC'S 22 PLANTS WITH ROAD LINKS



SUMMARY OF
TYPES OF WORK CARRIED OUT IN DIVISIONS



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VISIT PROGRAMME FOR K.J. KEMPSTER AND C.J.S. BAKER

(Working together except where shown 29/9 to 2/10)

DAY	DATE	
M	Sept. 22	Initial Meetings
T	23	GIHOC Head Office
W	24	GIHOC Head Office
Th	25	Vegetable Oil Mills Accra
F	26	Cannery Nsawam
S	27	Data Analysis
S	28	
M	29	VOM Tamale (KJK) Fibre Bag Kumasi (CJSB)
T	30	Meat Bolgatanga (KJK) Footwear Kumasi (CJSB)
W	Oct. 1	GIHOC Farms (Bolgatanga) (KJK) GIHOC Farms Kumasi (CJSB)
Th	2	Cannery Pwalugu (KJK) Meat Tema (CJSB)
F	3	Boatyards Tema
S	4	Data Analysis
S	5	To Esiama
M	6	Vegetable Oil Mills Esiama
T	7	Paper Conversion Takoradi
W	8	Boatyards Sekondi (and return Accra)
Th	9	Brick & Tile Accra
F	10	Marble Accra (and present interim report to UNDP)
S	11	Data Analysis
S	12	
M	13	Paint Tema
T	14	Steelworks Tema
W	15	Electronics Tema
Th	16	Metal Industries Accra
F	17	Data Analysis
S	18	Data Analysis
S	19	
M	20	Draft Final Report
T	21	
W	22	
Th	23	Discuss/Redraft as required
F	24	
S	25	
S	26	
M	27	Meetings UN/MININDST
T	28	
W	29	
Th	30	
F	31	Travel UK
		Complete Final Report in U.K.

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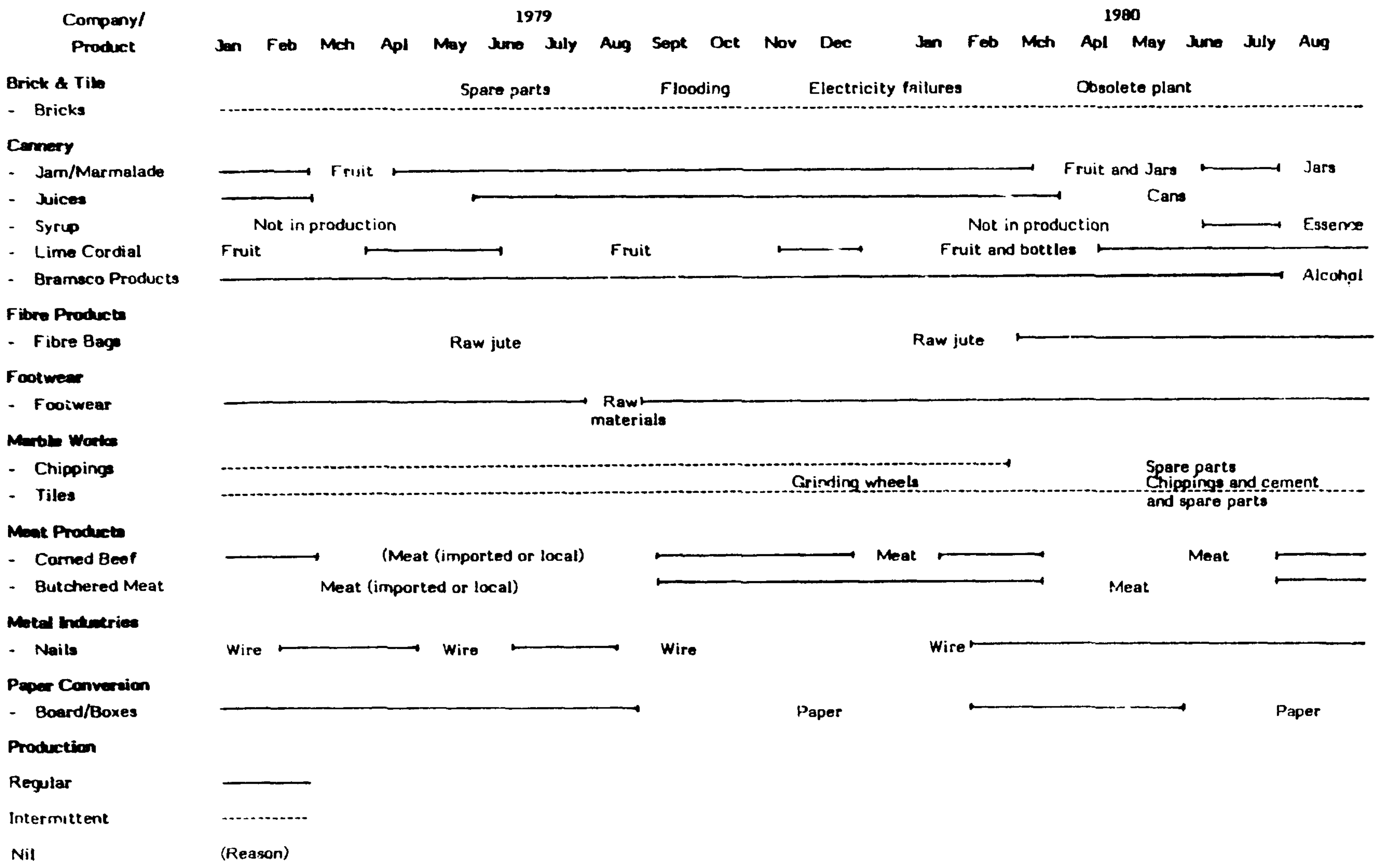
PRODUCTS

(Former Divisions and Farms)

COMPANY		PROCESS
Boatyards	-	manufacture of wooden boats up to 20 metres
	-	boat servicing and repair
Brick and Tile	-	manufacture of fired clay bricks and pottery
Cannery	-	canning and bottling of processed fruit and vegetables
	-	blending and bottling of alcoholic beverages
Distilleries	-	distillation, blending and bottling of alcoholic beverages
Electronics	-	assembly of electronic and electrical consumer goods
	-	injection moulding of plastic products
Farms	-	cultivation of groundnuts, kenaf, maize, pineapples, and tomatoes
Fibre Products	-	manufacture of jute and hessian cloth and sacks
Footwear	-	manufacture of boots, sandals and shoes
Glass Manufacturing	-	manufacture of glass holloware (not operational)
Marble Works	-	manufacture of pre-cast tiles, kitchen sinks and tombstones
	-	supply of marble tombstones and flooring
	-	floor laying (to be discontinued)
Meat Products	-	provision of slaughterhouse and cold-room services
	-	processing and canning of corned beef
Metal Industries	-	manufacture of nails and other wire products
	-	manufacture of tubular steel products
	-	corrugation of roofing sheets
Paint	-	manufacture of oil and emulsion paints
Paper Conversion	-	manufacture of corrugated cardboard cartons, chipboard boxes, cannisters, plastic bags, toilet rolls, paper bags and other paper products
Pharmaceutical	-	manufacture of tablets, capsules and ampoules
Steelworks	-	manufacture of steel ingots, reinforcing rods and iron castings
Vegetable Oil Mills	-	extraction of copra and groundnut oil and manufacture of soap

APPENDIX 4

EXAMPLES OF PRODUCTION STOPPAGES - 1979/80
(Approximate dates)



IMPORT LICENCES ALLOCATED AND UTILIZED

	1977		1978		1979		1980 (to 16/9)	
	A	U	A	U	A	U	A	U
	¢m	%	¢m	%	¢m	%	¢m	%
Boatyards	5.0	(76)	8.0	(6)	6.0	(nil)	0.5	(nil)
Brick and Tile	0.3	(nil)	0.3	(nil)	1.2	(nil)	0.5	(60)
Cannery	2.3	(12)	4.9	(22)	6.0	(72)	2.2	(89)
Distilleries	1.0	(69)	1.2	(53)	2.5	(37)	1.1	(55)
Electronics	4.5	(29)	4.5	(9)	5.0	(7)	0.9	(42)
Fibre Products	2.0	(16)	3.0	(nil)	3.5	(50)	1.5	(100)
Footwear	0.9	(67)	0.7	(25)	1.0	(47)	0.5	(100)
Glass Manufacturing	0.2	(4)	3.0	(10)	5.0	(nil)	5.0	(92)
Marble Works	0.1	(88)	3.1	(nil)	0.3	(nil)	0.2	(100)
Meat Products	3.0	(100)	8.5	(88)	10.0	(77)	2.0	(50)
Metal Industries	1.8	(33)	5.9	(34)	4.0	(22)	2.0	(96)
Paint	2.0	(67)	5.0	(21)	4.5	(52)	0.8	(100)
Paper Conversion	3.5	(8)	11.0	(1)	10.0	(27)	3.5	(86)
Pharmaceutical	10.0	(22)	10.0	(32)	20.0	(25)	4.0	(68)
Steelworks	6.0	(16)	8.0	(nil)	11.0	(10)	5.5	(58)
Vegetable Oil Mills	1.1	(8)	3.3	(20)	1.8	(nil)	1.5	(97)
	43.7	(40)	80.4	(22)	91.8	(30)	31.7	(76)
Utilized	¢17.4 m		¢17.7 m		¢27.7 m		¢24.1 m	

Abbreviations

A : Allocated
U : Utilized

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STAFFING LEVELS

Company	Senior Staff 1980	Senior Staff 1979	Senior Staff 1978	Junior Staff 1980	Junior Staff 1979	Junior Staff 1978	Total 1980	Total 1979	Total 1978
Steelworks	48	41	30	479	508	450	527	549	480
Metal Industries	19	17	15	260	295	296	279	312	311
Meat Products	31	28	21	251	246	243	282	274	264
Paper Conversion	34	30	23	499	553	550	533	583	573
Footwear	35	30	25	556	675	670	591	705	695
Glass Manufacturing	32	30	25	213	227	257	245	257	282
Marble Works	8	4	6	157	212	181	165	216	187
Fibre Products	36	36	33	1,400	1,400	1,499	1,436	1,436	1,532
Paint	29	21	19	260	239	245	289	260	264
Pharmaceutical	54	54	48	572	572	539	626	626	587
Vegetable Oil Mills	39	39	31	409	409	457	448	448	488
Electronics	21	26	18	250	259	242	271	285	260
Brick and Tile	7	5	6	121	77	77	128	82	83
Distillers	28	24	24	286	298	314	314	324	338
Boatyards	24	19	19	298	643	492	322	662	511
Cannery	38	30	32	473	476	734	511	506	766
Head Office	61	61	61	147	137	122	208	198	183
Totals	544	495	436	6,631	7,226	7,638	7,175	7,723	7,804

Note: Data in the above table were extracted from GIHOC staff returns for February 1980, March 1979 and March 1978.

Total Staff 1974-1980

March	1974	7,248
March	1975	7,608
March	1976	7,728
March	1977	8,253
March	1978	7,804
March	1979	7,723
February	1980	7,175

SUMMARY OF PROPOSED REGULATIONS GOVERNING BOARD STRUCTURE

Under the proposed regulations, the governing body of GIHOC, the Corporate Board, will supervise the activities of the Subsidiary Boards through various committees and representatives.

The Corporate Board will have 13 members and consist of a Chairman appointed by Government; a Managing Director nominated by the Corporate Board and appointed by Government; five ex-officio members made up of the two Deputy Managing Directors and the Directors of Finance, Development and Legal Services; and six outside members appointed by Government.

Each Subsidiary Board will have seven members and consist of a Corporate Board ex-officio member appointed by the Corporate Board as Chairman; the General Manager of the subsidiary who will have been appointed by the Corporate Board; two senior staff members of the subsidiary appointed as ex-officio members; and three outside members one of whom will be a representative of the TUC, appointed by the Corporate Board.

The Corporate Board will have at least two main committees. The Finance Committee will have 8 members and consist of the Vice-Chairman of the Corporate Board who will act as Chairman of the Committee; the Managing Director; the two Deputy Managing Directors; two members from outside the Corporate Board but appointed by it; and the Directors of Finance and Development. The Finance Committee will among other things formulate financial policies of the Corporation; direct in a general way its financial affairs; consider and make recommendations to the Corporate Board on all capital investment; ensure that the Corporation and its units or subsidiaries have adequate capital for their operations and that it earns a fair return on investment; review pricing policies and procedures from time to time; examine in detail budgets and review the financial operating statements. The Audit Committee will have 6 members and consist of the Managing Director as Chairman, the Deputy Managing Director (Administration), the Director of Finance, the Director of Internal Audit and two outside members approved by the Corporate Board. The Audit Committee will be responsible for the review of all internal and external audit reports and will ensure that corrective action is taken.

The Subsidiary Boards will be vested with full powers for the management of the companies within the limits and scope of the overall and broad policies and strategies of the Corporate Board. The General Managers will be responsible to their respective Subsidiary Boards for the day to day running of their companies. It is proposed that the existing subsidiary Management Committee system will remain in practice as an executive medium through which the General Managers will discuss operating problems with departmental heads.

Certain specialised functions such as legal, public relations, industrial relations, insurance and investment planning will continue to be performed at corporate level.

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EXTRACTS FROM NLC DECREE 207 - 19.9.67

2. (1) The objects of the Corporation are the establishment and the operation (whether established by the Corporation or not) of manufacturing and commercial enterprises in or outside Ghana in an efficient and profitable manner.

5. (1) The Corporation may be organised in such units to be known as divisions and the Board may disestablish or effect any change in any division of the Corporation or establish new or additional divisions or effect changes in the designation of the said units.

(2) The Board may group the units of the Corporation ----- as it may think fit according to the nature of the industries carried on by such units and may add to or diminish the size of any group or disestablish any such group or may otherwise carry out any change in the grouping of such units.

(5) ---- "the statutory corporations specified in the Schedule to this Decree shall, ---- thereafter, subject to the provisions of this Decree, constitute divisions of the Corporations ------

9. (1) It shall be the duty of the Corporation to conduct its affairs on sound commercial lines, and in particular, so to carry out its functions ---- as to ensure that its revenues are sufficient to produce on the fair value of its assets a reasonable return, measured by taking its net operating income as a percentage of the fair value of its fixed assets in operation, plus an appropriate allowance for its working capital.

(2) In determining what constitutes a reasonable return, all pertinent economic and financial considerations shall be taken into account, including, but not limited to, the need for net operating income in an amount sufficient -

(a) to meet interest payment on borrowings

(b) to provide for repayments to be made each year in respect of loans incurred by the Corporation to the extent that such repayments exceed the year's provision for depreciation charged to revenue account

PE

(c) to provide a reasonable proportion of the funds needed for expanding the Corporation's activities and improving its working

(d) to provide reserves for replacement, expansion or other purposes if and to the extent that the Board deems it necessary to establish such reserves - and

(e) to make such reasonable repayments to the Consolidated Fund from time to time as may be authorised ----

(3) ---- the words "net operating income" mean the amount of income remaining after subtracting from total operating revenues all charges which in the normal conduct of business are proper to be charged to revenue account, including provision for adequate maintenance and straight line depreciation of assets, but before deducting interest and other charges on borrowings.

SCHEDULE

(Excluding divisions since disposed of)

1. State Boatyards Corporation
2. State Brick and Tile Corporation
3. State Cannery Corporation
4. State Distilleries Corporation
5. State Electronic Products Corporation
6. Glass Manufacturing Corporation
7. State Marble Works Corporation
8. State Metal Industries Corporation
9. State Paints Corporation
10. Vegetable Oil Mills Corporation
11. Fibre Bag Manufacturing Corporation
12. Tema Steelworks Corporation
13. Paper Conversion Corporation
14. State Footwear Corporation
15. State Meat Products Corporation

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FINANCIAL RESULTS

The financial results for the years 1977 to 1979 together with the latest available results for 1980 are given in the following pages:

A Consolidated
B Boatyards
C Brick and Tile
D Cannery
E Distilleries
F Electronics
G Farms
H Fibre Products
J Footwear
K Glass Manufacturing
L Marble Works
M Meat Products
N Metal Industries
P Paint
Q Paper Conversion
R Pharmaceutical
S Steelworks
T Vegetable Oil Mills

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FINANCIAL RESULTS - CONSOLIDATED

¢ million	1977	1978	1979
Operating Statements	**Audited A/Cs**	**Draft A/Cs**	**Estimate**
Sales	90.7	100.9	117.3
Net Profit before Taxation	6.4	11.1	13.8
Balance Sheets			
Net Fixed Assets and Investments	45.6	61.1	
Current Assets	89.4	127.9	
Current Liabilities	54.8	87.9	
Net Current Assets	34.6	40.0	
Net Assets	80.2	101.1	n.a.
Capital	47.5	48.1	
Cumulative Surplus	7.4	18.5	
Grants	1.3	3.5	
Medium and Long-term Loans	24.0	31.0	
Capital Employed	80.2	101.1	n.a.
Net Profit on Sales %	7%	11%	12%
Net Profit on Net Assets %	8%	11%	n.a.
Current Ratio	1.6	1.5	n.a.
Debt Equity Ratio	30:70	31:69	n.a.

n.a. not available

PE

FINANCIAL RESULTS - BOATYARDS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Estimate	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	1.1	5.7	4.4	1.2
Raw Materials Used	1.2	3.6	2.2	1.1
Net Profit/(Loss)	(1.0)	(0.2)	(1.3)	(1.2)
Balance Sheets				
Net Fixed Assets	0.5	2.5	2.3	
Current Assets	8.0	11.9	n.a.	
Current Liabilities	9.0	11.1	n.a.	
Net Current Assets/(Liabilities)	(1.0)	0.8	2.9	
Net Assets	(0.5)	3.3	5.2	n.a.
GIHOC Capital	0.6	0.6	0.6	
Cumulative Surplus/(Deficit)	(2.8)	(3.0)	(4.3)	
Grants	1.5	4.5	6.9	
Medium and Long-term Loans	0.2	1.2	2.0	
Capital Employed	(0.5)	3.3	5.2	n.a.
Sales of Fishing Boats and River Craft hulls	11	16	14	n.a.
Number of Employees	481	511	662	322
Gross Added Value (Estimate) ¢ million	0.7	3.1	3.4	n.a.
Net Profit on Sales %	-	-	-	-
Net Profit on Net Assets %	-	-	-	-
Gross Added Value per Employees ¢ thousand	1.5	6.1	5.1	n.a.

n.a. not available

Notes:

1. Contract prices on Boatyards' products have not been subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were nearly 40% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢7.5 million, over double the value of 1977.

4. Trade debtors at the year-end 1979 stood at ¢ 5 million, more than double the level of 1977. Management estimate the required bad debt provision at ¢ 1.25 million.

5. Short-term funding at the year-end 1979 included:

	¢ million
sundry creditors	1.7
deposits against contracts	6.0
bank overdraft	0.9 (June 1980: 2.5)
GIHOC Head Office	1.8
	10.4

6. Medium and long-term funding at the year-end 1979 included:

	¢ million
ADB/IDA loan	2.0
Ghana Government grant?	4.5
Netherland grant?	2.4
	8.9

PE

FINANCIAL RESULTS - BRICK AND TILE

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	0.11	0.07	0.33	0.25
Raw Materials Used	-	0.01	0.02	-
Net Profit/(Loss)	(0.36)	(0.46)	(0.35)	(0.06)
Balance Sheets				
Net Fixed Assets	0.74	0.68	0.68	
Current Assets	0.10	0.18	0.31	
Current Liabilities	1.97	2.45	2.93	
Net Current Assets/(Liabilities)	(1.87)	(2.27)	(2.62)	
Net Assets	(1.13)	(1.59)	(1.94)	n.a.
GIHOC Capital	0.22	0.22	0.22	
Cumulative Surplus/(Deficit)	(1.35)	(1.81)	(2.16)	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	(1.13)	(1.59)	(1.94)	n.a.
Kiln Output (Estimate) thousand bricks	276	240	318	394
Number of Employees	134	83	82	128
Gross Added Value (Estimate) ¢ million	0.10	0.12	0.42	n.a.
Net Profit on Sales	-	-	-	-
Net Profit on Net Assets %	-	-	-	-
Gross Added Value per Employee ¢ thousand	0.7	1.4	5.1	n.a.

n.a. not available

Notes:

1. We understand that selling prices of Brick and Tile's products have not been subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 30% higher than those of 1977.

3. Short-term funding at the year-end 1979 included:

	¢ million
statutory debts	0.3
bank overdraft	0.4
GIHOC Head Office	2.0
	2.7

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FINANCIAL RESULTS - CANNERY

¢ million

	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	7.5	9.3	25.7	11.1
Raw Materials Used	3.1	3.9	8.9	4.7
Net Profit before Taxation	1.7	2.5	11.1	4.4
Balance Sheets				
Net Fixed Assets	1.8	1.4	2.0	
Current Assets	6.3	10.4	20.0	
Current Liabilities	1.5	2.7	1.8	
Net Current Assets	4.8	7.7	18.2	
Net Assets	6.6	9.1	20.2	n.a.
GIHOC Capital	1.7	1.7	1.7	
Cumulative Surplus	4.9	7.4	18.5	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	6.6	9.1	20.2	n.a.
Sales Volumes:				
Food thousand cartons	29.2	60.0	47.8	n.a.
Drink thousand cartons	76.6	56.9	84.8	n.a.
Number of Employees	617	766	506	511
Gross Added Value (Estimate) ¢ million	4.5	6.0	16.5	n.a.
Net Profit on Sales %	23%	27%	43%	40%
Net Profit on Net Assets %	26%	27%	55%	n.a.
Gross Added Value per Employee ¢ thousand	7.3	7.8	32.6	n.a.

n.a. not available

Notes:

1. Selling prices for Cannery's products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 70% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢5.6 million, over double the level in 1977.

4. At the year-end 1979, deposits with GIHOC Head Office amounted to ¢2.5 million and cash at bank and in hand stood at ¢6.4 million. Cash unaccounted for at ¢2 million was included in current assets.

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FINANCIAL RESULTS - DISTILLERIES

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	6.6	6.4	7.4	4.3
Raw Materials Used	3.6	3.0	3.5	3.2
Net Profit before Taxation	1.4	1.4	1.5	0.1
Balance Sheets				
Net Fixed Assets	1.0	1.0	1.3	
Current Assets	10.7	12.1	13.8	
Current Liabilities	0.9	1.1	1.6	
Net Current Assets	9.8	11.0	12.2	
Net Assets	10.8	12.0	13.5	n.a.
GIHOC Capital	1.9	1.9	1.9	
Cumulative Surplus	8.9	10.1	11.6	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	10.8	12.0	13.5	n.a.
Sales Volume thousand cartons	83.4	63.2	37.0	22.0
Number of Employees	338	338	324	314
Gross Added Value (Estimate) ¢ million	3.1	3.6	3.5	n.a.
Net Profit on Sales %	21%	22%	20%	nil
Net Profit on Net Assets %	13%	12%	11%	n.a.
Gross Added Value per Employee ¢ thousand	9.2	10.6	10.8	n.a.

n.a. not available

Notes:

1. Prices of Distilleries' products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 40% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢3.2 million, over 30% higher than the level of 1977.

4. At the year-end, 1979 deposits with GIHOC Head Office stood at ¢6.7 million and cash at bank and in hand at ¢ 1.9 million.

PE

FINANCIAL RESULTS - ELECTRONICS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	4.4	6.5	3.0	0.68
Raw Materials Used	1.9	1.7	1.8	0.19
Net Profit/(Loss)	0.2	2.9	(0.9)	(0.63)
Balance Sheets				
Net Fixed Assets	0.7	0.6	0.7	
Current Assets	3.9	7.0	5.9	
Current Liabilities	1.2	1.3	1.2	
Net Current Assets	2.7	5.7	4.7	
Net Assets	3.4	6.3	5.4	n.a.
GIHOC Capital	1.0	1.0	1.0	
Cumulative Surplus	2.4	5.3	4.4	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	3.4	6.3	5.4	n.a.
Number of Employees	269	260	285	271
Gross Added Value (Estimate) ¢ million	2.2	4.8	1.3	n.a.
Net Profit on Sales %	5%	45%	-	-
Net Profit on Net Assets %	6%	46%	-	n.a.
Gross Added Value per Employee ¢ thousand	8.2	17.8	4.6	n.a.

n.a. not available

Notes:

1. Prices of Electronics' products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 40% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢ 3 million, over 75% higher than the level of 1977.

4. At the year-end 1979, deposits with GIHOC Head Office amounted to ¢ 1.2 million.

5. Short-term funding at the year-end 1979 included:

	¢ million
statutory debts	0.8
deposits from customers	0.3
	1.1

PE

FINANCIAL RESULTS - FARMS

¢ million	18 months to 1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements		
Sales	0.5	0.4
Net Profit/(Loss)	(0.5)	(0.4)
Balance Sheets		
Net Fixed Assets	0.4	
Current Assets	0.9	
Current Liabilities	0.7	
Net Current Assets	0.2	
Net Assets	0.6	n.a.
GIHOC Capital	0.1	
Cumulative Surplus/(Deficit)	(0.5)	
Medium and Long-term Loans	1.0	
Capital Employed	0.6	n.a.

n.a. not available

Notes:

1. Prices of Farms' produce have not been subject to government price control.
2. There is no short-term finance. There are GIHOC subsidiary creditors for assets taken over.
3. Long-term funding is provided by a Ghana Government loan.

PE

FINANCIAL RESULTS - FIBRE PRODUCTS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	6.4	5.3	-	5.6
Raw Materials Used	2.2	2.1	-	1.9
Net Profit/(Loss)	(1.5)	(4.6)	(6.9)	(1.0)
Balance Sheets				
Net Fixed Assets	3.1	4.2	3.9	
Current Assets	7.6	8.9	8.9	
Current Liabilities	1.5	6.0	12.5	
Net Current Assets/(Liabilities)	6.1	2.9	(3.6)	
Net Assets	9.2	7.1	0.3	n.a.
GIHOC Capital	8.5	8.5	8.5	
Cumulative Surplus/(Deficit)	0.7	(3.9)	(10.8)	
Grants	-	-	-	
Medium and Long-term Loans	-	2.5	2.7	
Capital Employed	9.2	7.1	0.3	n.a.
Sales Volume million bags	3.7	2.5	nil	1.0
Number of Employees	1,790	1,532	1,436	1,436
Gross Added Value (Estimate) ¢ million	4.2	3.0	-	n.a.
Net Profit on Sales %	-	-	-	-
Net Profit on Net Assets %	-	-	-	-
Gross Added Value per Employee ¢ thousand	2.3	1.9	-	n.a.

n.a. not available

Notes:

1. There was no production throughout 1979.

2. Prices of Fibre Products' output are subject to government price control.

3. Fixed costs (direct labour and all overheads) in 1978 were 40% higher than those of 1977.

4. Short-term funding at the year-end 1979 included:

	¢ million
trade and sundry creditors	2.4
GIHOC Head Office	6.1
statutory debts	2.5
bank overdraft	1.2
	12.2

5. Medium and long-term funding at the year-end 1979 consisted of a UK Government loan of ¢2.7 million.

PE

FINANCIAL RESULTS - FOOTWEAR

¢ million		1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	5 months to May 1980 Management A/Cs
Operating Statements					
Sales		3.3	5.2	5.2	2.6
Raw Materials Used		1.3	2.0	1.4	1.3
Net Profit/(Loss)		(2.1)	(0.6)	(2.2)	(0.3)
Balance Sheets					
Net Fixed Assets		3.6	3.3	3.1	
Current Assets		5.0	7.0	5.4	
Current Liabilities		6.4	8.7	9.1	
Net Current Assets/(Liabilities)		(1.4)	(1.7)	(3.7)	
Net Assets		2.2	1.6	(0.6)	n.a.
GIHOC Capital		5.8	5.8	5.8	
Cumulative Surplus/(Deficit)		(5.6)	(6.2)	(8.4)	
Grants		-	-	-	
Medium and Long-term Loans		2.0	2.0	2.0	
Capital Employed		2.2	1.6	(0.6)	n.a.
Sales Volume	thousand pairs	225	209	139	69
Number of Employees		682	695	705	591
Gross Added Value (Estimate)	¢ million	0.9	4.0	3.5	n.a.
Net Profit on Sales %		-	-	-	-
Net Profit on Net Assets %		-	-	-	-
Gross Added Value per Employee	¢ thousand	1.3	5.8	5.0	n.a.

n.a. not available

PE

Notes:

1. Prices of Footwear's products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 60% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢3.3 million.

4. Short-term funding at the year-end 1979 included:

	¢ million
statutory debts	2.4
GIHOC Head Office	4.5
customers' deposits	0.8
	7.7

5. Medium and long-term funding comprised a Ghana Government loan of ¢2 million.

PE

FINANCIAL RESULTS - GLASS MANUFACTURING

¢ million

	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs
Operating Statements			
Sales	0.6	-	-
Raw Materials Used	0.1	-	-
Net Loss	(2.7)	-	-
Balance Sheets			
Net Fixed Assets	12.7	15.1	17.5
Current Assets	2.9	3.0	2.2
Current Liabilities	10.2	12.7	14.3
Net Current Assets/(Liabilities)	(7.3)	(9.7)	(12.1)
Net Assets	5.4	5.4	5.4
GIHOC Capital	6.4	6.4	6.4
Cumulative Surplus/(Deficit)	(11.0)	(11.0)	(11.0)
Grants	-	-	-
Medium and Long-term Loans	10.0	10.0	10.0
Capital Employed	5.4	5.4	5.4
Deferred Expenses	-	3.2	5.2

Notes:

1. Glass Manufacturing has been closed for rehabilitation since July 1977.

2. Short-term funding at the year-end 1979 included:

	¢ million
GIHOC Head Office	12.7
bank overdraft	0.5
	13.2

3. Long-term funding at the year-end 1979 comprised:

	¢ million
Ghana Government	3.5
African Development Bank (ADB)	6.5 (UA 5.0 million)
	10.0

As a result of the 1978 devaluation of the cedi, repayment of the principal of the ADB loan will cost at least ¢12 million.

FINANCIAL RESULTS - MARBLE WORKS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	0.56	0.67	0.59	0.35
Raw Materials Used	0.18	0.27	0.22	0.13
Net Profit/(Loss)	(0.15)	(0.35)	(0.78)	(0.21)
Balance Sheets				
Net Fixed Assets	0.15	0.22	0.16	
Current Assets	0.84	1.14	1 35	
Current Liabilities	0.95	1.77	2.70	
Net Current Assets/ (Liabilities)	(0.11)	(0.63)	(1.35)	
Net Assets	0.04	(0.41)	(1.19)	n.a.
GIHOC Capital	0.36	0.36	0.36	
Cumulative Surplus/(Deficit)	(0.32)	(0.77)	(1.55)	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	0.04	(0.41)	(1.19)	n.a.
Number of Employees	213	187	216	165
Gross Added Value (Estimate) ¢ million	0.5	0.7	0.4	n.a.
Net Profit on Sales %	-	-	-	-
Net Profit on Net Assets %	-	-	-	-
Gross Added Value per Employee ¢ thousand	2.3	3.7	1.9	n.a.

n.a. not available

Notes:

1. Prices of Marble Works' products are not subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 40% higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢ 0.9 million, nearly double the value at 1977.

4. Short-term funding at the year-end 1979 included:

	¢ million
statutory debts	0.3
deposits from customers	0.4
bank overdraft	0.2
GIHOC	1.6
	2.5

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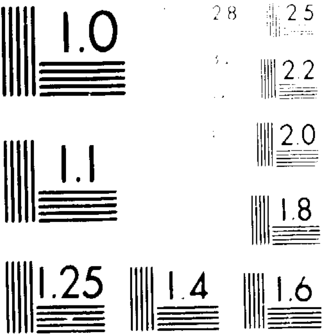
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PE

FINANCIAL RESULTS - MEAT PRODUCTS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	6.7	6.1	11.7	
Raw Materials Used	2.7	1.8	4.9	
Net Profit	1.2	0.3	2.2	n.a.
Balance Sheets				
Net Fixed Assets	0.7	1.8	2.0	
Current Assets	4.8	5.5	7.2	
Current Liabilities	6.4	7.9	7.6	
Net Current Assets/(Liabilities)	(1.6)	(2.4)	(0.4)	
Net Assets	(0.9)	(0.6)	1.6	n.a.
GIHOC Capital	1.5	1.5	1.5	
Cumulative Surplus/(Deficit)	(2.4)	(2.1)	0.1	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	(0.9)	(0.6)	1.6	n.a.
Sales Volume thousand tonnes	1.9	1.5	1.4	
Number of Employees	257	264	274	282
Gross Added Value (Estimate) ¢ million	4.0	4.3	6.8	n.a.
Net Profit on Sales %	18%	5%	19%	n.a.
Net Profit on Net Assets %	-	-	138%	n.a.
Gross Added Value per Employee ¢ thousand	15.6	16.3	24.8	n.a.

n.a. not available

Notes:

1. Prices of Meat Products' outputs are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were more than double those of 1977.

3. Stocks at the year-end 1979 stood at ¢ 1.8 million, more than triple the value of 1977. The major component was corned beef tins ¢ 0.7 million.

4. At the year-end 1979, deposits with GIHOC Head Office stood at ¢ 0.5 million and cash at bank and in hand at ¢ 3.1 million.

5. Short-term funding at the year-end 1979 included:

	¢ million
trade creditors	1.4
sundry creditors	2.1
GIHOC Head Office	1.9
bank loans	2.2
	7.6

6. The value of the slaughterhouse at Tema is excluded from the balance sheet.

PE

FINANCIAL RESULTS - METAL INDUSTRIES

¢ million

	1977 Audited A/Cs	1978 Audited A/Cs	1979 Audited A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	4.8	3.7	3.7	2.7
Raw Materials Used	2.3	1.8	1.3	1.1
Net Profit	1.1	0.5	0.7	0.8
Balance Sheets				
Net Fixed Assets	0.7	0.6	0.6	
Current Assets	3.0	4.0	4.5	
Current Liabilities	1.5	1.9	1.7	
Net Current Assets	1.5	2.1	2.8	
Net Assets	2.2	2.7	3.4	n.a.
GIHOC Capital	0.4	0.4	0.4	
Cumulative Surplus	1.8	2.3	3.0	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	2.2	2.7	3.4	n.a.
Sales Volume thousand cases 25 kg	40	44	18	12
Number of Employees	272	311	312	279
Gross Added Value (Estimate) ¢ million	2.5	1.9	2.4	n.a.
Net Profit on Sales %	23%	14%	19%	30%
Net Profit on Net Assets %	50%	19%	21%	n.a.
Gross Added Value per Employee ¢ thousand	9.2	6.1	7.7	n.a.

n.a. not available

Notes:

1. Prices of Metal Industries' products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were over 30% higher than those of 1977.

3. Short-term funding at the year-end 1979 included:

	¢ million
deposits from customers	0.5
sundry creditors	1.1
	1.6

PE

FINANCIAL RESULTS - PAINT

¢ million

	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	5 months to May 1980 Management A/Cs
Operating Statements				
Sales	4.2	2.9	8.3	2.2
Raw Materials Used	1.9	1.2	3.3	1.3
Net Profit/(Loss)	1.2	(0.2)	2.7	nil
Balance Sheets				
Net Fixed Assets	0.4	0.6	0.6	
Current Assets	6.9	6.4	9.3	
Current Liabilities	1.0	0.9	1.1	
Net Current Assets	5.9	5.5	8.2	
Net Assets	6.3	6.1	8.8	n.a.
GIHOC Capital	0.9	0.9	0.9	
Cumulative Surplus	5.4	5.2	7.9	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	6.3	6.1	8.8	n.a.

	1977	1978	1979	5 months to May 1980
Sales Volume thousand tonnes	1.4	0.8	1.4	0.4
Number of Employees	255	264	260	289
Gross Added Value (Estimate) ¢ million	2.3	1.7	5.4	n.a.

	1977	1978	1979	5 months to May 1980
Net Profit on Sales %	29%	-	33%	-
Net Profit on Net Assets %	19%	-	31%	n.a.
Gross Added Value per Employee ¢ thousand	9.0	6.4	20.8	n.a.

n.a. not available

Notes:

1. Prices of Paints' main products are subject to government price control.

2. Fixed costs (direct labour and all overheads) in 1979 were 50% higher than those of 1977.

3. At the year-end 1979, deposits with GIHOC Head Office stood at ¢ 3.2 million, and cash at bank and in hand at ¢ 2 million.

PE

FINANCIAL RESULTS - PAPER CONVERSION

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	3 months to April 1980 Management A/Cs
Operating Statements				
Sales	9.7	13.4	10.9	0.9
Raw Materials Used	4.8	5.5	6.2	2.9
Net Profit/(Loss)	2.5	4.6	(0.1)	(3.1)
Balance Sheets				
Net Fixed Assets	1.3	1.4	1.8	
Current Assets	11.5	16.2	15.0	
Current Liabilities	2.3	2.5	1.8	
Net Current Assets	9.2	13.7	13.2	
Net Assets	10.5	15.1	15.0	n.a.
CIHOC Capital	2.6	2.6	2.6	
Cumulative Surplus	7.9	12.5	12.4	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	10.5	15.1	15.0	n.a.
Production Volume thousand tonnes	7.2	6.2	2.9	1.1
Number of Employees	591	573	583	533
Gross Added Value (Estimate) ¢ million	4.9	8.0	4.5	n.a.
Net Profit on Sales %	26%	34%	-	-
Net Profit on Net Assets %	24%	30%	-	n.a.
Gross Added Value per Employee ¢ thousand	8.3	14.0	7.7	n.a.

n.a. not available

Notes:

1. Prices of Paper Conversion's products are subject to government price control.

2. In 1980 industrial products have been sold against deposits without invoicing, pending price rise approval by the PIB.

3. Fixed costs (direct labour and all overheads) in 1979 were over 50% higher than those of 1977.

4. At the year-end 1979, deposits with GIHOC Head Office amounted to ¢ 6.9 million, government stocks ¢ 1 million and cash at bank and in hand at ¢ 0.6 million.

PE

FINANCIAL RESULTS - PHARMACEUTICAL

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Audited A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	14.2	20.7	27.5	13.2
Raw Materials Used	4.8	6.0	7.4	3.8
Imported Finished Goods	2.2	1.7	3.7	3.4
Net Profit before Tax	4.2	8.0	9.3	3.1
Balance Sheets				
Net Fixed Assets	2.3	2.7	4.0	
Current Assets	13.6	22.2	32.7	
Current Liabilities	1.6	3.0	6.1	
Net Current Assets	12.0	19.2	26.6	
Net Assets	14.3	21.9	30.6	n.a.
GIHOC Capital	1.6	1.6	1.6	
Cumulative Surplus	12.7	20.3	29.0	
Grants	-	-	-	
Medium and Long-term Loans	-	-	-	
Capital Employed	14.3	21.9	30.6	n.a.
Sales Volume million tablets	675	651	319	170
Number of Employees	496	587	626	626
Gross Added Value (Estimate) ¢ million	7.5	13.0	18.1	n.a.
Net Profit on Sales %	30%	39%	34%	23%
Net Profit on Net Assets %	30%	36%	30%	n.a.
Gross Added Value per Employee ¢ thousand	15.1	22.1	28.9	n.a.

n.a. not available

Notes:

1. Prices of Pharmaceutical's products are subject to government price control.
2. Fixed operating costs (direct labour and all overheads) in 1979 were nearly 80% higher than those of 1977.
3. Stocks at the year-end 1979 stood at ¢ 11.8 million, triple the value for 1977.
4. Trade and sundry debtors at the year-end 1979 stood at ¢ 10.7 million, the majority of which was due from the Ministry of Health.
5. At the year-end 1979, deposits with GIHOC Head Office stood at ¢ 4.7 million and cash at bank and in hand at ¢ 1.6 million.

PE

FINANCIAL RESULTS - STEELWORKS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	½ year to June 1980 Management A/Cs
Operating Statements				
Sales	10.6	3.1	7.9	4.0
Raw Materials Used	1.4	0.6	1.0	1.4
Net Profit/(Loss)	1.0	(3.5)	1.0	(0.7)
Balance Sheets				
Net Fixed Assets	9.7	9.7	8.6	
Current Assets	8.4	7.9	10.0	
Current Liabilities	7.4	10.7	11.2	
Net Current Assets/ (Liabilities)	1.0	(2.8)	(1.2)	
Net Assets	10.7	6.9	7.4	n.a.
GIHOC Capital	3.8	3.8	3.8	
Cumulated Surplus/(Deficit)	(1.5)	(5.0)	(4.0)	
Grants	-	-	-	
Medium and Long-term Loans	8.4	8.1	7.6	
Capital Employed	10.7	6.9	7.4	n.a.
Sales Volume thousand tonnes	7.1	2.9	3.7	2.0
Number of Employees	497	480	549	527
Gross Added Value (Estimate) ¢ million	8.1	2.4	7.0	n.a.
Net Profit on Sales %	9%	-	13%	-
Net Profit on Net Assets %	9%	-	14%	n.a.
Gross Added Value per Employee ¢ thousand	16.3	5.0	12.8	n.a.

n.a. not available

Notes:

1. Prices of Steelworks' products are subject to government price control.

2. Fixed operating costs (direct labour and all overheads) in 1979 were not significantly higher than those of 1977.

3. Stocks and work-in-progress at the year-end 1979 stood at ¢ 8.8 million, nearly 80% higher than the value for 1977.

4. Short-term funding at the year-end 1979 included:

	¢ million
statutory debts	2.2
sundry creditors	1.0
deposits by customers	1.7
bank overdraft	2.4
GIHOC Head Office	3.2
	10.5

5. Medium and long-term funding at the year-end 1979 comprised:

	¢ million
Ministry of Economic Planning	0.75
GIHOC Loan	1.10
Ministry of Finance	4.62
EEC Loan	1.15
	7.62

PE

FINANCIAL RESULTS - VEGETABLE OIL MILLS

¢ million	1977 Audited A/Cs	1978 Audited A/Cs	1979 Draft A/Cs	4 months to April 1980 Management A/Cs
Operating Statements				
Sales	9.4	11.6	12.4	1.4
Raw Materials Used	6.0	9.7	7.9	1.1
Net Profit/(Loss)	0.2	(0.8)	(1.1)	(0.1)
Balance Sheets				
Net Fixed Assets	1.3	1.7	2.4	
Current Assets	5.8	15.7	8.4	
Current Liabilities	7.3	18.4	12.9	
Net Current Assets/ (Liabilities)	(1.5)	(2.7)	(4.5)	
Net Assets	(0.2)	(1.0)	(2.1)	n.a.
GIHOC Capital	0.4	0.4	0.4	
Cumulative Surplus/(Deficit)	(3.3)	(4.1)	(5.2)	
Grants	0.2	0.2	0.2	
Medium and Long-term Loans	2.5	2.5	2.5	
Capital Employed	(0.2)	(1.0)	(2.1)	n.a.
Sales Volume thousand tonnes	4.1	1.9	1.3	0.1
Number of Employees	470	488	448	448
Gross Added Value (Estimate) ¢ million	3.5	3.4	3.6	n.a.
Net Profit on Sales %	2%	-	-	-
Net Profit on Net Assets %	-	-	-	-
Gross Added Value per Employee ¢ thousand	7.4	7.0	8.0	n.a.

n.a. not available

Notes:

1. Prices of Vegetable Oil Mills' products are subject to government price control.

2. Fixed operating costs (direct labour and all overheads) in 1979 were over 50% higher than those of 1977.

3. At the year-end 1979, cash at bank and in hand stood at ¢2.4 million and government stocks at ¢ 0.5 million.

4. Short-term funding at the year-end 1979 included:

	¢ million
bank overdraft	5.7
deposits from customers	1.9
GIHOC Head Office	3.2
	10.8

5. Long-term funding comprises a Ghana Government loan.

APPENDIX 10

PE

CAPITAL PROJECT COSTS AND FUNDING

Company	Project		Latest Estimate Project Total Cost	Project Cost to Date	Balance of Project Cost	Funds Committed Amount	Funds Committed Source	Project Cost not Funded Amount	Project Cost not Funded Likely Source
			¢ million	¢ million	¢ million	¢ million		¢ million	
Boatyards	new slipways at Tema and Takoradi	Foreign:	6.0	0.5	5.5	0.5	GIHOC	5.5	GIHOC
		Local:	n.a.	n.a.	n.a.	nil		not known	GIHOC
	sawmill at Takoradi	Foreign:	3.5	1.1	2.4	1.1	GIHOC	2.4	GIHOC
		Local:	n.a.	n.a.	n.a.	nil		not known	GIHOC
Brick & Tile	rehabilitation and new plant (initiated 1974)	Foreign:	6.7	0.4	6.3	0.4	GIHOC	6.3	not known
		Local:	3.5	nil	3.5	nil		3.5	not known
Glass Manufacturing	Phase I, expansion and rehabilitation	Foreign:	27	17.1	9.9	17.0	ADB (UA5.0 million)	9.0	not known
		Local:	14	9.6	4.4	5.5	Ghana Government	4.5	not known
						5.0	GIHOC		
	Phase II, local raw materials processing plant	Foreign:	9.8	nil	9.8	nil		9.8	ADB
		Local:	2.2	nil	2.2	nil		2.2	not known
Meat Products	cold-rooms	Foreign:	3.7	2.7	1.0	2.7	GIHOC	1.0	not known
		Local:	3.2	0.9	2.3	0.9	GIHOC	2.3	not Known
Pharmaceutical	expansion of production facility	Foreign:	40	nil	40	none		40	West German Government Loan
		Local:	18	nil	18	none		18	Ghana Government Loan
Steelworks	Tema foundry project	Foreign:	21.1	10.4	10.7	7.8	Barclays Bank, Standard Bank, National Savings	18.2	local bank consortium
		Local:	7.5	0.1	7.4	2.6	GIHOC		
	Concast project	Foreign: / Local:	2.0	1.8	0.2	2.0	bank loan, Ghana Government	nil	
Kumasi Steel	complete rolling mill	Foreign:	n.a.	n.a.	n.a.	7.5	Ghana Government	not known	not known
		Local:	n.a.	n.a.	n.a.	5.5	bank loan		

n.a. not available

ACTION PLANS

Action plans are given in the following pages:

- A Definition of Corporate Aims
- B Restructuring of Debt and Equity Capital
- C Revision of Captial Investment Programmes
- D Examination of Operations of Farms
- E Market Study for Boatyards

PE

ACTION PLAN - DEFINITION OF CORPORATE AIMS

Objective: Provision of an agreed and recognised basis on which to plan the future of GIHOC as a whole and to assess its performance.

Tasks:

1. Review the past aims of GIHOC as a whole as set out in NLC Decree 207 and its amendments, eg the requirement to make a reasonable return on a fair value of its assets.

2. Consider the critical factors which have constrained its achievements, eg past political and economic instability, lack of foreign exchange allocation and requirement to provide continuity of employment.

3. Assess the performance of GIHOC as a whole in achieving these aims, eg its support for its financially weak companies, the development of all its companies and its overall financial performance.

4. Anticipate the factors which will impinge on the achievement of aims in the future, eg Government policy towards state-owned commercial ventures and the re-constitution of GIHOC's divisions as companies.

5. Re-define aims for GIHOC as whole, eg overall financial performance, extent of support for unprofitable companies and application of the revenue reserves of the profitable companies, and where possible decide how these aims may be quantified, eg return on net assets adjusted for the effects of inflation.

6. Specify targets for these corporate aims and a timescale for their achievement.

ACTION PLAN - RESTRUCTURING OF DEBT AND EQUITY CAPITAL

Objective: Provision to GIHOC and its companies sufficient funds of the appropriate type for operations and capital investment conducive with prudent commercial practice.

Tasks:

1. Review each company's past profit performance and its ability to generate cash flow.

2. Appraise each company's capital projects (see Appendix 11C) and project the company's potential profit performance and cash flow.

3. Review each company's and the group's current balance sheet with particular emphasis on current ratio, debt equity ratio, debt service coverage ratio, and sources of funding.

4. Prepare an outline financing plan for each company and the group on the assumption that all projects currently underway are continued and that the structure of funding and the ability to service the debt accord with prudent commercial practice.

5. Decide which projects will be given precedence (see Appendix 11C).

6. Prepare a detailed financing plan for each company and for the group as a basis for discussion with appropriate sources of funding.

PE

ACTION PLAN - REVISION OF CAPITAL INVESTMENT PROGRAMMES

Objective: Completion of viable capital projects in hand as soon as possible.

Tasks:

1. Assess the progress on each capital project in hand (eg site clearance, delivery and commissioning of plant and training of personnel) and review the current programme for completion.

2. Review in detail the assumptions on which the viability of each project was based, eg availability and cost of raw materials and plant and equipment, amount and sourcing of finance, cash flow generation, and ability to service debt.

3. Revise these assumptions realistically to cater for current and anticipated circumstances, eg availability of foreign exchange and amount and sourcing of finance.

4. Re-appraise each project using these revised assumptions and for each calculate as a minimum its break-even point, payback period and internal rate of return.

5. Define the criteria by which these projects may be ranked in order of priority, eg financial performance, proportion of project outstanding and strategic significance.

6. Decide which projects will be given precedence.

7. Programme capital project completion and implement, eg allocate project management, approach appropriate sources of finance and instruct suppliers and contractors.

PE

ACTION PLAN - EXAMINATION OF OPERATIONS OF FARMS

Objective: Resolution of organizational and commercial problems in raw material supply to Cannery and Vegetable Oil Mills from Farms.

Tasks:

1. Review the aims of Farms and assess its performance in achieving these aims, eg choice of crops grown; quantity, quality, yield and prices of harvested crops; and financial performance.

2. Consider the matters of policy which govern the operations of Farms, eg transfer prices to Cannery and Vegetable Oil Mills and their relationship with market prices; growing of crops not required by Cannery or Vegetable Oil Mills; sales of crops outside GIHOC; and development of existing and proposed farms.

3. Review the factors which affect the achievement of the aims of Farms, eg Government policy and the economic situation; requirements of Cannery and Vegetable Oil Mills as to crop type, quantity, quality and price; and availability of resources to Farms, eg land, finance, management, labour, transport and agricultural inputs and equipment.

4. Formulate and implement a programme to ensure security of supply of substantial quantities of good quality produce at reasonable prices to Cannery and Vegetable Oil Mills. Consideration should be given to:

   (a) Dissolution of Farms as an operating unit with:

      (i) return of its assets and control to the appropriate GIHOC companies, or

      (ii) transfer of assets and control outside GIHOC and discontinuation of farming activities within GIHOC

   (b) Continuation of Farms as a separate entity within GIHOC with more explicit definition of its aims as a basis for planning and performance assessment.

ACTION PLAN - MARKET STUDY FOR BOATYARDS

Objective: Identification of prospects for the expcr't of hulls which are not fitted out with plant and equipment.

Tasks:

1. Review the market study undertaken on behalf of Boatyards by the GIHOC Headquarters Market' 't in 197S which identified export opportuni'ies ı. ' ~. The Gambia, Nigeria and Cameroon and u.

2. Appraise the potential of production by Bo us of hulls in the existing ranges which are not fitted out with plant and equipment, eg production time and volume, minimum necessary foreign exchange input, availability of local materials, hull cost and projected financial performance.

3. Undertake an export market study which includes assessment of:

   - market size by country in West Africa
   - typical customer profile
   - typical customer requirements
   - potential selling prices
   - competition
   - willingness of export customers to accept hulls requiring fitting out and availability of facilities for so doing
   - export constraints and incentives offered by the Ghana Government.

4. Prepare a marketing plan and implement.

BRICK & TILE: HISTORICAL AND PROJECTED PROFIT AND LOSS STATEMENTS

	1977	1978	1979	1980	1981	1982	1983	1984
Physical Production of Bricks ('000 per Year)	276	240	318	500[1]	500[1]	2,000	4,000	5,000
Average Sales Revenue per Brick (¢)	0.40	0.30	1.04	1.00	1.00	1.00	1.00	1.00
Number of Employees	134	83	82	128	128	128	150	150
Sales Revenue (¢ thousand)	110	192	331	500	500	2,000	4,000	5,000
Cost of Goods Sold (¢ thousand)								
Direct Labour	61	56	99	118	118	118	140	140
Clay Deposit Royalty	7	6	22	17	17	68	136	170
Other Costs of Goods Sold	33	80	33	183	183	183	183	183
Fixed Cost of Production	86	132	131	232	232	232	260	260
Administration	98	121	159	284	284	284	320	320
Finance Charges	122	134	80	218	280	399	400	152
Depreciation	64	80	73	116	116	116	200	200
Total Cost of Goods Sold	471	609	597	1,168	1,230	1,400	1,639	1,425
Net Profit/(Loss) (¢ thousand)	(361)	(417)	(266)	(668)[2]	(730)	600	2,361	3,575

Notes:

1. Projected on the basis of the actual production of the first six months of 1980.

2. Projected losses of ¢ 868 thousand are exceptionally high due to substantial increases under fixed cost of production, administration and finance charges.