APPENDICES

Appendix One

Financial Planning

(1) An Example to illustrate the discounted cash flow method:

A company is looking for profitable production, the management has to choose between alternatives A, B, or C. The fixed capital requirements of each one of these projects are £12,000. Each project has five years useful life. The following are details about the earnings of each project after depreciation and tax.

Year	Project A	Project B	Project C
1	3,000	2,000	7,000
2	5,000	2,000	6,000
3	5,000	2,000	2,400
4	4,000	7,000	2,000
5	3,000	7,000	2,000
	20,000	20,000	18,400

The questions are:

- If a minimum rate of return is 10 percent, what are the projects' net present value?

- What is the time adjusted rate of return of each project?

(i) The Net Present Value:

This method assumes some minimum desired rate of return. All expected cash flows are discounted to the present; using this minimum desired rate. If the result is positive, the project is desirable, and vice versa.

Year	Present Value of £1 @ 10%	Project A		Project B		Project C	
		Net Profit	PV	Net Profit	PV	Net Profit	PV
1	0.909	3,000	2,727	2,000	1,818	7,000	6,363
2	0.826	5,000	4,130	2,000	1,652	6,000	4,956
3	0.751	5,000	3,755	2,000	1,502	2,400	1,802
4	0.683	4,000	2,732	7,000	4,781	2,000	1,366
5	0.621	3,000	1,863	7,000	4,347	1,000	621
Present value of future in flows			15,207		14,100		15,108
Initial Investment			12,000		12,000		12,000
Present Value			3,207		2,100		3,108

The table shows that an initial investment for projects A, B or C yield net present values £3,207, £2,100 and £3,108 respectively, therefore, the three alternatives are desirable but project A is the best one as it generates the highest net present value.

(ii) The Time Adjusted Method:

With the net present value method, the required earnings rate must be selected in advance. There exists an alternative method, which finds the earnings rate at which the present value of the

earnings equals the amount of the investment. This rate is the time adjusted method, or the internal rate of return.

	Project A	Project B	Project C
Initial investment	12,000	12,000	12,000
Net present value @ 10% as above	3,207	2,100	3,108

Since these projects yield more than 10% as it appears from the net present value method, therefore, we try 10% and 15%.

Year	Present Value of £1 @ 15%	Project A		Project B		Project C	
		Net Profit	PV	Net Profit	PV	Net Profit	PV
1	0.870	3,000	2,610	2,000	1,740	7,000	6,090
2	0.756	5,000	3,780	2,000	1,512	6,000	4,536
3	0.658	5,000	3,290	2,000	1,316	2,400	1,579
4	0.572	4,000	2,288	7,000	4,004	2,000	1,144
5	0.497	3,000	1,491	7,000	3,479	1,000	497
Present Value			13,459		12,051		13,846
Initial Investment			12,000		12,000		12,000
Present Value			1,459		51		1,846

Project A:

$$\text{Actual rate of return} = 10\% + \frac{\text{Net present value @ 10\%}}{\text{Net present value @ 15\%}} \times (15\% - 10\%)$$

$$= 10\% + \frac{3,207}{3,207 - 1,459} \times 5\%$$

$$= 19\%$$

Project B:

$$\text{Actual rate of return} = 10\% + \frac{2,100}{2,100 - 51} \times 5\%$$

$$= 15\%$$

Project C:

$$\text{Actual rate of return} = 10\% + \frac{3,108}{3,108 - 1,846} \times 5\%$$

$$= 22\%$$

From the above calculations the internal rate of return or the time adjusted return for the three projects are 19%, 15% and 22% respectively, therefore, project C is the best alternative according to the time adjusted method.

2. An example to illustrate the payback period ranking

Payback period is computed by the following formula:

$$\text{Payback period (years)} = \frac{\text{Investment outlay}}{\text{Average cash earnings per year}}$$

Referring to the previous example; the following are the stream of earnings of projects A, B and C after tax; but before depreciation.

Year	Project A	Project B	Project C
1	5,400	4,400	9,400
2	7,400	4,400	8,400
3	7,400	4,400	4,800
4	6,400	9,400	4,800
5	5,400	9,400	4,400

Calculations of the payback period.

Project A = 1 year + $\frac{12,000 - 5,400}{7,400}$ = 1.89 years

Project B = 2 years + $\frac{12,000 - 8,800}{4,400}$ = 2.73 years

Project C = 1 year + $\frac{12,000 - 9,400}{8,400}$ = 1.38 years

According to the payback period method project C is the best one as it has the fastest recovery of the investment.

3. An example to illustrate the annual rate of return or Average rate of return:

The average rate of return is calculated as follow:

$$= \frac{\text{Average earnings per year after depreciation}}{\text{Average life time investment}}$$

Project	Life Years	Total Investment	Earnings	Depreciation	Salvage	Net Earnings
A	4	12,000	24,300	4,800	1,500	6,000
B	5	12,000	26,400	4,800	1,600	8,000
C	6	12,000	24,400	4,800	1,200	6,400

Net Earnings P.A.	ROCE	Rank
1,500	50%	3
1,600	64%	1
1,600	53%	2

According to the table, project B is the best as it yields the highest ROCE.

4. Projections of Sales:

To illustrate, suppose that a company's sales in 1978 were 2,000 units and had risen by 5 percent per annum over the past ten years. Projections of the volume of sales for the next ten years will be as follows:

Years	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Volume of Sales	2,000	2,100	2,210	2,320	2,440	2,560	2,690	2,820	2,960	3,110	3,270

5. Projections of Variable Costs:

To illustrate with regard to the projected volume of sales (as above); suppose that materials cost per unit in year 1978 was £300 and the trend over the past ten years had been for material's price to rise by 3 percent per annum, therefore, a projection of the cost of materials can be done as follows to the nearest £10.

Years	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Materials Cost	300	310	320	330	340	350	360	370	380	390	400

Projections about direct labour and direct overheads can be developed as illustrated for materials, we can then draw projections about variable costs in total.

6. Projections of Fixed Costs:

To illustrate; suppose that the fixed costs of research and development in 1978 were £5,000 and analysing the behaviour in the past ten years shows that the costs of research and development had been risen by 5 percent per annum, therefore a projection of research and development for the next ten years can be done as follows:

Years	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Projection of R & D	5,000	5,250	5,510	5,790	6,080	6,380	6,700	7,040	7,390	7,760	8,150

Projections of other items of fixed costs can be made to obtain projections of the behaviour of total fixed costs for the next ten years.

7. Projections of the Four Components of Profit

To illustrate, let us refer to our previous examples. Suppose that the following data are obtained from projections, which have been done about sales volume, variable costs, fixed costs and selling price; the factors which have been called in the text "The Four Components of Profit".

Years	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Sales Volume	2,000	2,100	2,210	2,320	2,440	2,560	2,690	2,820	2,960	3,110	3,270
Variable Costs per unit	400	408	416	424	432	441	450	459	468	477	487
Fixed Costs £000's	145	150	155	162	170	180	195	196	200	202	204
selling price	600	600	602	602	599	598	596	594	593	591	590

From projections of the four components of profit; a projection of profit during the next ten years can be derived by the use of the gross contribution method.

Projections of Profits

From Year 1979 to Year 1988

Year	Sales Volume	Selling Price	Variable costs Per unit	Contribution Margin	Gross Contribution	Fixed Costs	Profits
1979	2,100	600	408	192	403,200	150,000	253,200
1980	2,210	602	416	186	411,060	155,000	256,060
1981	2,320	602	424	178	412,960	162,000	250,960
1982	2,440	599	432	167	407,480	170,000	237,480
1983	2,560	598	441	157	401,920	180,000	221,920
1984	2,690	596	450	146	392,740	195,999	197,740
1985	2,820	594	459	135	380,700	196,000	184,700
1986	2,960	593	468	125	370,000	200,000	170,000
1987	3,110	591	477	114	354,540	202,000	152,540
1988	3,270	590	487	103	336,810	204,000	132,810

8. Projections of the Balance Sheets:

To make projections of the balance sheets, each important item which appears in it should be projected:

a. Projections of debtors including receivables:

To illustrate; with reference to the previous example the following data are available:

i) Projections of sales: £000's

1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1,260	1,330	1,400	1,460	1,530	1,600	1,680	1,760	1,840	1,930

ii) Upon the assumption that the trends of the past performance show that the credit sales were 70% of gross sales, credit sales would be: £000's

1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
880	930	980	1,020	1,070	1,120	1,180	1,230	1,290	1,350

iii) The average collection period is 2 months, and the actual balance of debtors including receivables at the end of 1978 was £500,000.

iv) The projected balances of debtors can be derived as follows:

$$\text{Average collection period} = \frac{\text{Credit sales}}{\text{Average balance of debtors}}$$

$$2 \text{ months} = \frac{\text{Projected sales in year 1979}}{\text{Debtors at the end of 1978} + \frac{\text{projected balance at the end of 1979}}{2}}$$

$$2 = \frac{880,000}{\frac{500,000 + X}{2}}$$

$$X = 880,000 - 500,000 = 380,000$$

The projected balance of the debtors at the end of year 1979, then, will be £380,000. Using the same technique, projections of debtors for the other years can be carried out.

b) Projections of Creditors:

Using the same technique used to carry out projections of debtors, projections of creditors can be reached.

c) Projections of Cash Flows:

As pointed out in the text, projections of cash flows can be reached by the use of the receipts and payments method, in which cash transactions only must be taken.

9. Projections of Funds Flow:

To illustrate how to develop projections of funds flow, suppose that the actual balance sheet at the end of year 1978 and the projected one at the end of year 1979 are as follows:

Actual & Projected Balance Sheets for the years 1978/79

Liabilities	Actual 1978		Projected 1979		Assets	Actual 1978		Projected 1979	
	Sub-total	Total	Sub-total	Total		Sub-total	Total	Sub-total	Total
Share capital					**Fixed Assets:**				
Ordinary Shares	1,000,000		1,500,000		Freehold property		600,000		400,000
Capital Reserve	50,000		120,000		Plant & machinery	1,200,000		2,000,000	
General Reserve	100,000		200,000		Less Depreciation	240,000		440,000	
Retained Profits	300,000		505,000				960,000		1,560,000
		1,450,000		2,325,000	Motors & vehicles	300,000		300,000	
Long-term liabilities					Less Depreciation	30,000		45,000	
Loans	500,000		200,000				270,000		255,000
					Furniture & fixtures	200,000		270,000	
Taxation	150,000		30,000		Less Depreciation	40,000		50,000	
							160,000		220,000
Debentures	500,000		750,000						
		1,150,000		980,000			1,990,000		2,435,000
Current liabilities					**Current Assets**				
					Stock	800,000		950,000	
Taxation	100,000		120,000		Debtors	500,000		700,000	
Creditors	300,000		640,000		Cash at Bank	310,000		360,000	
Bank overdrafts	600,000		380,000				1,610,000		2,010,000
		1,000,000		1,140,000					
		2,600,000		4,445,000			2,600,000		4,445,000

Projection of Funds Flow
As at 31.12.1979 (£000's)

	Actual 31.12.78		Projected 31.12.79		Funds Flow	
	Debit	Credit	Debit	Credit	Applications	Sources
Current Assets						
Stock	800		950		150	
Debtors	500		700		200	
Cash at Bank	310		350		50	
Current Liabilities						
Taxation		100		120		20
Creditors		300		640		340
Bank Overdrafts		600		380	220	
Working Capital		610		870		260
	1,610	1,610	2,010	2,010	620	620
Working capital	610		870		260	
Fixed assets:						
Freehold property	600		400			200
Plant & machinery	1,200		2,000		800	
Motors & vehicles	300		300			
Furniture & fixtures	200		270		70	
Liabilities:						
Ordinary Shares		1,000		1,500		500
Capital reserve		50		120		70
General reserve		100		200		100
Retained profits		300		505		205
Long-term loans		500		200	300	
Long-term taxation		150		30	120	
Debentures		500		750		250
Accumulated Dep.						
Plant & machinery		240		440		200
Motors & vehicles		30		45		15
Furniture & fixtures		40		50		10
	2,910	2,910	3,840	3,840	1,550	1,550

From the above projection we can derive a precise projection of funds flow in 31.12.79 as follows:

Sources of funds: £000's	
Decrease in freehold property	200
Increase in ordinary shares	500
Increase in capital reserve	70
Increase in general reserve	100
Increase in retained profits	205
Increase in debentures	250
Increase in depreciation of plant & machinery	200
Increase in depreciation of motors & vehicles	15
Increase in depreciation of furniture & fixtures	10
	1,550
Application of funds: £000's	
Increase in plant & machinery	800
Increase in furniture & fixtures	70
Decrease in long-term loans	300
Decrease in long-term taxation	120
Increase in working capital	260
	1,550
Projected alterations in working Capital in 31.12.79	
Sources of funds: £000's	
Increase in taxation	20
Increase in creditors	340
	360
Application of funds: £000's	
Increase in stock	150
Increase in debtors	200
Increase in cash at bank	50
Decrease in bank overdraft	220
	620
Increase in working capital	260

Appendix Two:

The University of Aston in Birmingham

Management Centre

Finance and Accounting Subject Group

Researcher's Name: Muhammad Mounir Tolba

Questionnaire

Designed to Examine the Role of Accounting in Planning and Control in the Egyptian Iron and Steel Co., "Hadisolb".

October 1979

Questionnaire 1

Origin and History

1.1. Could you tell me something about the corporation's history?

a. When it began?

b. Who founded it, and how it was founded?

c. Reasons for foundation.

d. Governmental involvement in foundation - precise nature of.

1.2. Specify in detail the development of the organisation to its current structure.

1.3. Is there government intervention in the structure of the organisation.

(Please tick) YES NO

1.4. If the answer to Question 3 is YES, please specify in detail what sort of intervention.

1.5. What are the basic activities of top management?
Please specify in detail for each manager, including authorities and responsibilities.

1.6. Having put the open door economy system into practice, have there been developments in the way top management and organisation structure are formulated?

1.7. Is management centralized or decentralized?

(Please tick whatever applicable) Centralized Decentralized

1.8. If management is centralized;

a. What are, in your opinion, the benefits that the corporation gains from centralization?

b. Are these the essential reasons for centralization? If not, what are the essential reasons?

1.9. If management is decentralized;

a. What are, in your opinion, the benefits that the corporation gains from decentralization?

b. Are these the essential reasons for decentralization? If not, what are the essential reasons?

1.10. What is the status of the corporation?

(Please tick the one applicable) Independent

Subsidiary Unit

Closed Company

1.11. If the corporation is a subsidiary unit, does it have a separate legal identity?

1.12. Has the corporation subsidiaries of its own? YES NO

If YES, please list including the location of each subsidiary.

1.13. Are all your operations carried out on the central site?

YES NO

1.14. If the answer to Question 13 is NO, please specify where else your operations are carried out and the type of each operation.

1.15. How many employees are working in the corporation?
Please specify the number working in the corporation as a whole and in each subsidiary (if any).

Questionnaire 2

Planning and Control

2.1. Do you have a planning system for the corporation as a whole? Please specify in detail the nature of the planning system.

2.2. Do you have a corporate planner in the organisation structure?

(Please tick) YES NO

2.3. If the answer to Question 2 is YES, please specify in detail reasons for having such a job and the authority and responsibilities attached to him.

2.4. Is there any government intervention which authorises the corporation to have a planning system?
Please specify in detail.

2.5. Planning is normally divided into three levels according to the planning period being covered.
Are these the three levels which apply within your own organisation?

a. Long-range planning
(Please specify the period it covers)

b. Short-range tactical planning.
(Please specify the period it covers)

c. Short-range technical planning.
(Please specify the period it covers)

2.6. To plan, we have to decide on objectives and goals to be achieved at the end of the planning period. Who decides on those objectives and goals for the corporation?
(Please specify in detail)

2.7. Organisations do have several objectives, but often they have one main and specific purpose - that of profit.

Is that true for the corporation YES NO

2.8. If the answer to Question 7 is YES, please specify in detail the corporation's profit philosophy, and how the profit objective has been determined?

2.9. If the answer to Question 7 is NO, specify what objectives the corporation has for the current planning period, both for the long and short term, and how those objectives were decided upon?

2.10. Is there any government intervention in the determination of the corporation's objectives.
(Please specify what sort of intervention)

2.11. After determining objectives and goals, are these communicated to members of the corporation?
(Please specify in detail)

2.12. Who decides on the tasks that are to be performed in order to achieve objectives and goals of the corporation?
(Please specify in detail)

2.13. Who decides on the resources that are to be used to carry out these tasks?
(Please specify in detail)

Questionnaire 3

Corporate Appraisal

The objective of this appraisal is to find out where the organisation is at the present time in order to determine the gap which has to be filled in order to achieve the objectives at the end of the planning period.

- An internal appraisal has to be carried out to determine weaknesses and strengths within the organisation.

- An external appraisal has to be carried out to determine opportunities and threats in the environment.

3.1. Internal Appraisal

1. Do you carry out the internal appraisal to assess strengths and weaknesses within the corporation?

   YES NO

   If the answer is YES, please specify in detail including the development of such an appraisal into the current practice.

2. Financial Appraisal

   The following questions will be concerned with the financial appraisal into its current practice.

2.1. Financial External Appraisal

   a. Do you compare the corporation's results with other organisations?

      YES NO

   b. If the answer to Question (a) is NO, please specify what difficulties you face which prevent you from carrying out such an important appraisal.

   c. If the answer to Question (a) is YES, specify whether the external organisations are local or international.

   d. Do you carry out an external appraisal concerning "Profit Growth", meaning the comparison of your return on total capital employed for the past few years, whether growing or declining, with similar organisations?

   e. If the answer to Question (d) is NO, why is such an appraisal not carried out?
      Specify in detail the difficulties which you face in carrying it out.

   f. If the answer to Question (d) is YES, specify on what basis you calculate your return on total capital employed.

g. In computing your rate of return on total capital employed, do you consider net profit before or after interest and tax?
Explain why you choose any of them.

h. How do you compute the total capital employed?

i. What is the management view about computing the return on investment?

- Does management consider net profit is that before tax and interest?

YES NO

If not specify management's view of what net profit constitutes.

- Does management consider total capital employed as follows?

Total capital employed = ordinary shares + long-term loans + overdrafts + retained profits including reserves and provisions.

If not, please specify the management approach to computing the total capital employed.

j. What is the shareholders' approach to computing the rate of return on investment?
Please specify in detail including their point of view for computing net profit and total capital employed.

k. Do you compute the earnings per share as a financial yardstick?

YES NO

If YES, please specify in detail including the basis on which it is computed.

l. If the answer to Question (k) is YES, it will be easy for the corporation to compute the price/earnings ratio which is as follows:

$$\text{The price/earning ratio} = \frac{\text{Market price per share}}{\text{Earnings per share}}$$

Do you compute this ratio? If so, specify on what basis.

m. If the answer to Question (l) is NO, please specify what difficulties you face which prevent you from doing so.

n. If the answer to Question (l) is YES, it follows that you can compute the capitalisation ratio which is:

$$\text{The capitalisation ratio} = \frac{\text{Earnings per share}}{\text{Market price per share}}$$

Do you compute the capitalisation ratio? YES NO

o. If the answer to Question (n) is NO, what difficulties do you face which prevent you from doing so?

p. If you compute the capitalisation ratio in a way different from that mentioned in Question (n) please specify in detail.

2. Financial Stability

The financial stability or financial internal appraisal can be assessed by using the following ratios:

a. The Acid Test Ratio or Quick Ratio which can be computed as follows:

$$\text{The Acid Test Ratio} = \frac{\text{Cash + Receivables + Short-term Investments}}{\text{Current Liabilities}}$$

b. The Current Ratio which can be computed as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

c. Capital employed to working capital.
To assess how much of the working capital is financed by the corporation's permanent capital.

d. Capital employed to fixed assets.
To assess how much of the fixed assets are supplied by permanent capital.

e. Equity to equity + long-term liabilities.
To assess how much of the corporation's permanent capital has been supplied by ordinary shareholders.

f. The debt-equity ratio or capital gearing which can be computed as follows:

$$\text{Capital gearing} = \frac{\text{Equity capital}}{\text{Long-term debt}} = \frac{\text{Ordinary shares + Retained Profits + Reserves}}{\text{Long-term debt}}$$

The objective of computing this ratio is to assess whether the organisation is high or low geared.

- Which of those ratios do you use to assess the corporation's financial stability?
Please specify in detail including:
  - Any other ratios you use to assess the financial stability
  - Attach your financial internal appraisal for the past two years.

3.1.1.3 Financial Facilities

a. Could you specify how you determine the liquid resources that the corporation possesses?

b. How do you know that the liquid resources are fully utilized?

c. Could you determine the effect of the following on the corporation's cash flow?

- large capital projects
- seasonal fluctuations

d. If the corporation needs to raise additional capital, what sort of examinations do you carry out to assess the availability of additional capital and its costs?
Specify in detail.

3.1.2. Profitability

3.1.2.1. Analysis of Sales and Profits

a. Do you carry out an analysis of your sales and profits to ascertain from what activities the corporation derives the bulk of its profits and cash?

b. If the answer to Question (a) is NO, what difficulties do you face which prevent you from carrying out this analysis?

c. If the answer to Question (a) is YES, specify in detail how you carry it out and whether your analysis to sales and profits includes the following:

- Sales and trends of profitability of each division
- Sales and trends of profitability of the company as a whole
- Sales and trends of profitability of each product.

d. Does your analysis include the determination of the relative profitability of customers and markets "home and export".
Specify in detail.

e. Do you carry out an analysis of the corporation's sales mix to determine the most profitable products in the most profitable markets?
Specify in detail how you carry out this analysis.

f. In carrying out the internal appraisal of the corporation it is very important to recognise the effect of selling prices on volume and, therefore, on unit costs and margins.
Do you carry out this analysis? Specify in detail.

g. Do you offer your customers discounts?

h. If the answer to Question (g) is YES, do you give attention to that when planning for future sales and profits?
Specify in detail.

3.1.2.2. Return on Total Assets Employed

a. In assessing how efficiently capital is employed, do you use this ratio?
YES NO

b. If the answer to Question (a) is NO, what difficulties do you face which prevent you from doing so?

c. If the answer to Question (a) is YES;

i. Specify how you do it, and attach a copy of the assessment for the last two years

ii. Does the assessment breakdown into

- Main Activities
- Main Products

3.1.2.3. Manufacturing

a. In carrying out an internal appraisal, do you carry out an appraisal of manufacturing?
Specify please.

b. In carrying out a manufacturing appraisal, which of the following do you do?

i. A review of the effectiveness of works' organisations; specify

ii. A review of staffing and level of competence; specify

iii. The general condition of plant, building and equipment; specify

c. Do you compare the corporation's productivity with similar organisations?
Specify.

d. Which of the following do you use to measure the corporation's productivity:

i. Added value trends per direct and indirect employee.

ii. Estimated performance indices.

iii. What else?

Specify.

3.2. The External Appraisal

The external or environmental appraisal is carried out to assess opportunities and threats in the environment in which an organisation survives.

1. In the first place, do you carry out such an appraisal?
YES NO

2. If the answer to Question 1 is NO, which of the following reasons do you consider:

   a. Lack of awareness of this need.

   b. No need to carry it out.

   c. Any other reasons, specify.

3. If the answer to Question 1 is YES, does your external appraisal include the following:

   a. Competitors' appraisal; to examine what actions the competitors might take over the relevant future that will affect the corporation at the national or international level.

   b. A political appraisal; to determine whether any political changes at the national or international level may affect the corporation.

   c. An economic appraisal; to determine whether any economic changes at the national level will affect renumeration rates, availability of labour, purchasing patterns, and prices.

   d. Social appraisal, to determine whether any changes in education, wealth, life styles, attitudes to work, the composition of the society, will affect the corporation.

   e. Technological appraisal; to recognise whether there are any technological changes, which may be e.g.

      i. A substitute product may appear

      ii. New methods of manufacturing or distribution of existing products may be discovered.

   Please specify in detail, including any other external factors you consider in carrying out the external appraisal.

3.3. Statement of Appraisal

1. Having done the appraisal, do you draw up a statement summarising the main factors emerging? YES NO

2. If the answer to Question 1 is YES, does the statement include the following:

   a. Strengths inside the corporation.

   b. Weaknesses inside the corporation.

   c. Opportunities in the environment.

   d. Threats in the environment.

   e. What else? Please specify.

f. Please attach a copy of the statement for the last two years.

3. If the answer to Question 1 is NO, please answer the following questions:

   a. What difficulties do you face which prevent you from doing so?

   b. What method do you use for preparing both strategies and action plans normally built on such a statement?

3.4. The Action Plan

1. Do you design an action plan?

2. If the answer to Question 1 is YES, does the action plan provide the following?

   a. Maintain or enchance strengths.

   b. Correct weaknesses.

   c. Counter or minimize threats.

   d. Evaluate or implement opportunities.

   e. What else? Please specify.

3. If the answer to Question 1 is NO, please circle the one applicable:

   a. A lack of awareness of this need.

   b. No need to design such a plan.

   c. The corporation has its own tool, specify.

   d. Any other reason? Specify.

4. The action plan must lead to actions; does the action plan you design ensure the following? Please circle which is applicable.

   a. Defines the course of action to be taken.

   b. Allocates managerial responsibilities for this action.

   c. Establishes final and intermediate goals.

   d. Provides a timetable for completion.

   e. What else does your action plan ensure? Please specify.

Questionnaire 4

Products and Markets

1. What product range/product groups/products does the corporation produce at the present time?

2. Has the corporation had significant changes in products and markets in recent history?
Please specify in detail.

3. What are the markets for the present products?
Specify with % breakdown of each product group to each market.

4. What is the market share for each product group/product within each market?

5. How is the market itself changing
(Tick whatever applicable)

	Growing	Declining
At fast rate		
At slow rate		

6. How is your market share changing?

	Growing	Declining
At fast rate		
At slow rate		

7. What product development is taking place? Is it adequate to the needs of the situation?

8. Are individual product profitabilities known? YES NO

9. If the answer to Question 8 is YES,
   a. Please specify the profitability of each product
   b. On what basis is the profitability of each product computed?
   Specify in detail.

10. Are the volume, price, investment and cost relationships understood and acted upon? YES NO

11. If the answer to Question 10 is NO, what problems do you face in determining these relationships?
Please specify in detail.

12. Does the corporation determine future demand for its products and prepare a sales forecast? YES NO

13. If the answer to Question 12 is NO, how does the corporation determine future demand for its products?
Please specify in detail.

14. If the answer to Question 12 is YES, which method or methods does the corporation use in carrying out its sales forecast?
Please circle the one or ones that applied.

a. Utilize Sales Department estimates

b. Utilize past sales trends of the corporation

c. Utilize new product plans

d. Utilize correlation of corporation sales with general economic trends

e. Utilize market surveys

f. Utilize industry forecasts and corporation's share of the potential

g. Utilize production capacity

h. Utilize survey of corporation executive's opinions

i. Utilize promotion plans

j. Utilize salesmen's estimates

k. Utilize correlation of corporation sales with industry economic indicators

l. Utilize financial capacity

m. Utilize competitors' activities

n. Utilize outside consultants

o. Utilize time series analysis.

p. Utilize statistical demand analysis

q. Other methods, please specify in detail.

15. How often does the corporation prepare its sales forecast?

16. What is the probable life cycle of present products?

17. It is known that each product has its own life cycle moving from the introduction or initiation stage, the growth stage, the maturity stage, to the decline stage. Do your products pass through those stages.

YES NO

18. If the answer to Question 17 is NO, please answer the following questions:

a. What stages do your products have within their life cycle? Please specify in detail determining the characreristics of each stage and the marketing strategies adopted in each.

b. What in your opinion makes your products life cycle different?

19. If the answer to Question 17 is YES, please omit Question 18 and answer the following question:

Which marketing strategies of the following the corporation adopts within each product life cycle.
Please circle the one applicable:

a. Marketing strategies within the introduction or initiation stage
   i) A high profile (high price and high promotion level)
   ii) A selective penetration strategy (a high price and a low promotion level)

iii) A pre-emptive penetration strategy (a low price and a heavy promotion level)

iv) A low profile strategy (a low price and a low promotion level)

v) Other strategies (please specify)

b. Marketing strategies within the growth stage.
Please circle the one applicable.

i) Improve product quality and add new product features and models.

ii) Searches out new market segments to enter.

iii) New distribution channels.

iv) Lower prices to attract sensitive buyers into the market.

v) Other strategies (please specify)

c. Marketing strategies within the maturity stage.
Please circle the one applicable.

i) A continuation strategy; in which the firm continues its past marketing strategy until the product dropped from the line.

ii) A concentration strategy; in which the firm concentrates its resources only in the strongest markets and channels of distribution.

iii) A milking strategy in which the firm sharply reduces its marketing expenses to increase its current profits which will lead to the acceleration of sales decline.

iv) Other strategies (please specify in detail)

20. Which of the following pricing methods does the corporation apply when pricing its products?
Please circle the one applicable.

a. Profit margin pricing; in which the selling price is determined by computing the full cost of each product (which is the direct costs plus a fair amount of the allocated costs) plus a profit margin.

b. Contribution margin pricing.

c. Other methods of pricing.
Please specify and explain in detail.

21. Is there any governmental or institutional involvement in pricing policies?

22. What are your competitors?
Specify by product areas.

23. What are your product/market strengths and/or weaknesses?

24. Could you specify please what are the methods of selling which the corporation adopts and why?

25. What are the corporation's methods of distribution? Please specify in detail.

26. What is the role of accounting in product/market analyses?

Questionnaire 5

Financial Planning

Since plans for products, markets, facilities, etc., will all require funds, there must be planning to determine where the necessary funds are to come from.

This section of the Questionnaire will deal with financial planning and will concentrate upon the following:

1. Evaluating Alternative Strategies
2. Planning of Finance
3. Accounting Projections
4. The Control Aspects

5.1. Evaluating Alternative Strategies

1. Do you carry out a forecast of capital expenditure? YES NO

2. If the answer to Question 1 is YES, please specify for what periods? (viz. long-term, short-term)

3. Do you often face the problem of having to examine a large number of alternatives? YES NO

4. If the answer to Question 3 is NO, could you please specify how alternate strategies arise?

5. If the answer to Question 3 is YES, is it possible to evaluate precisely all these alternatives? YES NO

6. If the answer to Question 5 is YES, please specify in detail how the process of evaluating alternative strategies is carried out and the techniques used.

7. If the answer to Question 5 is NO, which of the following criteria do you use to test any proposed strategy to reduce the large number of alternatives to a manageable number?

   a. The strategy fulfills the target which satisfies any group of beneficiaries.

   b. The corporation has the necessary competence to carry it out.

   c. The strategy reduces the corporation's outstanding weaknesses.

   d. The strategy allows the corporation to exploit any opportunities that may occur in the future.

   e. The strategy reduces one or more of the severe threats that may face the corporation.

   f. The strategy does not call for an action which may become objectionable on moral or social grounds.

   g. What else, please specify.

8. After testing the huge number of alternatives according to the criteria listed in Question 7, it follows that you will have a "short list", which contains the most promising alternatives which might fulfil the corporation's objectives.
Do you have a "short list"? YES NO

9. If the answer to Question 8 is YES, please attach a copy of this list for the last two years.

10. If the short list contains projects which involve the cost element, do you consider that the best alternative is the one with the lowest cost? YES NO

11. If the answer to Question 10 is NO, what criterion do you use when evaluating projects which involve costs only, with investment and revenue unaffected?
Please specify in detail.

12. If the projects involve both revenue and costs, do you consider that the best alternative will be the one which yields the highest net profit? YES NO

13. If the answer to Question 12 is NO, what then is the criterion which you consider when evaluating those projects which involve both revenue and costs?
Please specify in detail.

If the projects involve cost, revenue, and investment, it will be a different matter, as it will imply the use of certain techniques for capital investment appraisal, which the following part of the Questionnaire will deal with.

5.2. Capital Investment Appraisal

1. After having arrived at a short list which contains a manageable number of projects, do you employ a quantitative appraisal to choose the most promising ones which fulfil the corporation's objectives? YES NO

2. Do you have a committee to authorise capital expenditures? YES NO

3. Is there any government intervention in authorizing capital expenditures? YES NO

4. If the answer to Question 2 is NO, who authorizes any capital expenditures in the corporation?
Please specify if the authority is outside the corporation.

5. If the answer to Question 2 is YES, could you specify how this committee is structured and the number, titles, and quality of representatives?

6. When considering the purchase of fixed assets, do you estimate the following:
(Please circle whatever applicable)

   a. Increase in sales expected.

   b. Reduction in costs.

   c. Costs to be incurred.

      i. Purchase price
      ii. Running costs

   d. What else do you estimate, please specify in detail.

7. In estimating running costs, which of the following factors are included:
(Please circle whatever applicable)

   a. Direct labour.

   b. Direct material.

   c. Fixed overhead costs.

   d. Variable overhead costs.

   e. What else, specify.

8. For what future period do your estimates cover?

   a. A short-term period

   b. A long-term period.

9. If your estimates cover both short and long-term periods, are the short-term estimates an integral part of long-term estimates?

   YES NO

10. If the answer to Question 9 is YES, specify how integration is realised.

11. Do you consider the cash flow position of the corporation when considering capital expenditure proposals?

   YES NO

12. Do you compare expected cash receipts and payments before making a capital expenditure decision? YES NO

13. Do you employ budgetary control? YES NO

14. If the answer to Question 13 is YES, is the system for capital expenditure decisions part of budgetary control?

15. In doing appraisal for capital investment proposals, which of the following methods do you apply?

   a. Pay-back period.

   b. Discounted cash flow.

   c. Rate of return on investment.

   d. Average rate of return on investment.

e. Other methods(s), please specify.

16. If discounted cash flow is applied, which of the following is used. (Please circle the one applicable)

a. Trial and error method.

b. Net present value.

c. Other methods, please specify.

17. Are there any other non-financial criteria against which capital investment proposals have to be assessed? YES NO
If YES, plesse specify in detail the non-financial criteria which you consider.

18. When a project is completed and is in operation, do you make any analysis to compare the actual profitability with the profitability estimated?

YES NO

19. If the answer to Question 18 is NO, could you please specify why you are not carrying out such an analysis and what difficulties do you face which prevent you from carrying it out.

5.2. Planning of Finance

1. Having decided on the total amount of funds which the corporation needs, is there a committee in the corporation whose job it is to decide how this amount of funds will be provided? YES NO

2. If the answer to Question 1 is NO, could you please specify whose responsibility it is to decide on how the funds required will be provided.

3. If the answer to Question 1 is YES, please specify how this committee is structured, and the numbers, titles and quality of representatives.

4. Is there any government intervention which specified the way in which the corporation obtains the funds required? YES NO

5. If the answer to Question 4 is YES, please specify what sort of intervention.

6. Does the Government finance the corporation's fund requirements in part or in full?
Specify in detail.

7. Could you please specify what are the corporation's main sources of funds.

8. Do you consider the capital structure of the corporation when deciding on sources of finance? YES NO

9. If the answer to Question 9 is YES, which of the following do you consider when deciding on sources of finance?
Please circle whatever applicable.

   a. The relationship between sources and usages of funds.

   b. The relationship between long-term sources and long-term usages.

   c. That equity capital should be the essential part of the corporation's funds. (Specify why in the case of your corporation)

   d. The cost of capital.

   e. Gearing or leverage.

   f. Other considerations - specify in detail.

10. Which of the following factors related to the nature of the corporation do you consider when deciding on sources of finance?
Please circle whatever applicable.

   a. Industry stability.

   b. Rapidity of assets turnover.

   c. Size of physical plant requirements.

   d. Length of production period.

   e. Distribution methods.

f. General level of profits.

g. Sales terms.

h. Growth patterns.

11. Which of the following factors related to the corporation's management do you consider when deciding on sources of finance? Please circle whatever applicable.

a. Management's decisions that certain risks have to be covered by insurance.

b. Management's decisions as to necessary liquidity.

c. Management's decisions as to the extent to which property will be purchased rather than leased or rented.

d. Management's decisions as to both scale of operations and capacity, which are justified by the future outlook for the corporation.

12. Have you faced, or do you often face, problems such as the following?
Please tick whatever applicable.

a. The inability to carry out an inventory commensurate with optimum operating level.

b. Restriction of buying policies and inability to take advantages or quantity or cash discounts.

c. Chronic pressure on cash position, which will impair credit standing.

d. Inability to make necessary outlays for machinery and equipment to improve efficiency.

e. Inability to take advantage of sudden changes in business opportunity.

5.3. Accounting Projections

1. Do you construct accounting projections for the long-term planning period? YES NO

2. If the answer to Question 1 is NO, could you please specify what difficulties do you face which prevent you from doing so?

3. Projections are rough guides about the future based upon past trends and assuming that the future will be the same; do you do forecasts about the future to adjust those projections according to the factors which appear to affect the items upon which the projections are built? YES NO

4. If the answer to Question 3 is YES, could you please specify what are the forecasts you do, and whether or not they have a great effect upon the items upon which your projections are built. Could you please make available to me the forecasts which you have done for the last two years?

5. Which of the following projections do you construct? Please circle whatever applicable.

   a. Projections of profit.

   b. Projections of balance sheet position.

   c. Projections of funds flow.

   d. Other projections, please specify.

6. Which of the following do your projections of profit include? Please circle whatever applicable.

   a. Projections of sales.

   b. Projections of variable costs.

   c. Projections of fixed costs.

   d. Projections of profits.

   e. Other projections, please specify.

7. Do your projections cover the whole of your long-term planning period?

8. If you construct projections of balance sheet positions, please specify how you do projections for the following items:

   a. Projections of debtors, including receivables.

   b. Projections of creditors, including payables.

   c. Projections of cash flows.

9. If you construct projections of funds flow, could you specify on what basis these projections are built?

10. Can you easily derive from the projections of funds flow a statement which includes the sources and usages of funds at the beginning of each year of the long-term planning period?

11. Do you know the amount of any increase or decrease in the working capital at the beginning of each year compared with previous year? YES NO

Questionnaire 6

Financial Accounting

1. Could you please specify what are the sections of your accounting department?

2. I know that your corporation, being in the public sector, uses the Standardised Accounting System which has been designed to meet the public sector accounting requirements.
   Could you please give brief details of the standardised accounting system.

3. Could you please specify the financial accounting records used by the Accounting Department in the corporation.
Please attach a copy of each of these records.
If you use a computer, please give the table headings.

4. Could you please specify the functions and responsibilities of the Accounting Department.
If these functions and responsibilities are written down, could you please attach a copy.

5. Do the responsibilities of the Financial Accounting Department include the preparation of period reports? YES NO

6. If the answer to Question 5 is NO, could you please specify who is responsible for the preparation of periodic reports.

7. If the answer to Question 5 is YES, could you please describe these reports, to whom they are circulated, and how frequently.
Please attach a copy of each type of report.

8. What are the sources of information included in these reports?

9. Do you face difficulties in getting information from your present financial accounting records? YES NO

10. If the answer to Question 9 is YES, could you please specify the difficulties which you face and the reasons for them.

11. Have you a financial accounting code? YES NO

If YES, please attach a copy of this code.

12. Does the standard financial accounting system demand certain statements and accounts? YES NO

If YES, please specify the required statements and accounts.

Questionnaire 7.

Cost Accounting

1. Do you have a complete system of cost accounting?

2. Is the cost accounting system

a. separate from the financial accounting system

b. Integrated with the financial accounting system.

Circle whatever applicable.

3. Is there any uniform cost accounting system designed for the public sector? YES NO

4. If the answer to Question 3 is NO, does the Standardised Financial Accounting System outline the general framework of a uniform cost accounting system? YES NO

5. If the answer to Question 4 is YES, please specify in detail the framework for uniform cost accounting system outlined by the Standard Financial Accounting System.

6. Is the corporation divided into cost centres for the purposes of cost accounting?
YES NO

7. If the answer to Question 6 is NO, is the corporation as a whole considered one unit for cost accounting purposes?

8. If the answer to Question 6 is YES, please specify the cost centres and the functions of each.

9. In determining the activity level of each cost centre, do you consider the total activity objectives for the corporation?
YES NO

10. Do you divide cost elements according to their nature and behaviour? Please circle whatever applicable.

a. Direct - Indirect

b. Variable - Fixed

11. Do you separate controllable costs from uncontrollable costs?

12. If you divide costs into variable and fixed, could you please specify on what basis?

13. Do you have a special code for cost elements?
If YES, please attach a copy.

14. What are the cost accounting records used in your corporation?
Please attach a copy of these records.
If you use a computer, please give the table headings.

15. Do you verify the cost accounting results through comparisons with financial accounting results?
YES NO

If YES, what are the procedures?

16. How do you allocate the cost of the following items to each cost unit?

a. Transport cost of raw materials.

b. Workshop repairs and maintenance.

c. Storage costs.

d. Administration costs.

Questionnaire 8.

Materials

1. What are the raw materials used in the corporation?
Please give details.

2. I know that you obtain raw steel from your mines in Aswan, are the mines in Aswan considered a separate subsidiary?
YES NO

3. If the answer to Question 2 is NO, could you please specify how you price the raw steel transported from Aswan to main operating units in Helwan?

4. If the answer to Question 2 is YES, do the mines in Aswan price the raw steel?
If YES, on what basis?

5. Do you import other raw steel from foreign centres?

YES NO

6. If the answer to Question 5 is YES, please circle whatever is applicable.

a. The imported steel is different from that of Aswan's and consititute no problems in pricing.

b. The imported steel is the same as that of Aswan.

7. If the imported steel is the same as that of Aswan, could you please specify the following:

a. How you solve the problem of material cost. (Specify)

b. Does this problem constitute yet another in the pricing of finished products. (Specify)

8. What elements do you include in the total cost of raw materials?

9. Is there a separate store for each kinds of material?

YES NO

10. Are there material sub-stores for different operations?

YES NO

11. If the answer to Question 10 is YES, is there a control system between main and sub-stores?

12. Which of the following methods of raw materials pricing do you use for materials issued to main operating units?
Please circle whatever applicable.

a. First in, first out. (F.I.F.O.)

b. Last in, first out. (L.I.F.O.)

c. Average price.

d. Standard price.

e. Next in, first out. (N.I.F.O.)

f. Replacement cost.

g. Highest in, first out. (H.I.F.O.)

13. What are the control documents of the main and sub-stores?
Please attach a copy of each document.

14. What are the control records? e.g. bin cards, stores ledger, etc.,

Questionnaire 9

Labour

1. How do you estimate the number of workers required by the corporation?

2. Which of the following methods do you use to calculate workers' wages:

   a. Time-related basis.

   b. Piecework-related basis

      i. Straight piecework

      ii. Differential piecework

   c. Other methods, please specify.

3. What are the "associated labour costs" in addition to the actual cash payment of wages?
   Please specify in detail.

4. How do you allocate the wages to cost centres?

5. Does the corporation provide any social services to workers?
   YES NO

6. If the answer to Question 5 is YES,

   a. Do you consider social service to workers as a cost element?
   YES NO

   b. If YES, how do you allocate this to cost centres?

7. What are the records used for recording wages in the corporation?
   Please attach a copy of these records.
   If you use a computer, please give the table headings.

8. What are the control documents for wages?
   Please specify and attach a copy of each document.

9. Are the wages documents used for recording in the cost and financial accounting records?
   YES NO

   If YES, please indicate the flow of documents.

Questionnaire 10.

Budgetary Control System

1. Do you employ a budgetary control system? YES NO

2. If YES, is the budgetary process linked to a longer-term planning process?
   YES NO

3. If the answer to Question 2 is YES, do you divide the target which has to be achieved at the end of the long-term period into annual targets to be achieved at the end of each year?
   YES NO

4. If the answer to Question 3 is NO, please specify the link between the longer-term process and the budgetary process.

5. If the answer to Question 3 is YES, please specify the basis on which you divide the long-term target into annual budgets.

6. Who designs and constructs the budget?

7. What are the basic procedures for the design of budgets?

8. Could you specify to what extent the budget procedures are prescribed by Head Office.

9. Could you please specify in detail the various budgets which you use.

10. Do you use flexible or inflexible budgets?

11. If you use flexible budgets, please specify the activity levels on which the flexible budget is based.

12. If standards are used, who is responsible for fixing these standards?

13. Could you please specify in detail what are the standards used in the preparation of the budget?

14. When designing the budget, do you compute the production capacity of each production unit and of the corporation as a whole?

YES NO

15. If the answer to Question 12 is YES,

a. How do you compute the production capacity.

b. Is there are relationship between the assessment of production capacity and the budgetary process?

YES NO

If YES, what are the procedures?

16. Are there any limiting factors which affect the budget and play an important part in its construction?

YES NO

17. Do you divide the annual budget into short-term operational budgets?

18. If the answer to Question 17 is YES, please circle whatever applicable.

a. Monthly budgets

b. Quarterly budgets

c. Others, please specify.

19. Do you translate the annual budget into work programmes?

YES NO

20. When do you prepare the annual budget?

21. When did the budgetary control system start in your corporation? What is the history of the system?

22. Could you please specify whether the budget for the year 1980 has been prepared, and in particular

    a. When it was developed?

    b. Who proposed the budget levels?

    c. Who was consulted about the budget levels?

    d. Who decided on the budget levels?

    e. Who authorised the budget?

23. Do you have any relevant information that could still be relevant to the budgetary control system in the corporation?

Specifically, I will ask the manager to provide the following:

a. The authorised budget figures for the present year and the last two years.

b. The actual performance figures of the last two years.

c. The names of members of the budget committee in the present and last two years.

d. Any recommendations from the Permanent Production Council concerning the preparation of the budget for the present and last two years.

e. Any written communication with Head Office dealing with budget matters during the present and last two years.

f. A list of names of budget staff in departments in the corporation and their organisational relationships.

g. A list of reports dealing with budget issues, whether the budget department is the receiver or the sender. This list must show the duration of the report, from whom to whom, and the purposes of these reports.

Questionnaire 11.

The Management Control Process and Policies Governing Divisional Performance

1. Is the corporation divided into sub-units whereby the manager of each sub-unit is assigned specific authority and responsibility for the operational activities of that unit?

YES NO

2. If the answer to Question 1 is NO, I understand then that the corporation as a whole is considered as one unit. Do you find any difficulties in controlling the business?

YES NO

If YES,

a. Please specify what difficulties you face.

b. Specify the control system in operation.

3. If the answer to Question 1 is YES, please specify the units into which the corporation is divided.

4. Do each manager of sub-units present a budget for his unit?

YES NO

5. Are the budgets of all sub-units presented to top management for critical review, evaluation, and suggested revisions where appropriate?

YES NO

6. Are all sub-units' budgets consolidated into the comprehensive budget for the whole corporation?

YES NO

If YES, please attach a copy of each sub-unit's budget and the comprehensive budget for the corporation as a whole for the present and last two years.

7. Are the objectives and the profit target for the corporation as a whole divided between sub-units?

YES NO

If YES, specify on what basis.

8. In the case of long-term planning, does each unit prepare the following.
Circle whatever applicable.

a. A statement of appraisal including its own strengths and weaknesses.

b. Products market plan.

c. Projections of profits.

d. Projections of balance sheets.

e. Projections of funds flow.

f. What else, specify please.

9. Are the sub-units projections' consolidated into projections for the corporation as a whole?

YES NO

10. Are the corporation's sub-units treated as the following:
Circle whatever applicable.

a. Budget centres.

b. Profit centres.

c. Responsibility centres.

d. Cost centres.

e. Investment centres.

f. What else, please specify.

11. In the case of determining capital requirements, does each sub-unit management:

a. Devise and evaluate its own capital budget? YES NO

b. Operate within limits of predetermined sum made available to each sub-unit from central sources?

YES NO

c. Free to explore outside sources of capital? YES NO

12. Could you please make available to me a statement including all sub-units in the corporation, showing whether and how they are divided into budget centres, responsibility centres, profit centres, cost centres, on what basis?

13. Could you please specify how you measure sub-units' managers' performance?
Specify according to the following:

a. Performance of budget centres' managers.

b. Performance of responsibility centres' managers.

c. Performance of profit centres' managers.

d. Performance of cost centres' managers.

e. Performance of investment centres' managers.

14. Is there a formal procedure for the appraisal of sub-units' managers?

YES NO

If YES, make it available to me.

15. Does the performance appraisal normally result in:

YES NO

Reward
Specify what kind of reward.

YES NO

Punishment

16. Does the performance appraisal for each sub-unit include a comparison between predetermined budgets and the actual performance?

YES NO

17. In the trading activities of the corporation, what is the proportion (compared with external sales) of products and/or services transferred internally between sub-units during a typical year?
Please tick one of the following boxes.

50% or more | 25 - 50%

10 - 25% | below 10%

Virtually none

18. When an external and internal market exists for products and/or services of a main operating unit, which of the following describes your policy?
Circle whatever applicable.

a. Total output must be sold within the corporation.

b. All internal requirements must be supplied, but surplus output can be sold outside the corporation.

c. The unit is free to find the best market regardless of the internal/external distinction between customers.

19. When an internal and external source of supply exists for the product and/or service requirements of a main operating unit, which of the following best describes your policy.
Please circle whatever applicable.

a. Total supply of the unit must be obtained internally.

b. Internal supply is always preferred, but surplus requirements, over and above internal capacity, can be obtained externally.

c. The unit is free to choose its cheapest source of supply regardless of the internal/external distinction between suppliers.

20. For central service departments, broadly distinguished between two types, management expertise - e.g. computer systems and facilities, financial expertise etc.,

technical expertise - e.g. product and production knowhow etc.,

for which an external and internal market exists, which of the following best describes your policy?

	Management Expertise	Technical Expertise
a. In respect to central service departments		
i. All the outputs of the department must be used internally.		
ii. All internal requests for services must be supplied, but surplus capacity can be sold outside the corporation.		
iii. The service department is free to find its best market regardless of the internal/external distinction between customers.		

b. In respect to users of central services
i.e. the main operating units

i. The total requirements of the unit must be obtained internally.

ii. Internal supply is always preferred but surplus requirements over and above internal capacity can be obtained externally.

iii. The unit is free to choose its cheapest source of supply regardless of the internal/external distinction between suppliers of services.

Questionnaire 12
Performance and Variance Analysis

1. Do you compare the actual performance with that budgeted?
YES NO

2. Is the variance analysis the concern of the budget staff only?
YES NO

3. If the answer to Question 1 is NO, could you please specify who else in the corporation is concerned about variance analysis.

4. If the answer to Question 1 is YES, do you not agree that for control to be effective the line managers and supervisors must involve themselves in tracing the reasons for variances and then take the necessary action?

5. If you agree what is stated in Question 3, what prevents you from involving line managers and supervisors in the variance analysis process in practice?

6. Is there any personal contact between the budget staff and the line managers?

7. When should the variances be regarded as serious, and at what stage should action be taken?

8. Are controllable and uncontrollable variances recognised?

9. Do you adopt the integrated approach, which means that you put emphasis on the interrelationships which exist between the different variances?
YES NO

10. If the answer to Question 8 is NO, do you carry out the variance analysis process by comparing actual profit with standard profit only?
YES NO

11. If the answer to Question 8 is YES, do you not agree that the comparison between actual profit and standard profit may be much too late in time as correcrive action can only apply to future periods?

If the answer to Question 8 is YES, ignore Questions 9 and 10 and please answer the following questions.

12. How often do you carry out the variance analysis?
Circle whatever applicable.

a. Daily

b. Weekly

c. Monthly

d. Quarterly

e. Yearly.

13. Which of the following factors do you use when considering the profit variances?
Circle whatever applicable.

a. Return on total capital employed.

b. Return on the sales achieved.

c. Capital turnover.

d. What else, please specify.

14. When considering the return on total capital employed as a key factor, which of the following do you consider?
Circle whatever applicable.

a. Compare with previous years' results.

b. Look at the industry as a whole.

c. Ascertain why profit has declined or increased.

d. What else, specify please.

15. When considering the return on sales achieved, what of the following do you consider?
Circle whatever applicable.

a. Are profit margins adequate?

b. Is the most profitable sales volume and sales mixture being produced?

c. Are prices competitive?

   i. Are we obtaining our share of the market?

   ii. Has there been a decline in the total market?

d. Are selling and distribution costs realistic and reasonable?

e. What else, specify please.

16. When considering capital turnover, which of the following key questions do you consider?
Circle whatever applicable.

a. Which divisions are not producing a large enough volume of business?

   i. Production

   ii. Sales

   iii. What else, specify please.

b. Are some assets excessive for the turnover being achieved?

i. Are machines utilized fully?

ii. Are stocks excessive?

iii. Are any parts of the business not operating at normal capacity level?

17. Which of the following do you consider when carrying out the sales variance analysis?
Circle whatever applicable.

a. Sales price variance.

b. Sales volume variance.

c. What else, specify please.

17.1. When carrying out the sales price variance analysis, do you use an equation as follows?

Sales price variance = (Actual Quantity Sold x Actual Selling Price)
- (Actual Quantity Sold x Standard Selling Price)

If you use an equation which differs from that mentioned above, please specify.

17.2. When carrying out the sales volume variance analysis, do you use an equation as follows?

Sales volume variance = (Actual Quantity Sold x Standard Selling Price)
- (Budgeted Quantity x Standard Selling Price)

If you use an equation which differs from that mentioned above, please specify.

17.3. If you consider any other sales variance, please specify how you carry it out.

18. Which of the following do you consider when carrying out the direct material variance analysis?
Please circle whatever applicable.

a. Direct materials cost variance.

b. Direct materials price variance.

c. Direct materials usage variance.

d. What else, specify please.

18.1. When carrying out the direct materials cost variance analysis, do you use an equation as follows:

Direct materials cost variance =
The standard cost of direct materials used - the actual cost of direct materials used.

If you use an equation which differs from that mentioned above, please specify.

18.2. When carrying out the direct materials price variance, do you use an equation as follows?

Direct materials price variance=(Actual Quantity Purchased x Actual Price)

-(Actual Quantity Purchased x Standard Price)

If you use an equation which differs from that mentioned above, please specify.

18.3. When carrying out the material usage variance analysis, do you use an equation as follows?

Material usage variance = (Standard Price x Actual Quantity)

- (Standard Price x Standard Quantity)

If you use an equation which differs from that mentioned above, please specify.

18.4. If you consider any other direct materials variances, please specify. how you carry them out.

19. Which of the following do you consider when carrying out the direct wages variance analysis?
Please circle whatever applicable.

a. Direct wages variance.

b. Direct wages rate variance.

c. Direct labour efficiency variance.

d. What else? Specify please.

19.1. When carrying out the direct wages variance analysis, do you use an equation as follows?

Direct wages variance = (The standard direct wages for the activity achieved)

- (The actual direct wages paid)

If you use an equation which differs from that mentioned above, please specify.

19.2. When carrying out the direct wages rate variance analysis, do you use an equation as follows?

Direct wages rate variance = (Actual hours worked x Standard wage rate)

- (Actual hours worked x actual wage rate)

If you use an equation which differs from that mentioned above, please specify.

19.4. If you consider any other direct wages variances, please specify how you carry it out.

20. Which of the following do you consider when carrying out the overhead variance analysis?
Please circle whatever applicable.

a. Overhead variance analysis.

b. Overhead volume efficiency variance.

c. Overhead capacity usage variance.

d. Overhead volume variance.

e. Overhead expenditure variance.

f. Administration overhead variance.

g. Selling and distribution overhead variance.

h. What else, please specify.

20.1. When carrying out the overhead variance analysis, do you use an equation as follows?

Overhead variance = (The standard cost of overheads absorbed in the output achieved) - (The actual overhead cost)

If you use an equation which differs from the one mentioned above, please specify.

20.2. When carrying out the overhead volume efficiency variance analysis, do you use an equation as follows?

Overhead volume efficiency variance = (Overhead rate per standard hour x Standard hours value of production) -

(Overhead rates per standard hour x Actual hours worked on production)

If you use an equation which differs from that mentioned above, please specify.

20.3. When carrying out the overhead capacity usage variance analysis, do you use an equation as follows?

Overhead capacity usage variance = (Overhead rate per standard hour x Actual hours worked on production) -

(Overhead rate per standard hour x Budgeted standard hours)

If you use an equation which differs from that mentioned above, please specify.

20.4. When carrying out the overhead volume variance, do you use an equation as follows?

Overhead volume variance = (Overhead rate per standard hour x standard hours value of production) -

(Overhead rate per standard hour x Budgeted standard hours)

If you use an equation which differs from that mentioned above, please specify.

20.5. When carrying out the overhead expenditure variance, do you use an equation as follows?

The overhead expenditure variance = (Budgeted overheads - Actual overheads)

If you use an equation which differs from that mentioned above, please specify.

20.6. When carrying out the administration overhead variance analysis, do you use an equation as follows?

The administration overhead variance = Absorbed overheads - Actual overheads

If you use an equation which differs from that mentioned above, please specify.

20.7. When carrying out the selling and distribution overhead variances, do you use an equation as follows?

Selling and distribution overheads variance = (Selling and distribution absorbed overheads) - (Selling and distribution actual overheads)

If you use an equation which differs from that mentioned above, please specify.

20.8. If you consider any other overhead variances, please specify how you carry them out.

21. Do you design and construct the following?

21.1. A summary of standard factory cost of sales.

YES NO

21.2. Do you prepare a corporate operating statement which shows the budgeted activities, variances "favourable or unfavourable", and the actual activities of the corporation?

YES NO

21.3. If the answer to Question 21.2. is YES,

a. Please attach a copy of this statement for the last two years.

b. How often do you prepare this statement?

- Weekly
- Monthly
- Quarterly
- Yearly
- What else, please specify

22. Do you often carry out an investigation to know the reasons why variances occurred and whose responsibility they are?
Specify please.

23. Do you often take action to benefit from favourable variances and to correct the unfavourable ones?
Specify please.

Appendix Three:

Standard Forms of Statements and Accounts

as presented by the

Standardised Accounting System (SAS)

The Standard Forms Are:

3.1. Balance Sheet

3.2. Statement of Sources and Uses of Funds

3.3. Current Operations Account

3.4. Production and Trading Account

3.5. Profit and Loss Account

3.6. Cash Statement

- 3.6.1. Cash Statement "Payments"
- 3.6.2. Cash Statement "Receipts"
- 3.6.3. Cash Statement "Summary"

Code No.				
	Capital			
211	Owned (Paid-up) Capital	-		
212	Government Participation (to be redeemed)	-	-	
	Reserves and Surplus			
221	Statutory Reserves	-		
222	Government Securities Reserve Fund	-		
223	Reserves for Financing Investment Projects, Renewals, and Expansions	-		
224	General Reserves	-		
225	Reserve for Redeeming Government Participating	-		
226	Reserve for Replacement Value of Assets	-		
227	Other Reserves	-		
			-	
228	Surplus		-	
				-
	Provisions			
231	Provisions for Depreciation	-		
232	Provisions for Taxes	-		
233	Provisions for Doubtful Debts	-		
234	Other Provisions	-		
			-	
	Long Term Liabilities			
241	Domestic	-		
242	Foreign	-		
			-	
	Credit Banks			
251	Bank Overdraft and Facilities	-		
252	Secured Short Term Loans	-		
253	Documentary Credits	-		
			-	
	Creditors			
261	Accounts Payable - Trade	-		
262	Bills Payable - Trade	-		
263	Other than Trade	-		
264	Unpaid Dividends	-		
			-	
	Miscellaneous Credit Accounts			
274	Accrued Current and Ear-Marked Expenses	-		
			-	
				-

Code No.				
	Assets			
111	Land		-	
112	Buildings, Constructions, and Roads		-	
113	Plant and Machinery		-	
114	Transportation Systems		-	
115	Loose Tools and Equipment		-	
116	Furniture, Office Equipment and Fixtures		-	
117	Livestock		-	
118	Deferred Revenue Expenditure		-	
				-
	Projects in Progress			
121	Fixed Assets under Erection		-	
122	Investment Expenditure		-	
				-
	Inventories			
1311	Raw Materials		-	
1312	Fuels		-	
1313	Spare Parts and Loose Tools		-	
1314	Packing Material		-	
1315	Scraps		-	
132	Unfinished Production and Work in Progress		-	
133	Finished Production		-	
134	Merchandise held by Others		-	
135	Goods for Resale		-	
136	Documentary Credits for Purchasing Goods		-	
				-
	Long Term Debts			
141	Domestic		-	
142	Foreign		-	
				-
	Financial Investment			
151	Government Securities and Bonds		-	
152	Investment in Domestic Securities		-	
153	Investment in Foreign Securities		-	
				-
	Debtors			
161	Accounts Receivable - Trade		-	
162	Bills Receivable - Trade		-	
163	Others than Trade		-	
				-
	Miscellaneous Accounts Receivable			
171	Miscellaneous Debtors		-	
172	Other Debit Balances		-	
173	Accrued Current and Ear-Marked Receipts		-	
				-
	Cash in Hand and at Banks			
182	Bank Current Account		-	
183	Deposits on Demand		-	
181	Cash in Hand		-	
				=
	Deficit, Carried Over			

Form 3.2

Statement of Sources and Uses of Funds
For .....

Sources of Funds

Code No.					Code No.				
	Self-Financing					**Gross Capital Formation**			
221	Statutory Reserve	-			111	Land Levelling (All Expenses Except Cost of Purchase)		-	
222	Government Securities Reserve Fund				112	Buildings, Constructions, and Roads		-	
223	Reserve for Financing Investment Projects, Renewals, and Expansions	-			113	Machinery and Equipment (Excluding Custom Duties)		-	
224	General Reserve	-			114	Transportation Systems (Excluding Custom Duties)			
225	Reserve for Redeeming Government Participation	-			115	Loose Tools & Equipment (Excluding Custom Duties)		-	
226	Reserve for Replacement value of Assets	-			116	Furniture, Office Equipment and Fixtures		-	
227	Other Reserves	-			117	Livestock (Excluding Custom Duties)		-	
228	Surplus	-							
			—			**Deferred Revenue - Expenditure**			
231	Provision for Depreciation	-			1181	Preliminary Expenses	-		
232	Provision for Taxes	-			1182	Pre-Production Costs	-		
233	Provision for Doubtful Debts	-			1183	Research and Experimental Expenses	-		
234	Other Provisions	-			1184	Patterns and Models	-		
			-	-				-	
	Liquidity					**Inventories**			
11-15	Cost of Assets Sold		-		131	Commodity Inputs (Excluding Custom Duties)		-	
	Decrease in Inventories				132	Unfinished Production and Work in Progress		-	
131	Commodity Inputs	-			133	Finished Production		-	
132	Unfinished Production & Work in Progress	-			134	Merchandise Held by Others		-	
133	Finished Production	-			135	Goods for Resale (Excluding Custom Duties)		-	
134	Merchandise Held by Others	-			136	Documentary Credits for Purchasing Goods		-	
135	Goods for Re-sale	-							
136	Documentary Credits for Purchasing Goods	-				**Customs and Duties on Investment Components**			
			-			Custom and Duties on Gross Fixed Capital Formation		-	
14	Decrease in long-term lending	-				Custom and Duties on Inventories		-	
15	Decrease in Securities and Other Investment	-							
			-		12	Projects in Progress (All Costs Except the Cost of Purchasing Land)			-
	Decrease in Debtors					**Capital Transfers**			
161	Accounts Receivable - Trade	-			2722	Second Hand Assets	-		
162	Bills Receivable - Trade	-			11111	Lands (Cost of Purchasing)	-		
163	Other than Trade	-			11121				
171	Miscellaneous Debtors	-			11123				
172	Other Debit Balances	-				(Other Assets must be shown according to the Classification of Capital Formation)		-	
173	Accrued Current and Ear-Marked Receipts	-							
18	Cash in Hand and at Bank	-			1185	Pre-Production Interest		-	
			-		14	Long Term Lending		-	
	Borrowed Capital Long Term Loans					**Financial Investment**			
241	Domestic	-			151	Government Securities and Bonds	-		
242	Foreign	-			152	Domestic Securities	-		
212	Government Participation (to be redeemed)	-			153	Foreign Securities	-		
								-	
	Creditors and Banks					**Debtors**			
25	Credit Banks		-		161	Accounts Receivable - Trade	-		
261	Accounts Payable - Trade		-		162	Bills Receivable - Trade	-		
262	Bills Payable - Trade		-		163	Other Than Trade	-		
263	Others than Trade		-		171	Miscellaneous Debtors	-		
264	Dividend Creditors		-		172	Other Debit Balances	-		
272	Miscellaneous Creditors		-		173	Accrued Current and Ear-Marked Receipts	-		
273	Other Credit Balances		-					-	
274	Accrued Current Ear-Marked Expenses		-			**Redemption of Long-Term Loans**			
				-	241	Instalments of Domestic Loans	-		
					242	Instalments of Foreign Loans	-		
					18	Cash in Hand and at Banks	-		
								-	
						Decrease in Creditors			
					25	Credit Banks	-		
					26	Creditors	-		
					272	Miscellaneous Creditors	-		
					275	Other Credit Accounts	-		
					274	Accrued Current and Ear-Marked Expenses	-		
					22,2*	Decrease in Provisions and Reserves	-		
								-	
						Current Deficit			-
									-
									—

Uses of Funds

Current Operations

For the Year Ended ...

Form 3.3.

Code No					Code No				
	Receipts from Current Activity Production at Sales Prices				311	Wages in Cash			—
					312	Wages in Kind			—
					313	Social Insurance			—
411	Net sales of Finished Production	—							
412	Changes in Inventories of Production at Cost Price	—				General Expenses			
413	Finished Production Revaluation Adjustment	—	—		32	Commodity Inputs)			—
414	Changes in Inventories of Unfinished Production at Cost Price		—		33	Non-Commodity Inputs) Excluding Custom Duties			—
			—		34	Purchase for Re-Sale			—
415	Cost of Producing Capital Assets for Own Use		—						
416	Receipts of Work Done to Others		—	—		Current Transfer Expenses			
417	Sales of Services			—		Commodity Taxes and Duties			
					3511	Custom Duties	—	-	
	Goods for Re-Sale				3512	Production Excise	—		
					3513	Treasury Share	—		
4181	Sales (Net)		—		3514	Other Taxes	—	—	
4182	Changes in Inventories of Goods for Re-Sale at Cost Price		—						
4183	Goods for Re-Sale Revaluation Adjustment (difference between sales prices and cost price)		—			Depreciation			
					3522	Buildings, Constructions, and Roads	—		
	Subsidies				3523	Plant and Machinery	—		
					3524	Transportation Systems	—		
421	Subsidies (for Production)		—		3525	Loose Tools and Equipment	—		
422	Subsidies (for Exportation)		—		3526	Furniture, Office Equipment and Fixtures	—		
					3527	Livestock	—		
				—	3528	Deferred Revenue Expenditure	—		
					353	Actual Rent	—		
	Deficit of Current Transactions			—	354	Rent Adjustment (difference between actual and imputed rent)	—	—	
						Interest			
					355	Domestic	—		
					356	Foreign	—		
					357	Interest Adjustment (difference between actual and imputed rent)	—		
					358	Finished Production Revaluation Adjustment	—		
					359	Goods for Re-Sale Revaluation Adjustment	—		
								—	—
						Surplus of Current Transactions			—
				—					—

Form 3.3 Cont/d..

Current Operations

For the Year Ended ....

Code No	Surplus of Current Transactions				Code No	Deficit of Current Transactions			
43	Receipts from Securities					Current Ear-Marked Transactions			
	Transfer Receipts				361	Donations			
					362	Subsidies			
441	Credit Interest				363	Compensations			
442	Credit Rent				364	Capital Losses			
443	Capital Gains				365	Previous Year's Expenses			
445	Receipts of Previous Years				366	Dead Debts			
446	Compensations and Fines				367	Provisions (Other than Provisions for Depreciation)			
446	Miscellaneous Receipts				368	Taxes on Real Estate			
447	Rent Adjustment (difference between actual and imputed rent)				369	Income Taxes			
448	Interest Adjustment (difference between actual and imputed interest					Distributive Surplus			
	Current Deficit								
	Distributive					Current Deficit			
						Retained Surplus			
					221	Statutory Reserve			
					222	Government Securities Reserve Fund			
					223	Reserve for Financing Investment Projects, Revewals, and Expansions			
					224	General Reserve			
					225	Reserve for Redeeming Government Participation			
					226	Reserve for the Replacement Value of Assets			
					227	Other Reserves			
					228	Surplus Carried Forward			
						Surplus Distributed to			
					2641	State			
					2642	Employees			
					2643	Employees			
					2644	Others			—

Production & Trading Account

At the end of the Financial Year ....

Form 3.4

Code No					Code No				
414	Inventories of Unfinished Production at Cost Price								
	Production Costs (Balance carried forward)			—	531	Wages	—		
					532	Commodity Inputs	—		
					533	Non-Commodity Inputs	—		
					535	Current Transfer Expenses	—		
								—	
						Cost of Production Services			
					631	Wages	—		
					632	Commodity Inputs	—		
					633	Non-Commodity Inputs	—		
					635	Current Transfer Expenses	—		
								—	
				—					—
									—
	Current Activity Receipt					Production Cost (Balance Brought Forward)			—
	Production at Sales Prices				534	Purchase for Re-Sale			
411	Sales of Finished Production	—				Changes in Inventories Revaluation Adjustment			
412	Changes in Inventories of Finished Production at Cost Price	—				(Difference Between Sales Prices and Cost Price)			—
					358	Finished Production		—	
413	Inventories (Finished Production) Revaluation Adjustment (Difference between Sales Prices and Cost Prices)	—			359	Goods for Re-Sale		—	
						Total Surplus of Production			—
415	Cost of Producing Capital Assets for Own Use		—						
416	Receipts of Work Done to Others		—						
417	Sales of Services		—						
	Goods for Re-Sale								
4181	Sales								
4182	Changes in Inventories of Goods for Re-Sale at Cost Prices	—	—						
4183	Inventories of Goods for Re-Sale Revaluation Adjustment	—							
	Total Deficit of Production	—	—	—					
				—					—
	Total Surplus of Production			—		Total Deficit of Production			—
	Subsidies					Cost of Marketing Services			
421	Subsidies for Production		—		731	Wages		—	
422	Subsidies for Exportation		—		732	Commodity Inputs		—	
					733	Non-Commodity Inputs		—	
	Total Deficit of Production & Trading (Carried Forward to Profit & Loss Account)			—	735	Current Transfer Expenses		—	
									—
						Total Surplus of Production & Trading (Carried Forward to Profit & Loss Account)			—
				—					—

Form 3.5

Profit & Loss Account
At the End of the Financial Year ....

Code No			Code No	
	Total Surplus of Production and Trading (Brought Forward from Production & Trading Account			Total Deficit of Production & Trading (Brought Forward from Production & Trading Account
43	Receipts from Securities			
	Transfer Receipts			Administrative and Financing Services Costs
441	Credit Interest		831	Wages
442	Credit Rent		832	Commodity Inputs
443	Capital Gains		833	Non-Commodity Inputs
444	Receipts Concerning Previous Years		835	Current Transfer Expenses
445	Compensations and Fines			
	Miscellaneous Receipts			Current Ear-marked Transfers
4461	Sales of Scrap		361	Donations
4462	Discount on Purchases		362	Subsidies
4463	Receipts from Dead Debts		363	Compensations and Fines
4464	Profit of Materials Sales		364	Capital Losses
4465	Commissions		365	Expenses Concerning Previous Years
			366	Dead Debts
			367	Provisions (Other than Depreciation Provisions)
447	Imputed Rent Adjustment		368	Taxes on Estate
	Deficit (Balance Carried Forward)			Surplus (Balance Carried Forward)
	Surplus (Balance Brought Forward)			Deficit (Balance Brought Forward)
			369	Income Taxex
	Current Deficit			Distributive Surplus
	Distributive Surplus			
				Retained Surplus
			221	Statutory Reserve
			222	Government Securities Reserve Fund
			223	Reserve for Financing Investment Projects, Renewals, and Expansions
			224	General Reserve
			225	Reserve for Redeeming Government Participation
			226	Reserve for the Replacement Value of Assets
			227	Other Reserves
			228	Surplus Carried Forward
				Surplus Distributed to
			2641	State
			2642	Employees
			2643	Shareholders
			2644	Others

Cash Statement Payments

Form 3.6.1.

Code No	Description of Payments	Payment of Current Year Activity			Previous Years Payments					
					Redemption of Long-Term Loans			Other Redemptions		
		Domestic	Un-restricted	Agreements	Domestic	Un-restricted	Agreements	Domestic	Un-restricted	Agreements
	Gross Fixed Capital Formation and Projects in Progress (Except Inventories and Inventories Duties and Taxes)									
2721, 2511 2421	Purchases of New Fixed Assets									
26331	Custom Duties on Fixed Assets Purchased from the Rest of the World									
	Capital Transfer:									
2722/2412	Purchases of Existing Assets									
2723	Pre-Production Interest									
2724	Purchases of Government Bonds									
2725	Purchases of Securities									
2726	Purchases of Other Investments									
	Other Payments									
14	Long-Term Debts									
1613	Insurance to Others									
1632	Loans to Employees									
1633	Deposits. Customs Department									
232	Unsettled Taxes									
263212	Taxes Retained at Source (Transfer Value, Defence, Municipal & Stamps)									
2631	Redemption of Insurance from Others									
2636	Current Account with the Organisation									
26342	Current Account with the Treasury									
2733	Miscellaneous Credit Balances									
172	Miscellaneous Debit Balances									
2741	Wages									
2635	Social Insurance									
263211	Taxes Retained at Source (Earnings, Defence, Stamps etc.)									
2731	Deductions from Employees									
418/33/32	Commodity Inputs, Non-Commodity Inputs, Goods for Re-Sale									
	Current Transfer Expenses									
26331	Custom Duties									
26333	Production Excise									
26341	Treasury Share									
2742	Rent									
2743	Interest									

Form 3.6.2.

Cash Statement

Receipts

Code No	Designation of Receipts	Receipt of Current Year Activity			Receipts Covering Preious Years					
					Recovery of Long-Term Loans			Other Recoveries		
		Domestic	Unrestricted	Agreements	Domestic	Unrestricted	Agreements	Domestic	Unrestricted	Agreements
	Receipts of Current Activity									
161/162	Sales of Finished Production, Goods for Re-Sale. Receipts of Work Done to Others and Sales of Services									
173	Subsidies									
173	Receipts of Securities									
	Transfer Receipts									
173	Credit Interest									
173	Credit Rent									
173	Compensation									
173	Miscellaneous Receipts									
173	Previous Years Receipts									
1711	Sales of Fixed Assets									
1712	Amortisation of Government Bonds									
1713	Sales of Securities									
1714	Sales of Other Investments									
212	Government Participation (to be redeemed)									
	Other Receipts									
14	Recovered by Long-Term Loans									
1613	Recovered Insurances									
2631	Insurance from Others									
2636	Current Account with the Organisation									
26342	Current Account with the Treasury									
24	Long-Term Borrowing									
172	Other Debt Balances									

Form 3.6.3.

Cash Statement
Summary

Designation	Domestic			Foreign		Total
	Public Sector		Private Sector	Other Countries	Payment Agreements' Countries	
	Administrative	Enterprise				

	LE	M
Cash Balance at the Beginning of the Period	-	-
Add Surplus	-	-
or		
Deduct Deficit	-	-
Balance At	-	-

Appendix Four

Hadisolb's Expense Code

Code No.	Expense
01	Mixed Gas
28	Transportation
29	Social Rate
30	Social Rate - Experts
31	Mixed Gas
32	Blast Furnace Gas
33	Protective Gas
34	Hot Mazout
40	Steam
41	Chemical Water
42	Electric Current
43	Electricity
44	Compressed Air
45	Blowing Air
46	Machine Room Expense
47	Water
48	Potable Water
49	-
50	Hydraulic Oil
52	Dolomite
55	Services of Workshops
56	Maintenance "Mechanical & Electrical"
57	Civil Maintenance
59	Grinding Workshop
62	Steline
63	Own Products for Repair
64	Oxygen
65	Other Maintenance
66	-
67	Transportation
68	-
76	Chemical Treatment
86	-
92	Overhead Expense
93	Operation expense

Hadisolb's Expense Code (Continued)

Code No.	Expense
311100	Base Wages
311101	Expert Wages
311500	Bonus
311500	Overtime
311531	Production Incentives
311600	Other Allowances
311641	Hand Work Wages
311665	Cost-of-living Allowance
312100	Social Rate
312500	Transportation of Experts
313100	Insurance
322110	Anthracite
322210	Mazout
322220	Solar
322230	Benzene
322240	Oil Material
322300	Oil & Lubricants
322400	Electricity
322550	Coke Oven Gas
322551	Natural Gas
322560	Steam from Coke Plant
322590	Gases
322600	Industrial Water
323100	Spare Parts
323210	Acids
323220	Graphite
323230	Stores Material Issued for Job Orders
323240	Conveyor Belts
323260	Clothing for Workers
323290	Stores Material
323300	Refractories
323400	Depreciation of Rolls-Molds-Ladles
323800	Explosives
324000	Packaging
326000	Stationery
331200	Maintenance of Buildings
331500	Maintenance of Machinery
331700	Maintenance of Furniture
331800	Miscellaneous Maintenance
335110	Personnel Transportation - Rented Cars

Hadisolb's Expense Code (Continued)

Code No.	Expense
335120	Personnel Transportation - By Railways
335199	-
335210	Transportation Allowance
335200	Travelling Allowance
335300	Telephone Allowance
335400	Telegraph Allowance
335500	Postage Allowance
336000	Vehicle Rental
338200	Insurance
352000	Depreciation - Machines - Buildings - Furniture

Appendix Five

Hadisolb Cost Centre Code

Code No.	Cost Centres
	Aswan Mines
	Production Cost Centres
5001	Sand Removal
5002	Drilling
5006	Transport of Ore
5010	Transport of Ore to Crusher
5011	Crusher
5072	Heavy Equipment
5091	Geology Expenses
5093	Survey
5095	Preliminary Work
	Service Cost Centres:
6063	Electricity Station - Crusher
6064	Electricity Station - Mines
6067	Water Supply
6070	Maintenance Workshop - Mines
6071	Maintenance Workshop - Crusher
6072	Vehicles - Bulldozers - Trailers- Busses
6073	Laboratory
6075	Housing
6077	Clinic
8079	Administration
	Riffai Quarry (Limestone)
5020	Mining
5023	Crushing of Limestone
6020	Maintenance
6022	Cars
6024	Clinic
8020	Administration
	Adabia Quarry (Dolomite)
5050	Dolomite Quarry
	Baharia Mines
5102	Mechanical Drilling
5103	Sand Removal
5105	Explosion & Mining of Ore

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
5106	Bulldozers
5107	Ore Burden to Comions
5108	Ore Transport to Comions
5110	Ore Crushing
6100	Water Station
6102	Clean Water
6105	Electric Cables
6106	Lighting
6107	Main Workshop
6127	Light Transportation
6129	Personnel Transportation
6132	Chemical Laboratory
6133	Social Services
6134	Clinic Services
6135	Homes and Flats
6136	Stores
8100	Administration
9100	Research
	Benni Khalid Quarries (Limestone)
5112	Explosives and Dust Removal
5114	Stone Crushing & Screening
6112	Workshop Maintenance
6114	Energy and Power
6116	Transportation
6118	Clinic Services
6119	Socail Services & Homes
8120	Administration - Stores Purchases
	Sinter Plant 1
5201	Reception Pins
5202	Coke Screening
5203	Coke & Stone Preparation
5204	Storage Bins
5205	Material Bunkers
5206	Sinter
5207	Premixed Plant
5208	Sinter Machine
5209	Sinter Burden
	Sinter Plant 2
5210	Tippler
5212	Ore Crushing
5213	Ore Blending

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
5214	Burden Bunkers
5218	Reception Pins
5219	Coke & Ore Crushing
5220	Premixing Plant
5221	Sinter Machine
5222	Sinter Crushing & Cooling
6220	Mechanical Workshop
6224	
6226	Electrical Workshop
6227	Water for Sinter Plant 2
6228	Chemical Laboratories
6229	Overhead Expenses
	Blast Furnaces
5230	Stockyard for Nos. 1 & 2 Blast Furnaces
5231	Blast Furnace No. 1
5237	Blast Furnace No. 2
5235	Stores - Nos. 1 & 2 Blast Furnaces
5239	Oil Firing - Nos. 1 & 2 Blast Furnaces
5240	Coke Transportation - Conveyor
5241	Charging - No. 1 Blast Furnace
5243	No. 3 Blast Furnace
5245	Charging - No. 4 Blast Furnace
5246	No. 4 Blast Furnace
5247	Stores - No. 3 Blast Furnace
5248	Stores - No. 4 Blast Furnace
5250	Slag Granulation
5260	Pig Casting
	Service Cost Centre
6237	Taphole Clay Preparation Nos. 1 & 2 & 3 & 4 Blast Furnaces
6238	Transport Hot Metal Nos. 1 & 2 & 3 & 4 Blast Furnaces & Ladle Repairs
6242	Turbo Power Nos. 1 & 2 Blast Furnaces
6244	Turbo Power Nos. 3 & 4 Blast Furnaces
6249	Gas Distribution Systems
6251	Slag Transport Nos. 1 & 2 & 3 & 4 Blast Furnaces
6252	Slag Ladle House

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
6257	Mechanical Maintenance Nos. 1 & 2 & 3 & 4 Blast Furnaces
6258	Electrical Maintenance Nos. 1 & 2 & 3 & 4 Blast Furnaces
6299	Other General Expense
	Steelworks
5301	Mixer - 500 tons
5311	Thomas Convertors
5314	Thomas Yard
6315	Thomas Blowing
6316	Hydraulic for Thomas & Dolomite
	Dolomite Plant
6317	Mechanical Maintenance
6318	Electrical Maintenance
5320	Scrapyard
5321	Electrical Furnaces
5330	Lime Kiln
5321	Reserve Dolomite Crushing
	Oxygen Convertor - Steel
5340	Mixer 1300
5342	Oxygen Convertors
5343	Addition Yard
5344	Scrapyard
5346	Scrap Crushing
5349	Hot Steel Transportation
5350	Dolomite Ore & Stone Yard
	New Dolomite Plant
5352	Dolomote Mill
5353	Dolomite Furnace
5354	Dolomite & Magnesite Mixing
5355	Tan Bonded Dolomite
5356	Lime Kiln
6371	Convertors - Boilers
6372	Continuous Ladles - Building
6373	Continuous Ladles - Maintenance
6374	Slag Yard

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
	Steel Service Cost Centres
6375	Mechanical Maintenance
6376	Electrical Maintenance
6377	Dolomite Maintenance
6378	Dolomite Boilers
6379	Air Blowers
6381	Gas Mixed & Pouring
6388	Overhead - Steel
5332	Dolomite - Burnt
5333	Tar Mixed Dolomite
5334	Tar Mixed Dolomite Bricks
5335	Tar Mixed Dolomite Bottom
5338	Thomas Grinding Mill
6391	Electric Furnace & Dolomite Mechanical - Maintenance
6392	Electric Furnace & Dolomite Electrical - Maintenance
6395	Ladle Firebrick
6399	Overhead Expenses - Steel Plant
	Continuous Steel Plant
5380	Direct Pouring
5381	Slabs Continous Pouring 1, 2, 3
5382	Slabs Transport to Storage
5383	Slabs Cutting
5384	Slabs Cleaning
5385	Continous Pouring for Billets 1, 2, 3
5386	Billets Storage
5387	Slab Storage
5388	Internal Circulated Water
6396	Mechanical Maintenance
6397	Electrical Maintenance
6398	Overhead Expenses
	Blooming Mill
5401	Pit Reheating Furnaces
5402	Blooming Mill
5403	Blooming Shear
5404	Clean by Fire
5405	Means of Burden
	Service Cost Centre
6407	Mechanical Maintenance
6408	Electrical Maintenance
6409	Overhead Expenses

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
	Heavy Sections
5411	Pusher Furnace
5412	Section Mill
5413	Cooling Beds
5414	Sleeper Shears
5415	Straigntening Machine
5416	Sleeper - Finishing
5417	Fish Plated - Finishing
5418	Straighening - Finishing of Rails
6421	Mechanical Maintenance
6422	Electrical Maintenance
6425	Rolling Mill Grinding Workshop
6426	Guides Workshop
6429	Overhead for Section Mill
7419	Dispatching
5431	-
	Light Section Mill
5431	Pusher Furnace and Blooms storage
5432	Reheating Furnace
5433	Primary Rolling Mill
5435	Wiring Rolling Mill
5436	Finishing
6439	Guides for Light Section
6440	Grinding for Light Section
6999	Overhead Expenses
6445	Mechanical Maintenance
6446	Electrical Maintenance
7449	Dispatching
	Plates Rolling Mill
5451	Pusher Furnace
5453	Trio Mill (Plate Mill)
5454	Straightening Machine
5458	Operating Rolling Mill
5461	Plate Shears
5464	Annealing Furnaces
6462	Mechanical Maintenance
6463	Electrical Maintenance
6465	Overhead Expenses
7469	Dispatching

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
	Sheet Mill
5471	Reheating Furnace
5473	Sheet Mill
5474	Sheet Finishing
5481	Annealing Furnace
5484	Oiling
	Service Cost Cente
6495	Rolling Mill Roll Shop
6497	Mechanical Workshop
6498	Electrical Workshop
6499	Overhead Expenses of all Rolling Mills
	Strip Mill Hot Rolls
5501	Slab Storage Yard
5502	Slab Reheating Furnace
5505	Prerolled Mill
5506	Finishing Rolling Mill
5510	Machine Room No. 1
5511	Machine Room No. 2
	Service Cost Centre
6553	Water Pump Room
6554	Oiling & Hydraulic Station
6555	Mechanical Workshop
6556	Electrical Workshop
6557	Roll & Guide Shop
6558	Steam Unit
6559	Overhead Expenses
	Cold Roll (Pickling)
5601	Coils - Transportation
5602	Continous Pickling Line
5649	Chemical Treatment
	Reversible
5605	Reversible Mill (right)
5606	Reversible Mill (left)
5608	Coils Rerolling Medicine
5610	Distilation of Palm Oil

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
6746	Chemical & Testing of Products
6991	Carpenter Workshop
6992	Precise Worshop
6993	Weighing Machines Maintenance
6759	Welfare Building
7121	Dispatch Cost Centre for Hot Plates
7122	Dispatch Cost Centre for Cold Sheets
7123	Dispatch Cost Centre for Cold Strip
7124	Dispatch Cost Centre for Galvanising Sheets
7125	Dispatch Cost Centre for Tining Sheets
	Workshops - Machine & Heat Treatment
5901	Raw Material Preparation Yard
5902	Heavy Machines
5905	Moderate Machines
5907	Light Machines
5910	Assemblies, Machines & Tools
5911	Collecting Machine
5912	Chrome Painting Workshop
5915	Tool Producing Workshop
5919	Heat Treatment Unit
6904	Mechanical Maintenance
6906	Transportation Equipment Expenses
6909	Overhead Expenses
5930	Sand Preparation
5931	Steel Knockout Department
5933	Iron Knockout Department
5935	Steel Department
5936	Iron Department
5937	Iron Furnace
5611	Bell Type Annealing Furnaces
5612	Skin Pass Mill
5615	Slitting Line 1
5616	Slitting Line 2
5618	Plates Shear 1
5619	Plates Shear 2
5621	Combined Shears
5625	Shearing Line for Cold Products
5626	Shearing Line for Hot Products
5630	Hot Tinning Line
5635	Hot Galvanising Line
5638	Sheets Corrugating Mill
5640	Tinplate Packing Machine
5641	Scrap Compressor
5643	Transportation and Rising Tools
6572	Oiling and Lubricants Station

Hadisolb Cost Centre Code (Continue

Code No.	Cost Centres
6573	Mechanical Maintenance
6576	Electrical Maintenance
6578	Grinding Repair Shop for Rolling Mill
6581	Rubber Relining Workshop
5652	Protective Gas Unit
5653	Machine Room
5655	Preparing Solution & Fluxes Unit
6588	Galvanising Workshop & Tinning
6579	Overhead Expenses
6590	Gas Pushing & Mixing Maintenance
6691	Transformer Station
6595	Compressed Air Station
5939	Steel Furnace
5940	Pattern Workshop
5943	Finishing
6919	Overhead Expenses for Foundry
6921	Carpenter Workshop
6925	Overhead Expenses for Carpenter Workshop
5941	Forge Shop
5951	Raw Material Preparation Yard
5961	Steel Structural Yard
6931	Mechanical & Electrical Workshop
6933	Overhead Expenses for Forge Shop
5983	Raw Material Preparation Yard
5985	Preassembly Yard
5987	Finishing Yard Assembly
6942	Own Compressed Air
6944	Mechanical & Electrical Maintenance
6945	Transportation & Cranes
6946	Stores Material
6949	Overhead Expenses
6950	Fitting & Assmbly Department
6951	Spare Parts Producing Unit
6952	Welding, Forging, Carpenter
6953	Continous Casting Mold Maintenance
6954	Stopper Bars Workshop
6955	Guides for Rolling Mill Workshop
6956	Central Maintenance - Lubricante
6958	Reheating Furnace Maintenance
6960	Big Maintenance
6962	Own Maintenance
6969	Overhead Expenses
6970	Machines Workshop
6971	Forging, Welding - Sheets
6973	Central Big Maintenance
6975	Own Maintenance

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
6979	Overhead Expenses
6982	Mechanical & Electrical Erection Workshop
6984	Erection of Steel Structural Workshop
6988	Big Maintenance
6989	Overhead Expenses
6681	Maintenance of Weighing Machines
6701	Old Central Workshop
6710	Civil Workshop
6715	Own Maintenance
6718	Internal Producing Centre
6730	Overhead Expenses
6601	Oxygen Plant - Old
6602	Oxygen Plant - New
6603	Oxygen Cylinders
6604	Pipelines of Oxygen
6605	Mechanical & Electrical Maintenance
6609	Overhead Expenses
6615	Acetylene Station
6616	Acetylene Cylinders
6621	Old Boiler
6622	Turbo Blower Station T.B.S
6623	Steam Pipeline
6624	Mechanical Maintenance of T.B.S
6625	Electrical Maintenance of T.B.S
6629	Overhead Expenses
6631	Old Operation Water Station
6632	Drinking Water
6633	Blast Furnace Water Units
6634	Continuous Steel Water Units
6635	Oxygen & Compressors Units
6636	Rolling Mill Water Units
6637	Water Pipeline - New
6638	Water Sewage
6639	Mechanical & Electrical Maintenance
6641	Compressed Air Station - B.F. Stee, Rolling
6642	New Compressed Air
6644	Fuel Oil Station No. 1
6645	Fuel Oil Station No. 2
6647	Abou-El-Garadik Gas
6652	Chemical Water Treatment
6655	Ventilation & Air Condition Maintenance
6657	Central Mechanical Workshop
6658	Central Electrical Workshop
6659	Overhead Expenses
6670	Mechanical & Electrical Maintenance
6673	Mechanical & Electrical Workshops
6675	Electric Cars - Burden Unit

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
6677	Lights - Maitenance
6679	Overhead Expenses
6680	Communication & Precise Department
6681	Control Shop
6685	Supervisory of Control Shop
6686	Overhead Expenses
6687	Transformer Station for Operation & Lighting
6688	Wire & Wireless Communications
6690	Power Depart-Central Electrical Maintenance
6691	Electric Cables
6692	Electric Transformers Maintenance
6693	Overhead Expenses
6694	Lighting Cables
6720	Locomotive Maintenance
6722	Locomotives - Car
6724	Central Diesel Workshop
6726	Overhead Expenses
6731	Trains (Locomotives)
6734	Cars
6737	Railways
6738	Personnel Cars Workshop
6739	Cranes Workshop
6740	Station Carts
6741	Personnel Transportation - Overhead expenses
6742	Small Cars
6744	First Aid & Fire Protection Cars
6751	Jeeb Cars & Motorcycles
6745	Lorries (Camions)
6746	Tippler Lorries
6747	Electric Cars
6748	Cranes & Bulldozers
6749	Trailers
6750	Cranes
6752	Transportation Control Shop
6755	Cars Workshop - Maintenance
6756	Cars Workshop - Big Maintenance
6757	Cars Workshop - Mechanical Workshop
6758	Cars Workshop - Overhead Expenses
6759	General Administration of Transportation
6802	Production Director
6803	Technical Office
6804	Printing Machine
6805	Production Control
6807	Control Room of Production
6809	Sinter, Blast Furnace & Foundry Laboratories
6811	Non-central Laboratories
6812	Central Laboratories

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
6813	Inspection Laboratories
6814	Research
6815	Quality Control
6817	Natural & Metallurgical Laboratories
6819	Radiation Laboratory
6820	Training Department
6821	Apprentice Department
6823	Social Services
6824	Food for Workers
6825	Workers City
6826	Housing
6827	Clinic Departments
6831	Purchasing Department
6822	Alexandria Office
6833	Main Stores
6836	Stores
6841	Security Department
6842	Protective Clothes Workshop Maintenance
6843	Protective Clothes Workshop
6844	Fire Protection Cars
6851	Security & Cleaning
6857	Experts City
8901	Chief Board of Directors "President"
8903	Law Department
8905	Vice-President for Production
8906	Acting Chairman - Service
8907	Acting Chairman - Financial
8911	Internal Relations Department
8913	General Relations
8914	Administrative Securities
8921	Director Financial Affairs
8925	Financial Director
8929	Computers
8930	Costing & Budget Director
8942	Cairo Office
8945	Helwan Administration
8950	Mines & Quarries Administration
9901	Project Administration
9910	Vice-President for Projects
5608	Re-rolling Strip Mill
6599	Overhead - Strip Mill
6300	Overhead - Steel Plants
6781	Weighing Machines Maintenance
6861	Chemical Laboratories
6863	Central Chemical Laboratories
6866	Overhead Expenses for Laboratories

Hadisolb Cost Centre Code (Continued)

Code No.	Cost Centres
9990	Project Director
6870	Technical Documents
6875	Printing & Photo Units
8961	Industrial Relations Directors
8963	Salaries Revisors
8965	Personnel Affairs
5522	Reheating Furnace
5524	Pre-rolling Mill
5526	Continuous Rolling Mill
5528	Section Finishing Unit
5530	Straightening Round Bars
5534	Finishing Rails & Other Sections
6523	Roll Turning Shop
6524	Oiling & Hydraulic Unit for Products
6528	Oiling & Hydraulic Unit for Services
6532	Control Maintenance
6534	Main Electric Motors & Control Equipment
6536	Electric Maintenance
6539	Overhead Expenses
7522	Dispatch of Medium Section Products
5561	Raw Material Yard
5563	14 - Stand Cold Forming Machines
5565	Finishing Product Unit
6560	Centralised Greasing & Oiling System
6561	Roll Grinding Shop
6563	Mechanical Maintenance
6565	Electrical Maintenance
6567	Machine Room
6569	Overhead Expenses
7561	Finished Products Storage
6829	Hadisolb Hospital - Tebbin

Appendix 6

Statements of Actual Costs by Processes

Processes / Years / Description	1975	1976	1977	1978	1979
(1) Aswan Mines					
Net Raw Materials					
Operating Costs					
Wages	n.a.	582,229	603,574	739,676	
Fuel & Energy	n.a.	25,921	12,308	11,552	
Spares & Consumables	n.a.	166,787	101,384	107,930	
Work-shop services	n.a.	4,333	4,062	4,139	
Overheads	n.a.	257,940	216,118	207,246	
Internal Overs & Services Sold					
Operating Costs "Total"	n.a.	1,037,194	937,446	1,070,513	
Total Costs	n.a.	1,037,194	937,446	1,070,513	
Quantity Produced	n.a.	476,000	94,211	58,457	
Costs per Tonne	n.a.	10.323	9.950	18.313	
(2) Baharia Mines					
Net Raw Materials					
Operating Costs					
Wages	n.a.	524,611	412,711	901,419	1,040,761
Fuel & Energy	n.a.	56,554	65,686	102,087	102,130
Spares & Consumables	n.a.	223,869	379,779	472,529	609,964
Work-shop services	n.a.	3,656	3,646	-	44,289
Overheads	n.a.	1,349,152	665,910	998,167	1,206,637
Internal Overs & Services Sold		(86,301)	(53,781)	(812,053)	(91,518)
Operating Costs "Total"	n.a.	2,077,099	1,473,951	1,662,149	2,912,263
Total Costs	n.a.	2,077,099	1,473,951	1,662,149	2,912,263
Quantity Produced	n.a.	1,100,741	1,303,946	1,415,620	1,585,176
Costs per Tonne	n.a.	1.887	1.130	1.174	1.837

Processes / Years / Description	(3) Beni Khalid Quarry				
	1975	1976	1977	1978	1979
Net Raw Materials					
Operating Costs					
Wages	n.a.	244,849	304,172	394,476	445,767
Fuel & Energy	n.a.	7,843	8,874	24,520	25,243
Spares & Consumables	n.a.	180,441	193,504	245,849	316,173
Work-shop services	n.a.	19,648	2,083	10,503	6,937
Overheads	n.a.	170,050	150,611	174,138	193,577
Internal Overs & Services Sold	n.a.	(243)		(99,347)	(6,972)
Operating Costs "Total"	n.a.	622,588	659,244	749,439	980,725
Total Costs	n.a.	622,588	659,244	749,439	980,725
Quantity Produced	n.a.	269,824	367,306	414,918	336,556
Costs per Tonne	n.a.	2.307	1.796	1.608	2.914
	(4) Refai Quarry				
Net Raw Materials					
Operating Costs					
Wages	n.a.	188,471	205,804	265,384	273,568
Fuel & Energy	n.a.	18,178	18,410	17,056	14,279
Spares & Consumables	n.a.	115,422	4,227	106,047	110,435
Work-shop services	n.a.	5,230	2,819	3,607	1,063
Overheads	n.a.	79,145	68,858	84,403	108,578
Internal Overs & Services Sold		(346)		(5,534)	(16,121)
Operating Costs "Total"	n.a.	406,100	390,118	469,963	491,802
Total Costs	n.a.	406,100	390,118	469,963	491,802
Quantity Produced	n.a.	320,883	296,668	297,726	255,036
Costs per Tonne	n.a.	1.266	1.315	1.579	1.928

Processes / Years / Description	(5) Adabia Quarry				
	1975	1976	1977	1978	1979
Net Raw Materials					
Operating Costs					
Wages	n.a.	122,526	138,880	161,698	198,983
Fuel & Energy	n.a.	4,562	4,726	6,238	4,621
Spares & Consumables	n.a.	54,203	43,423	62,126	71,621
Work-shop services	n.a.	4,194	2,721	1,175	1,384
Overheads	n.a.	49,261	43,680	49,839	54,833
Internal Overs & Services Sold	n.a.		(44)		(1,629)
Operating Costs "Total"	n.a.	234,746	233,386	281,076	329,813
Total Costs	n.a.	234,746	233,386	281,076	329,813
Quantity Produced	n.a.	91,310	87,264	101,751	135,839
Costs per Tonne	n.a.	2.571	2.674	2.762	2.428
	(6) Sinter 1				
Net Raw Materials	2,657,540	3,764,350	3,985,187	3,326,978	3,305,621
Operating Costs					
Wages	117,091	116,514	94,201	211,798	222,781
Fuel & Energy	96,725	262,960	271,462	266,832	284,813
Spares & Consumables	202,186	367,868	444,407	370,309	944,621
Work-shop services	213,231	116,052	69,505	128,395	169,474
Overheads	477,818	692,734	658,000	1,010,214	682,274
Internal Overs & Services Sold					
Operating Costs "Total"	1,107,051	1,556,128	1,537,630	1,987,548	2,303,963
Total Costs	3,764,591	5,320,418	5,522,817	5,314,526	5,609,584
Quantity Produced	258,129	331,972	334,493	282,250	234,241
Costs per Tonne	14.584	16.027	16.511	18.829	23.948

Processes / Years / Description	1975	1976	1977	1978	1979
(7) Sinter 2					
Net Raw Materials	7,596,046	8,506,939	9,882,548	10,785,469	16,110,487
Operating Costs					
Wages	496,824	406,988	253,877	440,079	563,910
Fuel & Energy	1,288,567	687,738	638,569	902,730	1,459,032
Spares & Consumables	376,560	909,723	1,360,028	1,630,194	2,427,070
Work-shop services	613,600	512,646	210,789	527,011	719,494
Overheads	1,193,833	1,680,114	903,874	1,210,872	1,655,230
Internal Overs & Services Sold					
Operating Costs "Total"	3,969,384	4,206,209	3,367,137	4,710,886	6,824,736
Total Costs	1,565,430	12,713,148	13,249,685	15,496,355	22,935,223
Quantity Produced	640,952	743,283	873,273	909,687	1,173,359
Costs per Tonne	19.118	17.104	15.172	17.035	19.547
(8) Blast Furnaces 1 & 2					
Net Raw Materials	15,817,644	14,001,391	14,556,172	15,776,755	12,552,005
Operating Costs					
Wages	157,150	173,288	96,850	244,803	257,210
Fuel & Energy	505,287	357,977	495,845	726,952	401,830
Spares & Consumables	225,143	165,628	205,547	154,941	261,839
Work-shop services	205,072	332,878	259,420	474,480	674,051
Overheads	706,153	689,497	709,584	740,224	828,576
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	1,798,805	1,719,268	1,767,246	2,321,400	2,423,506
Total Costs	17,616,449	15,720,659	16,323,418	18,098,155	14,975,511
Quantity Produced	172,757	155,473	158,146	168,020	129,787
Costs per Tonne	101.972	101.115	103.217	107.714	115.385

Processes / Years / Description	(9) Blast Furnace 3				
	1975	1976	1977	1978	1979
Net Raw Materials	25,361,830	29,662,466	30,132,002	30,826,771	29,756,293
Operating Costs					
Wages	235,357	267,039	93,018	185,964	202,632
Fuel & Energy	1,734,330	1,787,274	1,373,550	1,661,410	1,421,181
Spares & Consumables	145,714	249,430	190,161	157,907	1,390,760
Work-shop services	272,629	418,047	406,215	686,905	1,101,366
Overheads	1,090,291	1,520,436	1,199,888	1,209,530	1,477,989
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	3,478,321	4,242,226	3,262,832	3,901,716	5,593,928
Total Costs	28,840,151	33,904,692	33,394,834	34,728,487	35,350,221
Quantity Produced	317,292	403,656	473,958	464,836	350,607
Costs per Tonne	90.118	83.994	70.459	74.711	100.826
	(10) Blast Furnaces 4				
Net Raw Materials					21,239,670
Operating Costs					
Wages					63,321
Fuel & Energy					1,035,760
Spares & Consumables					41,003
Work-shop services					456,174
Overheads					667,410
Internal Overs & Services Sold					-
Operating Costs "Total"					2,263,668
Total Costs					23,503,338
Quantity Produced					268,787
Costs per Tonne					87.442

Processes / Years / Description	1975	1976	1977	1978	1979
	(11) Pig Pouring Line				
Net Raw Materials	10,013,575	8,832,383	6,281,532	5,951,364	11,161,111
Operating Costs					
Wages	52,926	66,394	19,988	30,541	39,772
Fuel & Energy	28,684	34,635	26,810	26,314	38,030
Spares & Consumables	20,882	31,319	33,834	13,120	94,441
Work-shop services	8,693	10,523	1,341	2,854	3,281
Overheads	449,391	246,806	190,633	169,020	296,148
Internal Overs & Services Sold	-				-
Operating Costs "Total"	560,576	389,677	272,606	241,849	471,672
Total Costs	10,574,151	922,060	6,554,138	6,193,213	11,632,783
Quantity Produced	119,402	105,345	102,129	84,300	110,846
Costs per Tonne	88.559	87.542	64.175	73.466	104.945
	(12) Old Mixer				
Net Raw Materials	17,149,620	13,723,264	15,405,714		3,753,722
Operating Costs					
Wages	15,477	14,369	15,550		37,852
Fuel & Energy	53,094	55,332	84,894		62,204
Spares & Consumables	33,614	111,178	26,754		72,394
Work-shop services	33,400	18,672	58,936		126,968
Overheads	22,797	29,345	21,462		26,769
Internal Overs & Services Sold	-	-	-		-
Operating Costs "Total"	158,382	228,896	207,596		326,187
Total Costs	17,308,002	13,952,160	15,613,310		4,079,909
Quantity Produced	165,359	137,330	147,696		37,796
Costs per Tonne	104.669	101.596	105.712		107.946

Processes / Years / Description	(13) New Mixer				
	1975	1976	1977	1978	1979
Net Raw Materials	19,857,332	26,833,085	24,709,199		46,905,015
Operating Costs					
Wages	9,776	16,561	9,615		22,467
Fuel & Energy	13,862	23,460	20,443		30,642
Spares & Consumables	31,562	6,087	356,751		455,458
Work-shop services	5,945	17,232	8,428		16,649
Overheads	10,664	31,611	17,887		13,793
Internal Overs & Services Sold	-	-	-		-
Operating Costs "Total"	71,809	94,951	410,124		539,009
Total Costs	19,929,141	26,928,036	25,119,323		47,444,024
Quantity Produced	218,039	317,105	350,547		476,145
Costs per Tonne	91.402	84.918	71.658		99.642
	(14) Thomas Convertors				
Net Raw Materials	17,674,242	15,009,027	16,992,431	13,089,494	4,168,334
Operating Costs					
Wages	224,388	179,069	156,541	361,997	381,306
Fuel & Energy	171,381	240,716	213,583	271,807	94,538
Spares & Consumables	957,726	1,065,711	1,279,768	1,202,455	684,186
Work-shop services	211,440	284,586	176,224	342,588	310,146
Overheads	1,200,224	1,427,033	1,711,771	2,201,726	1,020,620
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	2,871,688	3,197,115	3,537,887	4,380,573	2,490,796
Total Costs	20,545,930	18,206,142	20,530,318	17,470,067	6,659,130
Quantity Produced	119,360	101,040	111,098	100,465	24,935
Costs per Tonne	172.135	180.187	184.795	173.892	267.055

Processes / Years / Description	(15) Electric Furnaces				
	1975	1976	1977	1978	1979
Net Raw Materials	1,511,540	2,131,089	2,167,183	1,975,054	2,412,308
Operating Costs					
Wages	130,352	100,405	86,264	189,640	192,921
Fuel & Energy	296,862	165,244	193,026	190,442	286,953
Spares & Consumables	550,725	819,435	730,750	856,039	1,102,788
Work-shop services	101,022	266,885	48,579	130,349	218,686
Overheads	409,486	654,235	742,338	778,869	1,576,874
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	1,588,447	2,006,204	1,800,957	2,145,339	3,378,222
Total Costs	3,099,987	4,137,293	3,968,140	4,120,393	5,790,530
Quantity Produced	32,226	45,718	45,773	41,978	49,546
Costs per Tonne	96.196	90.496	86.692	98.155	116.873
	(16) Oxygen Convertors				
Net Raw Materials	21,379,299	29,413,759	31,467,255	39,046,665	63,462,996
Operating Costs					
Wages	347,444	386,039	126,725	175,226	316,722
Fuel & Energy	151,898	236,903	191,055	248,044	310,648
Spares & Consumables	1,214,125	1,750,811	1,264,510	1,672,858	1,942,127
Work-shop services	291,815	614,461	803,182	958,090	1,165,763
Overheads	886,329	1,244,915	1,089,992	1,073,586	2,810,997
Internal Overs & Services Sold	-	-	-		
Operating Costs "Total"	2,891,611	4,233,129	3,475,464	4,127,804	6,546,257
Total Costs	24,270,910	33,646,888	34,942,719	43,174,469	70,009,253
Quantity Produced	204,090	303,867	383,357	416,230	564,054
Costs per Tonne	118.922	110.729	91.149	103.727	124.118

Processes / Years / Description	1975	1976	1977	1978	1979
(17) Liquid Steel for Continous Casting					
Net Raw Materials	n.a.	n.a.	n.a.	n.a	57,876,474
Operating Costs					
Wages	n.a.	n.a.	n.a.	n.a.	n.a.
Fuel & Energy	n.a.	n.a.	n.a.	n.a.	n.a.
Spares & Consumables	n.a.	n.a.	n.a.	n.a.	n.a.
Work-shop services	n.a.	n.a.	n.a.	n.a.	n.a.
Overheads	n.a.	n.a.	n.a.	n.a.	n.a.
Internal Overs & Services Sold	n.a.	n.a.	n.a.	n.a.	n.a.
Operating Costs "Total"	n.a.	n.a.	n.a.	n.a.	5,886,978
Total Costs	n.a.	n.a.	n.a.	n.a.	63,763,452
Quantity Produced	n.a.	n.a.	n.a.	n.a.	518,849
Costs per Tonne	n.a.	n.a.	n.a.	n.a.	122.894
(18) Continuous Casting					
Net Raw Materials	23,686,660	32,785,470	33,633,665	41,158,539	61,159,378
Operating Costs					
Wages	431,666	645,738	325,974	421,225	663,935
Fuel & Energy	256,787	352,463	276,923	385,881	435,699
Spares & Consumables	947,051	1,381,175	1,969,045	1,735,365	4,160,995
Work-shop services	288,917	802,158	302,809	612,678	879,864
Overheads	2,056,616	1,520,325	1,432,253	1,210,899	1,193,017
Internal Overs & Services Sold		-			
Operating Costs "Total"	3,981,037	4,701,859	4,307,004	4,366,048	7,333,510
Total Costs	27,667,697	37,487,329	37,940,669	45,524,587	68,492,888
Quantity Produced	189,484	282,332	354,750	373,409	460,177
Costs per Tonne	146.016	132.778	106.950	121.916	148.840

Processes / Years / Description	1975	1976	1977	1978	1979
(19) Blooming					
Net Raw Materials	25,989,013	24,257,051	25,702,694	21,769,694	23,671,403
Operating Costs					
Wages	99,955	105,606	79,498	140,782	161,342
Fuel & Energy	133,533	125,597	177,337	224,493	242,036
Spares & Consumables	317,110	341,099	346,996	448,657	458,112
Work-shop services	120,889	327,509	228,673	452,162	500,352
Overheads	191,205	217,171	205,382	206,154	178,006
Internal Overs & Services Sold	-	-	-		
Operating Costs "Total"	862,692	1,116,982	1,037,886	1,472,248	1,539,848
Total Costs	26,851,705	25,374,033	26,740,580	23,241,942	25,211,251
Quantity Produced	160,845	144,345	148,370	129,552	128,056
Costs per Tonne	166.941	175.787	180.229	179.402	196.876
(20) Heavy Sections					
Net Raw Materials	11,241,934	10,821,792	11,074,262	11,584,279	12,180,793
Operating Costs					
Wages	142,657	185,828	122,371	288,208	342,321
Fuel & Energy	102,550	92,372	125,711	167,503	215,777
Spares & Consumables	185,784	237,169	206,483	170,757	169,520
Work-shop services	121,982	107,632	71,080	138,360	208,181
Overheads	410,204	588,152	573,216	721,804	656,163
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	963,177	1,211,153	1,098,861	1,486,632	1,591,962
Total Costs	12,205,111	12,032,945	12,173,123	13,070,911	13,772,755
Quantity Produced	62,449	56,219	55,364	57,302	61,623
Costs per Tonne	195.441	214.036	219.875	228.106	223.497

Processes / Years / Description	(21) Light Sections				
	1975	1976	1977	1978	1979
Net Raw Materials	11,298,147	10,784,077	10,842,131	11,243,520	13,202,797
Operating Costs					
Wages	133,770	133,417	111,562	253,804	296,812
Fuel & Energy	64,972	71,019	81,022	112,086	148,148
Spares & Consumables	104,217	157,687	111,136	106,626	158,781
Work-shop services	137,459	227,802	140,821	347,240	326,408
Overheads	302,216	528,806	614,133	707,128	674,765
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	742,634	1,118,731	958,674	1,526,884	1,604,914
Total Costs	12,040,781	11,902,808	11,800,805	12,770,404	14,807,711
Quantity Produced	51,917	45,169	46,730	57,758	68,993
Costs per Tonne	231.922	263.516	252.530	221.101	214.627
	(22) Plates Rolling				
Net Raw Materials	4,979,062	6,122,230	3,891,231	5,930,241	9,118,309
Operating Costs					
Wages	164,503	186,353	134,255	330,457	366,646
Fuel & Energy	120,436	48,550	36,865	208,176	217,733
Spares & Consumables	164,632	242,880	213,658	232,430	216,087
Work-shop services	77,934	117,669	108,735	155,733	235,087
Overheads	167,019	294,265	251,852	393,366	453,071
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	694,928	889,717	745,365	1,320,162	1,488,624
Total Costs	5,673,990	7,011,947	4,636,596	7,250,403	10,606,933
Quantity Produced	38,524	43,769	30,518	38,433	48,567
Costs per Tonne	147.282	160.203	151.927	188.650	218.400

Processes / Years / Description	(23) Sheets				
	1975	1976	1977	1978	1979
Net Raw Materials	1,979,480	1,537,619	941,148	1,207,348	950,873
Operating Costs					
Wages	54,316	63,278	45,817	103,135	114,384
Fuel & Energy	28,246	17,414	10,760	23,742	15,893
Spares & Consumables	20,634	93,454	12,613	10,373	12,357
Work-shop services	52,505	111,886	54,265	63,295	76,971
Overheads	79,231	100,172	75,270	113,527	143,994
Internal Overs & Services Sold	-	-	-		
Operating Costs "Total"	234,932	386,204	198,725	293,326	363,599
Total Costs	2,214,412	1,923,823	1,139,873	1,500,674	1,314,472
Quantity Produced	12,397	9,395	6,561	6,359	4,281
Costs per Tonne	178.631	204.768	173.747	236.008	306.989
	(24) Hot Production				
Net Raw Materials	18,603,584	24,602,094	22,371,104	25,587,649	40,296,311
Operating Costs					
Wages	119,185	118,634	108,360	128,768	267,963
Fuel & Energy	1,202,740	432,062	1,043,075	1,184,838	1,246,850
Spares & Consumables	141,061	201,459	174,203	284,834	272,492
Work-shop services	203,193	539,776	298,150	339,505	295,677
Overheads	929,970	760,558	702,273	643,817	1,109,527
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	2,596,149	2,052,489	2,326,061	2,581,762	3,192,509
Total Costs	21,172,733	26,654,583	24,697,165	28,169,411	43,488,820
Quantity Produced	178,298	181,124	199,829	210,235	266,740
Costs per Tonne	118.749	147.162	123.591	133.990	163.038

Processes / Years / Description	(25) Pickling Line				
	1975	1976	1977	1978	1979
Net Raw Materials	13,069,414	14,925,197	13,750,115	15,210,464	18,777,652
Operating Costs					
Wages	50,168	35,523	28,344	51,930	100,054
Fuel & Energy	395,218	174,249	138,206	585,705	355,922
Spares & Consumables	85,553	132,841	157,094	92,219	1,250,188
Work-shop services	27,278	36,520	42,719	87,867	128,554
Overheads	328,991	530,056	824,163	171,556	364,115
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	887,208	909,189	1,190,526	989,277	2,198,833
Total Costs	13,956,622	15,834,386	14,940,641	16,199,741	20,976,485
Quantity Produced	112,185	99,123	107,837	108,823	112,887
Costs per Tonne	124.407	159.746	138.549	148.863	185.819
	(26) Reversing Line				
Net Raw Materials	13,866,855	15,215,824	15,201,391	15,985,965	20,633,200
Operating Costs					
Wages	41,015	58,287	30,202	69,924	82,409
Fuel & Energy	264,128	327,936	293,403	283,197	346,744
Spares & Consumables	119,098	140,273	146,554	165,580	466,981
Work-shop services	53,830	83,835	115,128	111,821	210,800
Overheads	386,358	207,760	313,501	300,364	333,660
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	864,429	818,091	898,788	930,886	1,440,594
Total Costs	14,731,284	16,033,915	16,100,179	16,916,851	22,073,794
Quantity Produced	111,771	95,065	109,720	107,524	111,428
Costs per Tonne	131.799	168.663	146.739	157.330	198.100

Processes / Years / Description	(27) Soaking Line				
	1975	1976	1977	1978	1979
Net Raw Materials	15,025,122	16,188,624	15,930,422	17,218,353	21,391,739
Operating Costs					
Wages	36,178	42,409	25,978	53,892	74,621
Fuel & Energy	198,102	227,369	249,158	382,627	320,835
Spares & Consumables	35,509	30,182	38,001	81,998	132,465
Work-shop services	12,934	6,173	4,192	23,500	79,075
Overheads	60,977	56,223	52,734	26,537	124,103
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	343,700	362,356	370,063	568,554	731,099
Total Costs	15,368,822	16,550,980	16,300,485	17,786,907	22,122,838
Quantity Produced	112,896	95,694	107,831	109,275	108,156
Costs per Tonne	136.133	172.958	151.167	162.772	204.546
	(28) Temper Line				
Net Raw Materials	15,126,773	16,226,738	16,098,236	17,962,802	21,763,060
Operating Costs					
Wages	36,259	21,564	10,473	18,020	16,118
Fuel & Energy	85,359	65,286	55,097	103,027	115,079
Spares & Consumables	26,103	38,193	47,356	68,985	83,133
Work-shop services	24,218	20,838	33,658	27,688	81,585
Overheads	154,197	125,855	94,180	71,281	158,969
Internal Overs & Services Sold	-	-	-	-	-
Operating Costs "Total"	326,136	271,736	240,764	289,001	454,884
Total Costs	15,452,909	16,498,474	16,339,000	18,251,803	22,217,944
Quantity Produced	111,455	93,293	105,845	109,204	105,540
Costs per Tonne	138.647	176.846	154.368	167.135	210.516

Processes / Years / Description	(29) Flying Shear				
	1975	1976	1977	1978	1979
Net Raw Materials	14,846,594	15,422,764	14,334,039	16,689,037	18,895,649
Operating Costs					
Wages	60,839	69,743	41,461	95,325	101,384
Fuel & Energy	56,319	49,231	19,928	53,970	95,963
Spares & Consumables	65,131	84,096	106,338	123,788	278,378
Work-shop services	21,548	85,219	45,719	102,174	200,661
Overheads	251,012	393,585	423,951	534,011	538,521
Internal Overs & Services Sold					
Operating Costs "Total"	454,849	681,874	637,397	909,268	1,214,907
Total Costs	15,301,443	16,104,638	14,971,436	17,598,305	20,110,556
Quantity Produced	150,569	85,106	88,896	96,055	87,257
Costs per Tonne	144.942	189.231	168.414	183.211	230.476
	(30) Slitting Shear				
Net Raw Materials	426,879	789,286	997,459	1,536,596	3,499,463
Operating Costs					
Wages	11,517	15,356	8,164	15,449	14,789
Fuel & Energy	32,678	14,507	8,138	8,673	12,787
Spares & Consumables	2,919	5,372	13,626	4,218	26,464
Work-shop services	17,413	27,941	16,036	4,593	40,760
Overheads	31,407	40,534	48,057	60,742	91,786
Internal Overs & Services Sold					
Operating Costs "Total"	95,934	103,710	94,021	93,675	186,586
Total Costs	522,813	892,996	1,091,480	1,630,271	3,686,049
Quantity Produced	2,913	4,328	6,142	8,778	16,547
Costs per Tonne	179.445	206.334	177.697	185.732	222.762

Processes / Years / Description	1975	1976	1977	1978	1979
(31) Combination Shear					
Net Raw Materials	8,214,004	10,125,295	9,605,770	11,733,252	18,997,247
Operating Costs					
Wages	27,080	37,768	22,769	42,749	48,074
Fuel & Energy	72,989	57,188	108,345	123,542	96,609
Spares & Consumables	12,189	45,565	35,133	37,178	80,782
Work-shop services	11,049	33,077	34,982	88,075	338,918
Overheads	190,189	303,222	349,064	414,039	501,684
Internal Overs & Services Sold					
Operating Costs "Total"	313,499	476,820	550,293	705,583	1,066,067
Total Costs	8,527,503	10,602,115	10,156,063	12,438,835	20,063,314
Quantity Produced	63,518	67,252	75,793	84,767	113,586
Costs per Tonne	134.256	157.646	133.997	146.741	176.636
(32) Galvanising					
Net Raw Materials	318,952	999,315	1,055,892	41,673	651,094
Operating Costs					
Wages	31,733	35,018	16,030	29,162	33,400
Fuel & Energy	11,071	30,355	7,944	40,777	69,572
Spares & Consumables	121,240	63,178	102,967	237,729	33,294
Work-shop services	17,186	72,523	20,175	79,244	34,409
Overheads	49,437	188,422	149,622	40,977	109,430
Internal Overs & Services Sold				(361,256)	
Operating Costs "Total"	230,667	389,496	296,738	66,633	280,105
Total Costs	549,619	1,388,811	1,352,630	108,306	931,199
Quantity Produced	1,804	4,656	5,660	187	2,399
Costs per Tonne	304.692	298.313	238.980	578.867	388.089

Processes / Years / Description	1975	1976	1977	1978	1979
(33) Corrugation					
Net Raw Materials	59,473	106,405	199,428	35,939	148,072
Operating Costs					
Wages		614	592	1,091	1,243
Fuel & Energy	2,642	344	1,723	1,733	833
Spares & Consumables	321	26	30	2,293	-
Work-shop services	217	121	16	3	-
Overheads	8,452	8,528	10,781	5,699	10,907
Internal Overs & Services Sold				(3,271)	
Operating Costs "Total"	11,632	9,633	13,142	7,548	12,983
Total Costs	71,105	116,038	212,570	43,487	161,055
Quantity Produced	412	408	931	147	391
Costs per Tonne	172.623	284.504	228.327	295.227	411.684
(34) Cold Forming					
Net Raw Materials	n.a.	n.a.	n.a.	580,812	1,341,941
Operating Costs					
Wages	n.a.	n.a.	n.a.	43,931	23,038
Fuel & Energy	n.a.	n.a.	n.a.	27,319	57,486
Spares & Consumables	n.a.	n.a.	n.a.	69,483	1,317
Work-shop services	n.a.	n.a.	n.a.	34,754	59,815
Overheads	n.a.	n.a.	n.a.	246,944	214,619
Internal Overs & Services Sold	n.a.	n.a.	n.a.		
Operating Costs "Total"	n.a.	n.a.	n.a.	422,431	356,275
Total Costs	n.a.	n.a.	n.a.	1,003,243	1,698,216
Quantity Produced	n.a.	n.a.	n.a.	4,017	7,853
Costs per Tonne	n.a.	n.a.	n.a.	249.752	216.252

Processes / Years / Description	(35) Fertiliser Grinding				
	1975	1976	1977	1978	1979
Net Raw Material	3,717	114,764	129,976	118,264	82,432
Operating Costs					
Wages	27,174	36,828	21,975	60,891	75,777
Fuel & Energy	3,846	5,343	6,596	7,360	6,809
Spares & Consumables	84,558	32,982	19,806	37,827	24,068
Work-shop services	19,554	16,004	5,823	11,461	19,047
Overheads	23,772	29,159	16,365	18,546	25,643
Internal Overs & Services Sold					
Operating Costs "Total"	158,904	120,316	70,565	136,085	151,344
Total Costs	162,621	235,080	200,541	254,349	233,776
Quantity Produced	33,177	26,570	30,087	27,377	19,082
Costs per Tonne	4.902	8.848	6.665	9.291	12.251
	(36) Limestone Burning				
Net Raw Materials	74,481	82,849	90,773	107,770	75,413
Operating Costs					
Wages	28,705	36,709	20,476	49,777	58,335
Fuel & Energy	69,884	20,644	19,604	26,264	14,784
Spares & Consumables	10,951	8,344	5,465	1,891	1,363
Work-shop services	11,175	3,946	6,504	7,951	10,391
Overheads	73,762	80,877	91,668	199,216	85,879
Internal Overs & Services Sold	-	-			
Operating Costs "Total"	194,477	150,520	143,717	285,099	170,752
Total Costs	268,958	233,369	234,490	392,869	246,165
Quantity Produced	26,212	19,343	20,072	20,226	5,320
Costs per Tonne	10.261	12.065	11.683	19.424	46.275

Processes / Years / Description	(37) Old Dolomite Burning				
	1975	1976	1977	1978	1979
Net Raw Material	123,860	156,252	172,418	135,242	86,472
Operating Costs					
Wages	30,663	35,272	20,465	43,034	53,082
Fuel & Energy	289,855	255,719	284,953	6,857	1,943
Spares & Consumables	9,006	3,656	23,633	274,536	170,586
Work-shop services	23,090	12,944	6,599	4,874	8,337
Overheads	34,020	19,808	20,597	20,336	23,864
Internal Overs & Services Sold	-	-			
Operating Costs "Total"	386,634	327,399	356,247	349,637	257,812
Total Costs	510,494	483,651	528,665	484,879	344,284
Quantity Produced	15,142	14,360	16,460	15,728	7,221
Costs per Tonne	33.714	33.680	32.117	30.828	47.679
	(38) Dolomite Mixing				
Net Raw Materials	503,251	541,650	566,902	562,473	356,485
Operating Costs					
Wages	11,482	12,161	7,397	18,192	22,247
Fuel & Energy	36,570	19,619	11,522	2,069	1,555
Spares & Consumables	(52,300)	99,610	27,475	13,564	5,730
Work-shop services	5,721	42,531	45,281	84,054	93,404
Overheads	13,453	(29,329)	4,659	27,691	14,758
Internal Overs & Services Sold	-				
Operating Costs "Total"	14,926	144,592	96,334	145,570	137,694
Total Costs	518,177	686,242	663,236	708,043	494,179
Quantity Produced	14,341	15,470	16,876	17,353	7,454
Costs per Tonne	36.133	44.361	39.300	40.802	66.294

Processes / Years / Description	(39) Dolomite Bricks				
	1975	1976	1977	1978	1979
Net Raw Material	191,869	233,724	237,774	253,446	134,759
Operating Costs					
Wages	19,057	21,789	12,656	28,642	33,940
Fuel & Energy	42	102	109	120	257
Spares & Consumables	20,383	10,191	150,614	32,175	40,074
Work-shop services	27,954	-	867	7,343	4,148
Overheads	8,027	894	736	459	370
Internal Overs & Services Sold	-				
Operating Costs "Total"	75,463	32,976	164,982	68,739	78,789
Total Costs	267,332	266,700	402,756	322,185	213,548
Quantity Produced	5,343	5,270	6,049	6,212	2,034
Costs per Tonne	50.037	50.606	66.577	51.867	105.008
	(40) Dolomite Bottom				
Net Raw Materials	63,013	76,517	68,608	72,796	45,281
Operating Costs					
Wages	21,351	33,113	20,768	51,006	58,396
Fuel & Energy	6,435	11,074	12,739	3,695	6,188
Spares & Consumables	5,861	18,692	87,916	39,398	4,558
Work-shop services	14,799	-	10,562	34,711	4,188
Overheads	8,332	1,067	1,086	784	1,078
Internal Overs & Services Sold	-				
Operating Costs "Total"	56,778	63,946	113,071	129,594	74,408
Total Costs	119,791	140,463	201,679	202,390	119,689
Quantity Produced	1,747	1,725	1,746	1,784	683
Costs per Tonne	68.581	81.412	115.540	113.437	175.155

Processes / Years / Description	(41) New Limestone Burning				
	1975	1976	1977	1978	1979
Net Raw Material	214,480	197,210	403,106	311,271	644,721
Operating Costs					
Wages	67,193	84,306	56,784	50,616	56,462
Fuel & Energy	64,230	107,361	123,445	164,345	189,619
Spares & Consumables	12,983	1,974	993	1,510	28,071
Work-shop services	43,900	51,895	8,206	10,592	17,524
Overheads	151,240	331,523	206,576	212,873	406,839
Internal Overs & Services Sold					
Operating Costs "Total"	339,546	577,059	396,004	439,936	698,515
Total Costs	554,026	774,269	799,110	751,207	1,343,236
Quantity Produced	35,134	34,878	44,024	48,757	68,355
Costs per Tonne	15.769	22.199	18.152	15.407	19.651
	(42) New Dolomite Burning				
Net Raw Materials	44,070	79,820	56,981	41,708	97,629
Operating Costs					
Wages	48,505	59,896	16,324	44,887	64,952
Fuel & Energy	9,234	33,956	35,749	72,693	122,296
Spares & Consumables	72,569	85,470	89,888	97,906	133,997
Work-shop services	42,262	36,431	43,186	48,342	61,937
Overheads	49,586	112,337	89,108	97,593	160,188
Internal Overs & Services Sold	-				
Operating Costs "Total"	222,156	328,090	274,255	361,421	543,370
Total Costs	266,226	407,910	331,236	403,129	640,999
Quantity Produced	3,453	4,729	3,866	3,781	6,790
Costs per Tonne	77.104	86.263	85.673	106.634	94.403

Processes / Years / Description	(43) New Dolomite Mixing				
	1975	1976	1977	1978	1979
Net Raw Materials	361,934	505,313	421,684	444,134	685,767
Operating Costs					
Wages	9,185	14,103	7,946	8,629	18,320
Fuel & Energy	1,733	2,495	1,582	2,177	6,017
Spares & Consumables	54,800	17,635	8,929	946	1,100
Work-shop services	17,296	41,673	7,833	39,104	58,068
Overheads	9,636	20,809	3,125	11,158	8,223
Internal Overs & Services Sold					
Operating Costs "Total"	92,650	96,715	29,415	62,014	91,728
Total Costs	454,584	602,028	451,099	506,148	777,459
Quantity Produced	4,456	5,323	4,526	3,970	6,610
Costs per Tonne	102.022	113.108	99.668	127.506	117.629
(44) New Dolomite Squeeze					
Net Raw Materials	409,603	543,099	429,798	482,215	742,289
Operating Costs					
Wages	5,600	11,674	7,061	18,688	23,466
Fuel & Energy	196	1,760	-	-	140
Spares & Consumables	55,502	38,077	4,051	38,383	5,003
Work-shop services	13,750	49,660	14,419	14,966	19,233
Overheads	52,664	119,433	89,400	59,130	123,801
Internal Overs & Services Sold					
Operating Costs "Total"	127,712	220,604	114,931	131,167	171,643
Total Costs	537,315	763,703	544,729	613,382	913,932
Quantity Produced	3,978	4,656	4,230	3,715	6,190
Costs per Tonne	135.061	164.011	128.774	165.123	147.642

Appendix 7

HADISOLB BASE PRICES COMPARED WITH
INTERNATIONAL PRICE LEVELS

US $ Per Metric Ton

Domestic Base	CR Sheets	HR Sheets	Plates	Struc-turals	HR Bars	Rebars
Hadisolb at $1.43 = LE[4] December 1977	315	300	286	279	293	N.A.
EEC Producers Guide Min.						
- Country Averages, January 1979	440	351	351	359	344	285
- W. Germanym, January 1979	446	357	357	365	349	289
EEC Import Reference, December 1978	427	352	352	-	358	288
USA Producers List[1], January 1979	435	366	394	392	354	298
USA Import Trigger, 1st Quarter 1979[2]	434	370	401	346	384	344
Japan, Dealer's Wholesale, October 1978	497	454	449	328	326	-
EXPORT QUOTATIONS						
EEC, January 1979[3]	360	305	305	310	295	280
Japan - September 1978[3]	332	285	300	300	280	290
- November 1978[3]	345	290	310	320	300	300
- December 1978[3]	345	290	320	320	300	300
- January 1979[3]	345	290	340	340	300	300

NOTES:

1 FOB mill, Eastern and Central USA

2 CIF, Great Lakes, including 2.5 percent importers margin

3 FOB, Port of Exit

4 The HADISOLB prices stated as of December 1977 should be subject to review and escalation due to increase in cost of raw materials principally coke costs.

SOURCES: Europe, Japan Metal Bulletin, HADISOLB and UEC.

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